

Pakistan's Development Challenges:

Federalism, Security and Governance

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**Research on Economy
&
Politics of Pakistan (REAP)
Karachi**

Pakistan's development challenges

*To
schanze', meher, and my parents*

PROPLAN

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This study has been done under the auspices of REAP. REAP, originally known as Research on Armament and poverty, has been rechristened as Research on Economy and Politics (of Pakistan). REAP was founded in early 1980s, and has organized and published many books and publications, including this author's previous books. reap@gmail.com.pk

Contents

Preface

1. Introduction 1

Economic Development

2. Pakistan must grow and develop fast enough or else? 31

3. Promoting Economic Growth and Development 67

4. Bridging the trade gap 81

5. Development through Cooperatives 111

6. Competition and Competitiveness 119

7. Food & Water 135

8. Energy: crises and options 153

Federalism & Political Economy

9. Federalism and Provincial Autonomy 185

10. Selected issues in Provincial Autonomy 195

11. Political Economy of Mineral Resources 223

12. Tarbela Hydro-profits and Royalty issue 253

Governance & Politics

13. Good Governance or Failed States? 261

14. Freedom, Liberty and Transparency 297

15. Local Government: a victim of new democrats! 313

16. Electoral Issues and Reforms 319

17. Democracy and Political Parties 329

Internal & External Security

18. Lagging Social Sector Development	351
19. Islami Nizam & Jihad (Islamic Rule & Jihad)	369
20. Conventional and Strategic Balance	393

Appendices

Appendix - I: Excerpts from selected federal constitutions of countries	443
Appendix - II: Center - Province relationship in Oil and Gas sector in federal countries	463

Bibliography	469
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Index	475
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Preface

If someone asked me to change the name of the book, I would have named it, "Issues in Public Policy of Pakistan", for rather disparate topics and issues dealt with in various chapters could have only been brought under the discipline of public policy. It is an empirical study, trying to build a status report on various issues and attempts to offer solutions, mostly borrowed from experience of other countries in similar conditions. It may serve a useful purpose in several ways; in shattering myths and confusion, in questioning conventional wisdoms and policies, and in offering solutions and recommendations in areas where there is enduring contention and policy makers are groping for solutions. The issues covered are in the area of economic development, natural resources, political economy, governance, democracy, politics, freedom, Islamic values, and Islamic system of governance, Jihad, national defence and terrorism.

My four decades of involvement in Pakistan's development as a consultant to private and public sector and as executive and manager at top levels, gives me a rather unique insight and vantage over issues, which would benefit my readers and policy makers and managers of economy, politicians, academia, and people from media.

In its approach to technical details, it tries to take a middle path; going to technicalities where it is absolutely essential to elaborate a problem and to evaluate a solution. In Pakistan, public discussions often lack objectivity which is also one of the first victims of myths and conspiracy theories, which often generate a disabling political environment making essential decision making in crucial areas very difficult by the rulers, be it politicians or military. Yet delaying decisions and inability to depart from traditional path may be recipe for disaster. On the other hand, this is no radical book and it is not the intention to put some people, group or sector on the spot. All that is said is in extreme sincerity and is well meaning. There may be some rough corners left un-intentionally, despite my request to my editor-wife Dr. Meher Akhtar Zaidi to round off such areas and put them rather mildly.

Bulk of the data in this book comes from the websites of the known international bodies like World Bank, UNDP, IMF, IEA, EIA, European Union, OECD etc. However, some lesser known but equally credible NGOs and organization like World Economic Forum (for

competitiveness ratings) Transparency International (for corruption ratings) and Freedom House (on Freedom & Civil Liberties) have also been used. Such sources have been acknowledged on the spot and here in this preface are thanked also. I am not sure if some rather longer reproduction and excerpts do not fall within their copy right codes.

I am grateful to Ali Baqar Naqvi for reviewing the manuscript and offering useful input and advice. My wife Dr. Meher painstakingly edited the book, and offered fresh ideas and critique for which I would remain grateful as ever. Schanze's usual outdoor trips in the evening to relatives and friends were interrupted, which she bore with amazing patience. She deserves my special thanks. And thanks to my house girl Fazeela also who was never hesitant in offering fresh and copious cups of tea and Juices. Last but not least Mr. Rashid Abbasi word processed and organized the write-up. It is my second book which he has handled in such a sincere manner. To Mr Mirza, the owner of Royal Book Co, the publisher of this book, my sincere thanks for an early production.

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1 Introduction

Federalism, security and governance are three major issues faced by Pakistan's development prospects. It is in the framework and space provided by these three elements, that the economic development is to take place in Pakistan. Federalism and security put demands on development which generate demand for governance, that is to say good governance. The pace of development is tempered by the balance of demand and supplies of the three. Demands of federalism may not permit certain economic efficiencies and optimalities to operate, while external security requirements may divest a disproportionate and unaffordable portion of resources to militarization and the lack of internal security may discourage local and foreign investment. An inadequate governance response may further deteriorate the impact of the two or better governance ameliorates the effect of the two. Development itself creates challenges for governance in many forms. Governance can and has to balance all towards an economic and social optimum.

Governance can deteriorate security divisions into a military organization that is cruel, insensitive, oppressive, and predatory, while reverse is also possible by boosting social and economic multiplier through a civil-military partnership through indigenization, creation and promotion of social sector in far off areas.

Fortunately democracy has returned and dictatorial rule is gone, hopefully forever, but a continuous threat for its return persists. Military in this country goes away when it is unbearable, lets democratic rule return while waiting in ambush to come back once again, on one pretext or the other.

Tall claims of salvaging the country are made, but in essence more problems are created. It is ironic that growth rates in the economy have been consistently higher during military rule, than during civilian rule, partly legitimizing the former, in the eyes of many, if not all. Why does this happen? This must be investigated and answered.

Social and economic problems are the main problems and remain as such, irrespective of military or civilian governments. Dictators manage to bring short term improvement through sheer coercive power, often putting to use, unutilized production capacity. Military rule is often endowed with stability and peace of mind that is often denied to civilian rule. Let us, this time, give some peace of mind to the new civilian government of PPP. Fortunately PML-N has acted wisely, because their suffering at the hands of military dictator in the immediate past. However more peace and harmony is required in the light of myriad of new problems.

Policy prescriptions are abundantly available. Some may require change of emphasis, such as the previous government's profligacy on higher education etc. There are few options, but hard choices. Solutions can be found only in national consensus including the military. It is unfortunate but they are to be on board if a major policy break-through is to be made; be it vis-à-vis India or reducing military expenditure. The main theme of this book is to define and elaborate on some selected problems, and draw the attention of all, that without a major departure resulting in enhancement of social sector investments, problems would continue to multiply. Politics is the art of the possible. The two major parties have to play a role in building the consensus that is so vitally needed but also because of the fact that the next government would also be facing the same issue.

There are four themes of this book or six areas where reform and initiatives need to be taken. These are;

Economic development
Federalism and Provincial autonomy
Governance
Security

In some ways, this book may please nationalist leaders as well as annoy them, for it argues for doing justice with smaller provinces especially Baluchistan in particular with reference to income generated from the utilization of natural and mineral resources. But it also advises them not to see too much into the natural resources and exaggerate the political issues to an abrasive secessionist tone. Without Pakistan, Baluchistan, it is prognosticated by the author, would be a lazy colony of foreign interests, yielding nothing much for the real development of its populace, as can be seen from the plight of the resource rich countries of Africa and

Latin America. Within Pakistan, and in solidarity with their brothers in other provinces, they have a bright future and potential notwithstanding the current problems and difficulties.

Similarly super-patriots may not like my suggestions for a dialogue on reduction of military expenditure, but would feel reassured by my denunciation of Indian policies and wishful thinking of building an empire in the region forcing other countries to direct precious resources in countering the real or perceived or both kinds of threats.

Politicians would like my advice of strengthening political parties and financial support from public resources and they may equally dislike my sermons and advice on bringing true democracy in their own parties.

Economic Development

In Chapter 3: Promoting Economic Growth and Development, we examine how and why some countries have developed and some countries did not and are on the verge of it for quite some time. We shun the question as to what is development and adopt the usually understood meaning. We find that countries develop without resources and do not develop despite resources, infact resources often become a curse and a liability. One common feature among all developed countries is cold weather, white race and human resource. We have argued for human resource development and have not examined the role of weather in fostering forbearance or genetic accumulation and improvement over time in white races. Infact that is not the subject of our concern in this study.

Are we a resourceful country?

We have also examined as to the resourcefulness of Pakistan and find to the disappointment of many, that we are not endowed with a lot of resources. We are short of land, water, forest, oil, energy, minerals etc. The land we have is of skewed distribution; more than 90% of the population is on 50% of land, while less than 10% live in sparsely populated Baluchistan with 50% area. Rainfall is one of the lowest; we are classified as an arid country. There are some low concentration minerals here and there. We suffer due to lack of oil and gas. The little we have is not sufficient for our needs of which imports breaks our backs during times of price instability, in particular, and otherwise in general.

So where are the resources my innocent people? There are some but not enough, as the popular myth goes. We have to break this myth to move forward out of the conspiracy theories and shifting the blame outside. We did not develop and would not develop because of our own apathy and domestic political problems. We could have done reasonably well with whatever we have, with sincerity and honesty. One should understand that we are no “Golden Bird”, which everybody is exploiting and trying to leave us under-developed and kept suffering. At least this is the “conspiracy theory” with which I had to struggle for considerable part of my intellectual life and had to find my answers, which I have tried to share with my readers. Bogey of being a, “resourceful country”, while one is not, hurts in many ways. It has created amongst our “nationalists” a disproportionate, unrealistic and accentuated sense of potential richness, which some of them believe could only be obtained through separation. And generally it creates an inappropriate domestic political environment out of line with world politics and realities of the time. It breeds unrealistic and suspicious polity which shuns rational analysis and depends on un-informed intuition and un-tested and irresponsible theories.

It may also be responsible for breeding “terrorist liberators”, who want to keep everybody away from the “promised land”, which has been a basket case for international donor community for most of its lifetime, something which is also quixotically interpreted to be an international conspiracy. One of my otherwise intelligent friend and bureaucrat was not ready to accept that our GDP somehow was that low, in continuation with the syndrome that I am bemoaning of. We conclude in Chapter 2: Pakistan must grow and develop fast enough or else, that we need not aim to be one of the most powerful countries, or be able to attack India and wrest Kashmir and wave our flag on the Red Fort. We can afford to be a modestly ambitious, with our feet on the ground and learn to stand before walking, and walking before running. A modest yet critical goal of removing abject poverty and hunger, 100% enrolment of our school going children, sanitation, safe drinking water for all, small clean homes for everyone is what we should strive and aim for, and not waste our resources in unending and fruitless competition with India and fight for Kargil and Siachen, the heights at which the only two heroic nations of the world with millions of people in abject poverty, can boast to have fought, surpassing USA and everybody else.

Pakistan Trade Gap

Pakistan trade gap has been widening ominously, consuming the reserves that had been built as a consequence of several political and economic policies and arrangements. The most recent and immediate cause has been the rise in energy, food and commodity prices internationally, on which there is no control or leverage of our poor governments. Infact even the rich and powerful governments and countries have not been able to do anything about it. The problem is structural embedded in capitalism as an ideology. This can be an interesting and long debate that would continue across the world governments, corporate board rooms and academia.

Govt. has taken some short term measures like devaluation of currency and controlling imports. In Chapter 4: Bridging the trade gap, we discuss and propose some measures to curb the trade gap, enhancing exports and curbing imports. However our focus would be more on exports than imports, the latter to be tackled in a separate section.

Cooperatives – a potential institution for social justice

In Chapter 5: Development through Cooperatives, we introduce the usefulness and relevance of cooperatives for Pakistan, and take a survey of the cooperative systems elsewhere in the world. In Pakistan cooperatives had a bad name, of scams and frauds. Cooperative housing societies have done rather well. Most of the land in urban areas has been developed by housing societies. However in Chapter 5, we are concerned more with agriculture and business cooperatives.

Cooperatives in some cases can be a substitute for privatization. Workers take-over of privatized units has not created successful examples in all the cases, and in most such cases there have been powerful and wealthy individuals behind the scene. Pakistan Post Office, Railways (in total or parts of it), Pakistan Television etc could be converted into workers cooperative, with some government interest and control.

There is a strong case for granting public level to the landless. One-third of the land of Pakistan is still not in use. An alternative could be to allot public land to agricultural cooperatives. 1000 acres per district would support 100 cluster cooperatives with approximately 100,000 workers as members of the cooperatives. There is a strong potential for meat, milk, and sugar-cane cooperatives. Similarly for industries, one village, one

product scheme of SMEDA (originally Chinese) could be implemented in the framework of cooperatives.

GOP could give the now semi-defunct PIDC the mandate of promoting cooperatives and provincial governments could energize their small industries departments by adding cooperatives to their mandate, it would be worthwhile to even establish an organization for this purpose.

International Competitiveness

I hope that businessmen would carefully read my advice and suggestions on building competitiveness through eliminating waste and improving productivity and profitability through innovation and efficient management and control and not just thrive on cheap labor. Competitiveness built on the foundation of cheap labor is temporary and transient. There is always another country in waiting, prepared to off-load a cheaper and more miserable workforce into the international market through still lower prices. Higher prices from higher quality have more potential for sales and export than low prices and still lower quality, which ends up in nothingness in the downward spiral.

Higher price/ high quality are an upward spiral leading into profits, growth, stability and prosperity. Although it is important to look after their short-term, day-to-day needs and cash flow, and personal financial pursuits, it is also important to take a long term view and leave stronger and larger enterprises to ones' successive generations and posterity. After all, together Toyota, Matsui, Ford, Tata, Maruti etc., were smaller companies in the yester years. Would not you like to be one of them, or your sons and daughters to be in their shoes?

In this book, we have assembled together most of the international ratings of countries on corruption, human development (HDI), freedom & democracy, economic freedom, competitiveness; and trade etc. We find that in all good things we are at the bottom of the lists, and in all evils we are the top. For years Pakistan remained as one of the top 10-20 most corrupt countries of the world. If I remember correctly, Pakistan's human development (HDI) rating used to be slightly higher than India in 1980. Now Pakistan is several ranks lower than India, with a rank of 142 vis-à-vis 134 of India, in the "befitting" company of such countries as Angola, Swaziland, and Yemen. Thanks to the Musharraf regime, till 2008 we were not classified as a free country by the reputable Freedom House ratings. In all indices we are lower than India, except for HIV-

AIDS or trade ratings. For the former we are thankful to our religious moorings and for the latter we should be thankful to the restively restrictive trade regime in India. We discuss these issues in Chapter 6, Competition and Competitiveness.

Food and Water

Food, water, energy, and environment are major long term issues, not just for Pakistan, but for all human kind. For populous, resource poor and developing countries the issues are even graver. On environment except for reducing and eliminating water and air pollution, we cannot do much, even on that account, it is a tall order. The climate change will affect us in more critical ways than many others, but we cannot do anything about it, except to lend support to Climate Change Convention at the UN General Assembly.

In many ways, food, water and energy are interlinked issues; you require water for food production and dams for hydro-energy, which in turn produces agricultural inputs. Food security can only be obtained through consistently raising production and productivity by increasing yield and productivity and also bringing more land into agricultural use. On both accounts, there is substantial scope for improvement. Crop yields can be increased by four times and more land is still available. If Egypt can reach a level of 6000Kg/hectare yield level in crop productivity, why do we have a one-third yield? They are fellow Muslims, endowed with similar qualities, suffering from same syndromes.

Agricultural yield and productivity is a key to progress and technical change. In Chapter 7: Food & Water, we have examined Pakistan's achievements and progress in this respect, which unfortunately has not been praise worthy. One may be confounded to know that Egypt has one of the highest cereal yields in the world, far ahead than that of USA. In Pakistan comparable yields have been achieved on demonstration farms, indicating that basic conditions are right to achieve this target or objective. It requires, however, a focused effort and approach drawing upon a host of issues such as pricing policy, technology package development and extension, supply and pricing of inputs, credit policy etc. It is easy and yet it is not easy, thus garnering a full suit of development activity. Food, water and energy are three key issues of the world. Recipes are well known, but a set of targets and action plan is required like the one developed by the Agricultural Commission of 1983. But the nihilists would ask, what is abnormal that was achieved as a

consequence? Certainly something should be done by our policy makers in this respect to put our act together. It is a lot easier and beneficial to achieve industrial growth.

More water would be required for more food production, where severe problems are expected. Pakistan is an arid country, with one of the most minimal rainfall in the world. By comparison, India gets several times much more rainfall. Fresh water resource supply of 1415m³/ yr in Pakistan is much less than the requirement, and as compared to 1754m³/yr of India and 2608m³/yr of Afghanistan. There are limited options and solutions, all of which have to be implemented including building storage dams, water conservation and efficiency. We have come to rely on rice exports, which we have to consider trimming down. Export of rice tantamount to exporting water, which we do not have. Rice production consumes six times more water, and has one-fifth economic productivity. Curtailing rice exports may be a shock to many who are striving for boosting exports and reducing trade gap, but difficult choices have to be made.

A water accord had been signed in 1991 among the four provinces, and a water body Indus River System Authority (IRSA) had been formed to implement and administer the award. River flow monitoring equipment has also been installed. Technical problems and discrepancies should be handled at technical level and technical people should not behave as politicians, displaying confusion and equivocation. Similarly there is Indus Water Treaty, which also has a mechanism for problem resolution. Political statement mongering should be discouraged on all sides within Pakistan and vis-à-vis India. Kashmir problem is more than enough to sour the relationship between the two countries. We cannot afford to have confrontation on other issues.

Water conservation and efficiency in usage is another resource which can be tapped through modernization of irrigation. Water pollution and discharging human waste to river and nullas is now a major problem. In earlier times, with smaller population, the volume of waste-water used to be much less than the recipient streams. Waste -water used to be digested by the national system. With time more poisonous chemicals and germs have come into the system and find their way into fresh water sources, polluting and causing disease. It is widely known that 50% of diseases in Pakistan are water-borne. Waste-water from a population approaching 200 million cannot whither away silently as it used to be without causing damage. Besides it is a resource, which can be recycled directly and

immediately. Waste-water treatment plants are far and few in between. Only Karachi has a number of plants, most of which repeatedly operating inefficiently and at much less than full capacity.

Water treatment technologies have much improved since. Indigenization can reduce cost; still a lot of investment would be required in water sector towards suggested improvement. Where will this come from? Foreign grants are too little to be counted. Foreign loans have to be paid back, so the real dependable resource is ones own. We have else where made recommendations in this respect.

Investments in all these sectors have a long gestation period. Lack of long term planning and implementation, results in short term crises and costs, which can be several times more than the normal costs, as we are currently experiencing the production losses due to power crises and buying expensive rental power.

We have been underestimating the impending water crisis, and postponing difficult decisions and looking the other way; thinking that some how we would be saved of the catastrophe. The water storage has been discussed and debated only in terms of provincial shares of water and Kalabagh dam etc. The problem is not but the total. Political and economic issues can be resolved. Fortunately large storage projects have been initiated without controversy yet. I keep my fingers crossed, for Kalabagh controversy started much after the initiation of the project.

Energy Crises

Energy sector in Pakistan suffers from a host of problems for example, lack of efficiency, competition and investments; some of the problems could be avoided and for some nothing can be done, at least presently. Energy sector is essentially based on a cost-plus environment. Utilities are natural monopolies. Efficient and transparent regulation can mitigate some of negative aspect of the cost-plus /monopolistic regime.

Regulatory institutions in Pakistan like NEPRA and OGRA need more teeth, muscle, spine and brains and brawn all of it. The problem is that even highly competitive sectors of sugar and cement where 50-60 parties operate, cartels and monopolies have been created and it has been difficult to fight them. However some competition could be brought by auctioning prepared or identified projects, which has a potential of bringing down the capital costs. Technical and commercial losses both in

electricity and gas distribution are a drain, which could be significantly reduced. Energy conservation is a big resource, for all sectors especially, building sector where a lot of energy could be saved in improving lighting and illumination, space heating and cooling. For a poor economy, this kind of waste is back-breaking. Some of the good steps that the authorities have done ought to be acknowledged and appreciated e.g., free distribution of energy savers.

Lately there has been a trend in acquiring a short term solutions like Rental Power, which could be condoned to some extent e.g., 1000-1500 MW. Now expensive LNG is being contracted and a Rental LNG plant is being acquired. LNG is coming out to be very expensive, as much as oil. If LNG is to be so expensive, why not import more flexible oil. Coal gasification and making fertilizer out of it is a mature technology that would replace 200 Billion cft of annual consumption of gas by the fertilizer sector.

There is an urgent need to put Thar Coal project on the fast track. Certain policy and preparatory issues are to be still decided upon which are slowing down the project e.g., Rate of Return, coal pricing, coal royalty, coal electricity pricing, streamlining the interaction of Thar Coal Energy Board (TCEB), with Private Power and Infrastructure Board (PPIB) and National Electric Power Regulatory Authority (NEPRA). While provincial autonomy is to be respected and Thar Coal Energy Board, reportedly has been given the requisite autonomy, opportunities for mobilizing expertise and know how should be created for a more cosmopolitan environment that would be required for a fast track implementation of such a large resource and project.

There is no substitute for Thar Coal. Somehow, skepticism and a question mark for some unknown reasons prevail throughout the country and even among foreign investors about Thar Coal, which the authorities should look into. Also TCEB may be encouraged to develop an attractive, encouraging and open style and profile. Its continued operation as a section of department of Sindh Secretariat has perhaps something to do with the misgivings that prevail. By teeth, I mean authority, sincerity and integrity. By muscle I mean technical and organizational strength, depth of expertise and skill and breadth of scope and horizons of knowledge. By brains, I mean intellect of the leadership and higher strata of the organization to lead and pursue common goals and objectives.

I do not say that these elements are not there, but certainly these characteristics are not very abundant in the regulatory set up of the country. Enrichment, strengthening and care in choosing leadership should be exercised by the ministers and the cabinet. Additionally, such bodies should not become a parking place or last stop for powerful secretaries for a prized, comfortable and cozy appointment for five years or so. More work, efficiency, energy, judgment, knowledge and wisdom is required in these organizations, than line –jobs elsewhere. The very best, through competitive process, should be selected. We discuss these issues in Chapter 8: Energy: crises and options.

Federalism and Provincial Autonomy

In Chapter 9: Federalism and Provincial Autonomy, we discuss provincial autonomy and the concurrent list. Those who are proposing confederation on the basis of Pakistan resolution 1940 are stuck in eighteenth century, when confederacy was popular and was practiced. Today's closer models are SAARC, EU and ASEAN, which are associations not countries. The only working confederation is of UAE. Can a poor country of 160 Million people work on the model of tiny countries. Proponents of confederation either are not serious or simply seem to cause confusion and chaos.

Most federal countries have graduated from the dual model, whereby there used to be rigid sovereign separation of powers among federation and the provinces. Now is the time of cooperative federalism, whereby federation and provinces cooperate in concurrent subjects, which has been made possible by progressive judicial interpretations of the constitutions in many countries including the USA and Germany, the citadels of federalism. Nowhere in the world, are federations limited to defense, currency and foreign affairs. In the US federation is involved in 18 different domains and subjects, although in concurrent manner with the states, with exclusive jurisdiction in currency, defense and foreign affairs.

Concurrent list in Pakistan is being portrayed as some kind of federal colonialism, and its removal is being mistakenly demanded by many liberal and well-meaning quarters. There may be a case for rewriting and redefining the concurrent list; removal of some items and addition from federal to concurrent. We have in Chapter 9, discussed the issue, provided evidence from other federations and some reproduced in

Annex-1, excerpts of subjects lists from the federal constitutions of the US, Germany, India, Australia and Canada.

In Chapter 10: Selected issues in Provincial Autonomy, we discuss the specific cases of royalties, taxation and income sharing with respect to natural resources such as oil, gas and minerals. We have also dealt with ownership and control issues, proposed an arrangement for transferring partial ownership of public sector companies such as OGDCL and PPL, in proportion to the provinces' contribution to the cumulative output to date. Finally there is no conclusion, as there was no theme. No point had to be proven. The idea was to inform the reader and initiate him on the subject and maybe foster a debate. If at all conclusions and recommendations would be found in the individual chapters themselves, sometimes implicitly in a garbled manner or sometimes more explicit and organized fashion.

Pakistan was dismembered amidst calls for provincial autonomy, six points, and resource sharing and transfer issues. Today there is the same cacophony, although it is from smaller provinces, and at the time it was, ironically, from the largest province.

Concurrent List has become highly contentious and controversial. There is an unfortunate consensus towards eliminating it, without much thought and preparation. Quite some economic structure is built against concurrent list. The issue of capabilities of smaller provinces is also a question, while they cannot run their provinces on their own, without significant human resource support from outside, on a smaller list of subjects, as it is today. What will happen when, all subjects except the five, are reverted to them. More subjects in provincial lists means more expenditure, and the real issue of income.

We have examined and argued for straight transfer of natural resource related revenues to the provinces, in addition to royalties and excise duty that is already being handled in that fashion. Dividend and profits, if not taxation, could also be brought at least partly to the provincial domain. There is a strong case of transferring GDP shares in PPL to Baluchistan, against payment of an appropriate capital value adjusted against the agreed payment of royalty arrears. Similarly there is a case for transferring 5% of GOP shares in OGDCL to the three provinces excluding Baluchistan, as it is accommodated over PPL head. Baluchistan may be given a token share in OGDCL. We have developed

an elaborate proposal in this respect that has been presented in chapter 10.

Democracy, freedom and rule of law guarantees a better and fairer deal, although one does not discount the value of an appropriate devolution of power. What value and credibility is there of provincial powers in Chinese and Russian federations without a democratic backup. In Pakistan also provincial disparities and problems have been exacerbated following successive military dictatorial rule, directly and indirectly.

There is a case for even broadening Concurrent List, as more powers and subjects are to be devolved from center to provinces, but through the Concurrent List, which provides an excellent medium for federal-provincial coordination and collaboration. Concurrent action does not always mean federal / central paramountcy. The ratio of powers within the concurrence is practically adjusted on a case to case and day to day basis.

Seraiki Province

In Pakistan provincial boundaries appear to be an article of faith. In next door India, state boundaries are continuously redefined according to new developments and demands. More than a dozen states have been added, mostly on linguistic grounds. In Punjab there is a lot of skepticism and resistance to being divided in two or three parts, even terming any such proposal as unpatriotic and conspiracy against national security and solidarity. Punjab is considered as first and last defense of the country.

However what is not appreciated or understood that boundaries are administrative divisions, serving practical needs and at time satisfying linguistic solidarity, romanticism and identity. There is nothing wrong with it, within the bounds of new geographical creations within the country. There is a long time demand for a Seraiki province, based on linguistic, cultural and administrative grounds. Rahim yar Khan is at a distance of several 100 kms from Lahore. Nowhere in the country, a people would have such a distance in between to get the issues and problems redressed, now that the new PML-N government in Punjab is not very enthusiastic about the local governments and intends to dilute its outreach and domain. The "big heartedness" of Punjab in many ways, is proving to be a liability for its own interest. Everybody, rightly or wrongly, claims of Punjab's exploitation of others, which it has to take coolly and often adopts a defensive posture. People of Punjab should

give due consideration to the demands of Seraiki province and even another province in the Attock-Jhelum area.

Six provinces would make a more stable political system, wherein four provinces, Sindh, Seraiki, Central Punjab and Northern Punjab would be roughly equal size, with only two smaller provinces of NWFP and Baluchistan, with a smaller gap in size with their big brothers. It would make interesting coalitions. Sindh may at times and on some issues may be divided or united with Seraiki and Northern Punjab with NWFP. Politics would have more interesting options and venues of compromise, providing vibrancy, flexibility and dynamism of the democratic process. It may be more expensive administratively, with the three chief ministers (kings) and three governors (viceroys) and more provincial assembly members currying for favors and benefits.

With smaller provinces in Punjab, all new units will be able to pursue their interests without the need for an apologetic response as currently prevails today, along with the dissipation of current doubts and fears of Sindh, NWFP and Baluchistan. Statesmanship would have to be shown by Punjab leaders. Please start thinking about it. Ironically, those who support division into small commission rates, oppose larger sub-provinces. Can there be a creative solution? The whole cacophony of provincial autonomy would either die out or would be resolved in a more stable fashion when most of the population would be covered by equally powerful or powerless provinces.

There would be broader co-convergence and coalition. This is a march of civilization culminating into new interests, alignment and identities; the alternative is stagnation and rigidity festering with corrosive problems and stresses. This may lead eventually to further linguistic alignments, like amalgamation of Pushtuns in Pakhtunkhwa, with no dissension in naming the province, and amalgamation of Hindko. Punjab is with Potohar plateau. These amalgamations would prevent expansion of larger neighbor, India which is watching our internal dissension with amusement and rapture. Flexible and accommodating political systems absorb new challengers and challenges, while rigid political systems vanish by the daily onset of dusty winds of grievances and misgivings.

The only factors that goes into favor of Seraiki province is their sweet Seraiki language and culture. They cannot claim exploitation or under representation of their interest, for some of Pakistan's most important, powerful and popular leaders have come from Seraiki belt of Multan, DG

Khan and Muzaffargarh etc, both past ones and present ones. Current PM Gilani is from Multan and Foreign Minister Shah Mahmood Qureshi also from Multan. Other national leaders of Seraiki origin are; Farooq Leghari, Jawed Hashmi, Mustafa Khan, Gardezi, Daultanas, Qureshis etc, both from PML and as well as PPP.

Another issue is that 40% of Seraiki people live in upper Sindh. Mr Asif Ali Zardari is from Nawabshah, where Seraiki is a major language. This may cause problems in other areas also where Seraiki is widely spoken (DJ Khan, Mianwali etc). While Seraiki issue may be accommodated with some ease in Punjab, possible demands of other linguistic groups i.e. Pushtuns of Balochistan and Hindko of NWFP, for linguistic adjustments of provincial boundaries may create major political problems, although in the long run these should be scope of discussion on these issues as well.

Fortunately the style and tenor of Seraiki demand is mild, cooperative and within the federation's patriotic domain. However, there is a risk that poverty, religion and sub-nationalism may not bring about the same kind of terrorism-genie that we are facing in Swat and Tribal areas. Most notorious and sectarian groups and individuals belong to the Seraiki belt e.g. Lashkare Tayyaba, Lashkare Jhangvi, Jaishe Mohammadi, and Riaz Basra etc. One hopes that in the presence of popular and liberal leaders like Yousuf Raza Gilani, Shah Mahmood Qureshi, Jawed Hashmi, Legharis and Mustafa Khar, the threat would not materialize. However, presence of ANP, and popular leaders like Esfandiyar Wali, Aftab Sherpao and others could not prevent TTP and Sufi Mohammad from causing the mischief and mayhem. Some advance planning and action is advisable.

Democracy and freedom has its own ways of meeting various kinds of demands. For example there used to be demands of Seraiki TV, and now there are a number of popular Seraiki channels. Infact there are channels in all other regional and provincial languages, without any fear or opposition. All kinds of people watch all kinds of channels. Similarly democratic and free institutions should be encouraged to accommodate sub-nationalist and linguistic yearnings of people.

Towards a natural resource accord

Recently National Finance Commission (NFC) award was unanimously agreed to with induction of new multi-criteria system in which financial

resource distribution has been based on poverty, under-development, and the needs, in addition to the classical singular basis of population. While the PPP government has been the main architect, PML- N support has been vital in the government of Punjab's acceptance of the new formula and the associated concessions. People are pleased to see the concord and unity.

Despite many political problems and divisive tendencies, Pakistan and its political leaders have been able to muster enough intellectual courage and political wisdom in solving one of the most crucial and basic problems with consensus and unity. In addition, to the recent NFC award, the unanimous approval of the 1973 constitution, persistence and sustenance of Pakistan's nuclear programme, despite political changes from one end of the spectrum to the other like Bhutto, Nawaz Sharif, Benazir and the Water Accord of 1991 pioneered by Mr. Nawaz Sharif are the demonstrated examples in support of such an assertion. Maybe there are other achievements of this nature, which I have not included in this small list of major achievements.

We must architect a "National Natural Resource Accord", in the same cooperative and collaborative spirit which has enabled the federation to achieve consensus in the afore-mentioned areas. Present government has already taken a number of steps in this direction in the form of Baluchistan package, payment of royalties and surcharge, and arrears of hydro -profits of NWFP and a few other ground breaking steps. Present government has also promised more concessions to the provinces in this area.

Most of the contentious issues are in the area of natural resources like oil, gas, coal, minerals, and hydropower. There are issues which go way beyond the oft repeated provincial autonomy which is generally understood as the panacea. These issues pertain, among others, to the following four areas; ownership, control, royalties and taxation. These are quite complicated issues whose federal and provincial domains clash; an orderly and efficient resolution of which is the call of the hour.

Thar Coal issue has been only partly resolved due to the PPP governments in the province and the centre. The protagonists and antagonists are waiting on the sidelines, and the problems are simmering. Some formula for federal and provincial interactions on the subject has to be evolved; otherwise it is highly unlikely that the required goals and targets of billions of dollars of foreign investment could be achieved out

of the Sindh Secretariat building. NWFP government has raised the issue of oil royalties. Sindh Assembly has recently passed a resolution demanding more say in oil and gas issues. Khattak tribe attacked and took over oil installations in NWFP in support of both their reasonable and unreasonable demands. Tribes in Balochistan, especially the Bugtis have been reportedly demanding share in royalties, which have been met through unofficial arrangements. Baluchistan has a longstanding complaint over control of natural resources. In chapter 11: Political Economy of Mineral Resources, these issues have been elaborated.

Hydro Profits

Although arrears of hydro-profit have been promised to be paid, there is no agreed formula for the coming years. The present settlement has been based on a tribunal's specific award and the AGN Kazi formula, which proved to be no formula at all with the benefit of hindsight. NWFP complains of high electricity tariff charged to its consumers despite its cheap hydropower located in Tarbela, while Balochistan complains that no benefit is given to it in electrical tariff for its cheaper gas from Sui gas field. There are other issues as well pertaining to policy, control and management. These issues, although being difficult, are nevertheless resolvable. These issues have been discussed in Chapter 12: Tarbela Hydro profits and royalty issue.

Governance: Good One?

Governance essentially is "the decision making process and its implementation", and in the context of this book, it is of government. A good governance system is expected to be effective and efficient in overseeing, guiding and regulating economic activity and social development, with democracy, consensus, participation of the people, in a transparent manner, keeping people informed of its decision, under a set of rules and laws to be adjudicated by an independent judiciary, and having a role for media, NGOs, civil society etc. Good government has to be protective and mindful of the religious and ethnic minorities. It should not rule by brute majority and force. It should be sensitive to the historical and heritage issues of its people. It should also be able to conduct itself with its neighboring countries and participate constructively in the international system, meet its obligations under conventions, treaties and UN resolutions.

Progress, development, economic output, improvement in social conditions, internal and external peace etc are outputs of good governance system and not the good governance itself. As has been proved by international experience, those countries and societies which are high in economic and competitiveness ranking and are socially more developed and more advanced than those which rank low in governance scales. Because governance is an input to the socio-economic development process and activities and not the output, and pertains to many aspects, most often qualitative in nature, it is difficult to measure it, as one is used to measure and define GDP, literacy, growth rates etc.

In Chapter 13: Good Governance or Failed States? We examine the issue of Governance and its constituents, and the role of freedom and transparency in it. We reproduce Pakistan's rating on these issues, issued by World Bank, and other international organization.

Local Government

In Chapter 15: Local Government: a victim of new democrats! We discuss the role of local government. Nazims would like my support for their local government and the bureaucracy may be unhappy over it; the latter would, however, appreciate my proposal for posting "Development Commissioners" in the districts, being representative of provincial governments in a coordinator capacity. The acronym DC, that sweet bygone era, should be of some consolation for some.

It is disturbing to note that most of our political parties have shown anti-local government behavior. They somehow consider local governments and Nazims as competitors and even a threat, and an un-necessary impediment towards their direct contact with the people and local government affairs. They have even shown a preference for a subservient Deputy Commissioner than an elected Nazim, who could have been from their own party. Adjustments and changes are a fact of life, but an obvious antagonism is really deplorable.

They even backed an unconstitutional magistracy system, which had been discarded through a long and sustained struggle of the civil society and democratic forces, of which they themselves were a component and part of. Fortunately lately some balance seems to have emerged, and it is hoped that the changes brought by them would not weaken the system

and would not inch towards bureaucratic role instead of elected representatives.

Strengthening Political System

Political parties are an important link between people and the system, and an essential player in democracy. Without strong political parties, there is no strong democracy. Our political parties are weak in many ways, and that is the reason that every now and then, an ambitious and selfish and egotist general manages to call off the democratic system and locks the prime-minister up in a jail, or even hangs them or exiles them.

In Chapter 17: Democracy and Political Parties, we develop on this theme and make proposals for broadening political participation of the people, deepening democracy within the parties, and encouraging parties to enlarge their membership. Presently despite claims of massive following, which is partly correct the number of members fall quite short of the required numbers in terms of sizes and ratios of membership, as is common in western democracies.

A norm of 4% of the electorate, suggests that PPP and PML should have a membership of one million each. Where these members and workers will come from. We have argued for permitting school teachers and university professors in public sector and other professionals to be allowed to become members and take part in active politics. We discuss some other relevant issues Chapter 16: Electoral Issues and Reforms.

Compromise – An essence of democracy

Compromise is essence of democracy and governments normally in our societies which under the load of history of misrule, are polarized, and usually dislike compromise. They call it a “deal”. Deals are essential, if one has more form and there is no fundamental truth, justifying rigidity. A compromise could have prevented Pakistan's dismemberment and another could have saved democracy and life of a former PM of Pakistan. Compromise and flexibility is, however required among political forces and not a conspiracy with rival military forces encouraging them to march in as it happened in 1977.

A compromise in 1988, enabled democracy to return, after the fateful demise of General Ziaulhaque, and another compromise of 2006-2007,

enabled the two former prime-ministers to return, and paved the way for return of democracy and civilian rules.

Compromise of Hudaibiya enabled prophet Muhammad (PBUH) to open up Makkah for Muslims and eventually culminated in victory. A compromise in 1998, after 9/11 tragedy, saved Pakistan from possible US attack, and a lack of concessions by Saddam Hussain resulted in invasion and occupation of Iraq. Lack of compromise among Sunni, Shia and Kurd factions would again result in catastrophe and destruction of Iraq again. Compromise, allowing drone attack, is enabling us to eliminate the killer Mehsuds and others. Ordinary weapons are no match for a drone. Eventually, we can get drone ourselves from the same source, if we continued to comply.

A historical compromise of Muhammad Ali Jinnah, the founder of Pakistan, led to the creation of the Pakistan, or the British may have hastily run away resulting in continued mayhem and bloodshed and eventual emergence of "Akhand Bharat". A lack of compromise among the two parties PPP and PML (N) may even result in the return of military rule, while another lack of compromise among PML factions may guarantee permanent winning of elections by PPP. A lack of compromise by India and Pakistan on Kashmir issue, one day may result in a nuclear catastrophe, and a settlement may usher into a new era of cooperation and reconciliation.

Corruption & Idealism

Freedom has many aspects and meanings to it. Zulfikar Ali Bhutto wrote his most influential book, "The Myth of Independence", in late sixties, in which he exposed the myth that we are a free, independent nation and decried the role of foreign powers in the affairs of small and poor countries of the third world. What he essentially said that it is a myth, that we are free or independent. We are neither free nor independent as we shall see later in this chapter.

Despite democracy, we are not amongst one of the 89 countries which have been declared Free. Those who think that conditions in Pakistan and India are the same, may be hurt by knowing that India has always been grouped under "Free" countries with high ratings on political rights and civil liberties. We are reproducing comparative trend of freedom data for several countries, in which mirror one could see his image. No wonder the issue of missing persons could not be adequately handled, even by

current Supreme Court, the most independent ever of judiciary in Pakistan and is continuously applying pressure to grapple with the issue. In fact, one of the “sins” of Iftikhar Chaudry, the chief justice, has been his “principled and hard” stance on the missing persons and the role of intelligence agencies. It does not, however, mean that intelligence agencies cannot peruse and perform their genuine professional work in a Free and democratic system.

Fortunately, after the elections in 2008, removal of Musharraf and assumption of office by a democratically elected government, Pakistan has been classified as a “partly free county”, by Freedom House. For half of the life of the country, we have been under military rule, and in those periods earned the stigma and disgrace of living in a “not-free” class of country, although we struggled for our independence and believed that we got it in 1947. We neither were (are) free nor independent. But partly we are, and should pray that we continue to enjoy this without break or discontinuity in the coming days. Freedom House measures “domestic freedom” in a society on the basis of a structured set of rules and criteria. These criteria are mostly non-value based and do not include such freedoms as of homosexuality or drugs etc.

In Chapter 14: Freedom, Liberty and Transparency, we examine the issues of governance, freedom and transparency. Let us not be given to idealism. Only prophets are sent as ideals to which no body can equal or replicate. After being a PM for eighteen months, one many have to pass life in exile costing billions of rupees. And money is with those whose forefathers allied and colluded with the colonialist power and got land and gifts from them. Progeny of Tipu Sultan and Bahadur Shah is suffering in poverty and squalor.

So where would the rich come from who are able to live in exile endlessly or other ordinary leaders who have to face persecution every time a military regime turns up. Politicians compete with military as claimants for power in this country. Military is so well provided through legal and pseudo-legal means. Transparency international (TI) in its report mentioned that a military officers get three plots in their life time in Defence Societies (and now even built-up homes), and total income of a military officer is US\$ 8.4 million. Politician has no legal or accepted rights in this respect. He is prosecuted even on offering jobs to the unemployed (present PM Gilani has been prosecuted for employing staff in the national assembly of which he was speaker in 1988). Please give

genuine and honest people some chance to live as well. Do not become so harsh and petty.

In Chapter 17: Democracy and Political Parties, we discuss the proposal on funding political parties, if not to support politicians. Most countries, except South Asia, have some kind of funding scheme to aid political parties or give financial support to electoral contestants. Otherwise only the dishonest businessmen or feudal lords would have the opportunity to take part in politics with obvious implications for monopoly and decadence.

We are suffering today under diametrically opposing “Khaarjites” like pursuit of the absolute truth and justice. On the other hand, we have Taliban (TTP), Lashkare Tayyaba, Kharjis- Takfiris for whom there is no role of moderation and compromise; either you are wrong (Baatil) or we are wrong (Baatil) and only one can survive and other eliminated. (Khaarjites was a sect in Hazrat Ali’s time, which opposed Hazrat Ali’s compromise with Muawiya and caused a lot of bloodshed. They divided in three sub-sects and most extremists of them are called Takfiris, according to whom all deviation is Kufr and deserves death punishment. They had a short lived state for some time in North Africa. Later day Salafists have been influenced by some of their thoughts.)

Ironically among our so-called liberals and moderates, a streak of Khaarjites values is taking roots; of immediate and total justice and immediate accountability even at the risk of causing instability. “Justice is blind syndrome”. Can we hold on to the stresses and strains caused by puritan immediate justice? Are we strong enough? Are not we being selective? This kind of thinking hanged a former, popularly elected prime minister of Pakistan and the protagonists of this “judicial murder”, argued at that time that if “ a rich and powerful” was hanged for his purported crime, justice will prevail. It could have been a cause of Sindh’s separation and eventual demise of Pakistan, but for patriotic and democratic forces (my salute to the PPP and to the Bhutto family in particular) which held the federation together.

Murder was re-enacted again with the murder (shahadat) of Benazir Bhutto. These same people are again saying “Pakistan Khappe” prevented the emergence of an abrasive nationalist/separatist movement, with the eventual weakening and (God forbid), demise of Pakistan. We must let democracy survive and respect election results, and refrain from abrasively pushing for “immediate and blind” justice.

The road to a fair, just and corruption-free society is long and gradual. Surprises cannot be expected. And the days of revolution have gone and only coup happens, which must be prevented. PPP and the Bhutto family could have launched a campaign for first and immediate revenge or prosecution of the “murderers” of Benazir and Qatleen e Usman syndrome. They did not. They have acted sensibly and responsibly. A large and credible political party leadership and rank and file has supported Mr. Zardari, to become the president. Their right and role, as custodians of peoples’ trust reposed in them in the 2008 elections, should be respected.

Millennium Development Goals Can be Good Manifesto

Internal & External Security

Political parties seem to be at a loss to give a viable programme and rally people around them. Television anchors blame the present government that there is no sense of direction or agenda. Millennium Development Goals (MDG) can offer this required sense of direction.

It would be highly visible and give a visible sense of direction, which people (including television commentators and anchors) desire. It is obvious that no government would dislike the idea of improvement in the living conditions of its people. But unlike political parties, a government has to survive first; survival is its first objective. Their major constraint is the requirement of continuity, and the inertia of the past. With the exception of revolutions, governments have to cater to the demands of more powerful sectors of the society, which manage to galvanize popular support around their sector and interests. It is ironic that support for security state and militaristic agenda comes from the weaker sections of the society. It is mostly they who want to “crush India” and “wave Pakistan flag on Lal Qila”, and “no compromise on Kashmir”. In the current circumstances with worsening law and order situation, it would be out of tune to talk of reducing military expenditure.

All heads of states gathered at UN General Assembly in the year 2000 and agreed to these goals. These goals were, to improve human conditions in developing countries by measurable amounts in a definite time frame i.e., by 2015. These goals are about reducing poverty and hunger, improving access to education and reducing illiteracy, improving health conditions, access to safe water and sanitation etc. Most developing countries have agreed to work for achievements of these

goals and targets including Pakistan. Ten years have gone by, only five more years are left, and we are now hearing to be able to achieve these goals. Certainly as it appears from the data, the time frame may have to be extended, perhaps to 2020. These goals and targets are quite practical and the need of the hour. All development should finally end up in improving human conditions; direct or indirect and the so called trickle down effect.

MDGs have the backing of the international community, and quite some technical and financial assistance is available through MDG mechanism. All that is needed is the political will, appropriate resource allocation and mobilization of people, common man and the state power. Without these elements, MDGs would not be achieved. The non-achievement of goals has been for the lack of these elements in the required amount.

One would have hoped that with the adoption of MDG goals and targets, as state commitment, things would improve by 2015. No way. Recent MDG monitoring report of UN is pessimist about our achieving any target at all except on HIV/AIDS. Investments in social sector are required. Words and glib talk or glossy reports do not help. Commitment must be backed by investment, without which not much can be achieved. No increase in allocations to education and health has been made. Recent PRSP-2 report predicts a shortfall of 5 billion US\$ in social sector investment, for achieving MDG targets. The plain fact is that allocations plan for PRSP-2 would not be made, not to talk of more ambitious MDG.

If we keep making our budgets as usual, any achievement in the MDG, if at all would be at its best, a coincidence. A conscientious effort for achieving the MDGs can only be done through doing things differently and through allocating resources differently. Do MDG systems mean business? (Lately PRSP has done some work on this). We discuss these issues in Chapter 18: Lagging Social Sector Development.

Islami Nizam & Jihad

In Pakistan, no discussion on governance can be complete without. Islami Nizam. There is considerable controversy as to whether Pakistan was made for a rigid “Islamic state” or a state for liberal Muslims like M.A. Jinnah, the founder of the country. The advent of Taliban and later its more frightful form of TTP-Suicide attackers, the issue has become even more controversial and polarized. Some fundamentalist ideological parties like Jamaate Islami, used to behave in peaceful democratic

struggle as is borne out by their early period. But now JI openly supports terrorist elements by denying that terrorists are terrorists and that there are "other" forces behind them.

Yet there are, philosophical and practical issues involved; what is Islami Nizam and is there something as Islami Nizam at all? Is it Muslim personal or criminal law alone which appears to be fairly developed, that could satisfy the fundamentalist? Should all implementations of Islam be preceded by beating women and cutting hands of thieves even in conditions of mass poverty!

Is there an alternative sequencing like introducing Islamic social justice? Is there a place of evolutionary interpretation in Islam or the interpretations done already are sufficient and unalterable? And finally does Islam offer a detailed prescription or provides broad outlines of a system? All of these questions cannot be possibly answered even in the length of one book, not to talk of a chapter. Yet we have tried to cogently and briefly touch upon the essentials in Chapter 19: Islami Nizam & Jihad (Islamic Rule & Jihad).

There may be many advantages to look at the same thing. There are people who see a wide gulf of difference among Shia and Sunnis and many have difficulty in recognizing each other as Muslims. On the other hand one could say that apart from belief, there are only three issues which separate modern, European or Anglo-Saxon civilizations away from Islam and Muslim societies, which are wine, sex and interest. But for these three factors, corruption-free societies of the West, based on justice, fair play and rule of law are closer to Islamic tenets, than many Muslim societies and governments of today.

In Chapter 19: (Part B) Islami Nizam & Jihad (Islamic Rule & Jihad), we discuss theory and practice of Jihad in the context of terrorism. Traditionally a dark image of Islam and Muslims has been painted. And Muslims themselves seem to be unsure whether this image is well deserved or untrue. Had coercion been used by Islam and Muslims, there should not be so many Christians in Spain and Hindu majority in India. Indonesia was beyond Arab geographical outreach, but accepted Islam and now most Indonesians are Muslims.

Muslims indulged in expansion because the prevalent world system permitted and even encouraged that. The vanquished people and nations

did not fight or resist the victors, as they would do today. It was alright to resort to war and conquer land. The system continued everywhere including in Europe. World has seen and experienced the swift and soft military campaigns by Muslim kings and has also suffered the Halakoo (the killers) conquests. By and large Muslim societies have conducted themselves peacefully and constructively. Their contribution to science, history, philosophy, mathematics, and civilization in general has been noted undisputedly. Today's period is an aberration which would go away with the passage of time.

Military has ruled most of the time of our national life. Even when it has not ruled, no politician and political party would be able to ask the right questions. In fact they are considered security risk. I have also delved into the difficult territory of Islamic system and Jihad. I am advised that I should have avoided that. It may generate unwanted controversy. On the other hand these are important questions of our political life. There is a controversy that the country was made in the name of Islamic system, while others argue that the aim was a liberal practice of Islam by Muslims of the sort that we are. Can a political party comprising of some practicing Muslims and a fundamentalist ideology, if by some fortuitous circumstances or backed by some terrorist organization is brought into power, be able to implement an Islamic system? What is an Islamic system? What does Quran say about Khilafate Ilaahiya? Does it give an outline and a foundation or provides a detailed and rigid prescription?

Is Jihad and fighting necessary? Was Islam spread with the sword? What are the principles of war in Islam? And what is the place of terrorism and suicidal attack on an unarmed poor people in mosques, bazaars and homes? Are these loaded questions? Are these neutral questions? Every one of us wants to know. But am I the right person to tell? Am I qualified to do that? Modestly speaking I am not, although I have studied these issues and spent quite some time on it. Strictly speaking as a fundamentalist would argue, one needs to be an Islamic scholar, having spent at least 12 years in a madressah of repute. But I am not to expand on a genuinely new concept of my own.

I had the benefit of reading what the eminent scholars have said on the subject, and develop my own thesis, if you will, as most interpretations are at variance. Finally everybody has to offer his own thesis, for none is complete or final, but so is my own. With these reservations I invite my readers to read these chapters. I am willing to be corrected and guided, should any opportunities or occasion arise. I forgot to add a point or two.

Often Islamic scholars lack a perspective of the other side and of the mundane world view. I can claim to have a better know how than them in this respect. So the inadequacy of having appropriate expertise evens out and hence my scope to dwell on the issues, although with a lot of modesty and trepidation on my part. I have only summarized the divergent views and otherwise stated conclusions of my own, for a detailed treatment is not meant here for lack of space and neither may I feel qualified for such a venture.

Can we tame Al Qaeda and Taliban menace? Wishful thinking? Halakoos were finally tamed and they started contributing and rebuilding what they had destroyed. Perhaps there is no harm in talking to “good Taliban”, if they are willing to shun violence and respect generally accepted human values vis-à-vis their fundamentalism. If this can happen, Afghanistan can find lasting peace with the withdrawal of foreign forces and elimination of symbolically democratic but corrupt Karzai government. But you cannot expect Malaysian or Turkish Islam in Afghanistan. The most they can be expected to come to is the social milieu of NWFP, and may improve with time.

National Defence

In Chapter 21: Conventional and Strategic Balance, one we examine conventional and strategic military balance issues in South Asia. Many of us supported nuclearisation, although in response to India's nuclear activities, and expected that nuclear weapons maybe cheap defence and that it would reduce reliance on expensive conventional forces. The reverse seems to be happening on expenditure on both accounts. I would like to understand the rationale of matching India, tank to tank.

We have acquired the same number of tanks as India. Internationally available data leads us to conclude that a conventional force ratio with India has improved from 1:3 in 1980s to 1:2 these days. In a way it may be pleasing, but it has a great social and political cost and a long term threat of being reduced to an outmoded polity of illiterate and underfed people at loggerheads with each other, due to this unending diversion of resources to military pursuits. We need national dialogue of track-2 type involving retired military leaders and politicians engaged in constructive debate. If strategy is a link, between ends and means, then where is the strategy?

Among things that we do not like in the military is frequent coups, pomp, exhibitionism, wasteful protocol, profligacy and a Roman army like lifestyle. A positive development has taken place, and that is liking and preference for self reliance and indigenization of military equipment. In my youth when I entered the job market, many seniors who were senior retired EME officers lamented of military's preference for the imported, for stated and unstated reasons. May be the local skills in 1970s were not up to the mark. There is a change now since 1970s, a positive preference for the local. Self reliance and indigenization itself is a meritorious task, additionally, it saves money in the form of lower production costs, saves foreign exchange, boosts local vendor industry and has a multiplier effect for the local economy. It boosts military preparedness and reduces reliance on foreign suppliers who may at times be black mailing.

We must thank our Chinese friends for their support and cooperation in this respect. Partly credit also goes to Dr. A.Q. Khan who proved in the 1970s that even nuclear weapons could be made locally, albeit with some imported componentary, which is normal even in the developed countries. Trend of third party electronics has also played a role. But most importantly it is the change in mind, where the toughest battle has to be fought.

In the long run, only social sector development and better living conditions can be a bulwark against Indian hegemony and political power. Nuclear weapons are a mid-term solution only, for Soviet Union could not be saved from dismemberment despite its capability to destroy the whole world many times over (including the US). We would face the same predicament unless reform is introduced, strategies adjusted and right priorities established. This is the theme that would be repeated in this book "ad-nauseum" as the issue is so grave and vital for our survival.

If we continue to under spend in education and health as we do, much less than any other country in South Asia, then it would directly and indirectly affect our military capability in a highly negative manner. It would bring down quality of military manpower and push the country into such backwardness that it would be difficult for it to survive politically. It would create a polity so much out of tune with the world that that it would be difficult to live in harmony with the world system, a tendency that has already set in, in the form of extremism and terrorism, and the "conspiracy theories syndrome".

Conclusion

I would conclude this introduction by two rather stark observations; one regarding Pakistan and the other regarding South Asia as a whole and would elaborate these themes later in respective chapters.

Military and civil development should grow proportionally. One sector should not grow at the expense of the other, and certainly not the military. Strong militaries can be managed by strong and organized states and governments. Disproportion is a catastrophe. I would like to quote here from Percival Spear, who wrote in Oxford History of Modern India (1965);

“An undisciplined state possessing disciplined troops may have far more anarchic possibilities than one resting solely upon a complex system of personal loyalties, as the fate of the Sikh Kingdom showed. A group of chiefs broke up within ten years a powerful kingdom through lack of inner cohesion and the existence of a fine military machine only made the collapse more violent and complete”.

Are we moving towards a nuclear conflict?

It was expected and speculated that after becoming nuclear weapon state the two countries would bring in necessary changes in their societies and in the mutual relationship, and that dialogue and negotiations would replace confrontation. This has not happened. Pakistan has not improved its governance and has been mired into a cycle of rather unmanageable problems of extremism and internal terrorism. The latter often spills beyond borders. Erroneous proxy wars were encouraged which have boomeranged. India instead of cooperating with Pakistan in dealing with this menace is reportedly fuelling the fire and accentuating the problems by various means. It appears that in both the countries, intelligence agencies and entrenched war-mongers are running the show in place of enlightened political leadership. Poverty and hunger in both the countries is not on decline, in the wake of continuing massive diversion of resources to military pursuits.

In nutshell, nothing has been done on the two sides to make adjustments with nuclear realities. It is business as usual and conventional. In the meantime at least twice the two countries have reportedly been dissuaded from going to the brink of war. On both the sides, the two countries are

ruled by rather insensitive elite hardened by daily observance of abject poverty, who would not be averse to sacrifice 10-20,000 lives on each side of the border. There is a significant chance that a conventional war will inevitably escalate to a nuclear catastrophe.

Recent statements of Indian military leadership indicate they are planning for a nuclear entanglement of sorts, instead of contributing to a robust deterrence regime. Robust deterrence is perceived to work against India (reducing options) and in favor of smaller Pakistan (nullifying the power advantage of the adversary). Diluting deterrence by opening a nuclear window is one of the newest degeneration that has started to plague this unfortunate part of the world. Perhaps it is only from the debris of nuclear destruction, that the two countries would change their confrontational attitudes and policies. Soviet system melted away into a more stable order, peacefully and with discipline. Such opportunity would not be available in South Asia. A nuclear conflict in the next two decades does not seem impossible.

2 Pakistan must grow and develop fast enough or else?

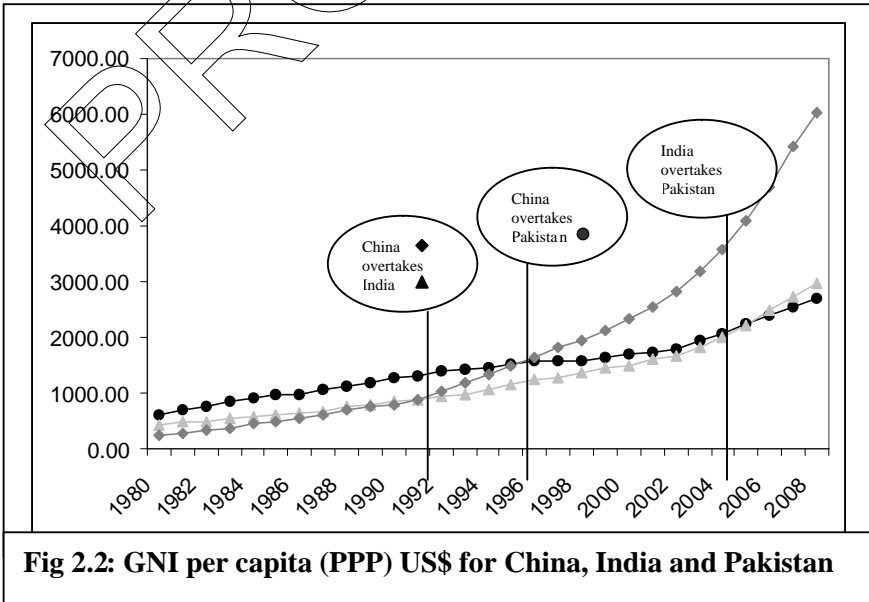
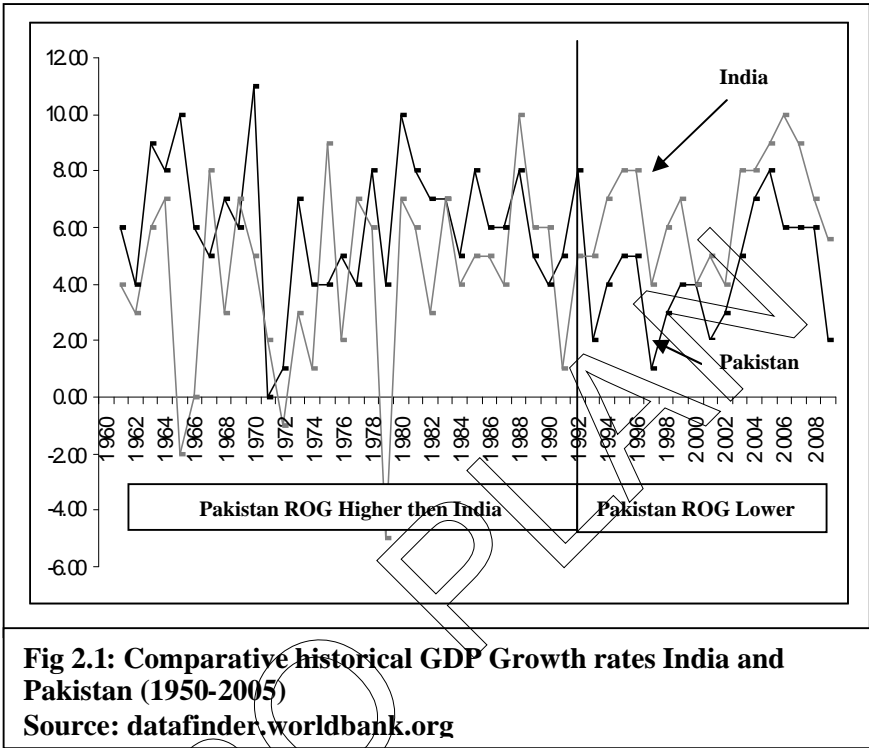
Pakistan's Long Term Economic Prospects

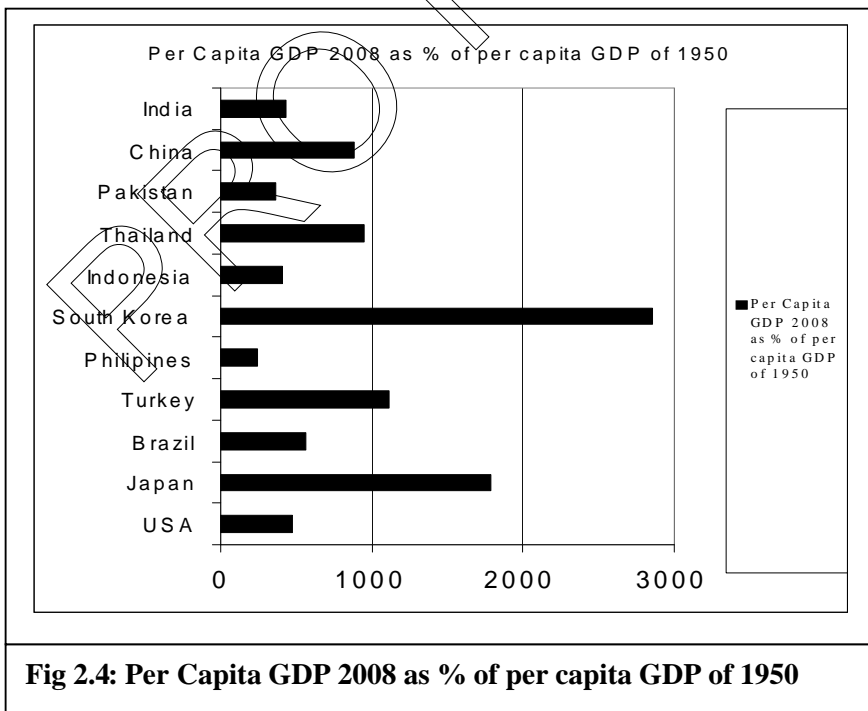
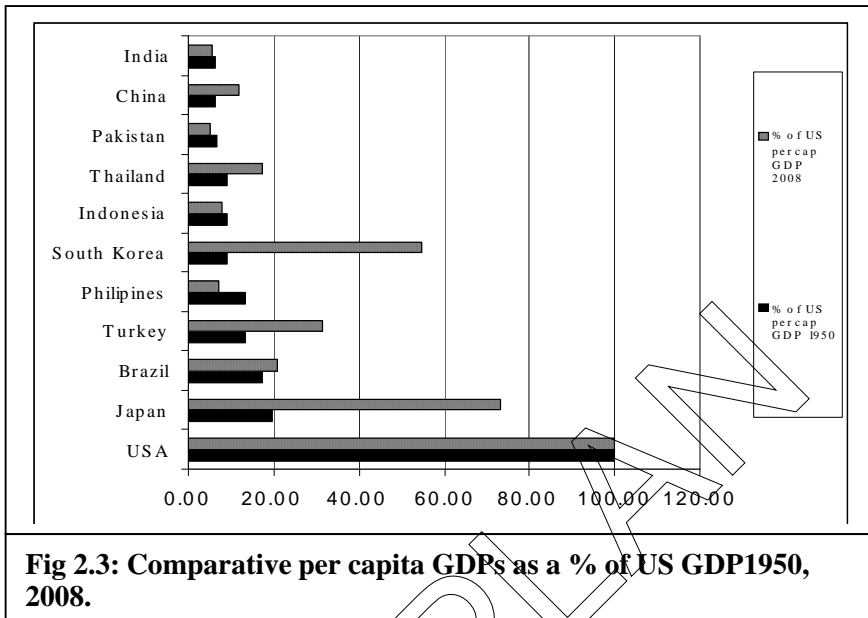
Pakistan is slipping out of the race and competition. It started with a 10% higher per capita GDP in 1950. It performed much better than India in the early days and continued to be better off than India till 2005. While Pakistan pursued in the 1960 a more open and outward looking economic policy regime, India suffered due to its inward looking closed economic policies, perhaps for building a technological base. Jury is still out on the question whether India then pursued the right policy. India was not an economically praiseworthy country till the 1980s, as it is today. It used to be viewed as a sluggish and poor state and a slow growth rate was often termed as "The Hindu growth rate".

Things have changed since then. India overtook Pakistan in HDI ranking as it did in per capita income. Its HDI ranking (2008) is 134 vis-à-vis Pakistan's 141. Pakistan used to be 3 points higher than India in 1992, with a ranking of 132. India gradually started building its human resource base by investing more in education and health, and has now acquired an investment rate in these sectors that is considered adequate for developing countries. India has started reopening dividends of its investment in social sector. Its GDP growth rate over the last several years has been in excess of 7% p.a. Indian society internally is also more at peace with itself than it used to be, perhaps an accumulated effect of sustained democracy, pluralism and libertarian policies.

In Pakistan, the cumulative effect of military dictatorships' high military expenditures and low investments is also showing rather brazenly in education and health. The long term forecast for Pakistan is not optimistic if not altogether pessimistic as discussed in Goldman Sachs report (elsewhere in the book), based on its recent economic performance and political trends. Polarization, deteriorating law and order, falling productivity and deteriorating physical infrastructure are the results. There are no magic solutions and quick fixes. We are today in a kind of

Fire-fighting mode, what to talk of growth and development, trying to save what we already have.





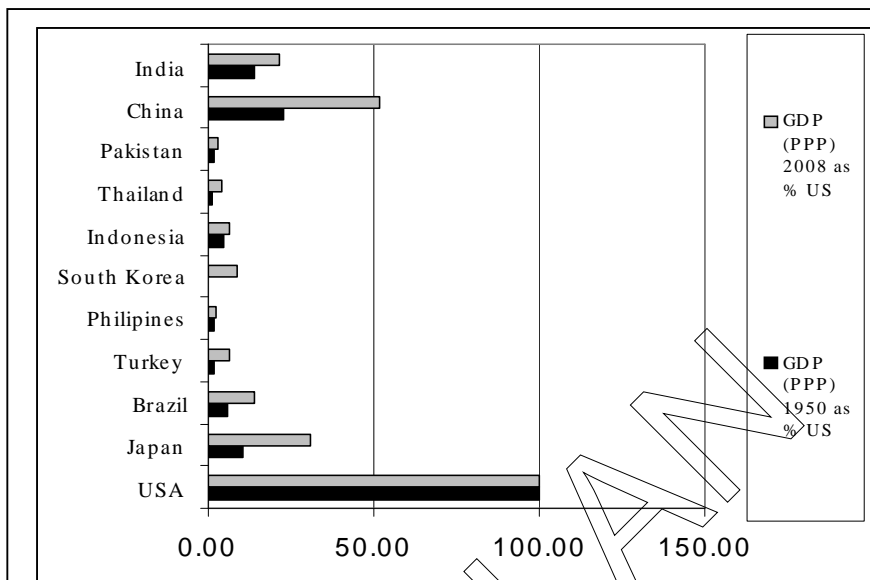


Fig 2.5: Comparative sizes of the economies as compared to US in the years 1950, 2008.

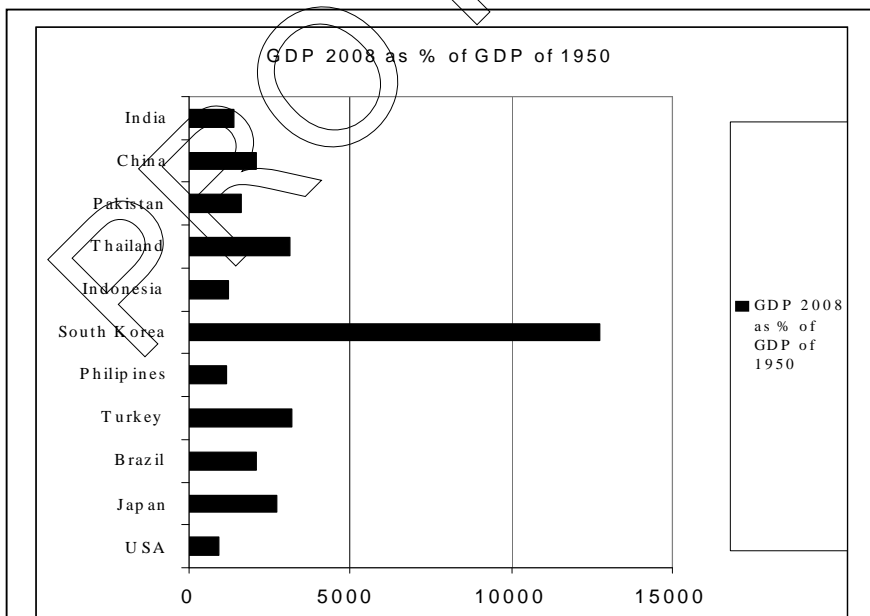


Fig 2.6: Comparative Growth of GDPs of Selected countries vis-à-vis USA

PRO PLAN

Table 2.1: Comparative performance of economy's and demography (1950-2008) and projections thereof

Countries	Per Capita GDP 1950 PPP US dollars 1	% of USA	GDP (PPP) 1950 (Mn USD)	% of USA	Per Capita GDP (PPP) 2008 US dollars	% of USA	GDP (PPP) 2008 (Bn SD) 3	% of USA	GDP 2008 as % of GDP of 1950	Per Capita GDP 2008 as % of per capita GDP of 1950	Population 2008 (as a % of population 1950)
USA	9573	100.00	1,510,744	100.00	45800	100.00	13,780	100	912	478	191
Japan	1873	19.57	156,630	10.37	33500	73.14	4,272	31.00	2727	1789	152
Brazil	1673	17.48	90,300	5.98	9500	20.74	1,894	13.74	2097	568	352
Turkey	1299	13.57	27,031	1.79	14500	31.66	854	6.20	3159	1116	342
Philippines	1293	13.51	25,855	1.71	3200	6.99	300	2.18	1160	247	455
South Korea	876	9.15	9,474	0.63	25000	54.59	1,206	8.75	12730	2854	453
Indonesia	874	9.13	69,516	4.60	3600	7.86	843	6.12	1213	412	295
Thailand	848	8.86	16,643	1.10	8000	17.47	521	3.78	3130	943	332
Pakistan	650	6.79	25,778	1.71	2400	5.24	412	2.99	1598	369	415
China	614	6.41	340,623	22.53	5400	11.79	7,099	51.52	2084	879	238
India	597	6.24	213,464	14.13	2600	5.68	2,966	21.52	1389	436	316
Srilanka	-	-	-	-	4000	8.73	82	0.60	-	-	280
Malaysia	-	0	-	-	14500	31.66	361	2.62	-	-	406

Source: ¹ Nation Master, ² www.Photius.com, ³ www.wikipedia.com/IMF, Complied by the author

Pakistan's development challenges

Table 2.2: Short term economic outlook (2008-2010)

Country	GDP (PPP) Billion USD 2008	GDP as % of World 2008	GDP as % of USA 2008	GDP ROG % P.A.			GDP per capita (PPP)	Population 2008 (thousand)	Population 2008 (as a % of population 1950)
				2008	2009	2010			
USA	14264	20	100	0.40	-2.50	2.70	46400	301139	191
EU	15247	21	106	0.60	-3.90	1.00	32700	499000	
China	7916	11	55	9.60	8.70	10.00	6500	1321851	20336
India	3288	4	23	7.30	5.60	7.70	3100	1129866	36447
Japan	4354	6.2	30	-1.20	-5.30	1.70	32600	127433	152
Korea	1342	1.9	9	2.20	-1.00	3.60	27700	49044	453
Indonesia	908	1.3	6	6.10	4.00	4.80	4000	234693	295
Turkey	915	1.3	6		-6.50	3.70	11200	71158	342
Pakistan	440	0.6	3	2.00	2.00	3.00	2600	164741	415
World	69743	100					10500		

Source: IMF

However there are positive signs emerging with the new democracy, revival of judiciary (although it may be advised to be slightly less puritan), dilute its obsession with political leaders and focus on grass root judicial issues and the way the two main stream political parties have cooperated with each other in the larger national interest. There are claims by both the sides that they have learnt their lessons, and proving that they have. If the same is learnt by the military and the latter is ready to sustain and support these trends. There is scope for optimism. It is still not too late. There are much strengths in Pakistan and its people, and a lot of people and nations in the world would not like us to go down.

Ironically large populations, when some improvement in its productivity and quality is made, are appearing to be more an asset than a liability. The large domestic markets, scale economics and ability to develop technology and exports, higher political leverage given to the populous countries are perhaps showing their impact. Consequently Nigeria, Bangladesh and Indonesia, not model countries at all, are also being forecast to be among the top 20 economies of the world in 2050, excluding Pakistan. Tides can change, if we start to do what others have done. Investment and focus on human development, low military expenditure, political consensus. Millennium Development Goals (MDGs) are an appropriate framework for target setting. There is consensus and international support behind them. Let us energize MDG process, before others lose hope and it is too late.

Musharraf Regime - What went wrong?

There is no denying the fact that economy grew fast under the Musharraf regime; GDP growth rate of 7%, doubling per capita income; exports tripled, but imports quadrupled, enhancing trade deficit /current account deficit at a record high of 14 billion US\$. Import bill increased by 9 billion US\$ in one year from 2006-2007 to 2007-08. Only in the initial years 2001-2003/4, current account deficit remained under control and in fact there was a current account surplus of 1.035 billion US\$ in these years. Trouble started well within the deep middle years of Musharraf period, when trade deficit/ current account balance started growing. This was much before the commodity/ oil price crises. Much of it could be traced to lower growth in Pakistan's exports, especially in the textile sector, and rising import bill due to a liberal trade regime policy.

Pakistan's economy literally collapsed under the load of widening trade gap, which had the following sources:

Pakistan's development challenges

1. Extraordinary commodity and energy import prices.
2. Heavy dependence on imported oil, due to lack of development of local energy sources and other commodities.
3. Rising imports due to liberal trade regime, with low tariffs and unrestricted imports.
4. Poor export performance of textile sector which was blamed on high input prices and bottlenecks in energy sector.
5. Poor export performance of other manufacturing sectors

One-third of Pakistan's electric power comes from oil/ thermal sources and there is an increasing trend of installing more oil based power plants due to lack of alternatives in the short term. There are indigenous energy sources like Thar Coal that could have been developed, which the Musharraf regime totally overlooked.

We have shown elsewhere that energy sector received a short shrift from the previous government, be it policy neglect, underinvestment or sheer apathy and lack of responsibility. There are three simple indicators supporting this assertion:

1. The entire sector of gas and electricity had a negative growth and the sectoral share of electricity and gas dropped from 3.7% in 1997-2000, at the beginning of Musharraf regime to 1.6% in 2007-08, at the end of his regime.
2. Pakistan's per capita electricity and energy consumption which used to be higher than that of India started coming down since 2005 and became lower than that of India. This is as per World Bank published figures.

Following were the key elements of the strategy of economic management of the last regime;

- Creating consumer demand especially in construction, automobiles and durables and consequently energizing the selected sectors.
- Liberal trade regime as a consequence of which exports grew, but imports grew faster, creating trade gap and balance of payment problems, currency devaluation and reserves depletion.
- Adapting soft paths depending on risky and sensitive resources such as portfolio investments, FDI and income from privatization.

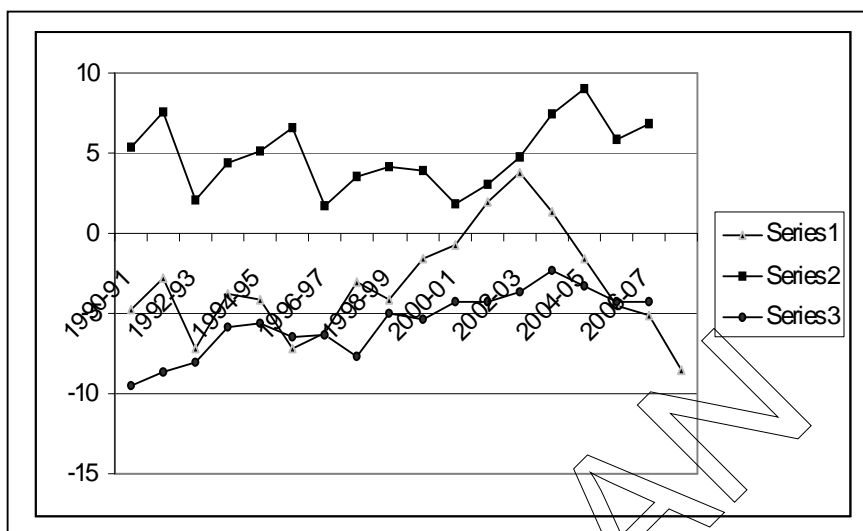
- Perhaps as a consequence of consumer led growth, adequate energy investments i.e. oil and gas production and power plants were either not made and that too created dependence on oil imports. Local energy options like Thar Coal were not developed despite opportunity and scope as has been discussed elsewhere.

From the data on world economies, it appears that some budgetary deficit and trade deficit is beneficial for economies and is a feature of all successful and growing economies. Trade surpluses are an exception. China and Saudi Arabia are obvious cases; also the natural resources exporting countries have large trade surplus. German surplus has more to do with German traits of frugality, prudence and stability, otherwise they might have been better off without a trade surplus; and similarly Japan. Otherwise, all other countries have trade deficit and current account deficit (CAD) of up to 4-5%. The current account deficit in Pakistan is 8.5% of GDP of 2008 is rather unmanageable and unaffordable. Bulk of the trade deficit has traditionally been financed by worker's remittances, which cannot grow with the growth of economy, imports and deficit.

Table 2.3: Fiscal and Trade Deficit 1991-2008

Years	Current Account Deficit	GDP ROG	Fiscal Deficit
1990-91	-4.8	5.4	-9.5
1991-92	-2.8	7.6	-8.7
1992-93	-7.2	2.1	-8.1
1993-94	-3.8	4.4	-5.9
1994-95	-4.1	5.1	-5.6
1995-96	-7.2	6.6	-6.5
1996-97	-6.2	1.7	-6.4
1997-98	-3.1	3.5	-7.7
1998-99	-4.1	4.2	-5
1999-00	-1.6	3.9	-5.4
2000-01	-0.7	1.8	-4.3
2001-02	1.9	3.1	-4.3
2002-03	3.8	4.7	-3.7
2003-04	1.3	7.5	-2.3
2004-05	-1.6	9	-3.3
2005-06	-4.5	5.8	-4.3
2006-07	-5.1	6.8	-4.3
2007-08	-8.5		

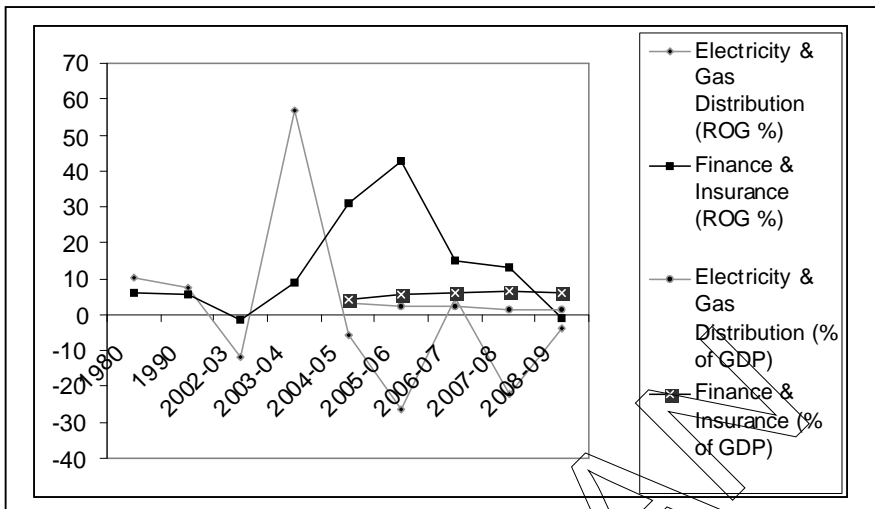
Source: Pakistan Economic Survey 2008



Pakistan will have to reduce its dependence on imported oil and develop indigenous resources. Except for oil rich exporting countries, almost nowhere there is so much dependence on imported oil even for power production as it is in Pakistan. Most power production of the world is based on domestic gas, coal and nuclear energy. In most countries, Oil dependence is generally for transport sector as IC engines are currently indispensable and there is no efficient technology choice.

Table 2.4: Growth Performance of Components of Gross National Product

	1980	1990	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Electricity & Gas Distribution (ROG %)	10.1	7.4	-12	56.8	-5.7	-26.6	4.7	-22	-3.7
Finance & Insurance (ROG %)	6	5.8	-1.3	9	30.8	42.9	14.9	12.9	-1.2
Electricity & Gas Distribution (% of GDP)					3.2	2.2	2.2	1.6	1.5
Finance & Insurance (% of GDP)					4	5.5	5.9	6.4	6.2



Why did not we develop or progress

Pakistan is a poor country both in terms of hidden and apparent resources. It needs international cooperation and support. Its socio-political environment cannot change overnight. It has to build gradually on democratic footing. It has racial, ethnic and religious divisions, which have to be gently handled and taken together. From the very beginning, it had to face a grossly unequal neighbor, not very happy with its creation. It inherited no resources or infrastructure. Its population, both local and those coming from India, suffered the prejudice, hostility and unfair treatment from its colonial masters and fellow majority citizens, in the wake of its several hundred years of 'majestic Muslim rule' over India and the mutiny of 1857, spearheaded by Muslim zealots and others alike. Unfortunately, a section of Muslims is still repeating the same un-ending conflict, without a plan, ideology, a sense of result or output. Non-chalance about costs and penalties, on themselves and on their fellows is a marked trait. Is a Sir Syed around in the offing? An explanation has to be made and a solution offered for revival and salvation of the country.

It is very difficult to explain why a nation, people or country develops or does not develop. What is the meaning of development; is it per capita income, possession of military power, possession of nuclear weapons or is it amassment of industries, plants and consumer goods like the oil rich Arab states; is it the tiny high per capita income countries like UAE, Qatar, Kuwait and Bahrain? And why is Argentina not developed, despite hope and expectations, spread over the twentieth century for its

crossing the barrier? It has been on the verge of it and remains on the verge. Portugal in the heart of Europe is almost an under-developed country and economy, despite earlier quests of the discovery of the world by its citizen groups like Vasco De Gama and Columbus. Countries in the South of Europe like Turkey, Greece and Bulgaria are less developed. Mexico, a stone's throw away from Texas and California is under developed or less developed. Japan without resources, small island with extra eastern values and militaristic past is developed and its more resourceful neighbors less well developed. China is developing at a super fast rate and may surpass the production levels of USA, Germany and Japan in many fields, if not living standards.

Why does India stagnate being so close to China, geographically, having comparable human and material resources, despite democracy and continuity and despite their willingness to ape and copy Western culture, with wine, women and all that goes with it? Why was East Germany the most advanced amongst communist countries and West Germany most advanced in Western Europe? Why is France stagnating now, after centuries of cultural progress? Why could not Egypt progress despite having heavy French cultural input and intervention in the 19th century? Why is Israel an almost developed country and its compatriots in Palestine, groping and suffering? The Lebanese, Christian or Muslims with comparable cultural milieu as that of Israel, do not go beyond a small trading and tourist country, thriving only on Arab market of customers and clients. Why did not Bangladesh improve its lot, despite having separated from Pakistan? Where did their initial zeal and sense of purpose, unity and coherence go?

The Pakistanis who thrive on their historical baggage of Tipu Sultan, Salahuddin Ayubi, Jabir Bin Hayyan, Ibne Khaldun, Rumi and Shirazi, seem dejected. The Iranis with the Shah and then the Islamic revolution are also going down. Similar is the fate of Turkey with the legacy of Ataturk. Where is the common thread or explanation for development or lack of it? The paradoxes are unending. Chinese are developing and growing at double-digit growth rate despite massive corruption and mixed up communist legacy. Sri Lanka with one of the highest literacy rates and high human development rankings continues to stagnate and there are no signs of it joining the list of developed countries. Neither is there any improvement in its domestic violent conflict, except for the accidental death of the separatist rebellious leaders.

Quebec separated from Canada despite a very liberal constitution and special deal with the federation, rejoined and is normally ambivalent. This same ambivalence is found in Nigeria amongst its many provinces, with grave underdevelopment and poverty, despite huge oil resources production and income. Australians used their resources to build an industrial economy, while the same could not be done by Iran and Iraq, despite, the Shah, Saddam Hussain and Khomeini. It is not absolutely essential to nurse grandeur and grand objectives of becoming a great and powerful nation, of conquering and subduing one's neighbors. In South Asia, this disease is not on one side of the border; across the border, they want to be one of the world's six powers despite having hundreds of millions of people living in hunger and extreme poverty.

It may not be a small objective or achievement if in two or three decades, we are able to provide a reasonably decent living to the bulk of our people; a hundred percent education, clean drinking water, sanitation, livable and affordable housing and adequate health system. Let us enrich that slogan or dream, as espoused by late Zulfikar Ali Bhutto, Roti, Kapra and Makan (Food, clothing and shelter), and add to it education and health. Time passes by. When I was a boy, I used to think that in two to three decades, these objectives would be achieved. Ironically, now that I am much older, I am hoping and arguing that the same may be achieved in the next two to three decades. Will it happen? Unfortunately or fortunately, I will not be there to see the success or failure.

There is an existential point of view also. Out of 150 plus countries, some 30 countries of OECD are having a good time, although not without issues and problems. Another 10 may join them eventually in the coming decades. The rest would keep suffering and enjoying their distasteful livings, some more, some less, amidst corrupt politicians, insensitive and lazy bureaucrats and 'peaceful' armies. The march may continue, till the present civilization is gone through slow climatic change or cataclysmic destruction. Most people, of all religions and persuasions, believe that doomsday is near. Why bother! Most of these countries are not going to go anywhere. They would continue to stagnate; some may perfume their broth and others may stink.

World has been trudging along; there have been a few rich and powerful and all others have been weak and poor. This will not change. Unfortunately the support and demand of elitist security agenda does not so loudly come from the elite, it is the loudest from the poor and lower middle classes, who are at the bottom of the rung, and ultimately may

pay directly and indirectly for the marches and campaigns. It is they who directly suffer from lack of public finance in education, health and excess of the same elsewhere. Liberals are most likely to be found among the rich elite than the poor masses.

Conspiracy Theories

The conspiracy theory starts in this fashion. "Pakistan is a very resourceful country; external powers do not let it develop its resources. We are located very strategically. If we develop, we can become one of the greatest powers on earth and be able to compete and show teeth to the USA, attack India, get Kashmir back and wave Pakistani flag on Lal Qila in India". Across the border, Pakistan is conceived as lackey of Western powers, and having been created by British colonial machinations. They claim that Pakistan has always been conspiring with foreign powers like USA to bring them in the region. It is also said that, whenever the US leaves the region due to temporary lack of interest and reason, there is chill and cold on Pakistani establishment and start wondering as to how they would survive. They may be partly true for Pakistani civil and military elite is so much weaned on American resources, aid and trips. Nobody believes that the Western imperialist powers are against Pakistan. Even Z. A. Bhutto, while welcoming French interest and aid, reminded of Tipu Sultan's invitation to French. Strategically speaking, there is a lot of sense in Pakistan's long term policy of welcoming and luring the Western interest and intervention in the area, in the classical game of balancing the power equation. This is understandable, but not by zealots and super-patriots.

Pakistan has been surviving on aid from Western countries and USA. There is a perennial foreign exchange deficit problem. We have almost proved elsewhere that Pakistan is an almost resource less country, neither physical nor human. It cannot afford to harbor enmity with international powers, and no prospect for militarily engaging India, despite its nuclear capability, although nuclear weapons have provided much needed minimal deterrence. But, based on these weapons, no aggressive foreign policy can be launched or sustained. Without correcting the basic assumptions that foster jingoism and unrealistic perceptions of power and potential, no possible break-through can possibly be made towards growth and development.

Is Pakistan a Resource Rich Country?

The popular myth is that Pakistan is a very resourceful country, and that the foreign powers and their local agents do not let us exploit our resource potential. An alternate religious version is that if we build a true Islamic state, the Earth will bring out its hidden gold and the like. In my childhood days, there was a myth that the Shah of Iran did not permit us oil exploration, fearing that its oil may flow down to Pakistan, little did we know that Iranian oil is mostly concentrated on its Southwestern frontier bordering Arab countries. As a continuation of these myths, Baloch nationalists have nursed the same fallacies. They dream of huge resources which they would be able to effortlessly benefit from, but for the Punjab 'Samraj', which does not let us enjoy these benefits.

The painful and plain truth is that the bogey of richness in natural resources in Pakistan and even Baluchistan is far fetched and unrealistic. Here and there are some resources, some discovered and some yet to be. There is nothing on world scale. There are four components of natural resources; land, water, minerals and natural gas. Land area of Pakistan is very small and unevenly populated. Saudi Arabia, Iran and even Ethiopia have land area that is twice that of Pakistan; 50% of the land area is occupied by less than 10% Baloch population, which is blocking the entry of everyone to it, for good and bad reasons. Rainfall is extremely low, much less than the average of India, with resultant reliance on rivers, amidst increasing threats of Indian and Afghan withdrawal from common river resources.

Except for low grade copper, and zinc nothing worthwhile has been discovered. Whatever Oil and Gas was discovered is going to be finished in a decade or two. Only Thar Coal resources are there of which exploitation we have been postponing for one reason or the other. The Saindak copper project has been a begging bowl. Government of Pakistan kept on losing money, and somehow managed to convince Chinese to run it and get back their investments, which they are doing. Where are those resources? And let me tell you, as do a lot of wise and learned people, these mineral resources are being seen as a mere 'curse' than a blessing, as we see the fate of most of such countries in the Middle East, Africa and South America. Poverty has not gone away from Iran, Iraq or Saudi Arabia, not to talk of the poor and "resourceful" countries of Africa like Niger, Congo, and Zaire etc. Resources or perception of these have invited coup, colonialism, war and strife. Oil rich Iraq and

Nigeria are under threat of breakup. Nigeria was partitioned but got united again.

Kurds of Kurdistan are on the verge of separation. In Pakistan, some Baloch nationalists have built their dreams on the myth of over blown natural resources. On the other hand, the resource rich Europe, US, and Australia have built their societies based on an integrated combination of technology and resources. They have not relied on exports of mineral resources. They have benefited from these internally. Similarly Baloch and Balochistan have a future within a united Pakistan and outside Pakistan; it is only a 'basti' of impoverished people. Having said that let me add that our treatment of Baloch and Balochistan has not been fair, to say the least. One after the other, military actions and campaigns have been perpetrated on them both by democratic and as well as dictatorial regimes. Less than the required attention has been given to them on their economic and social development. Why cannot (twenty brothers) be able to help one brother (5%) of the population? They have been short changed on Gas Royalties. The murder of Sardar Akbar Bugti is one such mistake. The new leaders in Pakistan, elected and non- elected, in government or out of government are sorry. They have formally apologized. A package has been announced. Let us have a new beginning, a new start, a new morning.

Lack of Resources; Some Evidence

Per capita Land availability in Pakistan is one of the lowest (5 sq kms per 1000 people), only better than some of the densest countries in the world like Japan, Israel, Sri Lanka and Bangladesh. One finds Pakistan in the company of dense European countries like Germany, UK, Switzerland and Italy, but unfortunately for bad reasons. Real land rich countries are Australia (378 sq. kms), Canada (282sq. kms), Russia (114sq. kms), Saudi Arabia (80 sq. kms), Norway (60 sq. kms), Sudan (60 sq. kms), USA (30 sq. kms), Iran (24 sq. kms), Even Egypt, Malaysia and Turkey have higher per capita land resources in the range of 11-13 sq. kms per 1000 persons. Pakistan's land availability is really unfortunately meager.

The land distribution is skewed like 10% of population lives in 50% of total area of Baluchistan, which is blocked due to political reasons and difficulties. Even Saudi Arabia has more forest cover (27,260 sq.kms) than in Pakistan (18,134 sq.km), almost equal to Sri Lankan figure.

As to the fresh water availability, Pakistan's rank is 105th with 2961 cubic meter per capita, is not a very distinguished company of countries like Niger, Afghanistan and Congo, who have even slightly more water than the US. The real resourceful countries are which are also water rich with 50,000 cubic meter of water per capita which includes countries in descending order from French Guinea (812,121 CuM), Congo (275.67CuM), Norway (5,478 Cu M), Liberia, Bolivia, Peru and Brazil at the bottom of the water rich list countries. Even Japan, Turkey and Iraq have 50% more water than Pakistan in per capita terms. India has fresh water availability of 1880 Cum. India is one of the top countries in terms of rainfall, with annual precipitation equal to 2168 mm followed by Japan (1406mm), USA (1201 mm), Turkey (697mm). Pakistan has one of the lowest rainfalls, with 218 mm, only better than Kuwait, UAE, Qatar and Djibouti, which world average is of 963mm. Energy consumption is not very high by international standards, 60-65 million tons of Oil equivalent and 375 kW per capita. Two thirds of energy consumption only is being met from local sources; one-third of the demand is being imported. More than 30% of energy consumption is of Oil and 47% is met by natural gas. As to the oil and gas resources, one knows that there is always shortage of both oil and gas.

Despite low energy consumption, energy supplies are not sufficient. Gas resources are dwindling, while oil production was meager anyway, meeting 5% of the total energy demand. Realistic forecasts and predictions about the future of oil and gas discoveries are not optimistic. Some of the wildest projections put oil potential at 22 billion barrels and of gas to be 282 TCF, which is nowhere near oil and gas resources of Iran and Saudi Arabia or Iraq.

Where Do We Go From Here

Having established that Pakistan is not such a resourceful country as it is popularly perceived, where do we go from here? Having lesser resources, does not mean that we cannot progress or develop. Most South Asian countries like Malaysia, South Korea and Japan developed without much physical resources. Yes, it would have been better had we more land and water and a bit more Oil and Gas, just for one's needs.

There are always some resources to start with, and we have that much. We will have to prioritize. All things and everything cannot be initiated and accomplished at the same time. Our weakest point is education and health. By any world standard, or yardstick, we are one of the lowest in

this area. This is a slow suicide in the long run. If we continue like this, and do not improve our education, and do not save and invest in education and in health, no amount of physical resources can come to our rescue. Let us not find solace in Dr Qadeer Khan or Dr Saleemuzzaman or Dr Abdul Salam and think that we are marvelous. Instead of marveling on one in a million episode, let us try to educate and improve millions who are not literate, millions who do not and cannot afford to go to schools, and still more millions who drop out before even completing primary school. Those who manage to continue, get a poor education in schools which lack basic facilities of teachers, rooms and desks. It is better to divert one's own resources to education to improve the outreach and quality of education from other elitist pursuits of power and false notions of national glory. You cannot pursue multi-agendas at the same time, educate and engage in un-necessary fights, in Kargil and the Siachen heights. For multi-point agendas, external assistance is required, which is what successive governments have been doing. Education and health do not have powerful conditions or supporters. Whichever choices have to be made, education and health get a short shift.

Without reducing the political and security profile, and postponing the elitist and fancy programs, and shunning meaningless and aggressive political agenda, budgets cannot be balanced and priority sectors of education and health cannot be provided the requisite resources. One had only hoped that with acquisition of nuclear deterrent, we would reduce the expenditure on conventional defense. Unfortunately this has not happened. And now ever more resources are required to meet 'The Taliban Menace'. One would not argue for any major reduction in military expenditure at this stage, but would ask and expect that economy and cost effectiveness be brought in the defense sector as long term pursuit and objective. It is fortunate that Pakistan has managed to reduce expenditure in relative terms. Last year only 15% of the budget went into defense, while in 1980's this percentage used to be 30- 36%. We will discuss the subject in more detail separately.

The choice to be North Korea or South Korea

If one studies the post World War two growth trends, Japan picked up speed in 1950 and grew at the rate of around 10% p.a., increased its GDP real growth rate by 2 % and per capita income up to 74% in Services sector%. In 1970s, Japan slowed down (5%) comparatively due to saturation and was replaced by South Korea which grew at a 10% p.a.

and increased its GDP by 39.4% in Industry 5% (2207) in GDP real growth and per capita income upto \$28000 in 2008.

In the 1980s, China started growing, after shunning communism and we are already witnessing the “Chinese Miracle”. Chinese economy has grown at more than 10 % pa and its GDP real growth rate a whopping, consistent 9% and per capita income in industry at 48.8% in industry and 40.5% in services sector by the year 2008. By that logic and history, it appears from the recent Indian recent economic growth, that India is poised to grow in the tradition of Japan, South Korea and China. And that the recent trend is going to be sustainable, as many economic models have suggested (Price Water House, Goldman Sachs and Carnegie Endowment). While world economy has contracted and most countries have posted negative growth, India's growth rate has dropped only marginally, (5.6% from 7.3% in previous year) and is projected to again grow at 7.70% in 2010 and China to grow at 10% pa.

It used to be said that when China was stagnating in 1950-1980, and India was registering poor growth rates of 2-3% in 1970s up to 1980s that large countries cannot grow fast due to inertia. Chinese and Indian growth has belied that assumption or perception. Even more, Europe is being projected to insignificance due to negative population growth and ageing. Even China is expected to slow down, due to largely slower population growth eventually due to one –child policy. India is projected to grow, as the population growth continues. Largely due to dynamic immigration policy, the US is projected to continue growing without any plateau arriving.

The next new comer is projected to be the populous Indonesia. It is becoming very clear that population is no more a liability but is rather an asset, provided you are able to feed and educate the incoming workforce. In that case increasingly skilled and trained manpower in larger numbers is an essential input for high growth.

May be the classical population control theories still work for subsistence economies which cannot feed and educate and not for those who have crossed the threshold and have put their house together. India has done it by successively increasing its social sector investments over the last two decades which has now started giving fruits in the form of an increasingly expanding pool of skilled and trained manpower. Earlier China, South Korea and Japan have done the same and Europe did it during 1700s and 1800s.

Another factor contributing to growth has been cited as openness of economy to trade and investment, providing the economy cheaper inputs and much needed foreign exchange, bringing in foreign capital and technology. India suffered in 1950-1970s due to its rather closed economy and import substitution regime, while Pakistan followed more openness, enabling the latter to post much higher growth rates in 1960s. It appears that by the 1990s, India had put its house together and started bearing the fruits of democracy, sound economic policies, liberty and cohesion.

In Pakistan, the national cohesion was destroyed by the likes of General Ziaul Haq, general Musharraf and earlier generals Ayub Khan and Yahya Khan, who gifted us finally with a dismembered Pakistan. General Ziaul Haq gifted us with a discontented Sindh province, millions of displaced Afghan immigrants, weapons, narcotics, Talibans and Al-Qaeda. General Musharraf created unrest in Balochistan. I am not sure that vital lessons of history have been learnt by our military rulers. Two-thirds of the world is living under some kind of democracy, half of the world under better democracy and one-third in ideal democracy. In a multi-ethnic society, democracy is a necessity rather than being just desirable.

The current economic crisis of Pakistan has been largely contributed due to high oil prices and high dependence on oil. While one cannot blame high oil prices on Musharraf regime, high dependence on oil has been brought about and exacerbated by facile and wrong energy policies. Oil fired plants continue to be installed, while ignoring local Thar Coal, mishandling Chinese investors which offered reasonable terms for Thar Coal exploitation.

Pakistan is a much smaller country than India. It has somehow competed with India, politically and in the wake of better and higher economic performance than India, in earlier periods. It is vitally important for Pakistan to end its current social and economic malaise and start growing at 7% plus. Growing at 10% plus is not possible. It has been done earlier in Japan and South Korea and later by China. If Pakistan fails to grow at a suitable and comparable rate, the gap between India and Pakistan would become politically unsustainable and there would be serious challenges to its independence if it loses the next two or three decades. It will plunge into political and economic insignificance and may have to perform accept Indian hegemony.

Rising disparity in literacy, education and living standards would cause despair, dependency and the will to fight and be independent may taper off in an international environment, highly tilted in favor of India due to the new found economic status.

Pakistan must be better off in per capita terms than India, if it wants to survive politically. The challenge cannot be met by military dictatorships suffocating initiative, freedom and cohesion. The nation has to grow politically, socially and economically in a milieu which discourages monopoly, permits and encourage people to come forth with their energies and vitality in a market place which is encouraging, fair and supportive, unhindered by non-competitive forces and agents of stagnation and status quos. The choice is between becoming North Korea, famished and brandishing nuclear weapons or South Korea and Canada, with burgeoning democracies and economies.

ZA Bhutto's decade of 1970s was largely lost at the alter of socialization or fast-track social justice. The current democratic opportunity may be lost due to the fast-track "Judicial Puritanism", pre-occupied with vendetta with top political leaders, while the 1980s were lost due to the whims and intransigence of the two presidents which gave rise to transitional and short lived democratic governments.

The need of the hour is consensus and cohesion among military, bureaucracy, politicians, government and judiciary, so that the lost growth and years are retrieved and the march to the renewed economic progress is initiated. How can this consensus and cohesion be delivered is the subject of this book, wherein we outline steps and improvements required in various sectors of national life.

Global Historical Economic Development

Asia started with clear predominance (75% share of world output / GDP excluding Japan) in the first century AD; Larger chunk of Asian GDP was contributed by China and India, with India being ahead of China. Asian predominance in world output came down to only 15.4% in 1950. Western Europe started with a share of only 10.8%, and over the 2000 years increased to a level of 33% in 1913 and 24% in 1950. Western Europe started picking up in somewhere in the mid of 1000-1500, while the US started picking up between 1820 and 1870 and peaked at 27.3% of world output in 1950. Former USSR / Russia started with a share of 1.5% and peaked at 9.6% in 1950. Japan started with a share of 1.2% and peaked to 7.8% in 1973. Japanese growth between 1950 to 1973 was

what it could achieve in the whole previous period of 2000 years. Japan has grown and once peaked in 1700 with 4.1% share of world output, touched a floor of 2.3% in 1870, and then again started picking up.

Till the year 1700, India had a significant share in world output of 24.4%, almost equal to China, thereafter India started deteriorating fast and touched its abyss of 4.2% in 1950. While China continued to grow, with some down trends in year around 1700, but grew rather fast in the subsequent century peaking at 32.9% in the year 1820. Thereafter China started deteriorating steeply and come down to the bottom of 4.5% in 1950 and stagnated at that level in 1973, and started to rise again, almost triple its share in the next three decades. China and India remained dormant and mired with domestic issues in the period 1950-1973, and started growing thereafter.

Per Capita GDP

World started with identical economic conditions of subsistence economy at 400 US\$ per capita GDP at the advent of first millennium around year 1AD. For another thousand years, gross subsistence continued with stagnation at 400 US\$ per capita. Around 1500, things started changing, with a GDP of 771 US\$ of Western Europe, 600US\$ of China and 550US\$ of India. This actually means that India, China already had fallen behind by the year 1500 by 30% around those fateful years of 1500.

India continued to stagnate at that per capita level, and infact continued to decline and deteriorate from 1500 until 1857, where after the US colonizers started their building activities and transferred some of their technologies and governance of the modern system. In the meantime Europe including UK improved their per capita income by six times in the wake of colonization and subsequent industrial revolution.

Highest growth rate in GDP in the pre-industrial revolutions period ever achieved was 4-5% p.a. and was of the US around 1820, and corresponding rate for the some period was 20% in Europe. The growth rate of US economy again jumped to 5-6% level around 1950, when Europe had recently ended its wars. Europe's growth suffered by the far and dipped to a mere 1-2% around 1913. The whole world got affected, and the recession was contagious.

Economic growth in the postwar period: 1950 +

The most dramatic economic achievement in the post-war period (1950 – 2008) has been of Japan and South Korea. South Korea increased its GDP by 127 times and per capita GDP by 28 times, despite the highest population growth of 453 times in the same period.

Japanese miracle is slightly reduced, if 2008 is taken as terminal year as most of Japanese growth came in the period 1950-73 and tapered off in 1973-2008. Even then, Japanese enhanced their GDP by 27 times and per capita GDP by 18 times. Unlike South Korea, Japanese population growth in the same period was only 1.5 times; the lowest in the sample countries, and perhaps lowest in the OECD countries.

Pakistan's GDP grew by 16 times, while per capita GDP grew only by 3.6 times, due to a rather high population growth of 4.15 times in the same period (1950-2008). By comparison, India could increase its GDP by 13.89 times despite a lower population growth rate of 3.18 times, resulting in a higher per capita increase of 4.36 times. As a result India started with a rather low level of 597 US\$ per capita in 1950 as compared to 650 US\$ of Pakistan, but managed to get to a higher level of per capita in 2008 at 2600 US\$ (PPP) as compared to 2400 US\$(PPP) of Pakistan. This India's slightly higher per capita GDP has been due to lower population growth rate, than a higher relative increase in GDP.

Competing Models of World Economy Projections (2030-2050)

World Bank initiated the idea of “Big Five” in its Global Economic Outlook of 1997. Goldman Sachs, a few years later in 2003, developed their own projections and coined the term “BRICs – Brazil, Russia, India and China”, excluding Indonesia from the “Big five list”, which around that time was in deep economic trouble, but has since recovered. Price Water House came with its own projection in 2006, essentially with identical methodology, results and conclusion. Carnegie Endowment for International Peace (CEIP) did its own modeling in 2007 and came out with less optimistic and low growth forecast, but essentially the same conclusion.

In 1980s, the dominant view was that the world economy would be dominated by the US, Europe and Japan. The popular view now is of the triad of India, China and USA, and possibly EU. Russia and Japan have been dropped from the competitor list. Large populations with a

favorable capital-output ratio, under valued currencies and rising productivity, it is premised, would put China and India at the forefront of the world economies. Even when India would be equaling US economy in 2050, and China surpassing US GDP around the same time, their per capita GDPs would still be a fraction $1/5 - 1/10^{\text{th}}$ of the US. When would China be replaced by a new challenger or by India, in the view of its ultimate slowing down of population growth, coupled by the saturation factor, is not known. And when does India start tapering down or stagnate again is still less certain. And whether the extrapolations and continuity of trends would be sustainable over such long periods is also not clear.

Goldman Sach's growth projections are the most optimistic for India and China, forecasting 7.55-8.42% growth for India and 6.02-7.8% p.a. for China. Carnegie Endowment has two projections; one low growth rate scenario and another alternative scenario. Price Water House figures are an approximate average of the two Carnegie projections, although done independently. It appears that Price Water projections are more realistic, mid of the road and comprehensive. Besides these were done several years after Goldman Sach's work.

As per Price Water House (PWH) model, in the next forty years i.e. by 2050, China is projected to improve its GDP from a level of 55% of the US GDP to 143% of the US GDP; India improves from 23% to 100% of US's GDP. Japan loses from 30% to 23% of US's GDP; Korea from 9% to 8% of US GDP. Indonesia and Turkey also enhance their GDP; Indonesia from 4.6% to 19% and Turkey from 4.6% to 10% of the US GDP.

Pakistan's long-term growth

Due to commodity prices shocks, and law and order problems, Pakistan's GDP growth has suffered a down turn, from an impressive 7% p.a. in the previous years. The growth rate in the years 2008-2009 has remained at 2% p.a. IMF predicts 1% improvement per year in successive years, which means, the economy may be able to acquire its earlier momentum by the year 2113, returning to a GDP growth of 7% p.a. Our forecast of Pakistan's GDP for 2030-2050 is based on 7% p.a., with a hiatus in 2008-2012, with lower growth rates.

Conclusion

If we combine Angus-Maddison's historical construct of world economy (1-2000) and the Price Water House/ Goldman Sach / Carnegie models of economies 2050, following conclusion emerges.

1. The western civilization had a share of 20% of world economy in the years 500+ and peaked at around double that level (37%) in the wake of industrial revolution and colonialism, will largely maintain their share of 39% by the year 2050 and perhaps beyond, equally shared by Europe and the US.

2. Europe, India and China combined had a 75% + share of world economy in the period AD 500 +, with roughly equal shares (25% each). India and China lost their share of world economy of 50% in AD500+, to a bottom of 8-9% in the period (1930-1973). The two countries together are projected to recoup their earlier / classical share by 2050+. Three-fourth (75%) of the world economy would again be shared by EU/US, India and China as before (500 AD). The historical peaks and troughs of (1870-1973) would only remain as historical reminder.

3. How does Pakistan fit into this model, politically, is to be pondered over by Pakistani thinkers and intellectual. Barrister Aitezaz Ahsan has been quite successful in his intellectual construct of "Indus People", who have lived and survived at the periphery of Indian power, which has been largely in disarray throughout the period. Will "New India" be as confused and existential as it has been?

4. For the next fifty years, Pakistan has no option but to grow fast enough, faster than or at least equal to the comparable growth rates of India. It would be feasible, following the models and logic of the very modes that are projecting India to be an economic power.

5. The main assumption in these models is that continuity will be maintained without any hiccups or cataclysm. If India wants to achieve these cherished goals and targets, it would be in her own national interest to pursue policies of peace and reconciliation. There is a scope for an (efficient) Pakistan living side by side with (vibrant) India ala Canada vs US. That equation can develop gradually through cooperation by emphasizing commonalities and common interests.

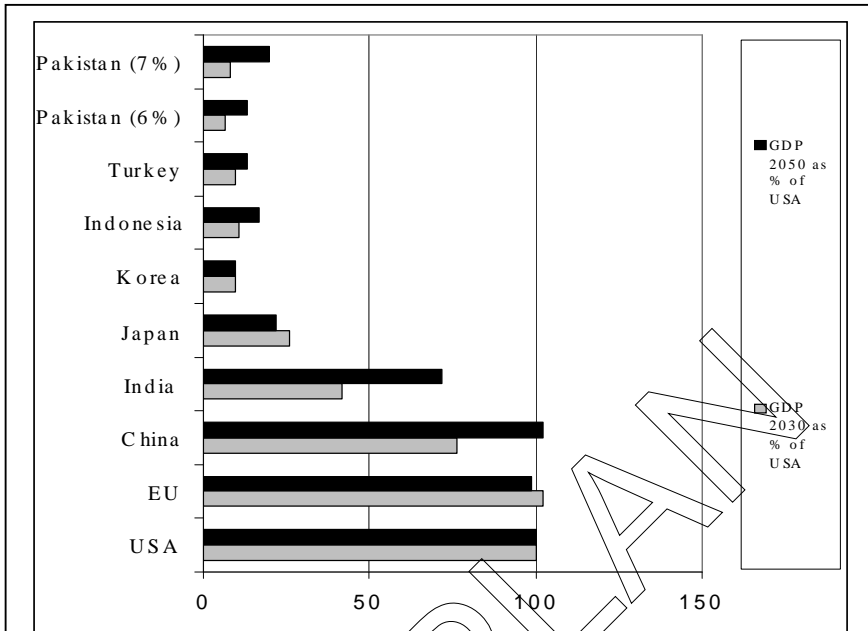


Fig 2.7: Comparative sizes of economies of countries in 2030, 2050 with US = 100

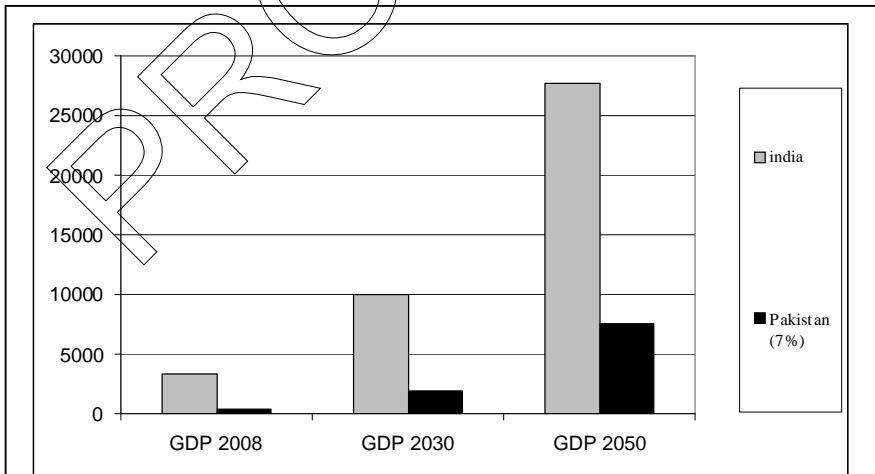


Fig 2.8: Comparative levels of economies of India (ROG 5.2%) and Pakistan (ROG 7%) for the years 2030-2050.

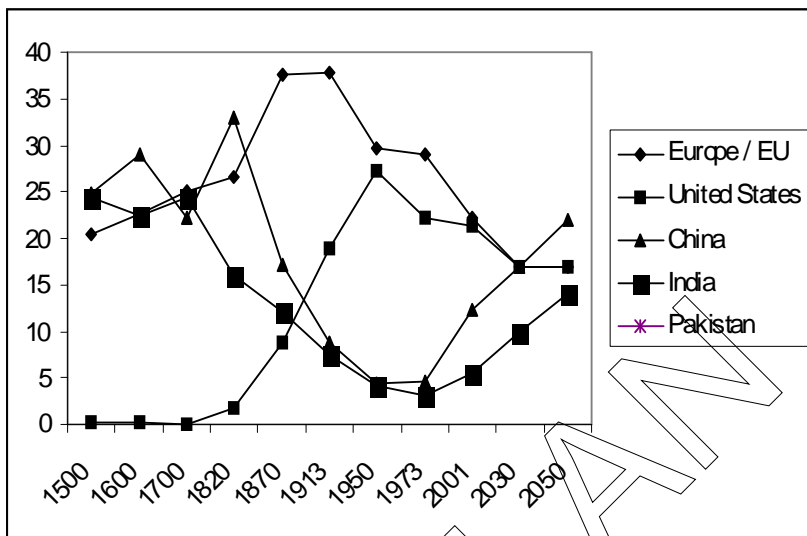


Fig 2.9: Share of World GDP, Selected Countries and Regional Totals, 1-2001 AD

Source: Same as Table ____ Curve made by the Author.

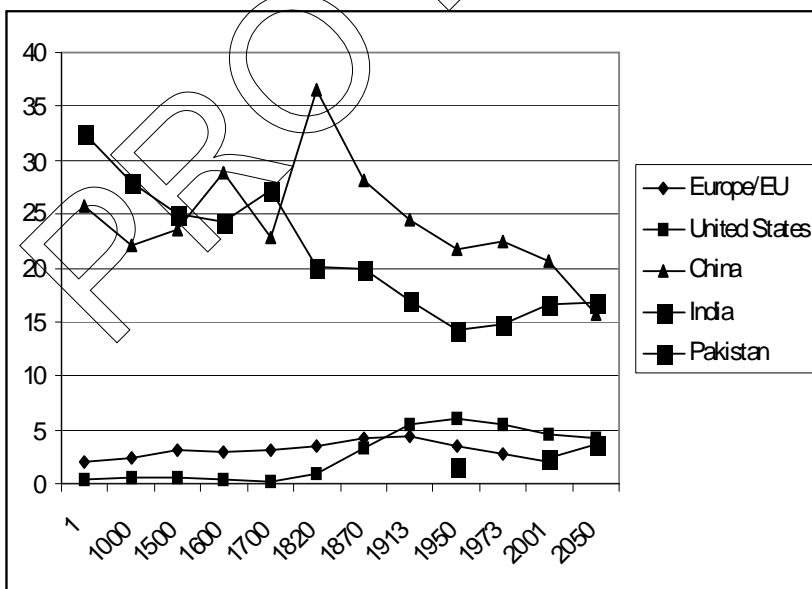


Fig 2.10: Share of World Population, Selected Countries and Regional Totals, 1-2001 AD

Source: Same as Table ____ Curve made by the Author.

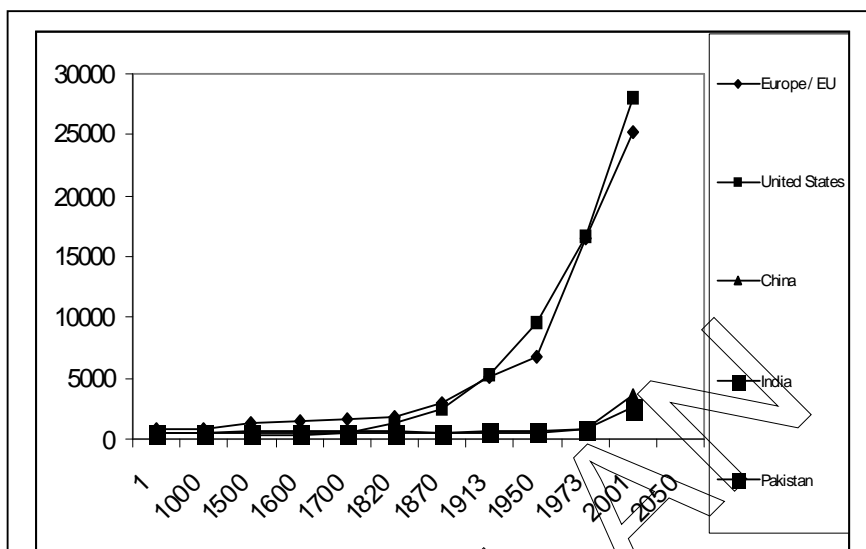


Fig 2.11: World per Capita GDP, Selected Countries and Regional Averages, 1-2001 AD

Source: Same as Table___ Curve made by the Author.

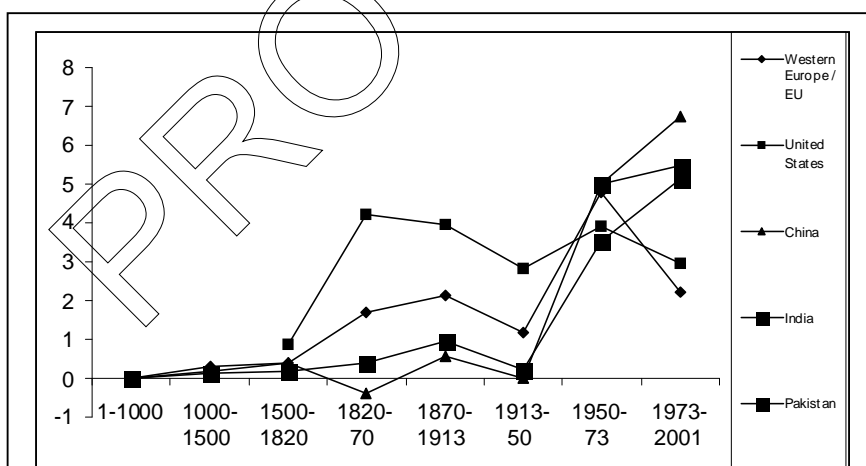


Fig 2.12: Rate of Growth of World GDP, Selected Countries and Regional Totals, 1-2001 AD

Source: Same as Table___ Curve made by the Author.

Table 2.5: Comparative Projections growth rates (GDP/PPP) 2030-2050: PW House, Goldman Sach & Carnegie & Endowment

Countries	Price Water House		Goldman Sach		Carnegie Endowment	
	ROG 2005-50	Popu. ROG	ROG 2030	ROG 2050	Low growth ROG	Alter Native ROG
USA	2.4	0.60	1.42	1.92	2.00	2.70
EU	2.2	0.10			1.50	2.00
PRC	3.9	-0.30	7.80	6.02	4.10	5.60
Japan	1.6	0.80	1.57	1.45	0.50	1.10
India	5.2	-0.10	7.55	8.42	4.30	5.90
Korea	2.4	0.60			1.60	2.50
Indonesia	4.8	0.70			3.30	4.80
Turkey	4.2				3.10	4.40
Brazil					2.80	4.10
World	2%					

Source: 1 Goldman Sachs, Global Economics Paper no. 99, Dreaming with BRICs: The Path to 2050, www.gs.com. 2003.
2 Price Water House The World in 2050, March 2006
3 Carnegie and Endowment for International Peace, Washington D.C. 2008

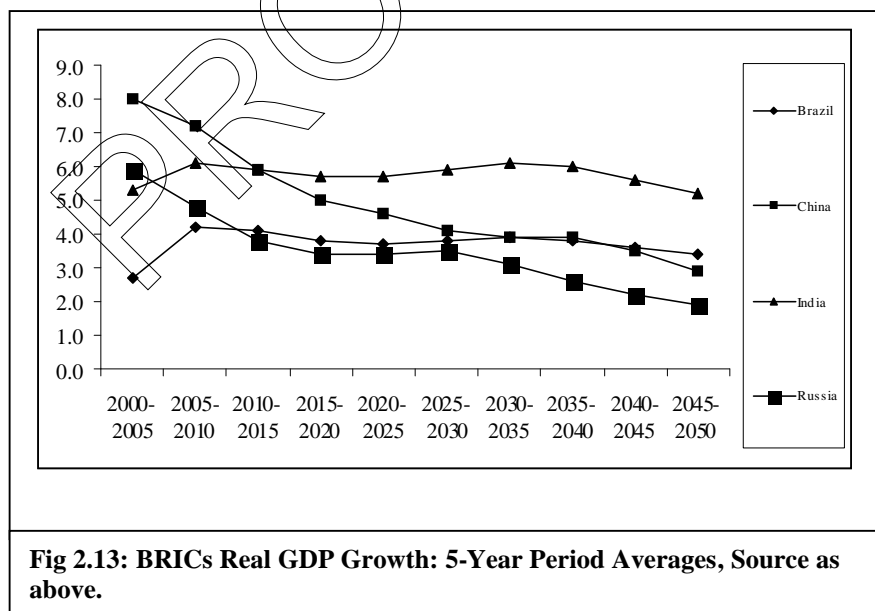


Fig 2.13: BRICs Real GDP Growth: 5-Year Period Averages, Source as above.

Table 2.6: Projected US\$GDP Per Capita: BRICs and OECD Countries

2003US\$

Years	BRICs				OECD		
	Brazil	China	India	Russia	Japan	US	Europe/ EU
2000	4,338	854	468	2,675	32,960	34,797	
2005	2,512	1,324	559	3,718	34,744	39,552	
2010	3,417	2,233	804	5,948	36,172	42,926	
2015	4,664	3,428	1,149	8,736	38,626	45,835	
2020	6,302	4,965	1,622	12,527	42,359	48,849	
2025	7,781	7,051	2,331	16,652	46,391	52,450	
2030	9,823	9,809	3,473	22,427	49,944	57,263	
2035	12,682	13,434	5,327	28,749	52,313	63,017	
2040	16,370	18,209	8,124	35,314	55,721	69,431	
2045	20,926	24,192	12,046	42,081	60,454	76,228	
2050	26,592	31,357	17,366	49,646	66,805	83,710	

Source: Goldman Sachs, Global Economics Paper no. 99, dreaming with BRICs: The Path to 2050, www.gs.com. 2003.

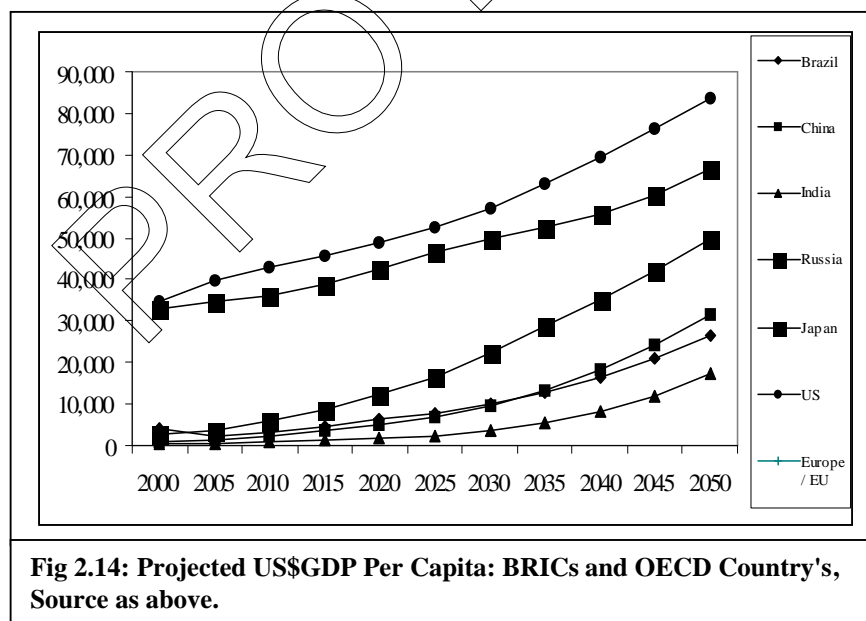


Table 2.7: Projected Growth rate of per capita GDP for selected countries (ERS Model 2010-30)

Countries	% per annum					
	2005	2010	2015	2020	2025	2030
World	2.18	0.96	2.36	2.47	2.71	2.99
United States	2.13	1.50	1.72	1.74	1.78	1.92
Europe	1.70	0.13	2.09	1.91	1.88	1.93
China	9.77	7.78	7.07	7.02	7.26	7.44
India	6.76	5.03	6.28	5.63	5.76	5.89
Pakistan	6.50	0.94	3.92	4.00	4.08	4.18

Note: These are milestone values for every fifth year. Data for intermediate years has been omitted due to lack of space.

Source: ERS International Macroeconomic Data Set

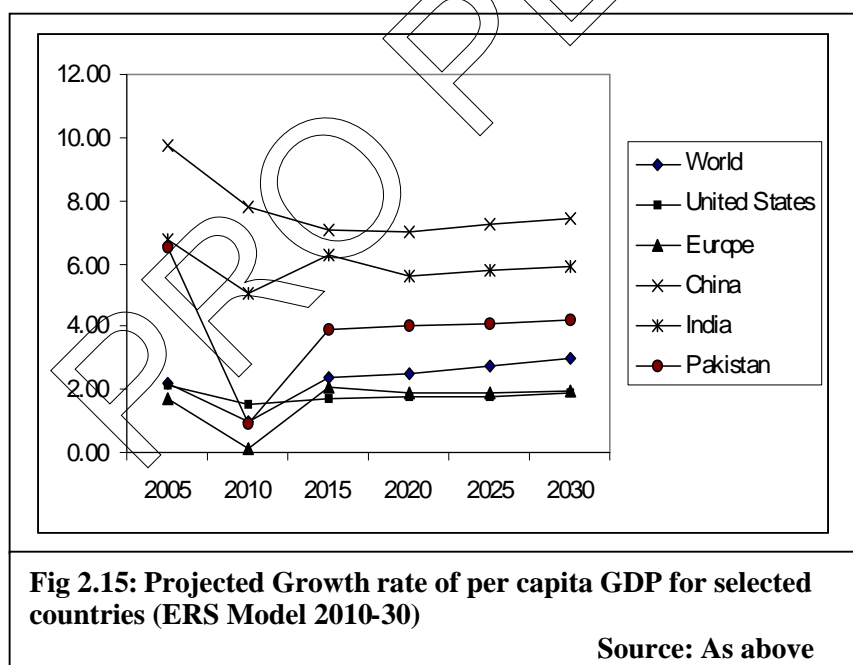


Table 2.8: GDP, Populations, Areas and other parameters for top 40 countries.

Rank	Countries	GDP (PPP)	Population	Area	Population Density	GDP per unit area
		Mn US\$	Persons	1000 Sqkm	Pers/Sqkm	M\$/Sqkm
3	Japan	4,354,550	127,288,416	375	339.44	11.61
7	UK	2,176,263	60,943,912	242	251.83	8.99
5	Germany	2,925,220	82,369,552	350	235.34	8.36
10	Italy	1,840,902	58,145,320	294	197.77	6.26
8	France	2,112,426	61,037,510	546	111.79	3.87
12	Spain	1,456,103	40,491,052	499	81.14	2.92
19	Poland	671,927	38,500,696	305	126.23	2.20
49	Bangladesh	213,514	0	134	0.00	1.59
1	USA	14,204,322	303,824,640	9631	31.55	1.47
15	Turkey	1,028,897	71,892,808	771	93.25	1.33
28	Malaysia	383,709	25,274,132	329	76.82	1.17
4	India	3,388,473	1,147,995,904	3288	349.15	1.03
23	Thailand	519,049	65,493,296	512	127.92	1.01
40	Norway	277,275	0	308	0.00	0.90
31	Sweden	344,712	0	411	0.00	0.84
2	China	7,903,235	1,330,044,544	9597	138.59	0.82
11	Mexico	1,541,584	109,955,400	1923	57.18	0.80
26	Pakistan	439,036	172,800,048	779	221.82	0.56
17	Iran	839,438	65,875,224	1648	39.97	0.51
16	Indonesia	907,264	237,512,352	1919	123.77	0.47
21	Saudi Arabia	589,531	28,146,656	1961	14.35	0.30
9	Brazil	1,976,632	196,342,592	8512	23.07	0.23
22	Argentina	571,537	40,482,000	2734	14.81	0.21
6	Russia	2,288,446	140,702,096	17075	8.24	0.13
14	Canada	1,213,991	33,212,696	9985	3.33	0.12
18	Australia	762,559	21,007,310	7687	2.73	0.10
	World			148,940	0.00	0.00

Source: World Bank Development Indicators

Table 2.9: Projected economies of selected countries 2050 based on Price Water House model (updated)

Countries	GDP ROG	GDP 2050	GDP 2050 as % of world	GDP 2050 as % of USA	Per Capita GDP 2050	Population 2050 (000)	Population 2050 as % of World
USA	2.4	38622	24	100	87976	439010	4.93
EU	2.2	38030	24	98	79482	478466	5.38
China	3.9	39478	25	102	30281	1303723	14.65
India	5.2	27643	17	72	16687	1656554	18.61
Japan	1.6	8481	5	22	84387	100496	1.13
Korea	2.4	3634	2	9	77271	47026	0.53
Indonesia	4.8	6505	4	17	20782	313021	3.52
Turkey	4.2	5151	3	13	51020	100955	1.13
Pakistan (6%)	6	5085	3	13	15690	324093	3.64
Pakistan (7%)	7	1195692	746	3096	3689348	324093	3.64
World	2	160217	100	415	18002	8900000	100.00

Note: GDP Growth rates have been taken from Price Water House model 2006, with GDP level of 2008 as provided by IMF. Population projections have been taken from US Census Bureau. Pakistan's growth rates have been assumed by the Author and have not been provided Price Water House model

Source: Price Water House, the World in 2050, March 2006

Pakistan's development challenges

Table 2.10: Share of World GDP, Selected Countries and Regional Totals, 1-2001 AD

Countries	1500	1600	1700	1820	1870	1913	1950	1973	2001	2030	2050
France	4.4	4.7	5.3	5.1	6.5	5.3	4.1	4.3	3.4		
Germany	3.3	3.8	3.7	3.9	6.5	8.7	5	5.9	4.1		
United Kingdom	1.1	1.8	2.9	5.2	9	8.2	6.5	4.2	3.2		
Europe / EU	20.5	22.6	25	26.6	37.5	37.9	29.7	29	22.3	17	17
United States	0.3	0.2	0.1	1.8	8.8	18.9	27.3	22.1	21.4	17	17
Japan	3.1	2.9	4.1	3	2.3	2.6	3	7.8	7.1		
China	24.9	29	22.3	32.9	17.1	8.8	4.5	4.6	12.3	17	22
India	24.4	22.4	24.4	16	12.1	7.5	4.2	3.1	5.4	10	14
Pakistan											
Total World	100	100	100	100	100	100	100	100	100	100	100

Source: The World Economy, 1–2001 AD, Angus-Medison,

Table 2.11: Rate of Growth of World GDP, Selected Countries and Regional Totals, 1-2001 AD

Countries	1-1000	1000-1500	1500-1820	1820-70	1870-1913	1913-50	1950-73	1973-2001
France			0.37	1.43	1.63	1.15	5.05	2.2
Germany			0.37	2	2.81	0.3	5.68	1.75
United Kingdom			0.8	2.05	1.9	1.19	2.93	2.08
Western Europe / EU	-0.01	0.29	0.4	1.68	2.11	1.19	4.79	2.21
United States			0.86	4.2	3.94	2.84	3.93	2.94
Japan	0.1	0.18	0.31	0.41	2.44	2.21	9.29	2.71
China	0	0.17	0.41	-0.37	0.56	-0.02	5.02	6.72
India	0	0.12	0.19	0.38	0.97	0.23	3.54	5.12
Pakistan							5	5.5
World	0.01	0.15	0.32	0.93	2.11	1.82	4.9	3.05

Source: The World Economy, 1–2001 AD, Angus-Maddison

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PROPLAN

3 Promoting Economic Growth and Development

There is misplaced hue and cry in the media that the new government has not been able to do anything in the last eighteen months and thus a conclusion is made by some commentators that it sets a trend and that nothing would possibly be done by the current dispensation. The threat is that the political government may come under such a pressure that it may start bringing in half baked policies and solutions and start tinkering with smooth running of established policies. We would examine as to what can be possibly done by the new government in the economic arena in the short run, which is the theme of this piece.

This hue and cry is not new. Unfortunately the system tolerates long spells of military led governments and becomes intolerant with the short spelled civilian and democratic governments; either it is the high expectations in the wake of elections wherein promises are made or the problems and difficulties of people have reached an unbearable level or it is both. It is sincerely hoped that it is too early for the undemocratic and invisible forces to start their destabilising game. Most pressing and urgent problem of food and energy inflation is largely imported. Almost all countries are suffering from these issues, except the oil rich nations. No governments headed by Nobel Prize holders, could have done anything about it, at least in the short run. It is simplistic to blame either the previous government or the current ones for these woes.

The days of revolutions and revolutionary policies are over. Many developing countries have played the politics of revolution without success. The name of the game today is continuity, stability and endurance in government policies; flexibility, involvement of the stake holders, fast track implementation mechanisms are the additional required features. Revolutionary policies have not delivered in the past. Look at what late Z. A. Bhutto's nationalization of industries and banks achieved. The Musharraf government started with jailing prominent industrialists and sending sentries to shop keepers for tax and bill collection. They activated the National Accountability Bureau (NAB) and ended up with the National Reconciliation Ordinance (NRO).

There are always new problems and new solutions in changing perspectives of international politics, technology and trade. The new government does not have to search for problems; these are well known, and are pressing ones. Even the solutions have long been debated and quite a few are in our national intellectual basket. The main problems are law and order, food shortages and high prices, energy demand, dwindling social sector, trade imbalance and shortage of revenue, poor housing and infrastructure.

It is being feared by many, that law and order situation may not improve in the foreseeable future. Poverty, underdevelopment, indefinite postponement of reforms in the Tribal Belt, the Afghan Jihad legacy, inexpedient expediencies of big powers in not solving the Middle East and Kashmir issues, convenient export of dissident and revolutionary/militant manpower from Arab countries to this region are the determinants of the problem. If Americans are not persuaded by our national leaders that peaceful options be pursued and if they intensify direct attacks and incursion on Pakistan territory, the problem may become even more complex. Is there a larger game? We are not short of conspiracy theorists who argue that 9/11 was an American conspiracy and that Americans are in for larger strategic goals including oil and minerals.

There is a myth among many Pakistanis that Pakistan is a resource rich country. It may not be liked by our patriots and my compatriots but the reality is that it is not. Resource rich countries are Iran, Iraq, Saudi Arabia, Nigeria, and Indonesia besides Europe and the USA and some Latin American countries. We are short of water and short of land, coupled with burgeoning populations. Half of the area falls in Balochistan which is mostly inaccessible for a variety of reasons. Ninety five per cent of the country's population is cramped in the remaining 50% land mass. Most minerals are of low grade and concentration e.g., Iron and Copper. The copper mine at Saindak has been a financial liability. One can bring forth many cases of resource poverty. It is useful to creatively investigate and contest these myths, for it would help us in truly understanding our country's problems and creating a political environment with consensus that may enable the government to pursue realistic policies, goals and initiatives, domestically and abroad, in political and economic arena.

Much of the population is poor and illiterate estranged with its governments and elite. It is divided in tribes, sects, ethnicity and

mythical folklore. Local government can not take action against traffic violations and land grabbers lest it may have ethnic fall out. Dams cannot be built because there is a zero sum game and mistrust among provinces. Where is the nation which the super patriots want to push against India and now even America .This is the perspective that must be borne in mind while dealing or commenting on the problems of governance and development in Pakistan.

Let us now see as to what is possible and feasible in the economic field. Assuming that law and order does not improve, one should not count much on direct foreign investment and export led growth. DFI may continue to flow in telecom and energy. Attention should therefore be paid on mobilising local investment for import substitution in industry, agriculture and other sectors. Budgetary resource gap and its allocation need special attention. Budget deficit has traditionally hovered around 7% of GNP. The deficit is met through internal and external borrowing which contributes to inflation and foreign dependence; the latter is of tremendous consequence to national sovereignty.

There is an upper limit on increasing the revenue. Most of it is indirect. Excessive extraction from existing tax payers may be counter productive. The only feasible option appears to be reducing the non-productive expenditure which constitutes 40% of the budget. Military expenditure and administrative expenses are the two major items thereof. In the current internal security environment, a reduction in these items appears to be impractical. However, this has been a long term problem for Pakistan's economy. The internal security situation has in major part developed because, for a long time disproportionate resources have been diverted to these items, away from vitally needed investments in social sector.

It is a vicious cycle, more military and police, more repression, more poverty and more estrangement and alienation. This has now acquired the dimension of militancy and terrorism. Recruits from a poor, unhealthy and illiterate populace would contribute to deterioration in performance and productivity. However such reductions in expenditure are easier said than done. The problem is that some people, especially the right wing wants education, health, prosperity along with a high agenda on Kashmir and fighting with India, all at the same time. It is not possible. One would have to prioritise; high political agenda or improvement in the lives of people. Ironically the poor masses are also for strong political agenda. Consequently the masses, having less power

for resource extraction, get a short shrift in terms of allocation in social sector. It is quite apparent that business as usual cannot go on for a long time now. On the other hand, an arbitrary cut in the short term by the legislature is neither possible nor advisable. A systematic approach and dialogue ought to be initiated with the stake holders.

Retired military leaders have often indicated that a 25% reduction is feasible without compromising defence effectiveness. A few percentage point reduction in real terms per year may be able to achieve this target in 3-5 years. One would also feel the need of strategic and doctrinal adjustments and restructuring in the wake of nuclearization and missile development. Roman or Raj army styles are wasteful and anachronistic and do not match with the requirements of an age compounded with the complexities of a nuclear milieu and fertile terrorism. Without creativity and innovation, nuclear weapons will be adding additional burden on conventional defence, as it appears to be happening already. Many believed that it would happen otherwise.

On macro economic policy front, consensus policies on tariff and taxation ought to continue in its present shape. Some reforms should be considered in the banking sector. Banking sector seems to have out grown disproportionately in the past years. Banks have earned profits of 40%. This surplus should not be permitted to continue; either government should siphon it off through taxation or some kind of interest rate control should be introduced. The banking spread (difference between average borrowing and lending rates) is much too high; 6-8% as compared to 2% in the US and 3% in Europe. Prices in developing countries such as ours are not determined by pure competition, the latter being there only for labour. (Infact with labour, the dice is loaded the other way round; more supply less demand, and thus unduly low wages. There are natural and informal cartels which operate; the invisible hand of monopolists and cartelists and not of market and pure competition. Partly high interest rates are due to excessive salaries of the banking executives, who seem to have conspired with the bank owners. Why the banks should be allowed to earn 40% return on equity. This must be cut down, decreasing the interest rates. The non performing loans are due to their own lending policies of pushing consumer finance to unsustainable limits.

Reform is in order in the micro finance sector. A number of unscrupulous micro finance banks have started operating. They are the bankers of the poor, but lend at excessive rates, sometimes 22-25% p.a. It

is difficult for a poor borrower to pay these rates. These banks are reportedly hiring goondas (strong men), who harass and even kidnap and torture these poor borrowers, sometimes reportedly in the premises of these banks or in the hide-outs of the collection agencies run by the goondas or retired police and military personnel. Government should introduce cheap and subsidised finance through its own banks thus phasing out these so called micro finance banks or put some lid on their practices resulting in cheaper and controlled rates through cheaper credit lines. Market is never fair in this country; food prices, cement and sugar cartels etc are the living example.

A lot can be done in agriculture. The country and the sector is not short of ideas and solutions. There is even consensus on many ideas. But a lot depends on government in this respect, which normally fails to deliver, be it credit or extension, and others. A lot can be achieved if government can bring the house in order. Having been associated with Harvard in the past for some time, I would like to disbelieve that Harvard Economists advised GOP in 1960's not to pay much attention to wheat and agriculture as it could be more efficiently produced in the US and imported from there. Fortunately the advice was not taken. However some traces of this simplistic advice remained in our successive policies which did not give the required attention and support to agriculture. It is said that a growth of more than 4% p.a. is required in agriculture, to feed the burgeoning population and enhance the currently prevailing low national nutrition levels.

The growth in agriculture has been erratic and depended on vagaries of weather. Much agricultural output is attributed to increase in area under cultivation and other inputs, and not to increase in productivity. There is an upper limit to increase in area under cultivation and in other inputs. Agriculture growth should be steady at 4% and should come out of increase in productivity. Neither production nor productivity could increase. Why, the answer is long. But a few things could be done without waiting for miracles. Fortunately, there is consensus on fair price approach to growers. Output increases in food crops can only be sustained if fair prices are guaranteed to the farmer. There is an upper limit in this respect as well. Part of the agricultural profitability should come from rise in productivity. This would result by the intervention of the government in agricultural credit; research and extension, improvement of the relevant institutions, bringing into play the market forces and reform in research in agriculture universities and in agricultural extension. There is a plethora of advice of past commission

reports that should be seen, analysed and implemented. Achieving self sufficiency in cooking oil and food grains should be our main objective in agricultural policy. An agricultural task force should be formed to help achieve these objectives and realistic but tough targets be given to the relevant officials along with monitoring of performance and achievements.

Agriculture is suffering and would suffer more in future due to water scarcity. Water problem, apart from being intimately associated with agriculture, is an independent problem on its own. Our supply of fresh water resources is 1415 cubic meters/year per capita as compared to 91419 cubic meters/year of Canada and 6459 cubic meters/year of Thailand. Water shortage would increase world wide, if not managed and controlled properly, by national governments. Too much water is wasted by industry, agriculture, commerce and household. Water conservation and its efficient use would improve agriculture, living standards and hygiene.

Sprinkling and drip irrigation has a lot of potential, which government should promote than to continue to rely on flood irrigation. A lot of international research and advice is available to be implemented. There is an annual water conference, which has generated a lot of advice. This should be read, analysed and put into practice where feasible. Water recycling, waste water management, small and dispersed water storage, saline agriculture etc are the areas which need special attention. Water wastage in urban areas would release a lot of useful water for the poor, hygiene and sanitation. Leakages and excessive flows at the household and municipal level are important culprits. A water conservation project or agency should be created, but not just a sign board.

In agriculture, initiatives are also required in areas other than grains and crops. Milk, dairy and meat could further rural prosperity significantly. There is a proposal (not mine) pending for quite some time now; allotting one acre rural land and loaning two buffaloes/ cows to the landless peasant families. This would provide both food and shelter and job to the landless unemployed peasants, enhancing milk and meat output. There cannot be a better multi targeted intervention. End of patwari culture, a cherished goal of all successive administrations, must be pursued.

Institutional measures such as modernisation of land records and associated legal procedural changes would dilute patwari power and machinations. Only if our security establishment could be persuaded,

GIS system could revolutionise not only the land record system but the whole agricultural statistical, planning and forecasting system through integration of GIS and satellite imagery. A way could be found out to mitigate the security concerns. Frankly all data management may have security implications. A thoroughly isolated village is the most secure but would one want it.

Drinking water in urban and rural areas needs much attention. There is marked deterioration in urban areas, and there is no system at all in rural areas for safe drinking water supply. A project had been launched by the previous government which has faded away due to the usual corrupt practices. A continuous program and activity in this respect is in order.

If peoples' lot is to be improved, investment and attention is required in social sector, namely education, health and sanitation. In this case again, the policy frame work is available in the form of MDGs (Millennium Development Goals), to which Pakistan and other developing countries are committed. Pakistan is already lagging behind the schedule in these. An affirmation and commitment to MDGs should be announced as a first step. Projects and programs should be developed for achieving MDGs. The sector is plagued by thorough corruption. It would appear simplistic to suggest that corruption be weeded out totally. However, one would expect that some success can be achieved towards curtailing excessive and flagrant cases. A task force, comprising of public representatives, independent professionals, and stake-holders should be formed for monitoring the progress in every section of MDGs. All of this requires money and resource allocation, which has been discussed else where.

Musharraf regime diverted disproportionately large resources to higher education. The excessive funding has naturally resulted in all kinds of fancy and supercilious projects. Immediate corrective measures are required. Much starved primary and secondary education should receive the kind of attention and resources it deserves. Already Pakistan ranks too low in human development indices, in "good" company with Mali, Chad and Zaire, although not very far below than India. The empowerment or betterment of the poor can come only through education, at least at the primary level.

In Sindh, primary education is the worst victim; apart from resource issues worst kind of habitual blatant corruption and economic, administrative mis-management has taken its toll resulting in extremely

poor quality, output and coverage, not to name the proverbial “ghost” schools and teachers.

Energy sector has been the biggest victim of Musharraf regime in action, delays and under posturing. Kalabagh dam was pushed hard enough, but in vain, as political consensus could not be granted. It is said that the crisis was created to woo support for Kalabagh Dam. Ironically Musharraf invited Chinese assistance on Thar in his very early years. A Chinese firm invested considerable time and effort in studying and developing a viable proposal and offered to sell electricity from Thar Coal at 6.5 cents. The offer was not accepted. Thar and hydel power are the only hopes for supply of much needed electrical power; hydel in the North and coal in the South. Although there are technical problems with Thar Coal, these are not insurmountable. Associated issues of infrastructure development must be handled by the provincial and federal government. Thar coal development has also been a victim of parochial and sub-nationalist themes along with those who are looking forward to reap undue gains; hence too much tussle on control.

The PPP government has done well to have made the Thar Coal Authority to safeguard the interest of Sindh; adequate royalty and mandatory social development of the area, which are already in vogue, would be taken care of. If private sector and international companies are shy, it would be a good idea to develop infrastructure and launch a 200 MW public sector project under WAPDA with Chinese assistance. It is a preposterous idea to import coal and invest in a jetty costing 200 million dollars or so. We already know that the government is not able to pay either in local or foreign currency the legitimate dues of WAPDA and IPPS and also that the foreign currency resources are being exhausted. While negotiating energy contracts with IPPS, local or foreign, one should bear in mind that the energy prices would continue to increase, as the fossil fuels are being exhausted world wide.

Pricing coal or other fossil commodity based on landed prices or international prices may be very dangerous. For a change, let us have same thing for comparative advantage. While anything else is expensive, let there be cheap electricity from Thar Coal. A cost plus pricing formula may be more appropriate in this respect. Present government should aim at 2000 MW of coal power during their tenure to be reached by 2012. There are many hydel options both small and large other than Kalabagh. Private power should be encouraged in small Hydel sector.

Industrial land and housing land is an essential input both for individuals and as well as industry and commerce. Urban land and real estate has become unaffordably expensive, resulting in housing shortage, congestion and higher cost of doing business having negative influence on exports, land and infrastructure development. A great housing scheme conceived by Nawaz Government was brought down due to political reasons and perhaps corruption as well. The idea of utilizing unused public land and passing it to the housing projects of the poor and lower middle class was a good one. A similar scheme with appropriate reform should be revived. As reported by Senator Taj Haider, Shaheed Benazir had a dream of giving way one plot of land to every single poor family in the country, and to be leased in the name of the woman of the house, thereby achieving two cherished goals in one step. I am sure PPP government should be actively considering this. Apart from subsidized schemes, even a normal land development and supply should bring the land prices down.

Industrial land especially in Karachi is still dearer. Industrialists owning land in industrial estates prefer to indulge in real estate activities than installing industries there. Most industrial estates are fully allotted and over subscribed. Hub and Nooriabad have literally fled into oblivion for a variety of reasons. SMEs, the so called and rightly called engines of growth can not buy such expensive land thereby industrial growth is discouraged. The current solidarity among the two major political parties should also show its effect in reviving the projects which were victims of earlier political brutality. Schemes like Surjani Town in other parts of the country should be revived and developed. There are other novel and innovative proposals for SMEs such as high rise industrial estate that need to be looked into and implemented. There is no dearth of good ideas in this respect.

Streamlining the Planning Commission

Planning Commission has traditionally been a PC-1 processing house, among other tasks such as sectoral planning. For a number of decades, the PC-1 system has worked well, largely for physical projects. There are four such proformas; PC-1 for project planning; PC-2 for funding request for pre-planning work and studies & PC-3 for progress monitoring and PC-4 for post-project evaluation. Only PC-1 is ever heard of. There is less talk of PC-3 and hardly any of PC-4. Many involved and knowledgeable people have not even seen a single PC-4 in their life time.

There is a need for improving upon these planning proformas. While PC-1, may still continue to serve well for physical projects, having fixed shapes, inputs and outputs. It is highly unsatisfactory for programme planning especially in the social sector. PC-1, there is to be augmented with LFA – logical frame work analysis, widely understood in the international donor circles and fairly developed methodologies and formats. The need in this area perhaps has not been felt, because most programme planning is done by foreign consultants who are already aware of these techniques and activities these systems abundantly.

Local know-how should be developed for post-project evaluation. That is the assessment of achievements of project or program goals, targets, impact, outreach, efficiency, sustainability or replicability and the lessons learned. PC-4 was reportedly designed for this. Currently, foreign consultants undertake such mission, while locals also play some role in the appraisal mission teams; how about local programmes and initiatives? Capacity should be built in this area training local consultants, 3rd party experts, programme managers, NGOs etc.

Improving the efficiency in project and programme planning, monitoring and post fact evaluation would go a long way in speeding up development activity.

Mobilizing the business leaders

There are thousands of experienced professionals and businessmen in the private sector who can help develop policies and assist in their implementation as volunteers. These successful professionals and businessmen would not demand any remuneration but recognition. Currently only very limited number of such people have been inducted in the governmental system. In order to encourage such participation of individuals and experts in assisting the government's development work and schemes, civil awards system should be liberally extended to include such experts who may have made useful contributions. Currently only government, military persons, artists and social workers are awarded Tamghas, and Hilals. I have seen government functionaries with rather modest contributions, getting away with Tamghas.

Reform SMEDA or close it down

SMEDA was formed to support the development of SMEs in all sectors of the economy by the Nawaz Sharif government. Mr. Sharif and many

others had a lot of hope from this new organisation, which had been headquartered in Lahore. Mr. Nawaz Sharif reportedly heard even some junior executives of SMEDA to elicit useful ideas for promoting industrial development. A professional who attended a Fisheries workshop for improving quality and booming exports, also mentioned the lack of interest shown by the junior officers of SMEDA as participants without even taking notes or participating in discussions. They were sons of influential people, on plush jobs with no interest in the work of the organisation itself and for the purpose it was created. Unfortunately not much output has come out of this organisation. A performance review of SMEDA should be undertaken with a view to either close down this organisation and divert the resources to better use, or reorient it to be able to perform its designated functions. All we see is a website on which some data feasibility studies and a few soft wares are listed for free down load.

Our SMEs are run by people of modest means and education. They require down-to-earth practical guidance, institutional facilitation, export market linkage assistance, access to finance etc. They do not need long speeches and seminars in five star hotels. Instead of opening their offices in bazaars, industry clusters and adopting a lifestyle that could foster communication with their target group, they have chosen to sit in aloof air conditioned offices, where access of ordinary folks is hardly encouraged. The writer himself a former technocrat had difficulty going past the security operators of their office(s), much before the current problem of terrorism.

They are in need of complete transformation. They should be asked to vacate their posh offices, and rent modest facilities among the target group, without air conditioning and fancy furniture. English should be banned from these organisations and they should be asked to speak in regional or national languages. They should ride motor bikes and wear Shalwar Qameez. Acquire skills, be ready to sit together with SME people, develop comraderies with them and solve their problems of accounting, finance, materials technology etc. With the kind of prescriptions that I have made, the sons of elite and near elite would leave the organisation and vacate the place for induction of people from poor and lower middle class who would have an understanding and cultural affinity with their target group. As a model, study the extension officers of the agricultural department. The way they work, live and move about, is a more practical example, although they may choose to appear more business like and professional.

Engineering Development Board (EDB) is another white elephant and drain on national exchequer. They have literally no output or usefulness. Whatever little they are doing may be done by expert consulting groups or external consultants. If government somehow does not want to cause unemployment, it should either merge this board, undertake reform and restructuring with a worth while programme and output.

It is time for putting life into this dead organisation which has reduced itself to collecting rent of the PIDC building and providing a safe place for surplus staff of the privatised public enterprises. PIDC had done wonderful job in industrialising Pakistan in the Ayub era identifying, launching and developing most of the important public enterprises in almost all sectors of the economy. It was considerably weakened with the advent of sectoral corporation like PACO, PERAC etc. PIDC had the scale of economies to accumulate the pool of expertise. A lot of policy advice came from PIDC.

As said earlier, corporations and public sector DFIs started playing major role in advice and development of government policies. Now all these being gone, there is a need for a dedicated and central organisation for launching a 3rd or 4th round of industrial revolution; if you will after Ayub, ZAB and Zia. I am not including Musharraf as his contribution lies with mobiles, media, banking and stock market. PIDC should be energised, with the merger of small and failed organisations like SMEDA, EDB, etc., and inducting fresh blood, a private sector board and professional cadre and leadership. After 1980s, no new industrial technology (except mobiles) has been introduced in Pakistan.

We have been eating the fruits of the earlier initiatives. There are no fruits, as the trees are no more or are too old. A lot of saplings ought to be planted. Our Chinese friends are reportedly eager to help as they did in the 1970s with HMC (Heavy Mechanical Complex, Taxila), HFF, etc. There are additional reasons for Chinese involvement which would be elaborated elsewhere in these lines. I would only hint at "China plus One" policy of western nations in making DFIs in China. They want to have an alternative to China. It can be Pakistan and with the assistance of China itself.

Table 3.1: Pakistan Economy at a glance

POVERTY and SOCIAL 2008	Pakistan	South Asia	Lower middle income
Population, mid-year (millions)	166.1	1,543	3,702
GNI per capita (Atlas method, US\$)	950	986	2,078
GNI (Atlas method, US\$ billions)	157.3	1,522	7,692
Average annual growth, 2002-08			
Population (%)	2.3	1.5	1.2
Labor force (%)	4.1	2.2	1.6
Most recent estimate (latest year available, 2002-08)			
Urban population (% of total population)	35	30	41
Life expectancy at birth (years)	67	65	68
Infant mortality (per 1,000 live births)	72	59	46
Child malnutrition (% of children under 5)	-	41	26
Access to an improved water source (% of population)	90	87	86
Literacy (% of population age 15+)	54	63	83
Gross primary enrollment (% of school-age population)	85	108	109
Male	93	111	112
Female	77	104	106

KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1998	2007	2008
GDP (US\$ billions)	62.2	143.2	164.5
Gross capital formation/GDP	17.7	22.5	22
Exports of goods and services/GDP	16.5	14.2	12.8
Gross domestic savings/GDP	16.7	15.4	11
Gross national savings/GDP	21.3	24.6	20
Current account balance/GDP	-2.7	-4.8	-8.3
Interest payments/GDP	1.4	0.8	0.6
Total debt/GDP	51.9	28.4	30
Total debt service/exports	19.8	9.3	9.3
Present value of debt/GDP	-	22.9	21.9
Present value of debt/exports	-	117.8	113.2
(average annual growth)	2007	2008	2008-12
GDP	5.7	2	3.5
GDP per capita	3.4	-0.2	1.2
Exports of goods and services	2.3	-5.3	0.2

Source: World Bank

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PROPLAN

4 Bridging the trade gap

Pakistan trade gap has been widening ominously, consuming the reserves that had been built as a consequence of several political and economic policies and arrangements. The most recent and immediate cause has been the rise in energy, food and commodity prices internationally, on which there is no control or leverage of our poor governments. Infact even the rich and powerful governments and countries have not been able to do anything about it. The problem is structural, embedded in capitalism as an ideology. This can be an interesting and long debate that would continue across the world governments, corporate board rooms and academia. Government has taken some short term measures like devaluation of currency and controlling imports. In this chapter, we will discuss and propose some measures to curb the trade gap, enhancing exports and curbing imports. However our focus would be more on exports than imports, the latter to be tackled in a separate section.

Trade Gap

In the year 2003, there was virtually no trade gap with exports of 11.160 Billion US\$ and imports of 12.22 Billion US\$. Five years hence in the year 2007, the size of the economy almost doubled from 75 Billion US\$ to 140 Billion US\$. Exports did not double, and stagnated at 17 Billion US\$, and imports increased by 2.5 times to 30.5 Billion US\$, resulting in a trade gap of 13 Billion US dollars. In this period economy grew at an average rate of 6.5-7% p.a. Agricultural sector grew but at an unstable rate with highs of 5.0% to 6.5% and lows of 1.6% to 2.4%, giving an average of 4%. Manufacturing sectors growth has averaged to 7.42%, with a high of 14-15% to a low of 5.2%. Median figure for inflation has been 8-9% p.a. Lending rates have increased from 8% to 12%, while deposit rates increased from 2 to 4% - giving an enormous spread of 7 percent to the bankers, thus contributing hefty profitability to the latter and bad debt for the depositors and borrowers both which is having a negative effect on savings and investment. In terms of physical output in the period 2003-07, sugar, fertilizers and chemicals stagnated at constant level. Textile yarn and cloth increased by 50%. Cement and tractors

output was doubled. Motorcycles production became 5 times, leaving bicycles behind. Therefore the growth scenario has been rather satisfactory.

Table 4.1: Foreign trade as % of GDP 1991-2008

Years	Exports	Imports	Workers Remittances
1990-91	13.5	16.7	4.1
1991-92	14.2	19.1	3
1992-93	13.3	19.4	3
1993-94	13.1	16.6	2.8
1994-95	13.5	17.2	3.1
1995-96	13.8	18.7	2.3
1996-97	13.4	19.1	2.3
1997-98	13.9	16.3	2.4
1998-99	13.3	16.1	1.8
1999-00	11.7	14.1	1.3
2000-01	12.9	15.1	1.5
2001-02	12.8	14.4	3.3
2002-03	13.5	14.8	5.1
2003-04	12.5	15.9	3.9
2004-05	13	18.5	3.7
2005-06	13	22.5	2.9
2006-07	11.8	21.2	3.8
2007-08	11.7	24.3	3.9

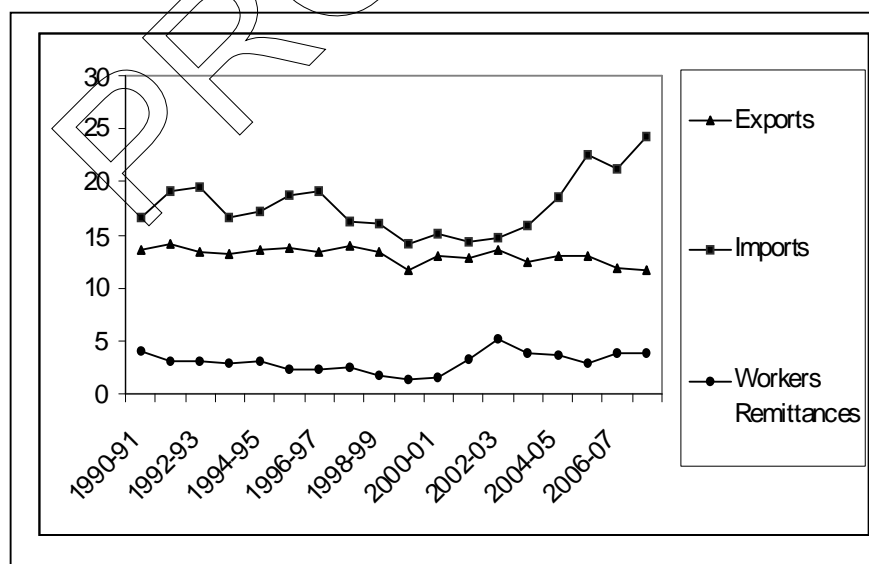


Table 4.2: Trend of Imports and Exports of Pakistan 1997-2009

Period	Exports	Growth Rate % p.a.	Imports (BOP)	Growth Rate % p.a.	Balance of Trade
	Value		Value		
1996-97	8,096	-2.59	11,236	-6.48	-3,140.00
1997-98	8,434	4.17	10,301	-8.32	-1,867.00
1998-99	7,528	-10.74	9,613	-6.68	-2,085.00
1999-00	8,191	8.81	9,602	-0.11	-1,411.00
2000-01	8,934	9.07	10,202	6.25	-1,268.00
2001-02	9,140	2.31	9,434	-7.53	-294.00
2002-03	10,889	19.14	11,333	20.13	-444.00
2003-04	12,396	13.84	13,604	20.04	-1,208.00
2004-05	14,482	16.83	18,996	39.64	-4,514.00
2005-06	16,553	14.30	24,994	31.58	-8,441.00
2006-07	17,278	4.38	26,989	7.98	-9,711.00
2007-08	20,427	18.22	35,397	31.15	-14,970.00
2008-09 R	19,121	-6.40	31,747	-10.31	-12,626.86

Source: Federal Bureau of Statistics / State Bank of Pakistan

Out of total of \$ 17 billion of exports in the year 2007, \$ 10 billion of export was to Europe and the US. Imports from South East Asia are \$10 billion, from the Middle East another \$10 billion. With Africa, all of it, exports are \$1000 million and imports are roughly the same. Similarly with South America, exports and imports remain at under \$300 million each. Much can be done to enhance regional trade which stands at 1700 Million US\$, a region with a population of less than 2 billion. There are political problems with India, but how about Iran.

International Market Outlook & Competition

World export market is of 16 Trillion US\$, roughly two-third of it is taken by manufactured products and one-third by primaries like agricultural, food, fuel and minerals. Machinery & Transport Equipment sector represents one-half the manufactured exports and one-third of the total exports, at 5.3 Trillion US\$. World exports trade has grown at a rate of 12% p.a. over most of the last decade (2000-2008), while Machinery Trade (exports) grew at a rate of 9.24% in the same period. By comparison textile and clothing exports were of the order of 600 billion US\$, roughly one-tenth of the machinery and transport equipment sector.

Fifty countries of the world had a share of 92% together. Pakistan is not included in the list of top 50 exporters, its rank is 63. Prominent exporting countries are Hong Kong (rank 13), Singapore (14), Taiwan (18), Malaysia (21), Thailand (20), India (27), Indonesia (31) and Turkey (32). Two-third (67%) of the world exports were of manufactured products; one-fourth of fuel & minerals and only 8% of food and agriculture. One-third (34%) of world exports are in Machinery & Transport equipment / Engineering sector, and only 3% in textile and clothing. Pakistan is, however, 10th largest exporters of textiles. Three-fourth (72.9%) of world textile exports was shared by European Union, China and the US, with India ranking 6th and Turkey 7th. Surprisingly, UAE had a rank of 11th in textile sector, with Indonesia and Thailand ranking 12 & 13. In clothing, Pakistan ranked 12th, while Bangladesh ranked 5th, only superseded by Turkey (ranked 4th). In automotive sector 15 countries shared virtually all the exports (97.4%) of the world exceeding 1.2 Trillion USD. EU had two-third of the world share (68.3%), Japan 13.9%, and the US 9.0%, Turkey, Thailand & UAE had equal shares valued at 15-17 billion US\$ each, ranking them as 8th, 9th and 10th. India ranked 14th, with automotive products exports of 4.9 Billion US\$ in 2008.

World engineering sector exports (Machinery & Transport Equipment) stood at 5.34 Trillion USD in 2008, 33% of total world exports of merchandise. Engineering sector World exports grew at a rate of 9.24% p.a., as opposed to 20% p.a. of all exports, in the period 2000-2008. Engineering sector is subdivided in the following three sub sectors:

Office & telecom equipment (Electronics)	= 1561 Billion US\$
Transport Equipment	= 1840 Billion US\$
Other Machinery	= 1946 Billion US\$

In economics and trade, as elsewhere in the book, we have taken India, Malaysia, Indonesia, Thailand, Philippines as reference countries for a variety of understandable reasons. India has very similar socio-economic conditions, and per capita comparisons would be quite meaningful and instructive. Indonesia has a population of 231 million and Thailand 64 million, while Pakistan is in between with a head count of 169 million. Thailand has done quite well for itself, with trade and economic parameters and numbers exceeding Indonesia even in absolute terms. Although no two countries are the same, Pakistan should be able to achieve a place in between the two countries, Indonesia and Thailand, in terms of economic achievements. Malaysia has done extremely well,

especially in foreign trade. It is a relatively smaller country with a population of 27 million, and has different sets of strengths and weaknesses, perhaps not quite comparable to Pakistan. We have therefore reproduced WTO figures and data for these countries in order to have a palpable base for comparing performance and target setting for Pakistan for various sectors.

World export market of Telecommunication equipment stood at 596 Billion US\$ in 2008, 97.1% of which was shared by top 15 countries. Singapore, Malaysia, Taiwan, Thailand, Indonesia and even UAE are prominent Asian exporters among top 15, with a combined share of 9.6%. China's market share is a whopping 27.1%, EU as usual the highest at 30.8% and the US only 6.6%. In computers and office equipment, China had the largest share of exports at 32.2% of the world total, followed by EU of 28.6%. Singapore, Malaysia, Thailand, Philippine, UAE and Indonesia again appear to be among top 15 exporting countries list, with a combined share of 18.8%. India is not included among top 15 in this sector.

Office and Telecom equipment is further divided in product categories of a) computers & office equipment (548 Billion US\$) b) Telecom equipment (596 Billion US\$) and c) IC & electronic components (416 Billion US\$). In Transport equipment category, automotive products (Automobiles, cars, truck, motorcycles, and auto parts) have a majority share of 1234 Billion US\$; the rest of 600 Billion US\$ goes to other Transport equipment like Airplanes, Ships & Boats etc.

In food sector, World exports stood at 1119 billion US\$. Surprisingly China has emerged as one of the top 15 food exporting countries, while classically it was feared that China's food requirements would impel it towards expansionism. Also surprisingly, India is a food exporter, only second to the traditional food exporters like Australia. Also Vietnam has emerged as 15th largest food exporter. Indonesia, Thailand and Malaysia rank higher than Australia in food exports.

As expected Japan, Korea, UAE and Nigeria are among leading net importers of food. UAE and Canada are also among leading food importers, but also have exports larger than imports, and thus are net exporters in food sector.

Similarly in Automotive sector, which has a world market of 1.23 Trillion US\$, twice that of textile sector, Pakistan's share is 72 million

US\$, as against 16.2 billion US\$ of Thailand, and 17.823 billion US\$ of Turkey. Even Philippines has only a share of 1.979 billion US\$. Electronics items have the following sub-sectors:

- Office equipment (world exports 548 billion US\$)
- Telecom (596 Billion US\$)
- IC & electronic components (417 billion US\$)

Turkey and Thailand started with a very low base in automotive sector i.e. exports of 153 million US\$ and 108 million US\$ respectively in 1990. By 2000, which is in ten years time, Thailand enhanced its automotive exports to more than 20 times (2917 million US\$) and Turkey by ten times (1517 million US\$). In subsequent eight years both countries galloped to 17 billion US\$, at growth rates of 26-36% p.a. Motor cycles and Light Commercial Vehicle domestic market and production appears to have played a role in the development of automotive sector in Thailand, which is by now a world leader in LCV sector (one-tonne) truck, after the US.

World power equipment demand today is estimated at 600 Billion US\$ per year. Power equipment is going to be the driver of engineering sector in Pakistan. At world level, electronics, computers telecoms and automotive sector are going to be the lead sectors in the coming decades.

Pakistan's exports achievements & potential

Pakistan's total exports in 2008 stood at 20.3 billion US\$ representing a negligible market share of 0.126% in world exports. However, in textile and clothing sector, Pakistan has a significant share of 3.951%. Textile sector represented 56.58% of Pakistan's total exports. The second largest export sector is food, which has a share of 16.7% in Pakistan's exports. Surprisingly, minerals & oil is the third largest export item sector with a share of 9.76%. Leather & Hides are the fourth largest with 6.31% of total country exports. In imports, as expected, energy / oil have the lion's share of 31.16%, although, due to extra ordinary oil prices in the recent period. In 2003, market share of oil imports was 26.43%. Second largest import item is of machinery and equipment at 18.59%, and the third chemicals & fertilizers at 11.37% market share.

Pakistan is significant market player in textile and clothing with exports of 11 billion US\$ in 2008, which represents 3.951% of world market in

that sector. By comparison India's corresponding market share was 7%, Indonesia 3.2%, Malaysia 1.6%, Philippines 0.62%, Thailand 2.45% and Turkey 7.5%, Amazingly Bangladesh's clothing exports alone are equal to Pakistan's total Textile & Clothing exports of 11.0 billion US\$. In addition, Bangladesh exports another one billion worth of textiles. Bangladesh's clothing exports are roughly 2.75 times that of Pakistan and are equal to clothing exports of India. Among the comparable developing countries, it is only second to Turkey.

In textile exports, knitwear had the largest share of 20% at 2135 billion US\$, followed by cotton cloth with equal market share of 20%, Bed wear exports ranked 3rd with a 15% share. Clothing / Readymade garments, came down to 983 million US\$ in 2008-09, from a level of 1204 million US\$ in the previous year, a shortfall of 19%. Although value added sector has come a long way from raw cotton and cotton yarn only exports only a decade earlier, clothing sector remains a lagging sector, despite tremendous scope and potential, particularly in the view of Bangladesh exports of clothing of 10.00 billion US\$.

In food sector, Rice exports at 1.5 billion USD represented a three-fourth (75%) share, followed by fish exports of 202 million US\$ with 11% market share. Fruits & vegetables as a group were 374 million US\$. In food imports, Palm oil imports have had successively a maximum share at 1.3 to 1.4 billion US\$, representing 40% of food imports. For the year 2007-08, and 2008-09, Wheat imports represented a significant drain on foreign exchange at 918 million US\$ in 2008-09, represent 25% of total food imports in those years. In some years (2006-07) sugar imports were as much as 312 million US\$, 12% of the total. In subsequent years, when sugar was not imported, there were severe sugar shortages, leading to black market and sky rocketing prices.

Pakistan is an almost insignificant player in Engineering Sector / Machinery & Transport Equipment. Unfortunately, there is a misnomer and general misunderstanding in Pakistan, considering and focusing on metal products perceived as to be the engineering sector only. The market segments that are considered the Engineering sector in Pakistan are only a part. In Electronics, Pakistan's achievements are in negative. By comparison, most countries of South East Asia have made major inroads in these areas. Malaysia's exports of 85 billion US\$ of Machinery & Transport equipment consist of 73 billion US\$ of

Table 4.3: World Trade by commodities (2000, 2008)

Mn USD

Merchandise	Year	Export	Import	Export % 2008	Import % 2008
Agricultural products	2000	551827	598832		
Agricultural products	2008	1341564	1413383	8.33	8.57
Food	2000	432121	469742		
Food	2008	1114016	1172801	6.92	7.11
Fuels and mining products	2000	858779	909319		
Fuels and mining products	2008	3530217	3617498	21.93	21.93
Fuels	2000	666593	704884		
Fuels	2008	2861893	2921958	17.78	17.72
Manufactures	2000	4698185	4918126		
Manufactures	2008	10458106	10808122	64.97	65.53
Iron and steel	2000	142816	156041		
Iron and steel	2008	587193	612774	3.65	3.72
Chemicals	2000	583773	608677		
Chemicals	2008	1705446	1739221	10.59	10.55
Pharmaceuticals	2000	108626	141155		
Pharmaceuticals	2008	426672	426672	2.65	2.59
Machinery & transport	2000	2637219	2735560		
Machinery & transport	2008	5347841	5521522	33.22	33.48
Office and telecom	2000	968714	1009919		
Office and telecom	2008	1561384	1672714	9.70	10.14
EDP and office eqpt.	2000	372015	381933		
EDP and office eqpt.	2008	548199	556508	3.41	3.37
Telecom eqpt.	2000	288248	299542		
Telecom eqpt.	2008	596248	622820	3.70	3.78
IC & electronic comp.	2000	308451	328444		
IC & electronic comp.	2008	416936	493386	2.59	2.99
Automotive products	2000	577153	593789		
Automotive products	2008	1233545	1246265	7.66	7.56
Textiles	2000	157295	167487		
Textiles	2008	250198	262863	1.55	1.59
Clothing	2000	197722	208915		
Clothing	2008	361888	375614	2.25	2.28
Total 2002	2002	6,493	6741		
Total 2008	2008	16,097,000	16493000	100.00	100.00

Source: WTO

electronics products exports. Similarly Thailand's 74 billion US\$ of engineering exports have 58 billion US\$ of electronics.

In engineering sector, Pakistan's own domestic demand is going to be quite significant. In the next 2-3 decades, 200,000 MW of electrical power equipment, and associated energy production facilities are projected to be installed, which would amount to 200 billion US\$ plus of market; on the average 6-7 billion US\$ per year. In the last few years, the power generation equipment imports have averaged at 1000 million US\$ per year.

In machinery group, Power Generation Equipment, Telecom and Other machinery have a comparable even equal market share of 20-25% each, at 1.3-1.50 billion USD each. We have discussed the subject of power generation equipment elsewhere. Textile Machinery, for obvious reasons, is another major import category worth about half a billion US\$.

In transport equipment sector, one billion US\$ worth of imports are there, with insignificant exports of 50-60 million US\$. Bulk of the imports, 73% on the basis of last three years average, are of CKD imports, and 27% of CBU's. Overall in engineering sector, the only worthwhile exports are of surgical instruments largely made and exported from Sialkot only, at an average of 250 million US\$ per year. Most other categories' exports, are under 25-50 million US\$, which is really negligible in the context of international market.

In Telecom sector, mobile phone sets alone is a market of half a billion US\$ plus, although in the year 2009, the imports plummeted to only 131 million US\$. JVs should have been encouraged by now in this sector, although fragmentation of demand and low-cost China would be a major dissuading factor in local production of mobiles. There might be better opportunity in the local production and exports of other telecom equipment (transmitters, electronics accessories etc.) which have almost the same market size of one-half billion US\$ plus.

Export Measures

Erstwhile Export Promotion Bureau (EPB) and new TDAP (Trade and Development Authority Pakistan) have in the past taken many initiatives, and as it is in the process of implementing many others, fresh thinking is required.

Pakistan's development challenges

Table 4.4: Exports of selected countries for the year 2008

	Million USD								
Merchandise	India	Indonesia	Malaysia	Pakistan	Philippines	Thailand	Turkey	World	ROG %
Agricultural products	21372	32857	27797	3901	3961	31662	11204	1341564	11.74
Food	18275	24090	23121	3621	3650	23293	10704	1114016	12.57
Fuels and mining products	43271	50622	39861	1486	4155	13585	11900	3530217	19.33
Fuels	31637	39780	36281	1230	1608	11299	7531	2861893	19.98
Manufactures	112185	52698	129870	14881	40542	127155	103773	10458106	10.52
Iron and steel	11226	2201	3120	103	262	2869	16842	587193	19.33
Chemicals	20345	6915	11784	687	1123	13778	5664	1705446	14.34
Pharmaceuticals	5766	230	169	119	32	291	469	426672	18.65
Machinery and transport equipment	24589	17343	85792	571	33031	74342	39122	5347841	9.24
Office and telecom equipment	1737	5800	67695	87	25651	32544	2400	1561384	6.15
Electronic data processing and office equipment	517	1781	26778	7	9016	17600	151	548199	4.97
Telecommunications equipment	620	3192	13856	80	1062	6734	2202	596248	9.51
Integrated circuits and electronic components	600	828	27060	0	15573	8210	46	416936	3.84
Automotive products	4869	2783	1154	72	2196	16227	17873	1233545	9.96
Textiles	10267	3675	1549	7186	194	3211	9399	250198	5.97
Clothing	10854	6285	3624	3906	1979	4241	13591	361888	7.85
Total	194828	139606	199516	20323	49078	177778	132027	16097000	12.00

Source: WTO

Bridging the trade gap

Table 4.5: Exports of selected countries for the year 2008 with breakdown of percentage of commodity

Merchandise	India	Indonesia	Malaysia	Pakistan	Philippines	Thailand	Turkey	ROG %
Agricultural products	10.97	23.54	13.93	19.19	8.07	17.81	8.49	11.74
Food	9.38	17.26	11.59	17.81	7.44	13.10	8.11	12.57
Fuels and mining products	22.21	36.26	19.98	7.31	8.47	7.64	9.01	19.33
Fuels	16.24	28.49	18.18	6.05	3.28	6.36	5.70	19.98
Manufactures	57.58	37.75	65.09	73.22	82.61	71.52	78.60	10.52
Iron and steel	5.76	1.58	1.56	0.51	0.53	1.61	12.76	19.33
Chemicals	10.44	4.95	5.91	3.38	2.29	7.75	4.29	14.34
Pharmaceuticals	2.96	0.16	0.08	0.59	0.07	0.16	0.36	18.65
Machinery and transport equipment	12.62	12.42	43.00	2.81	67.30	41.82	29.63	9.24
Office and telecom equipment	0.89	4.15	33.93	0.43	52.27	18.31	1.82	6.15
Electronic data processing and office equipment	0.27	1.28	13.42	0.03	18.37	9.90	0.11	4.97
Telecommunications equipment	0.32	2.29	6.94	0.40	2.16	3.79	1.67	9.51
Integrated circuits and electronic components	0.31	0.59	13.56	0.00	31.73	4.62	0.03	3.84
Automotive products	2.50	1.99	0.58	0.36	4.47	9.13	13.54	9.96
Textiles	5.27	2.63	0.78	35.36	0.40	1.81	7.12	5.97
Clothing	5.57	4.50	1.82	19.22	4.03	2.39	10.29	7.85
Total percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	12.00
Total (value)	194828	139606	199516	20323	49078	177778	132027	

Source: WTO

Pakistan's development challenges

Table 4.6: Market Share % of selected countries in exports of commodities 2008

Merchandise	%							Million USD	
	India	Indonesia	Malaysia	Pakistan	Philippines	Thailand	Turkey	World	ROG %
Agricultural products	1.593	2.449	2.072	0.291	0.295	2.360	0.835	1341564	11.74
Food	1.640	2.162	2.075	0.325	0.328	2.091	0.961	1114016	12.57
Fuels and mining products	1.226	1.434	1.129	0.042	0.118	0.385	0.337	3530217	19.33
Fuels	1.105	1.390	1.268	0.043	0.056	0.395	0.263	2861893	19.98
Manufactures	1.073	0.504	1.242	0.142	0.388	1.216	0.992	10458106	10.52
Iron and steel	1.912	0.375	0.531	0.018	0.045	0.489	2.868	587193	19.33
Chemicals	1.193	0.405	0.691	0.040	0.066	0.808	0.332	1705446	14.34
Pharmaceuticals	1.351	0.054	0.040	0.028	0.008	0.068	0.110	426672	18.65
Machinery and transport equipment	0.460	0.324	1.604	0.011	0.618	1.390	0.732	5347841	9.24
Office and telecom equipment	0.111	0.371	4.336	0.006	1.643	2.084	0.154	1561384	6.15
Electronic data processing and office equipment	0.094	0.325	4.885	0.001	1.645	3.211	0.028	548199	4.97
Telecommunications equipment	0.104	0.535	2.324	0.013	0.178	1.129	0.369	596248	9.51
Integrated circuits and electronic components	0.144	0.198	6.490	0.000	3.735	1.969	0.011	416936	3.84
Automotive products	0.395	0.226	0.094	0.006	0.178	1.315	1.449	1233545	9.96
Textiles	4.104	1.469	0.619	2.872	0.078	1.284	3.757	250198	5.97
Clothing	2.999	1.737	1.002	1.079	0.547	1.172	3.756	361888	7.85
Total	1.210	0.867	1.239	0.126	0.305	1.104	0.820	16097000	12.00

Source: WTO

Export Measures

Erstwhile Export Promotion Bureau (EPB) and new TDAP (Trade and Development Authority Pakistan) have in the past taken many initiatives, and as it is in the process of implementing many others, fresh thinking is required. On enhancing exports, following strategies and actions are suggested.

- Reform Textile Sector.
- Look into Africa & South America.
- Develop export synergy with China.
- Develop food processing & exports to Middle East.
- Export surgical and sports goods.
- Improve foreign buyers access through ICT.
- Open border trade with Iran, China and even India.
- Capacity building of SME exports in light manufacturing.
- Broaden the export product list, especially automobile components, engineering and capital goods.
- Improve workers remittance by launching high skill training & certification programme..
- Launch quality schemes & initiatives along with revamping ISO -9000 services and regime.
- Launch Productivity Initiatives.
- Promote rise in workers salary & welfare, improve EOBI.
- Reduce cost of doing business by improving inputs supply especially industrial and commercial space/land.
- Conduct research in foreign markets; buy research.
- Disseminate research resources such as UN's trade data bank.
- Bring in corporate farming.
- Introduce workers cooperatives.

Doubling exports in five years is not a utopia. It is feasible, if the economy grows, barring short term problems, at the rate of 7% p.a. I would select a few of these proposals for elaboration, as the rest may be well understood in its own right.

Going to South America & Africa

Pakistan textile exports should be promoted in both the regions. Light engineering and other manufactured items have a lot of potential in

Africa. American items have a lot of potential in Africa. American & European goods and capital projects are too expensive and there are travelling issues of time and security etc. Our SMEs from Gujranwala can do wonders in African countries, which do not have a lot of money to spend on expensive plant and machinery. We can be highly competitive in installation, commissioning and training as well setting up of workshops, light engineering factories. A wide variety of machinery and capital goods are produced in Gujranwala belt. These entrepreneurs require support in initial match-making, documentation and some engineering management capacity. This is all feasible. It is not utopia. It can be done. Some body has to provide leadership and institutional support. Engineering Development Board in cooperation with the TDAP should launch a programme in this respect.

ICT in Export Promotion

It is extremely difficult for a foreign buyer to approach Pakistani exporters. They have to almost always resort to physical travelling. In textiles, quite a few buyers community has become familiar with the Pakistani producers, but the basket is too small. Mostly larger companies are known. Rest steal buyers address from custom documents. There is a thriving small business going on providing such services. In the industrialised countries, Thomas Register kind of suppliers' directory was well known. Now Thomas Register has gone global, instead of being an American company's register. It is now available on the net. There are similar other business portals, linking buyers with sellers.

A recent success story is Alibaba, originally a Singaporean software portal, but seems now to be bought by Chinese. Ali Baba is playing a major role in boosting Chinese exports, through linking foreign buyers with Chinese producers and exporters. A similar portal is badly needed for Pakistani exporters. TDAP could buy services from portals like Ali Baba. It should, however be noted that it is not simply an IT or ICT issue. A major effort would be required to prepare the database of Pakistani companies' products and profiles in major sectors of interest like textile, food engineering, furniture etc; perhaps more than 100 sectors, 5000 products and 10,000 companies. But it would certainly go a long way towards boosting Pakistan exports. Imagine a buyer sitting in Kenya or Ethiopia linked to our producer in Gujranwala and making a deal on the net. Most such portals are only informational and transactions are not conducted on it. TDAP may support establishment of B2B transactional parts as well. There are progressive businessmen who have

already started selling to buyers directly, sometimes from Pakistan itself and sometimes through a local office and warehouse in Europe and the US. The kind of supply chain requires a lot of capital and an average SME may not be able to have up front capital to initiate and maintain such operations. A good start could be made thru information portals ala “Ali Baba”, and later a B2B & B2C portal service could also be facilitated and even managed by TDAP.

Provision of ICT based market Research Tools

While reportedly, export promotion bureau has been commissioning studies on international markets of interest, more focussed initiative is in order. TDAP could lend a supporting hand in acquiring access to international data bases. A useful online database on international trade is a UN portal, which is available at reasonable prices. Few people in our business circles know about it and still fewer would know how to use it. TDAP would do well to familiarise itself with it, providing and encouraging regional chambers of commerce to acquire access rights to these databases. Workshops should be conducted to train the marketing and research personnel of the industry in efficient uses of such tools. There are now 200 countries, not just 20 or 30 which our companies do business with.

Quality Initiatives and Revamping of ISO-9000 Systems

ISO-9000 had been a global initiative by world businesses to standardise quality systems and introducing certification to ease national and international trade. It is now more than two decades that it is in vogue, and a lot of body of knowledge has been developed and linked to it. Export Promotion Bureau, the predecessor of TDAP had invested considerable resources in popularising ISO- 9000 and created capacity in ISO -9000 services sectors. It even provided direct finances to companies for acquiring ISO - 9000 system and its certification. Such initiatives even continue to date under ADB supported programme.

However, the impact of ISO – 9000 in both enhancing quality and consequently enhancing exports has not been a significant one. This is rather unfortunate. World wide business and companies have been able to improve quality through ISO – 9000 processes and the momentum is carrying on and even expanding to include environment, safety, and corporate social responsibility.

As is normal in Pakistan, ISO – 9000 became perverted in Pakistan. Many companies have acquired the ISO – 9000 labels, but very few could improve their quality. The reason is the second quality culture that prevailed. Companies got interested in just buying the label and an army of service providers including consultants, trainers and certification companies started issuing false or near false ISO – 9000 certification. The fact is that certification companies are based in UK/ Europe, USA, with their representatives in Pakistan, where regulatory control is exercised. They were however interested in making money through issuing certification. And why should they be interested in genuine efforts for improving our quality systems, if we are not interested in it ourselves. The result is that ISO – 9000 certification of Pakistan companies does not impress any buyers. They are convinced, it is fake. Majority of ISO – 9000 manuals and documentations are locked in cupboards and are treated as confidential documents. Every year the certification companies issue certificates of compliance or issue renewal certification.

It should be remembered that ISO – 9000 system is a first step in the long drawn and continuous process of improving quality. It is not the last. And if the first step is faulty, what can be expected of the next. TDAP should take stock of the situation. Fortunately PSQA has acquired quite some infrastructure. Some legal and administrative steps should be initiated. Certificate companies should be warned and blacklisted if they do not reform themselves. PSQA should initiate additional initiatives to improve upon the situation. TDAP/ PSQA combined should be able to deliver in this respect as well. The new leadership at TDAP has an immediate task, if he wants to go getting, before the sitting bureaucracy pollutes and absorb him into complacency and contempt for new initiatives.

Food Processing Export

Gone are the days when people used to buy their food from near by street vendors selling new vegetable, meat, fruit and the milk man? This may still be in vogue in Pakistan, but is fast changing due to the induction and proliferation of retail chain stores/ departmental stores like Metro/ Macro etc. The trend would further expand, broaden and deepen. Elsewhere in the world it is established. Even street vendors sell processed and certified food. In Pakistan a major issue in the expansion of food processing and its export is the poor hygiene and harsh hot climate. If any head way is to be made cool chain from farm through transportation

and processing has to be established. Such facilities are lacking, where they are, output and sales are limited and expensive e.g., processed milk. Ironically most milk vendor shops have installed rather innovative refrigeration products made out of stainless steel, giving a very attractive look and providing adequate hygiene.

The need is to introduce, popularise and support such innovations at all levels, small, medium and large enterprises. A particularly deficient area is refrigerated transport especially of milk, meat etc. Companies and technologies are there in Pakistan who can provide cost effective solutions. TDAP has to provide leadership and initiatives in bringing the users, producers and bankers together with some seed money for development of models and prototype facilities that may later be replicated with the continuing sacrilegious activities of. European food exporting companies and the credibility of Halal nature of Pakistan food products, food exports can be quadrupled in not such a distant future.

Such initiatives could be indigenous or joint ventures could be encouraged with multinationals. However, one should not be mistaken about the food processing industries already established in the Middle Eastern countries, especially Saudi Arabia. Saudi JVs in Pakistan can be very successful integrating market and food chains in the two countries. Pakistan Horticulture Board was formed with some very competitive professionals, some 5 – 7 years ago. I do not know where it is now. It is not visible. Either close it down or reenergise it, if it is not already closed. The problem in Pakistan is that initial enthusiasm is evaporated very soon, if immediate successes and break-throughs do not occur. Sustained effort over a reasonable period is a normal requirement, if one wants to achieve anything. One should think beyond one's tenure. New comers reap the bounty of the predecessor work. Seeders and harvesters are never the same in the development process.

Expanding Engineering Sector

Pakistan market appears to have identical characteristics. Motor cycle volumes have picked up to 700,000 per year and may reach 2 million in next 5-7 years. Pakistan has an additional interesting product, which are agricultural tractors. There is a market of 70,000 tractors, only half of which is supplied by local production. In the past, some tractors were exported, as the cost of production of locally produced tractors is reportedly much lower. A high degree of local content has been achieved

in tractors manufactured in Pakistan. There is a significant base and structure in automotive sector which could be further developed.

Keeping in view the enormous international market in the engineering sector (6 Trillion US\$) and the fast capture of market by ASEAN developing countries, it does not appear impossible to have engineering exports of 20 billion US\$ in 10-12 years time. However it would require a major policy support and facilitation, leadership and hard work by the stake-holders in government and private sector. Pakistan existing exports in engineering sector are limited to:

- Surgical instruments (279 million US\$)
- Cutlery (30-36 million US\$)
- Fans (32 million US\$)
- Automotive sector (78 million US\$)
- Electrical Machines (74 million US\$)
- Machinery Specialized (51 million US\$)
- Auto parts (15 million US\$)
- Other Machines (160 million US\$)
- Total (~ 794 million US\$)

Pakistan's engineering sector comprises of the following elements::

1) Large public sector enterprises like Heavy Mechanical Complex, Karachi Shipyard, Pakistan Machine Tool Factory and Heavy Electrical Complex. Most of these enterprises were conceived in 1960s, and have now lost their earlier commercial edge, as traditional markets and products have disappeared or have been over by more competitive private sector. These companies have served as technology nuclei and have played a vital role in spreading technology and training qualified and skilled manpower. Most of these companies require major technologies and product designs under license from the western countries and also China. A major initiative is required to revitalize these companies through such modernization and technology input. A lot of power equipment of various kinds could be produced in these enterprises, saving foreign exchange, reducing production cost and increasing employment opportunities.

2) Larger private sector enterprises like DESCON have largely taken the market of pre-mentioned enterprises and have greatly expanded their product and services scope. They are also involved in some foreign

projects. More enterprises of this type are required and should be encouraged.

3) In automotive sector, wherein there are the following types of plants and companies. a) Automotive assembly plants for cars, Light Commercial Vehicles and Trucks of Suzuki, Toyota, Honda and Hino. b) Agricultural tractor assembly and manufacturing plants involving FIAT and Massey-Fergusson tractors. c) More than two dozen motor cycle assembly and manufacturing companies. d) About 400 automatic component manufactures supply locally produced parts and components to the vehicle assemblers and also for the after-market. There is a great potential for exports of the output of these companies to third countries and even to the parent companies, where vehicles are being assembled here. Cooperative trade frame work in SAARC countries including Iran and Afghanistan could also prove to be useful in this respect.

4) Machinery Sector; a wide variety of plant and machinery is being designed and built in Pakistan including food processing, Pharmaceutical, Machine tools and various other kind of machinery. Although these plants are not very sophisticated, but are very cost effective and affordable. In a lot of countries of Asia and Africa, there is a demand for this kind of equipment. Indian manufactures have made quite some in roads in this sector. Pakistani companies should be facilitated by GOP/TDAP through exhibitions, commercial counsellors and even direct selling through web-portals. The latter have been discussed separately in this chapter.

5) Surgical instruments and cutlery are already major export items. Cutlery is in its nascent state facing severe competition from China, but has a tremendous potential despite difficulties. Surgical instruments, the largest export item in engineering sector, seem to have reached a plateau. Modernization and expansion of product spectrum is perhaps required in this sector.

As mentioned earlier, Thai engineering / automotive sector grew on the basis of motorcycles and light commercial vehicles. This can and would be the situation in Pakistan. Due to a very small market of cars, the required scale economies may not be available in cars sector. LCV/ Loaders demand is expected to grow with the expansion of the economy and population increase. It is a low-priced product and carries both goods and passengers, and is used as ambulance, police mobile, school children transport etc. The demands on quality is much less stringent than it is in

the area of cars and almost no model change is required for a long time, offering scale economies and reduction in tooling costs. As prices became more competitive and affordable, the demand of both Motorcycles and LCVs is going to expand tremendously. Reduction in costs and increase in product quality would be made possible by the scales offered by the expansion of market, which would make products competitive in export markets.

Similarly domestic power equipment market is expected to grow. Over the past years, an average of 1000 million US\$ per year of imported power equipment has arrived from abroad. Market is expected to double every 7-10 years. There is a backlog resulting in load shedding. More than 100,000 MW of additional capacity is expected to be installed in the next two decades. JVs should be promoted and facilitated by GOP/TDAP in this area. Indigenization may save foreign exchange and cut costs and would ultimately provide the basis for exports in their area.

Reducing Imports

Oil Imports

Oil imports could be reduced by introducing fuel rationing, especially when oil prices cross a threshold of e.g. 100 US\$ per barrel. Advance Ready-made rationing scheme(s) should be available to implement there in such emergencies. Other measures are increased exploration and production (E&P) activities for oil and gas, substitution of oil by Thar coal in power sector and natural gas by coal gas produced from Thar coal. A detailed discussion on this is beyond the scope of this chapter and even this book.

Edible Oil

For more than two decades now, the need and issue of planting palm oil trees in the 700 kms long coast line of Baluchistan and of the same length in Sindh has been discussed and debated. Technical feasibility has been demonstrated. Cheaper imports from Malaysia probably thwarted the Palm trees plantation proposals.

Time has come; indeed it is overdue, that the present Government takes serious steps to bring self sufficiency in this sector in the next five years. However, plantation in a 700 kms area is a tall order although achievable. Malaysia could be provided incentives to enter into corporate plantation and installing local refineries. The latter they are doing already.

Food Rationing

When I was a boy, every fifteen days, I used to visit a designated ration shop, with a ration card and may be 20 or 25 Rupees in my hand. The rationwalla used to weigh and supply quite some atta (wheat flour) and sugar, for which I had to hire a labourer to carry home. The rationwalla used to write the amount of atta and sugar supplied by him. A widow used to visit our house every month, with a few kg of sugar bound in her dupatta (scarf), to sell it to my mother, perhaps at double the price. Those were the days of food shortages. The Green revolution of fertilizers, pesticides and tractors had not started yet, at that time combined West and East Pakistan population was around 47 million. Today (West) Pakistan alone is 170 million, with its strategic depth Afghanistan of 31.9 million who produce nothing but poppy.

Why cannot we ask the US the supply Afghan's requirements of food, and why do not we introduce the ration shop again. Their new version that is the utility stores are still there. Their number could be increased. However, the staff and management are thoroughly corrupt and involved in black marketing. But this is due to no ration cards and manual recording. Now with the advent of computerisation, NIC cards and NADRA, there can be a significant control and transparency by introducing "Smart ration cards". Rich should not be issued the ration cards, and they should buy from the open market. Similarly fuel rationing can be introduced also through smart cards. Present federal government has converted wheat subsidy into Benazir Cards, whereby Rs.1000 would be transferred monthly to poor families.

Many people are sceptic of the feasibility of such a scheme. Passing the subsidies, through ration shops/ utilities, may be more practical. One can include one or two more items. Through rationing, Government could also have a handle on smuggling and hoarding. Reportedly, there are significant wheat losses at the post – harvesting stage. Modern storage system should be introduced both at farm, district and provincial level. Modern storage system increases life and hygiene of the stored crop. These storages can be made in 2 or 3 months. Private sector could be involved in building and renting out such storage facilities ala IPPs in electric power sector. Countries like Turkey, Iran and now India have introduced such facilities at a large scale. This is a standard practice. Long term storage should be built at sea ports and other efficient locations.

Table 4.7: Pakistan Commodity Imports and Exports 2003-08 and Projections

(Million US\$)

Commodity	2008				2003				ROG Exports (%)	ROG Imports (%)
	Exports	Share (%)	Imports	Share (%)	Exports	Share (%)	Imports	Share (%)		
Food	3182	16.70	4359	10.91	1288	11.54	1412	11.55	19.83	25.30
Minerals (oil)	1860	9.76	12454	31.16	277	2.48	3230	26.43	46.36	30.98
Chemicals & Pharma & Fertilizer	220	1.15	4543	11.37	160	1.43	1801	14.74	6.54	20.32
Plastics	274	1.44	1752	4.38	123	1.11	600	4.91	17.30	23.91
Leather & Hides	1202	6.31	115	0.29	693	6.21	34	0.28	11.64	27.69
Textiles & Cotton	10780	56.58	2334	5.84	7794	69.84	611	5.00	6.70	30.74
Base Metals, Iron & Steel	293	1.54	2795	6.99	81	0.73	720	5.89	29.29	31.15
Machinery	153	0.80	7428	18.59	64	0.57	2221	18.17	19.01	27.32
Transport Equipment	60	0.31	2317	5.80	16	0.14	714	5.84	31.09	26.56
Grand Total	19052	100.00	39966	100.00	11160	100.00	12220	100.00	11.29	26.74

Source: Trade data from Federal Bureau of Statistics, Computation by the Author

Table 4.8: Total Exports by category (Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
A. Food Group	1,979,802	2,587,775	2,796,664
B. Textile Group	10,011,350	10,354,218	9,776,297
C. Petroleum Group	887,703	1,330,786	983,571
D. Other Manufacture	2,802,248	3,399,937	3,510,875
E. All Others	628,604	809,598	819,076
Total Export	17,278,306	20,426,902	19,120,542

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.9: Total Imports by category (Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
A. Food Group	2,419,910	3,326,450	3,586,061
B. Machinery Group	5,082,818	5,749,967	4,922,514
C. Transport Group	1,104,017	1,199,524	981,493
D. Petroleum Group	7,345,909	10,496,043	10,031,945
E. Textile Group	1,265,554	1,820,656	1,354,605
F. Agri. & Other Chemical	4,044,515	5,111,673	4,847,874
G. Metal Group	1,976,368	2,314,723	2,041,979
H. Miscellaneous Group	652,155	742,934	613,913
Total Import	26,989,443	35,396,897	31,747,400

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.10: Total Food Sector Exports (Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
A. Food Group	1,979,802	2,587,775	2,796,664
01. Rice	1,131,565	1,585,344	1,765,680
A) Basmati	785,399	988,702	1,186,850
B) Others	346,165	596,642	578,830
02 Fish & Fish Preparations	190,947	202,123	238,443
03 Fruits	143,070	172,200	162,361
04 Vegetables/Leguminous Vegetables	91,879	87,009	69,637
05 Tobacco	8,570	8,810	9,245
06 Wheat Unmilled	4,046	1,030	6
07 Spices	15,942	15,518	18,690
08 Oil Seeds, Nuts and Kernels	22,251	39,350	46,064
09 Sugar	7	64,119	6,381
10 Meat and Meat Preparations	55,044	64,345	85,356
11 All Other Food Items	316,481	347,928	394,800

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.11: Total Food Sector Imports (Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
A. Food Group	2,419,910	3,526,450	3,586,061
1.Milk And Cream Incl For Infants	61,829	72,527	68,038
2.Wheat Unmilled	14	570,829	918,579
3.Dry Fruits	45,292	55,846	56,155
4.Tea	184,551	180,525	200,476
5.Spices	40,263	64,379	53,730
6.Soyabean Oil	22,751	73,286	48,702
7.Palm Oil	859,836	1,445,467	1,342,483
8.Sugar	312,878	11,898	51,355
9.Pulses	225,192	178,890	200,268
10.All Others Food Items	667,305	872,803	646,275

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.12: Total Textile Sector Exports (Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
Textile Group	10,011,350	10,354,218	9,776,297
Raw Cotton	75,640	86,561	105,416
Cotton Yarn	1,075,966	1,167,597	988,907
Cotton Cloth	2,318,481	2,172,879	2,106,840
Cotton Carded or Combed	275,972	212,015	136,562
Yarn Other than Cotton Yarn	141,307	80,453	70,047
Knitwear	2,104,198	2,134,729	2,054,853
Bed Wear	1,394,372	1,456,417	1,526,642
Towels	166,288	415,106	546,591
Tents, Canvas & Tarpaulin	72,334	71,063	61,294
Readymade Garments	1,097,732	1,204,125	983,443
Art, Silk & Synthetic Textile	385,991	399,233	387,410
Made-up Articles (incl. Other Textiles)	346,840	365,718	330,484
Other Textile Materials	556,229	588,323	477,808

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.13: Total Textile Sector Imports (Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
Textile Group	1,265,554	1,820,656	1,354,605
Raw Cotton	647,187	1,101,670	619,970
Synthetic Fiber	214,427	265,956	301,273
Synthetic & Artificial Silk Yarn	233,853	259,900	255,796
Worn Clothing	7,357	7,173	18,272
Other Textile Items	162,730	185,957	159,294

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.14: Total Other Manufacture Exports

(Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
D. Other Manufacture	2,802,248	3,399,937	3,510,875
28 Carpets, Rugs & Mats	259,671	239,698	169,432
29.Sports Goods	411,979	415,363	384,823
A) Footballs	217,127	219,653	164,067
B) Gloves	62,071	77,105	82,106
C) Others	132,780	118,605	138,651
30 Leather Tanned	469,353	536,438	453,610
31.Leanther Manufactures	282,774	294,234	295,639
A) Leather Garments	171,150	170,238	200,112
B) Leather Gloves	52,864	51,157	39,111
C) Other Leather Manufactures	58,760	72,839	56,416
32.Footwear	110,352	114,301	88,618
A) Leather Footwear	83,453	88,594	64,936
B) Canvas Footwear	7,944	6,483	4,895
C) Other Footwear	18,956	19,224	18,787
33 Surgical Goods & Medical Instruments.	236,302	273,609	279,067
34 Cutlery	33,946	36,028	30,426
35 Onyx Manufactured	10,854	16,813	15,532
36.Chemical and Pharmaceutical Products	473,948	665,830	667,855
A) Fertilizer Manufactured	1,254	1,180	661
B) Plastic Materials	159,409	268,921	299,229
C) Pharmaceutical Products	78,952	86,508	94,049
D) Other Chemicals	234,332	309,221	273,916
37.Engineering Goods	324,685	325,241	347,498
A) Electric Fans	23,175	29,568	32,114
B) Transport Equipment	51,505	78,369	63,558
C) Other Electrical Machinery	42,979	57,827	74,683
D) Machinery Specialized	29,316	44,889	51,188
E) Auto Parts	15,214	16,945	14,080
F) Other Machinery	162,496	97,642	111,876
38 Gems	4,894	4,896	4,409
39 Jewellery	13,229	24,574	22,434
40 Furniture	11,070	10,065	7,895
41 Molasses	25,826	52,862	102,373
42 Handicrafts	1,123	586	843
43 Cement	102,609	354,427	606,396
44 Guar and Guar Products	29,637	34,972	34,026

Source: Federal Bureau of Statistics / State Bank of Pakistan

Table 4.15: Total Engineering Sector Imports

(Thousand US\$)

Commodity	2006-07	2007-08	2008-09 (R)
B. Machinery Group	5,082,818	5,749,967	4,922,514
11.Power Generating Machinery	567,444	1,010,723	1,304,622
12. Office Machines .Incl .Data Pros. Equip.	348,591	276,028	285,607
13.Textile Machinery	471,627	425,261	252,135
14.Construction & Mining Machinery	85,488	83,970	88,836
15.Electrical Machinery & Apparatus	591,894	870,567	715,704
16. Telecom	1,347,683	1,330,876	700,078
A. Mobile Phone	670,163	445,815	131,608
B.Other Apparatus	677,519	885,061	568,470
17.Agricultural Mach. & Implement	188,969	152,590	106,518
18.Other Machinery	1,481,122	1,599,952	1,469,013
C. Transport Group	1,104,017	1,199,524	981,493
19. Road Motor Vehicles	970,593	931,700	639,966
19.1 Completely Built Unit (Cbu)	139,142	250,458	96,996
A.Buses, Trucks & Other. Heavy Vehicles	48,142	112,720	43,960
B.Motor Cars	85,846	131,144	50,339
C.Motor Cycles	5,153	6,594	2,697
19.2 Completely Knocked Down (Ckd)	715,320	573,243	457,372
A.Buses, Trucks & Other. Heavy Vehicles	128,971	126,148	82,834
B.Motor Cars	499,825	375,341	327,820
C.Motor Cycles	86,524	71,754	46,718
19.3.Parts	71,152	78,616	65,623
19.4.Others	44,978	29,383	19,974
20.Aircrafts,Ships And Boats	113,405	238,831	317,616
21. Others Transport Equipments	20,019	28,992	23,911
G. Metal Group	1,976,368	2,314,723	2,041,979
34.Gold	47	61	0
35.Iron And Steel Scrap	243,445	463,584	530,513
36.Iron And Steel	1,192,332	1,319,966	1,127,162
37.Aluminium Wrought & Worked	180,945	169,304	123,264
38.All Other Metals & Artificials	359,599	361,809	261,040

Source: Federal Bureau of Statistics / State Bank of Pakistan

Bridging the trade gap

Table 4.16: Pakistan Trade Profile 2008

BASIC INDICATORS				
Population (thousands, 2008)	166 037	Rank in world trade, 2008	Exports	Imports
GDP (million current US\$, 2008)	168 276	Merchandise	69	52
GDP (million current PPP US\$, 2008)	439 036	excluding intra-EU trade	47	34
Current account balance (million US\$, 2008)	- 15 402	Commercial services	84	56
Trade per capita (US\$, 2006-2008)	375	excluding intra-EU trade	58	37
Trade to GDP ratio (2006-2008)	41.6			
		<i>Annual percentage change</i>		
	2008	2000-2008	2007	2008
Real GDP (2000=100)	152	5	6	6
Exports of goods and services (volume, 2000=100)	175	7	2	-9
Imports of goods and services (volume, 2000=100)	170	7	-3	-2
MERCHANDISE TRADE				
	<i>Value</i>	<i>Annual percentage change</i>		
	2008	2000-2008	2007	2008
Merchandise <i>exports</i> , f.o.b. (million US\$)	20 323	11	5	14
Merchandise <i>imports</i> , c.i.f. (million US\$)	42 329	19	9	30
	2008			2008
Share in world total exports	0.13	Share in world total imports		0.26
Breakdown in economy's total exports		Breakdown in economy's total imports		
By main commodity group (ITS)		By main commodity group (ITS)		
Agricultural products	19.2	Agricultural products		16.8
Fuels and mining products	7.3	Fuels and mining products		36.3

Pakistan's development challenges

Manufactures	73.2	Manufactures	46.9
By main destination		By main origin	
1. European Union (27)	25.7	1. Saudi Arabia	14.1
2. United States	18.0	2. European Union (27)	13.6
3. United Arab Emirates	9.9	3. China	11.2
4. Afghanistan	7.1	4. United Arab Emirates	8.9
5. China	3.6	5. Kuwait	8.1

COMMERCIAL SERVICES TRADE			
	<i>Value</i>	<i>Annual percentage change</i>	
	2008	2000-2008	2007
Commercial services <i>exports</i> (million US\$)	2 393	8	-1
Commercial services <i>imports</i> (million US\$) a	9 079	...	4

Share in world total exports	2008	Share in world total imports	2008
	0.06		0.26

Breakdown in economy's total exports		Breakdown in economy's total imports	
By principal services item		By principal services item	
Transportation	49.6	Transportation	44.3
Travel	10.2	Travel	16.6
Other commercial services	40.2	Other commercial services	39.1

Source: WTO

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PROPLAN

5 Development through Cooperatives

As defined by International Cooperative Association (ICA), cooperatives are defined as unions of persons united voluntarily to meet their common economic and cultural need, through a jointly owned and democratically controlled enterprise. In Pakistan the entrepreneur class having capital has a very small base. There is an upper limit to the investment and output in the traditional enterprise sector. Cooperatives could be a first step for the under-employed, unemployed in the upward social mobility of becoming a SME owner. Our artisans, farmers, professionals and workers have a lot of potential which can be tapped from such innovative schemes.

Cooperatives should not be confused with the archaic communist cooperatives or fraudulent banking companies. Cooperatives are an efficient form of business organisation where people are at the centre; workers employ capital rather than capital employing labour; owned and controlled by 10, 20 or 30 people and could be a multi-million dollar enterprise employing thousands of people. Over the last two decades, cooperatives have been getting increasingly popular. To date 100 million people are employed by cooperatives. Moreover, multinational cooperatives should also not be confused with non profit associations or NGOs. There are all kinds of cooperatives working in all kinds of sectors ranging from garments and textiles, dairy, agriculture, buildings, credit union, health, social and even utilities.

There are certain principles and values of the cooperatives system as is being practiced these days world wide. These are self help, self responsibility, democracy, equality, equity, solidarity, social responsibility, autonomy and independence. According to UN estimates in 1994, that the livelihood of some 3 billion people, half the world population was some how linked with cooperatives of one kind or the other. 180 million people in China, 236 millions people in India, 9.1 million people in Argentina, 5.4 million people in Malaysia and in the UK, 9.8 million people are coops members or beneficiaries.

There is an international association of cooperatives, known as International Cooperative Alliance. Some 95 countries are members with the ILO providing support from the UN system. There are nine sectoral organisations at international level in agriculture (ICAO), business (ICBA), consumers (CCW), Fisheries (ICFA), health (IHCO), housing (ICAH), mutual insurance (ICMIF), industrial and services producers (CICOPA) and (TICA).

Transparency, domestic control, and self-ownership are to be the cornerstone of the cooperative organisation. However the threat is that the mafia, cronies, middleman may take control of cooperatives behind the scene, defeating the very purpose and moto of cooperative organisation. The regulatory regime should see to it that this does not happen. An effective facilitation regime in the area of small finance, marketing, linkage and support, if brought about by the government, would be a key to success in this area.

- In Argentina, there are 17941 cooperatives with 9.1 million members.
- In Belgium there are 30 cooperatives; cooperative pharmacies there have a 20% market share.
- In Canada and Japan, one person in three is a member of one cooperative or the other and 1 in 4 in the USA. In Singapore 50% for the population are members of cooperatives.
- In Brazil, cooperatives produce 72% of the wheat, 44% of barley, 43% of soya, 39% of milk and 35% of cotton and 21% of coffee resulting in exports of 1.3 billion US\$.
- In Japan, agricultural cooperatives report output of US\$ 90 billion, with 91% Japanese farmers as members.
- In Finland 74% of meat, 90% of dairy products, 50% of eggs, poultry and 34% of forests are controlled by cooperatives.
- In Korea, agricultural cooperatives have a membership of over 2 million farms (90% all farmers), and an output of US\$ 11.00 billion and 70% of fishery products.
- In Norway, 99% of Milk production and 76% of timbre is coming out of cooperatives.
- In the UK, the largest travel agency is a cooperative.
- In France, Germany and Canada 700,000, 440,000 and 160,000 people are employed by cooperatives.
- In India cooperative movement has had considerable role and success in improving the Indian economy and social conditions. Two

cooperatives have had country wide out reach and are known world wide. One covers milk and dairy and the other fertilizer. Gujrat Cooperative Milk Marketing Federation (GCMMF) markets its milk products with the trade name Amul, with turn-over of around 1.3 billion US dollars. It has 2.7 million milk producer members in 13141 village societies. In addition to marketing milk, it owns processing plants, markets a variety of milk products like cheese, butter, chocolate and ice cream. Even multinational firms are scared of its distribution network and competitiveness and quality.

- Top 300 cooperatives called “Global 300”, and an annual turn-over of US\$ 963 billion, almost equivalent to Canada’s economy which is 9th in the world. The list includes Switzerland largest employer “Eenpore” largest dairy business, France’s largest bank, the largest rice company, Japan’s largest agricooperative Zen Noh with a turn-over of US\$ 54 billion.

People enter in the job market with innovative ideas. Jobs have to be found to absorb them with reasonably acceptable remuneration. Cooperatives can provide an acceptable employment to teeming millions, alongwith providing products and services at reasonable prices and stable fashion. It is estimated that 50% of Pakistan’s economy is black and informal, most of it in retail, beset by hoarding and middle manship etc. In almost all sectors of Pakistan’s economy, cooperatives can be promoted. Following are a few examples.

For organic farming, hundreds of cooperatives can be formed. Organic farming essentially means non chemical based farming. Many of our poor farmers do not have the money to buy fertilizers and pesticides. They are the natural organic farmers. Organically produced fruits and vegetables and other products fetch better prices, normally 20% higher than the normal products. However these have to be certified by international agencies, where a government has to chip in.

1. Vegetable and fruit growers always complain of the middle man and the “arthi” skimming off their profits. Vegetable and fruit growers cooperative could eliminate the villain, if ministry of agriculture, agricultural development banks, and market committees put their act together.
2. Teacher’s cooperatives can run schools.
3. Student’s cooperatives can run tuition centres.
4. Pakistan is 5th largest producers of Milk. Milk producers’ cooperatives and consumer cooperatives could be established

which would result in increased supply of milk, reduction in wastage, reduction in prices and introduction of intermediate technology. As mentioned earlier in India, such cooperatives are working very effectively.

5. Doctors' cooperatives can run rural basic health units.
6. Thousands of cooperatives can be formed in garments, handicrafts.
7. Sweeping and janitorial cooperatives can improve the lot of members from minorities who work in these fields.
8. Rural roads construction, urban road maintenance, canal building can all benefit from cooperatives.
9. Even household worker's life could be improved through cooperatives old age insurance ala EOBI.
10. Taxis and public transport offer many interesting opportunities as cooperative ventures, which currently pay excessive interests to money lenders and rentiers.
11. In housing, cooperative societies can provide houses at 30 – 50% low prices.
12. Engineering and management consulting companies including IT can be organised on cooperatives principle. Currently the profession suffers from fragmentation and lack of scale economies. There is a potential of hundreds of million dollars export in this area.
13. Credit Unions could be formed as cooperatives of savers and depositors, affording low interest rates to home buyers, avoiding a 6 – 7% excessive margin consumed by the banks and their crony defaulters.
14. In all such areas which are labour intensive, cooperatives can be a useful agent; also to provide economies of scale bringing consumers together to create a large market; bringing producers together to support them with market, technology and information. Establishing cooperatives and putting them together is a lot easier than SMEs where greed, secrecy and taxation issues do not let them go very far. However this should not be taken as a discouragement of SMEs which has a role for itself for those with money, ambition and enterprise.
15. A pilot project in garments or electronics could be launched in Karachi or Faisalabad, with a high rise industrial business such as banking, vendors, material supplies, shops etc.
16. In minerals mining and marble sector, the state of technology and mechanisation is very low. Work is largely done with axes, shovels, hammer and chisels, with a very low output. These

sectors are also ideal for cooperatives that would lead to higher earnings for these sector workers.

Government can increase employment, improve worker welfare and enhance economic output and exports by launching a major initiative comprising the following.

- Developing a new and modern legislative and regulatory frame work for cooperatives.
- Opening departments in SECP for dealing with cooperatives.
- Ask facilitative organization like SMEDA, EPB and NGOs to support formation and management of cooperatives.
- Induce lending agencies to finance cooperatives.
- Provide tax exemption or preferential tax treatment for next 10 years.
- Join and integrate with the global cooperatives framework for market linkages and exchange of information etc.
- Develop a five year cooperative development plan, with a target of creating 50,000 cooperatives with employment of 1.5 million workers and a value added of 1.50 – 3.0 billion US\$, half of which should be exported.

Cooperatives – a potential institution for social justice

In Pakistan cooperatives had a bad name, of scams and frauds. Cooperative housing societies have done rather well. Most of the land in urban areas has been developed by housing societies. However in this chapter, we are concerned more with agriculture and business cooperatives.

Cooperatives in some cases can be a substitute for privatization. Workers take-over of privatized units has not created successful examples in all the cases, and in most such cases there have been powerful and wealthy individuals behind the scene. Pakistan post office, Railways (in total or parts of it), Pakistan Television etc could be converted into workers cooperative, with some government interest and control.

There is a strong case for granting public land to the landless. One-third of the land of Pakistan is still not in use. An alternative could be to allot public land to agricultural cooperatives. 1000 acres per district would support 100 cluster cooperatives with approximately 100,000 workers as

members of the cooperatives. There is a strong potential for meat, milk, and sugar-cane cooperatives. Similarly for industries, one village – one product scheme of SMEDA (originally Chinese) could be implemented in the framework of cooperatives.

GOP could give the now semi-defunct PIDC, the mandate of promoting cooperatives. The provincial governments could energize their small industries departments by adding cooperatives to their mandate; it would be worthwhile to even establish an organization for this purpose.

The Indian Dairy Sector has achieved remarkable success under cooperatives movement, strengthening democracy and economic participation. We have reproduced in the following, a narration of the history and success of cooperative movement in developing the dairy sector, from the website of the Indian Dairy.

History and success of Dairy Cooperatives in India

Before the cooperative movement began, the dairy industry in the Kaira District was being exploited by middlemen who supplied milk to the consumer. It began as a response to this exploitation and put an end to it. Today in India, there are 75,000 dairy cooperative societies, spread all over the country with a membership of 10 million. The leading-three names in the cooperative sector are; The Gujarat Cooperative Milk Marketing Federation (GCMMF), The Kaira District Cooperative Milk Producers' Union Limited and The Mehsana District Cooperative Milk Producers' Union. The Kaira District Cooperative is the second best in the country. It helped to create GCMMF, the apex body of all cooperatives in Gujarat.

Operation Flood which started in 1970 concluded its third phase in 1996 and has to its credit these significant results:

- *The enormous urban market stimulus has led to sustained production increases, raising per capita availability of milk to nearly 200 grams per day.*
- *The dependence on commercial imports of milk solids are done away with.*
- *Modernization and expansion of the dairy industry and its infrastructure, activating a milk grid.*
- *Marketing expanded to supply hygienic and fair priced milk to some 300 million consumers in 550 cities and towns.*
- *A nationwide network of multi-tier producers' cooperatives, democratic in structure and professionally managed, has come into existence.*

Competition and Competitiveness

Millions of small producers participate in an economic enterprise and improve the quality of their life and environment.

- *Dairy equipment manufacturers have expanded to meet most of the industry's needs.*

Modern technologies in animal breeding and feeding have been adopted by a significant number of farmers. Modern consumer processing and marketing facilities have been created all over the country.

Technical input services including animal insemination, balanced cattle feed / bypass proteins feed, better fodder varieties and emergency veterinary health services - have not only helped in raising and sustaining milk production but have also ensured a better quality of life in the villages.

Besides creating urban employment in dairy plants, marketing, transport and distribution, these dairy cooperatives have helped to provide farmers with a sustainable rural employment program. A majority of the cooperative members are landless, marginal or small farmers who contribute their produce of milk at the cooperatives. For these contributors, the income derived from milk provides their only regular cash flow, transforming dairying into an economic activity.

The village cooperative is a clean well lit and orderly place. The villages have gone through a similar transformation ever since the cooperatives began to operate. When the people of a village see cleanliness, sanitation, hard work and discipline in the cooperative, and they know that the cooperative serves them well, it probably inspires them to bring more of these qualities into their own lives the migrating population is settling down. About Rs 2,000 crores is being paid to the farmers in their villages daily -- morning and evening -- which constitutes a large portion of their income.

Courtesy: www.indiadairy.com

PROPLAN

6 Competition and Competitiveness

Competitiveness in international markets and elsewhere would come about first from promoting competition within the country internally, by promoting social mobility, reducing invisible barriers, eliminating class monopoly, releasing millions of human beings from social bondage of one form or the other. It is not just poverty and economic conditions; it is the socio-political apparatus that may have to be overhauled. The politics of corruption and favoritism must end. Even in the mundane sense, the monopoly rentiers push the cost of doing business up by extracting and imposing their price and restrict market conditions. A significant part of the economy is under cost-plus regime, and where it is not, there are many social and political barriers to entry.

The second major determinant of international competitiveness is social conditions. In a primitive stage of economic development, one does benefit from lower wages due to poverty. And this is perhaps the story of initial inroads of Pakistan in international competition, and of many other similar countries. The crass competition which is based on low-wage poverty vanishes into thin air with slight improvement in social conditions and wages due to labor demand creation. Pakistan textile sector is a classic example which has thrived on 'cheap cotton' and 'cheap labor', both undeserved and undesirable factors. Cheap cotton robbed agriculture and agricultural workers while cheap labor robbed industrial work. Our textile sector is able to sell only when it gets cheap cotton, cheaper than the international prices. Ironically, there is always some competing poor country in the line, who replaces today's competitive champion. Therefore competitiveness based on productivity, innovation and true domestic competition is enduring and lasting. The nineteenth century competitiveness is whimsical and transient.

We badly need transformation of our industrial owners and business classes. All their focus and attention is on underpaying workers, avoiding taxes and indulging in all kinds of illegal practices and bypassing labor laws. While government machinery is corrupt, the race for becoming

millionaires over night, our businessmen further corrupts the government system.

There are other opportunities for reducing costs such as energy conservation, and better material management. Until recently, when government and utilities tightened their belt and became strict with electricity and gas theft, no talk of energy conservation cut ice with most of the industrialists. They saw more potential in bribery and theft. Only now, energy conservation has become fashionable with some of them.

Lack of proper accounting and proper inventory control is normally a drain on profits, especially in the textile SMEs. Instead of investing in proper accounting system and computerization, reliance is made on make shift system and stolen software, which is prone to error and manipulation by the insiders, who are normally close to them and are 'trust worthy'. Some of their employers with a nominal salary of Rs 25000 have made bungalows in posh areas. Partly double book keeping for tax purposes is responsible for poor accounting practices and infrastructure. The accounting system cannot meet the diametrically opposite requirements, any information and confusion or wrong information for the tax collectors and correct information for the management and control purposes. (Some creative and genuine reform for the SME sector may have to be done, which is a million dollar question.)

Improving the selling price is yet another programme for improving profitability and competitiveness, by searching new markets and by improving product quality. Escalating labor costs should be accompanied by improvement in product quality and price. If this is not done, one would lose competitiveness. Again our textile sector is busy only producing shoddy products, low quality level towels and bed sheets. At first it used to be yarn only, and that of low grade and number, used to be produced. To give the devil its due, some inroads have been made towards fabrics and high quality and finer yarns.

And now the China factor, which can beat any price and can afford to sell at mind-boggling prices catering to every price class. They can do it for a variety of reasons; scale economics, communist capitalism, undervalued currency and sheer hard work and discipline. All qualities and all quantities are possible from China. Chinese are our friends, what can we learn from them, nothing but corruption? Chinese are also very good at it. At least we have something in common.

Competition and Competitiveness

While it would be fool hardy. We expect that the government would be able to do much towards improving competitiveness. There is a lot of traditional literature offering recipe, some of which will be reproducing here as well. Competitive Support Fund has been established with the support of USAID and is doing useful work in many sectors and is open to suggestions.

One thing government can do is towards making affordable energy available regularly and without shutdowns. It is well within the realms of possibilities and cheaper. Reportedly government of Sindh has done some quiet progress. But the noise of progress is still not audible. Progress does make some noise and we want to hear that.

World Economic Forum has adopted the Michael Porter's model of development, in design of measuring competitiveness that divides nations' economic development in the following three stages;

First Stage is factor driven, based on cheap and abundant supply of labor and commodities. Second Stage is efficiency driven, when nations invest in machines, automation and training of its workforce to increase output and profitability. Third Stage is Innovation driven; when competition requires continuous improvement in products and process. Fourth Stage is my "concoction", of wealth driven, when nations focus their energy on accumulation of capital and technology (and marvel on the past, and start engaging in monopoly and hegemony).

World Economic Forum (WEF) has devised twelve pillars for its competitiveness measurement paradigm on methodology, essentially based on Porter's model:

1. Basic Requirements
 - a. Institutions.
 - b. Infrastructure.
 - c. Macroeconomic Stability.
 - d. Health and Primary Education.
2. Efficiency Enhancers
 - a. Higher Education and Training.
 - b. Goods Market Efficiency.
 - c. Labor Market Efficiency.
 - d. Financial Market Sophistication.
 - e. Technological Readiness.
 - f. Market Size.

3. Innovation and Sophistication
 - a. Business Sophistication.
 - b. Innovation.

In the following, rather than reinventing the wheel, we reproduce the annual review report released by CSF Pakistan.

Overview of Pakistan's ranking in Global Competitiveness (2008-2009)

Pakistan's rankings in the global competitiveness report (GCR) fell to 101st place among 134 countries. Scores fell across the board in most indicator areas. The following analysis presents specific areas of priority and how Pakistan's competitiveness can be restored and improved. The global economic downturn, the internal security situation, the down-turn in demand for Pakistan's key exports and other factors are daunting challenges. The following chapter pinpoints specific areas which timely action can improve Pakistan's performance in the near term and lay the foundations for future economic growth. As mentioned in previous State of Pakistan's competitiveness reports, if the government of Pakistan (GOP) can design and implement a comprehensive set of economic reforms to improve competitiveness, Pakistan would rapidly rise in the rankings.

Pakistan's Rank and Hard Score '07-'09

	2006-2007	2007-2008	2008-2009
Rank	83	92	101
Miscellaneous	122	131	134
Hard Score	3.82	3.77	3.65

This chapter dissects and analyzes Pakistan's rankings from the World Economic Forum involving human capital. Confidence in institutions decreased as a result of the worse situation and a decline in the perceived fairness of public and private sectors in macroeconomic stability of 15 ranks was precipitated largely by the growing budget deficit and significant increase in the interest rate spread from 4.0 to 6.9. Other significant declines were in goods market efficiency (down 18 ranks, led by trade barriers and agricultural policy) and financial market sophistication (down 23 ranks, led by increased difficulty in accessing loans). Overall, Pakistan does well in market size and infrastructure. (WEF) GCR 2008–2009. Pakistan's ranking fell overall, largely due to low ratings in human development with relatively high ranks in business sophistication and innovation. In order to improve its competitiveness, Pakistan should simultaneously move to reduce or eliminate structural deficiencies, while building on its comparative strengths.

Competition and Competitiveness

A relatively small decline in Pakistan's hard score over the last two years has led to a disproportionate decrease in its rankings, even when taking the addition of new countries into account. From 2007 to 2009, Pakistan's hard score fell from 3.82 to 3.65 (-.17), while its rank fell from 83 to 101 (-18).¹ In 2007 Pakistan's score was 3.82, which earned it a respectable rank of 83. The score declined only slightly in 2008, but Pakistan fell to 92nd place. Pakistan's score again dropped marginally to 3.65 in 2009 yet fell further to 101st. This is an important observation because these rankings, like competitiveness itself, are relative. There fore, even staying at the same level objectively could mean falling behind competitors and a net decrease in overall economic competitiveness. Part of the decline may be attributed to an increase in the number of countries included in the report.

While Pakistan ranks comparatively well on the two most advanced pillars, its ranking on all 12 pillars fell compared to last year. Figure 1-2 illustrates the change in Pakistan's rankings from last year to this year by pillar. Some of Pakistan's top rankings are on the most advanced two pillars: business sophistication (87) and innovation (82). While these are still comparatively strong vis-à-vis Pakistan's other pillars, it is important to note that these rankings fell by 8 and 13 points, respectively, since last year. Pakistan ranks highly in terms of its market size (29), which is largely a function of the large population and growing middle class, it also scores comparatively well in the pillars for financial market sophistication (88) and infrastructure (83). Yet these also fell by 23 and 11 points, respectively. Institutions (95) and goods market efficiency (101) were relatively competitive last year but fell 14 and 19 points, respectively. It is concerning that Pakistan fell the most in the pillars that were most competitive.

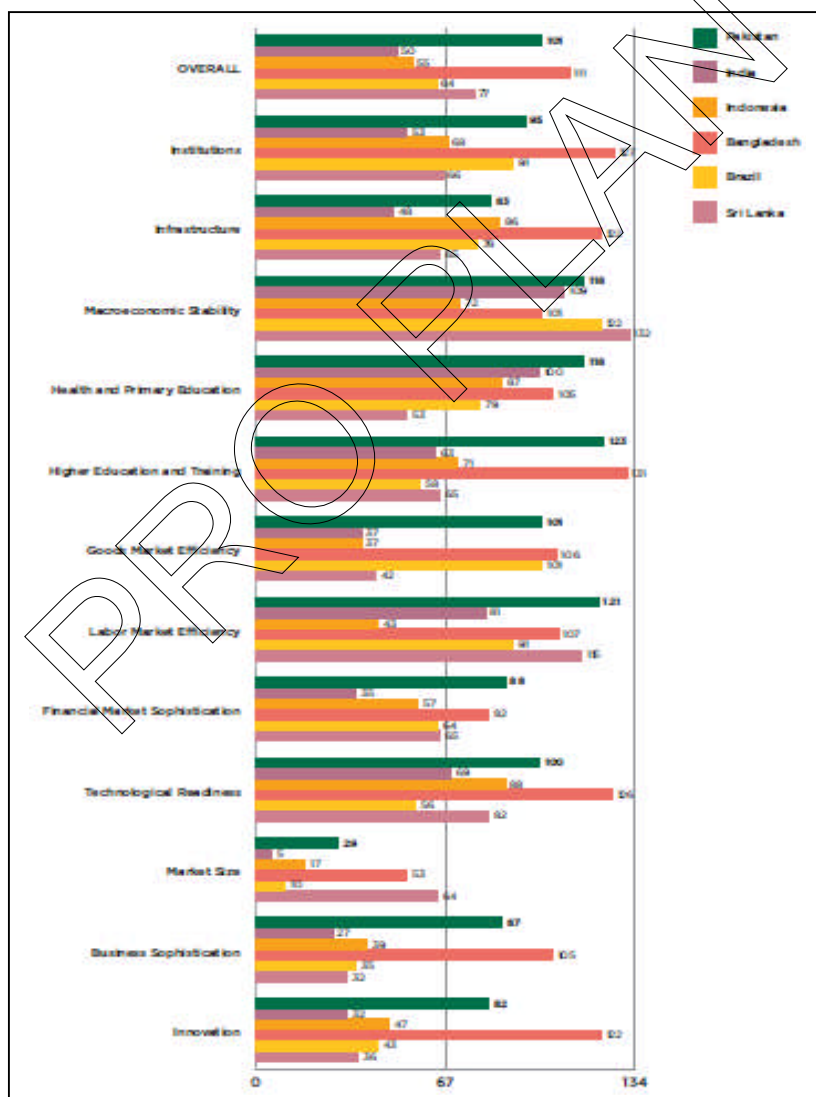
Pakistan's Best and Worst Ranked Indicators: Pakistan's performance indicators cluster at the bottom with 15 of 113 indicators in the bottom 15% of countries and with only 1 indicator in the top 15%, but these could improve significantly with attention to improving education and improving investment-related policy and infrastructure. Figure 1-3 displays the highest (top 40%) and lowest (bottom 15%) ranked indicators for Pakistan. **It is immediately evident that if Pakistan could improve its educational system, its rankings would improve greatly since many indicators are interrelated.** Increasing enrollment, quality, equity, and expenditure would address 8 of the 15 lowest indicators. Adding an additional 1% of gross national income (GNI) (from 1.8% to 2.8%) to education expenditure would result in a jump of 20 places.

Pakistan lags behind most regional competitors, except Bangladesh, and fell more in the past year than all comparator countries. Benchmarking Pakistan against comparator countries is a useful analytical tool because competitiveness is a relative concept and depends on how a country's peers are performing. This report benchmarks Pakistan's performance against a set of comparator countries.

Pakistan's development challenges

As illustrated in Figure 1-5, Pakistan falls below most of its benchmark countries, except Bangladesh, in all but three indicators. Pakistan scores slightly higher than Indonesia in infrastructure, but given that Indonesia is the world's largest archipelago, it is reasonable to assume it has additional infrastructure challenges compared to contiguous nations. Macroeconomic stability in Pakistan ranks higher than Sri Lanka and Brazil. Pakistan's market size is larger than Sri Lanka and Bangladesh. Pakistan falls behind regional competitors in Pillar 5 (higher education and training), Pillar 6 (goods market efficiency), and Pillar 11 (business sophistication).

Pakistan and Benchmark Countries across GCI Pillars



Competition and Competitiveness

Pakistan fares well compared to other factor-driven economies in terms of the more sophisticated pillars but falls behind in terms of basic human capital development. While benchmarking against individual regional and global competitors is useful, it is also important to compare Pakistan to an aggregated group of countries at the same level of development.

For Pakistani businesses, lack of transparency and stability in the government represent the greatest obstacles for doing business, while workforce deficiencies also figure prominently. Competitiveness is based largely on the ability of firms to achieve sustained increases in productivity and to outperform their international competitors. Consequently, Pakistan must also address deficiencies in the overall business-enabling environment to make it easier for firms to conduct business.

Pakistan's growth in GDP per capita has been modest and is anticipated to improve only marginally in the next few years. Pakistan is the 6th most populous country with the 47th largest GDP, which translate into the 111th lowest rank in GDP per capita out of the 134 countries ranked in the GCR2008–09. Again, Pakistan lags behind all benchmark countries in terms of growth except for Bangladesh, which suffers from recurring and destructive natural disasters and only enjoys a small percentage of the natural resources with which Pakistan is endowed. If Pakistan can increase its GDP per capita, through high GDP growth and effective family planning policies, it will produce prosperity for all citizens. However, since growth in disposable incomes translates into growth in the size and sophistication of the local market, it will also create a virtuous cycle which can accelerate competitiveness gains. Additionally, higher GDP per capita growth means people can afford access to basic education and health services, improvements which would address some of Pakistan's lowest ranking pillars on the GCR.

Source & Courtesy: Competitive Support Fund (CSF Pakistan Annual Report 2009)

Education & Economic Competitiveness

An education policy has been announced recently. The policy environment had been put to a hold due to intervening political process. The policy has been developed by the previous government. As has been mentioned earlier in these passages elsewhere, that a lot of policy prescription is already available in our intellectual and administrative stock pile. There is a consensus on major issues among political parties and even the so-called establishment. On education as is widely acknowledged, the news is almost bad; lagging achievements and big pronouncements. The policy spells out the broad goals, programs and approaches. The successive administrators would have to announce

priorities, financial allocation, develop programme and projects and monitor and streamline a basically inefficient and corrupt education system. Therefore, it may be in order to review it, change and adjust where advisable, and announce it. Rejecting the previous efforts only for showing contempt for the past and appear revolutionary would be a luxury present government can ill afford, in view of the many pressing and urgent problems that it is facing. Such policies are normally outcomes of long consultation processes, expensive foreign consultancies, input of internal agencies, which is the same irrespective of the color of the ruling parties or grants.

However there are two exceptions, where new government should take a fresh stock of the situation; first the activities and programs of Higher Education Commission which have been full of extravaganza, narcissism and lop-sidedness. Some of its projects like of new engineering universities at the expense of the existing ones and other employment and remuneration policies and schemes need a thorough review. A more equitable and much needed primary education system and its distribution is the need of the hour.

Another vestige of the past, the so called National Commission on Human Development, I suppose is already inactive with the ouster of its founding chairman who found more interesting opportunities in destroying cricket. Its staff should be absorbed, as those mortals do not share the benefits reaped by its germs and sycophants.

The policy recognizes that the educational framework and policies of the period 2002-2008, and the output were unsatisfactory, and therefore a premature end to that framework and search for a new framework, initiated even by the previous regime itself. Their protagonists would have some solace in this admission of guilt. The two main admissions, as is widely known, are:

- One third of the school going age children are still out on the streets, and not attending schools. The enrolment rates are much lower than countries at similar stage of development.
- Literacy rate, with literacy defined at absolute minimum possible standard stands at 49%, as opposed to Sri Lanka (90.7%), Iran (82.4%), Indonesia (90.4), Vietnam (90.3%), Egypt (71.4%), and our neighbor India (61%).

The culprits identified, as is widely known and acknowledged; low financial and administrative commitment reflected in educational expenditure of 2.7% of GDP, as apposed to 4-8% of other countries; the other factor being inefficient and under managed system. On both the counts, the present government has to show its sincerity; gradual but significant enhancement of education budget, achieving a target of 4% by the end of its term in the year 2013; secondly, bringing a revolutionary change and spirit in the education system. Popular governments backed by democratic and grass root supports are at much advantageous position to control corruption and inefficiencies. The problems are known, of ghost schools, teachers and students; poorly trained teachers, and corruption. Fortunately, frameworks are still there. School Management Committees should be organized and energized. Ministers can play a direct role by visiting at least one district every week, demonstrate commitment, observe school performance directly, and remove the absentee education lords on the spot. Encourage the honest even if he or she may be belonging to the cronies and scare the dishonest and powerful who siphon of resources and convert schools into their Hujra or Otaq giving rise to the "ghostism".

The elite and establishment normally pay lip service to the equity goals. Their political agenda and high international profile is normally their priority number one. I have a bad news for them. The Competition Support Fund of Pakistan has released a report, on Pakistan's competitive position derived from the data published and prepared by the World Economic Forum.

The bad news is that Pakistan lags behind the regional countries in the Global Competitive Index GCI, Malaysia tops the list at 21, followed by India 26, Sri Lanka 53. One does not mind China at 46. We should be happy that our brothers in Bangladesh are worse off there at 109. Higher number denotes lesser competitiveness. Pakistan's GCI is 60 and that of the US being one (1), the most competitive nation in the world. Pakistan's low status in GCI stems largely from poor health and education attainment. India has similar issues but has much better ranking in institutions, infrastructure, market efficiency technological readiness, business sophistication and innovation. It is much more difficult to achieve efficiencies in those sectors. India's sheer size of the economy may have generated the kind of the surplus that is required in achieving excellence in these areas. Pakistan can achieve competitiveness on a fast track basis by achieving higher education, training and health standards by investing higher resource level in these

sectors. So if not for the Poor's sake let one improve the education and health for one's own sake of competitiveness, positive trade balance and comfortable reserves. Pakistan's textile industry crises largely emanates from the poor standard of work force to which government and the sector itself have contributed.

Competitiveness & Competition

Competition commission of Pakistan (CCP) seems to be confusing competition with competitiveness, an indication of which is its posting on its website the "Global Competitiveness Data of Pakistan", issued by World Economic Forum. I would not have taken an issue with this otherwise, but I am afraid this may distract CCP from doing its more essential job of promoting competition. Let me first try to understand the difference between the two;

Competition is defined (as per www.investorword.com) as:

The existence within a market for some goods or service of a sufficient number of buyers and sellers such that no single market participant has enough influence to determine the going price of the goods or service (Opposite of monopoly).

www.businessdictionary.com defines as:

Open market rivalry in which every seller tries to get what other sellers are seeking at the same time-sales, profit, and market share by offering the best practicable combination of price, quality, and service. Where the market information flows freely, competition plays a regulatory function in balancing demand and supply.

www.businessdictionary.com defines competitiveness as:

Ability of a firm or a nation to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them.

Out of 12 pillars and 100+ factors determining competitiveness, only a few factors pertain to competition. Most pertain to factor, efficiency and innovation. Hence Pakistan's ranking of 101 on competitions model of WEF, does not represent state of competition in Pakistan but represents state of competitiveness. CCP would be well advised to develop its own "Index of Competition", major determining factors of which could be;

Competition and Competitiveness

- % of GDP under cost-plus system
- % of GDP under other interactive practices
- No of companies (%)
- Commodities short subject to input, of output price, of quota or other control.
- Volume of business services brought units competition domain as a corrosiveness of CCP actions.

What CCP is doing and has been data to do in a short period of its existence is commendable and ought to be encouraged and supported. It is not easy, even for a government agency, to stand against the vested interest and power of monopolist. Both the chairman CCP and the CCP itself could have lost their job and were fortuitously saved, indicating some vitality in Pakistan's governing system. They have dented the power of the cement cartel, but have not succeeded in breaking or diluting similar practices in banking and sugar sectors. While sugar pricing and monopoly issue are widely known, there are also grave questions on Pakistan's banking sector and interest rate determination, and the wide gap between lending and deposits rates of interest. SBP is supported to be a watch dog in this respect, but suffers from professional identification with banking activities and in interest and many not have the right organizational perspective to curb monopolist practice and CCP may possibly have to adopt a more pro-active approach, while appeasing SBP's possible misgivings on CCP action in this respect. We reproduce in the leeching excerpts from the CCP report "State of competition-2008"

Methodology of Computing Global Competitiveness Index (GCI)

Methodology: The GCI is based on 12 pillars of competitiveness that are divided into 3 *pillar groups*: Basic Requirements (Institutions, Infrastructure, Macroeconomic stability, Health and primary education), **Efficiency Enhancers** (Higher education and training, Goods market efficiency, Labor market efficiency, Financial market sophistication, Technological readiness, Market size), and **Innovation and Sophistication Factors** (Business sophistication, Innovation).

Each pillar is made up of indicators that come from either 'hard data,' from major international sources, or 'soft data,' from the WEF conducted Executive Opinion Survey. These raw data indicators for a given country are scored on a scale of 1 to 7, where 7 is the best score. The pillars are

then given a score by averaging the indicator scores under that pillar. Similarly, the scores of the pillar groups are derived by averaging the scores of the pillars within that group.

When creating the overall score for each country, weighting schemes are applied, based on GDP per capita. Countries are grouped into three *Stages of Development* based on their GDP per capita. Least developed countries are thought to be **factor driven**, middle income countries are **efficiency driven** and developed countries are deemed **innovation driven**. As a country develops, less weight is put on the Basic Requirements and more is placed on Efficiency Enhancers and Innovation and Sophistication. To ensure that the changing weights do not cause jumps in the GCI scores over time, there are transition GDP per capita ranges. These ranges apply a linear method to the transition stages that allow score changes to be smooth as countries enter different stages of development.

Stage of Development	GDP per capita in US\$
Stage 1: Factor Driven	< \$2,000
Transition from Stage 1 to Stage 2	\$2,000 - \$3,000
Stage 2: Efficiency Driven	\$3,000 - \$9,000
Transition from Stage 2 to Stage 3	\$9,000 - \$17,000
Stage 3: Innovation Driven	> \$17,000

Pillar Group	Factor Driven Stage %	Efficiency Driven Stage %	Innovation Driven Stage %
Basic Requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

Table 6.1: Foundation of Twelve Pillars of GCI

Basic Requirements 1. Institutions 01 Property rights 02 Intellectual property protection 03 Diversion of public funds 04 Public trust of politicians 05 Judicial independence 06 Favoritism in decisions of government officials 07 Wastefulness of government spending 08 Burden of government regulation 09 Efficiency of legal framework 10 Transparency of government policymaking 11 Business costs of terrorism 12 Business costs of crime and violence 13 Organized crime 14 Reliability of police services 15 Ethical behavior of firms 16 Strength of auditing and reporting standards 17 Efficacy of corporate boards 18 Protection of minority shareholders' interests 2. Infrastructure 01 Quality of overall infrastructure 02 Quality of roads 03 Quality of railroad infrastructure 04 Quality of port infrastructure	05 Quality of air transport infrastructure 06 Available seat kilometers (hard data) 07 Quality of electricity supply 08 Telephone lines (hard data) 3. Macroeconomic Stability 01 Government surplus/deficit (hard data) 02 National savings rate (hard data) 03 Inflation (hard data) 04 Interest rate spread (hard data) 05 Government debt (hard data) 4. Health and Primary Education 01 Business impact of malaria 02 Malaria incidence (hard data) 03 Business impact of tuberculosis 04 Tuberculosis incidence (hard data) 05 Business impact of HIV/AIDS 06 HIV prevalence (hard data) 07 Infant mortality (hard data) 08 Life expectancy (hard data) 09 Quality of primary education 10 Primary enrollment (hard data) 11 Education expenditure (hard data) Efficiencies Enhancers 5. Higher Education and Training 01 Secondary enrollment (hard data)	02 Tertiary enrollment (hard data) 03 Quality of the educational system 04 Quality of math and science education 05 Quality of management schools 06 Internet access in schools 07 Local availability of specialized research and training services 08 Extent of staff training 6. Goods Market Efficiency 01 Intensity of local competition 02 Extent of market dominance 03 Effectiveness of anti-monopoly policy 04 Extent and effect of taxation 05 Total tax rate (hard data) 06 Number of procedures required to start a business (hard data) 07 Time required to start a business (hard data) 08 Agricultural policy costs 09 Prevalence of trade barriers 10 Trade-weighted tariff rate (hard data) 11 Prevalence of foreign ownership 12 Business impact of rules on FDI 13 Burden of customs procedures 14 Degree of customer orientation 15 Buyer sophistication 7. Labor Market Efficiency 01 Cooperation in labor-employer relations
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Pakistan's development challenges

<p>02 Flex ability of wage determination</p> <p>03 Non-wage labor costs (hard data)</p> <p>04 Rigidity of employment (hard data)</p> <p>05 Hiring and firing practices</p> <p>06 Firing costs (hard data)</p> <p>07 Pay and productivity</p> <p>08 Reliance on professional management</p> <p>09 Brain drain</p> <p>10 Female participation in labor force (hard data)</p> <p>8. Financial Market Efficiency</p> <p>01 Financial market sophistication</p> <p>02 Financing through local equity market</p> <p>03 Ease of access to loans</p> <p>04 Venture capital availability</p> <p>05 Restriction on capital flows</p> <p>06 Strength of investor protection (hard data)</p> <p>07 Soundness of banks</p> <p>08 Regulation of securities exchanges</p> <p>09 Legal rights index (hard data)</p> <p>9. Technological Readiness</p> <p>01 Availability of latest technologies</p> <p>02 Firm-level technology absorption</p> <p>03 Laws relating to ICT</p> <p>04 FDI and technology transfer</p> <p>05 Mobile telephone subscribers (hard data)</p> <p>06 Internet users (hard data)</p> <p>07 Personal computers (hard data)</p> <p>08 Broadband Internet subscribers (hard data)</p>	<p>10. Market Size</p> <p>01 Domestic market size index (hard data)</p> <p>02 Foreign market size index (hard data)</p> <p>Innovation and sophistication factors</p> <p>11. Business Sophistication</p> <p>01 Local supplier quantity</p> <p>02 Local supplier quality</p> <p>03 State of cluster development</p> <p>04 Nature of competitive advantage</p> <p>05 Value chain breadth</p> <p>06 Control of international distribution</p> <p>07 Production process sophistication</p> <p>08 Extent of marketing</p> <p>09 Willingness to delegate authority</p> <p>12. Innovation</p> <p>01 Capacity for innovation</p> <p>02 Quality of scientific research institutions</p> <p>03 Company spending on R&D</p> <p>04 University-industry research collaboration</p> <p>05 Government procurement of advanced technology products</p> <p>06 Availability of scientists and engineers</p> <p>07 Utility patents (hard data)</p>	
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Source: Guidance Manual on GCI, USAID.

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PROPLAN

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7 Food & Water

I draw the attention of the readers to the water woes of Pakistan. A few decades ago, people use to think that Pakistan had a lot of water in its rivers. No more. Everybody has witnessed and has suffered from water shortage problems. Nationalists in Sindh oppose building of dams and are skeptic of water shortages, in the upper part of the country. Large storages can unfortunately be built in Northern mountainous/ plateau areas, where the gradients change. It is not possible to build storages, save small storage dams, in the southern plain where there is no gradient and no slopes. Many in Sindh believe that dams/ storages consume water.

More knowledgeable argue that dams restrict river flow down the Kotri, which leads to encroachment of the sea. Do we have the technology to stop the sea encroachment by other means or barriers? Why do not we do a cost-/benefit analysis, and compensate the losers (say of land in Thatta or elsewhere in Sindh). Why cannot we include the people of Thatta among the affectees of the dams, as we do in the North for those whose land and communities are submerged. There should be some way out. Fortunately Bhasha and other projects have been initiated by the PPP government and there is no controversy from Sindh, for which all of us should be thankful to the positive and knitting contributions of the PPP. The water future even with dams and storage is very stressful, if not bleak altogether. In the prediction of climate change, and rise in global temperature and melting glaciers, we would be in a dangerous journey alternating between droughts and floods. Only storages could swallow ensuing floods, and later supply much needed water during low flow and droughts. Our media in addition to focusing on individuals and trivia should find time and resources to create awareness amongst people and powerful alike.

Food, water, energy, and environment are major long term issues, not just for Pakistan, but for all human kind. For populous, resource poor and developing countries the issues are even graver. On environment except for reducing and eliminating water and air pollution, we cannot do much.

Pakistan's development challenges

Even on that account, it is a tall order. The climate change will affect us in more critical ways than many others, but we cannot do anything about it, except to lend support to Climate Change Convention at the UN General Assembly.

In many ways, food, water and energy are interesting issues; you require water for food production and dams for hydro-energy, which in turn produces agricultural inputs. Food security can only be obtained through consistently raising production and productivity by increasing yield and productivity and also bringing more land into agricultural use. On both accounts, there is substantial scope for improvement. Crop yields can be increased by four times and more land is still available. If Egypt can reach a level of 6000Kg/hectare yield level in crop productivity, why do we have a one-third yield? They are fellow Muslims, endowed with similar qualities, suffering from the same syndromes.

More water would be required for more food production, where severe problems are expected. Pakistan is an arid country, with one of the most minimal rainfall in the world. By comparison, India gets several times much more rainfall. Fresh water resource supply of 0.23000m³/yr is much less than the requirement. There are limited options and solutions, all of which have to be implemented including building storage dams, water conservation and efficiency. We have come to rely on rice exports, which we have to consider trimming down. Export of rice tantamounts to exporting water, which we do not have. Rice production consumes six times more water, and has one-fifth economic productivity. Curtailing rice exports may be a shock to many who are striving for boosting exports and reducing trade gap, but difficult choices have to be made.

In the energy sector, although we are suffering most especially due to electricity and gas shortages, the long term potential appears to be much better than for anything else. Thar Coal appears to be a big savior with 200 billion tons of resource, followed by hydropower potential of 90,000MW, and unlimited resource potential of solar power, which has been projected to become competitive in next ten years. But these are resource options only. Massive investments would be required to develop these and for IPPs. FDIs and domestic investments have to be promoted and arranged.

Investments in all these sectors have a long gestation period. Lack of long term planning and implementation, results in short term crises and costs, which can be several times more than the normal costs, as we are

currently experiencing; the production losses due to power crises and buying expensive rental power.

Food and Agricultural productivity.

There is an old adage in economics that one of the indicators of technological progress is agricultural yield and productivity. One of the widely used indicators for measuring agricultural productivity is output per unit area. We have at hand international data on cereal (rice, wheat etc.) yield per hectare. We have condensed the available data and generated a table, as in the adjoining table 7.1.

Table 7.1: Cereal yield and rankings of selected countries

Rank	Yield (kg/ha)	Countries
1-5	10400-7500	Barbados, Belgium, Netherlands, New Zealand and Egypt.
6-10	7500-6500	UK, France, Ireland, Germany and USA
11-22	5000-6500	Korea, Switzerland, Denmark, Japan, Chile, Austria, Hungary, Italy and China,
23-43	3500-5000	Sweden, Vietnam, Saudi Arabia, Indonesia, Norway, Argentina, Israel, Greece and Bangladesh.
44-70	3000-5000	Finland, Burma, Sri lanka, Venezuela, South Africa, Malaysia, Romme, Poland, Cuba, Canada and Philippine
71-102	2000-3000	Brazil, Mexico, Thailand, Pakistan, Iran, Turkey, India, Oman, Nepal, Spain, and Australia.

Source: Nation Master

Pakistan has a long way to go in agricultural yield from around a level of 2563 kg/ha, (only 7% higher than India) to the high level of Egypt

Pakistan's development challenges

with comparable weather and water conditions, of 7516 kg/ha. Egypt has three times higher agricultural productivity than of Pakistan. The Nile is as old as Sindh River, and Pakistan soil is newer than the Nile valley. There must be something unique to Egypt so as to surpass even the American productivity level.

There are many questions and issues. And a relatively new question that has emerged is; should we be producing rice and sugar cane, when we are so short of water.

Production per hectare.

103-147	1000-2000	Russia, Jordan, Kenya,
148-172	<1000	Senegal, Yemen, Sweden, Niger,
Avg 2789 kg/ha		

Some surprising facts and comparisons are seen. Egypt has a productivity of 2516 kg/ha, as opposed to the US of 6454 kg/ha; Egypt is one of the top five highest agro - productivity countries of the world, in the company of Belgium, New Zealand and Netherlands. Bangladesh has higher agro- productivity than India and Pakistan, perhaps due to extreme land shortage. Pakistan and India have comparable productivity and fall in the same class. Canada's lower productivity of 3031 kg/ha, could be explained by cold weather, although she has abundant water and land resources. Australia, India, Pakistan, Oman, Nepal and Spain are roughly in the same category. Saudi Arabia, Sweden, Indonesia and Argentina fall into the same class.

Comparative Agricultural Performance and Potential

Among the sample countries China has the largest agricultural area of 554 million ha, largest in the world as well. Three countries qualify to be grouped under large agricultural area countries, i.e., Australia, USA and China. China has to feed its large population, while Australia and USA are major agricultural exporters. As we will see later China has the highest agricultural output as well, if measured in the terms of value added. Most countries in the sample are under 50 million ha i.e., Bangladesh, Indonesia, Japan, Malaysia, Pakistan, Thailand, France and Germany; Iran's large agri-area, which is twice that of Pakistan (agri-area 27 million ha). India's food requirements of its large population have impelled it to bring 50% of its area under cultivation i.e. 180 million ha. Pakistan can double its agriculture area, as its land under

agriculture is only 25%. However, water is the constraining element in its case.

In terms of per capita land under agriculture, Pakistan and India are about the same, 150-160ha per 1000. Iran's agricultural land is 1000 ha per 1000 people. In terms of ecological foot print, world average is 3.1 ha per person. All industrialized, population countries, have EP lying between 5-12 ha per person. Pakistan and India have the lowest EP of 1.06-1.09 (ha per person) China, Turkey, Malaysia and Iran have EP in the range of 2.47- 3.68 ha per person.

In terms of agricultural output, as measured by value added, China's rank is number one both in the sample, and otherwise i.e., 216 billion US\$. India and the US have comparable agricultural output of 109-113 billion US\$. Japan follows with a value added of 78.8 billion US\$. Egypt, Iran and Pakistan have a comparable agri-output in the range of 17-20 billion US\$. In the case of Egypt high land productivity, in case of Iran, higher area and in the case of Pakistan, large population workforce seems to be a contributor.

Japan and Australia have the highest per capita output of 600-700 US\$. Most Asian countries fall in the lower category of 100-200 US\$. Egypt, Iran and Mexico are grouped together in the range of 200 -300 US\$. France with 515 US\$ per capita of agri-output qualifies to be an agricultural country, as against half that figure of 279US\$ of Germany, which puts it in industrial countries. Pakistan has a potential to graduate up into the higher category of 200-300 US\$ in the company of Iran, Egypt and Mexico, which appears to be its right place.

Pakistan is a water stressed country. Water is cited among major constraints in increasing agricultural output. However, when we compare water productivity figures, there appears to be a potential for utilizing water more efficiently, thus increasing yield and output. Pakistan's water consumption per ha at 7407 CM is more than twice that of India of 3289CM per ha. The climate, output mix and land and socio-economic conditions are comparable. Germany, Malaysia, USA and Turkey are in the median range of 700-1000CM per ha. It appears that Pakistan should strive to achieve this figure. Leaving aside three water profligate countries of Bangladesh, Japan and Egypt, Pakistan has the highest water consumption per ha. If water efficiency cannot be improved, Pakistan may have to think in terms of changing its output mix by reducing cultivation of sugar cane and rice, which would have, however,

significant trade balance consequences. This need not be done because there is a reasonable scope of improvement by 100% to reach Indian level of efficiency, if not of Malaysia, Turkey and USA.

Pakistan's level of mechanization as measured by value added per worker of 697US\$ is about right, comparable with Indonesia and Thailand and higher than India and China. Comparable tractorization studies have also yielded the same conclusion. Mechanization, therefore, should not be pushed higher than the current level, lest it may contribute to rural unemployment and poverty.

Drip Irrigation

More than 80% of water consumption in Pakistan goes towards agricultural irrigation. Predominantly flood irrigation is used. In the meantime, alternative irrigation technologies have been developed promising 70-80% reduction in irrigation water consumption, and thus doubling the yield. Drip and sprinkler irrigation techniques are increasingly giving positive results in as widely dispersed and different agro-climates and socio-economic conditions as USA, Spain, India, Nepal and China.

In Drip irrigation, a small diameter piping net work is established throughout the farm. At the end of secondary small diameter tubes, water emitters having orifice diameter as small as few millimeters, are employed to drip the water in drops, at the root zone of the plant. All it requires is a water source, a water pump with filter, one or two other control devices, and ordinary plastic pipe, hard or flexible, along with fittings. Pipe emitters, valves and fittings are all produced in relatively large factories to minimize overheads and reduce unit costs.

Contracting (SME) companies design, procure and install the systems and provide training and after sales service. Nature of the produce, water availability and soil conditions influence the design of the drip network. Thus every installation has to be custom designed. It is possible that eventually with the popularization of the technology, area and product based standardization of design may develop resulting in cost reduction. It is a Lego type technology. One can start with a small area of 1-5 acre, and go up to 100 + acres in steps. In Pakistan, still imported system are being marketed and the cost is relatively high i.e. Rs 100,000/- per acre. There is a potential of reducing these costs by more than 100% by

inducting more economic Chinese technology and supplies and locally trained designers and SME contracting companies.

Table 7.2: Water Productivity Gains from Shifting to Drip from Conventional Surface Irrigation in India

Change in Crop	Change in Yield (%)	Change in water use (%)	Water Productivity Gain (%)
Banana	52	-45	173
Cabbage	2	-60	150
Cotton	27	-3	169
Cotton	25	-60	255
Grapes	23	-48	134
Potato	46	~0	46
Sugarcane	6	-60	163
Sugarcane	20	-30	70
Sugarcane	29	-47	91
Sugarcane	33	-65	205
Sweet potato	39	-60	243
Tomato	5	-27	49
Tomato	50	-39	145

Notes: Results from various Indian research institutes measured as crop yield per unit of water supplied.

Sources: a. Postel, 1999, based on data from Indian National Committee 1994, and Sivanappan, 1994.

b. Sandra Postel, et al., Drip irrigation for small farmers, IWRA, Water International, Volume 26, Number 1, March 2001.

Conventionally drip irrigation has been employed by large rich farmers wanting to increase portability and reducing labor employment. However, more recently, concepts and systems (Bucket type) have been introduced in India and Nepal for small land- less farmers, having less than one acre of land. The system involves a bucket or water tank installed at a height of 2-4 meters, along with simple plastic pipe network. No water pump is employed and the system works without electricity. Water flows through gravity through the tubing network, and

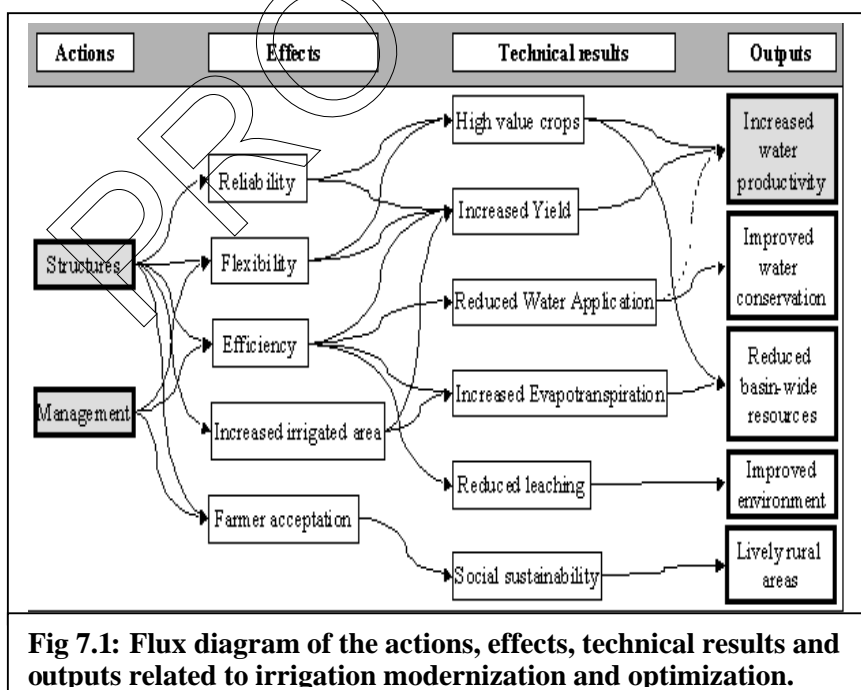
reaches plant root zone, through emitters. Such systems have been installed successfully for a few thousand rupees for small orchards, and vegetable farms of poor farmers, having small and fragmented land, having temporary or permanent titles and user rights.

Adopting Drip irrigation thus would accrue the following benefits:

1. Reduce water consumption, and increase water productivity.
2. Increase food supplies and area under cultivation.
3. Increase farm profitability and incomes.
4. Increase income and welfare of small farmers.
5. Reduce water leaching and consequent pollution of water bodies.
6. Water from ponds and streams and artificial storage could be used enhancing flexibility of timing and scheduling.

Following two programs are proposed:

1. **Large scale drip irrigation promotion**, whereby reasonable market size is brought about through policy and incentives involving low interest loans, demonstration projects, and volume procurements etc. Once an initial market/demand has been created, the momentum would be expected to continue as the Drip technology benefits have been firmly demonstrated and would certainly accrue.



2. **Small Drip irrigation for small and landless farmers:** Under this scheme, small plots of 1000 SqM or one-acre plots in rural areas may be awarded to the landless, along with a grant of Rs 10,000/- for the drip irrigation scheme. Drip irrigation loans could also be given independently to those who may already have some recourse to land either through ownership or rent. A NGO/donor agency project(s) could also be launched especially in water scarce area, including tribal areas.

Our Water woes

A World Bank report on “Pakistan’s water economy” makes the following statements:

Pakistan is one of the most arid (water less) countries of the world with an average rain fall of 290 mm a year. It is one of most water-stressed country as well and it is expected that the situation would worsen with the passage of time, when by the year 2035, per capita water availability would come down to a low level of 100 CM per capita per year. There is no additional water to be injected into the system. There is no feasible intervention, which would enable Pakistan to mobilize appreciably more water than it now uses.

Pakistan’s water situation is highly risky; in being based just on one river Indus i.e. no scope of error, as there is no compensating source or river. Large scale degradation of water resources base has occurred due to salinity and pollution. Ground water has been over exploited over many years and its quality is deteriorating. Flooding and drainage problem are going to get worse, especially in the lower Indus basin. Climate change (CO₂ effect) is going to exacerbate the problem due to excessive expected flooding and successive decrease in river flows. There is an inadequate knowledge base of the eco-system underlying the Indus river basin, and the knowledge base has deteriorated over the years. The country is literally flying blind into a hazardous (and unknown) future. Much of the water infrastructure is in a state of poor repair. The quality of project implementation is low and the system is financially unsustainable.

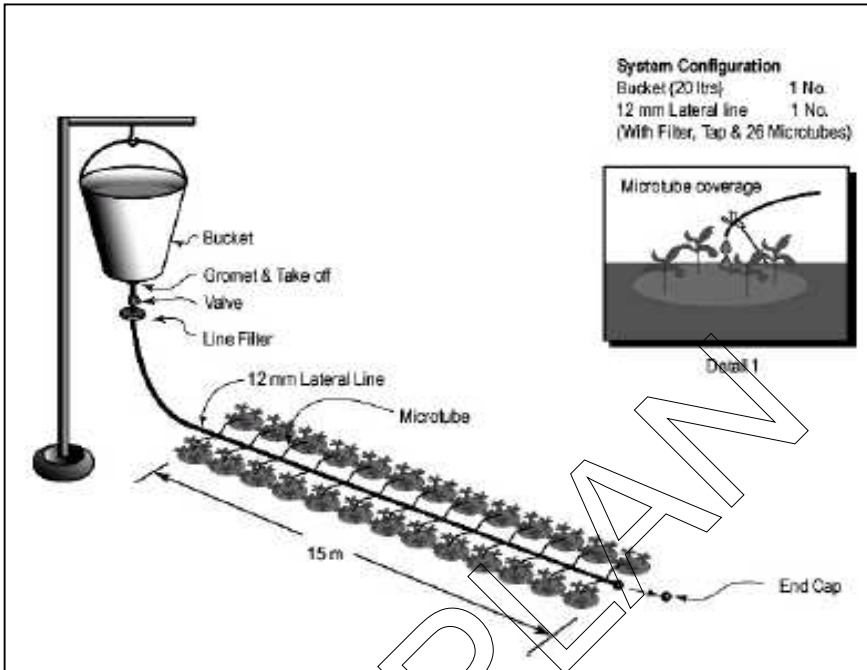


Fig 7.2: Schematic of a Bucket Kit System

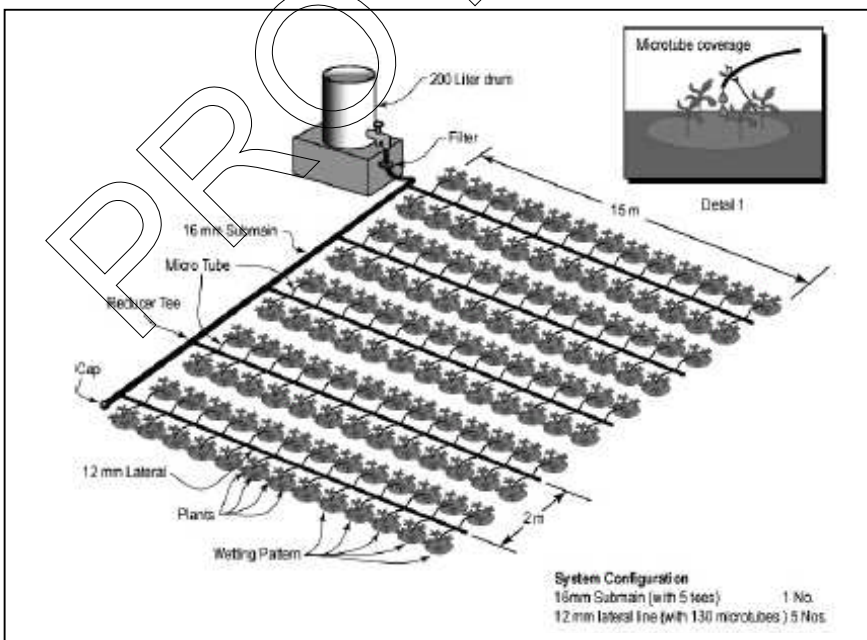


Fig 7.3: Schematic of a Drum Kit, micro tube version

Table 7.3: Yield per hectare of major agricultural crops

(Kg/Hectare)										
Fiscal Year	Wheat	Index	Rice	Index	Sugarcane	Index	Maize	Index	Cotton	Index
1990-91	1,841	100	1,543	100	40,720	100	1,401	100	615	100
1991-92	1,990	108	1,546	100	43,371	107	1,419	101	769	125
1992-93	1,946	106	1,579	102	43,024	106	1,364	97	543	88
1993-94	1,893	103	1,826	118	46,144	113	1,380	99	488	79
1994-95	2,081	113	1,622	105	46,747	115	1,481	106	557	91
2002-03	2,388	130	2,013	130	47,324	116	1,858	133	622	101
2003-04	2,375	129	1,970	128	49,738	122	2,003	143	572	93
2004-05	2,568	139	1,995	129	48,906	120	2,848	203	760	124
2005-06	2,519	137	2,116	137	49,246	121	2,985	213	714	116
2006-07	2,716	148	2,107	137	53,199	131	3,036	217	711	116
2007-08	2,451	133	2,211	143	51,507	126	3,427	245	649	106
2008-09 P	2,585	140	2,346	152	48,634	119	3,610	258	713	116
Progressive Farmers Yield (Tons/Hectare)										
	4.6		3.8		200/130		6.9		2.6	
Yield Gap%	44		46		67		59		31	

Source: Ministry of Food and Agriculture Federal Bureau of Statistics.

Pakistan's development challenges

Pakistan has to invest and invest soon in costly and contentious large dams. Most arid countries have large storage. The US and Australia have 5000 CM per capita of storage and China 2200 CM, while Pakistan has only 150 Cubic Meters. The dams of Colorado Rivers in the USA can hold 900 days of river run-off; while in South Africa storage of 500 days is provided for its Orange River. In India the corresponding figure is of 120-220 days, while in Pakistan it is only 30days.

The two main storage dams of Mangla and Tarbela are already silted significantly .Water productivity (use-efficiency) is low due to one of the lowest crop yields in the world and other reasons. Within Pakistan, there is a large variation among efficient and inefficient farmers and among head-enders and tail-enders. Tail-enders (lands which are situated at the far end of the canals and water courses and their distributaries) crop yields are 40% less than those of the head-enders, speaking volumes about the inadequacy of the irrigation system.

Pakistan's farmers consume 60% more than Indian farmers and 100% more than Californian farmers with respect to wheat production. However there is hope, ironically, because we are so low in crop-yield and water productivity, there is a large potential to be exploited of doubling and tripling the output with the same amount of land. And more, if more land is brought into the system of which there is greater scope, if not much in the case of water. Increase in crop-yield is going to have doubly important impact. Firstly solving the food shortage problem and secondly improving the welfare of the poor and subsistence farmers, with direct impact on reducing poverty among a large section of our population. It would have many other salutary side effects; increased supplies to agro-processing industry resulting in-higher value added and savings of foreign exchange.

Table 7.4: Comparative water and economic productivity of wheat and rice crops

	Wheat	Rice	Ratio Wheat: Rice
Crop water productivity	1.48 kg/M ³	0.23 kg / M ³	6.43
Economic water productivity	17 yen / M ³	3.7 yen / M ³	4.59

Source: Pakistan Economic Survey

Conclusions and recommendations

1. More water storages should be built, may be postponing Kalabagh dam for the time being and initiating other possible projects like Bhasha and Bunji dams as is being already done.
2. Speedy implementation of the projects, as more than two decades has been lost in Kalabagh controversy.
3. Improve the irrigation system and the physical infrastructure, solving tail-enders problem.
4. Improve agricultural R&D and extension services, introducing technology packages more frequently than has been the case.
5. Introduction of water efficient on -farm irrigation technologies such as sprinklers and drip irrigation;
6. Reduction of water losses and lining of canals and their distributaries;
7. Improving water rights system making it more fair and transparent, reducing corruption and influence-peddling; Award at least some water rights to the share-cropper and the landless tenants, in addition to the land owners. Currently water rights are for the land owner only. Consequently all increases in water supply go to the benefit of the “haves” only and have-nots remain without right or an asset.

Water rights should be tradable, through an efficient water market, where water efficiency is rewarded and the proposed water rights for the landless and share-croppers bringing additional income.

Pakistan's development challenges

Table 7.5: Agricultural Parameters of various countries

Countries	Agricultural Land (a) (1,000 ha) 2003	Fertilizer (Kg/ha) 2003	Water (m3/ha) 2000	Agri workforce as % of total	Water Poverty Index 2002	Value Added Mn USD	Value Added per capita USD	Value Added per worker USD	Productivity persons / ha
Bangladesh	9,019	187	8,999	52	54	21538	81	323	-
China	554,851	257	2,871	64	51	21538	216	402	-
India	180,000	95	3,289	58	53	113148	123	386	1.6
Indonesia	47,600	79	2,250	46	65	39206	174	594	1.5
Japan	4,736	366	11,435	3	65	78820	612	-	0.6
Malaysia	7,870	175	736	16	67		445	5170	0.2
Pakistan	27,230	150	7,407	45	58		144	697	1.1
Thailand	18,487	128	4,300	53	64		273	605	-
France	29,690	209	200	3	68	31371	687	47408	-
Germany	17,001	226	775	2	65	22980	269	28741	0.1
Egypt		535	17,928	31	58		169	-	-
Iran	63,012	60	4,057	25	60		287	2491	-
Turkey	40,644	77	1,056	43	57	28140	489	1793	0.5
Canada	67,505	52	104	2	78		468	44276	-
USA	416,902	118	1,111	2	65	109200	497	39126	0.05
Mexico	107,300	68	2,210	19	58	23947	-	2877	-
Australia	439,500	46	356	4	62		990	32346	0.05

Source: Earth Trends Data Tables: Agriculture
World Resources Institute, www.earthtrends.wri.org

Table 7.6: Fresh Water Resources in selected countries

Countries	Ground water Recharge (km ³)	Surface water (km ³)	Total (km ³) (b)	Total (km ³)	Per capita (m ³ per person)	Total (Mn m ³ 2000)	Per capita (m ³ 2000)	Depend ency Ratio (c)	Water Poverty Index 2002	Precipitat ion (MM)
Pakistan	55	47	52	223	1,415	169,384	1,187	76	58	218
Bangladesh	21.1	84	105	1,211	8,089	79,394	576	91	54	
China	828.8	2,712	2,812	2,830	2,206	630,289	494	1	51	
India	418.5	1,222	1,261	1,897	1,754	645,837	635	34	53	2,168
Indonesia	455	2,793	2,838	2,838	12,749	82,773	391	0	65	
Japan	27	420	430	430	3,365	88,432	696	0	65	1,406
Malaysia	64	566	580	580	23,316	9,016	392	0	67	2,366
Thailand	41.9	199	210	410	6,459	87,065	1,429	49	64	1,498
France	100	177	179	204	3,371	39,959	674	12	68	650
Germany	45.7	106	107	154	1,866	47,052	572	31	65	933
Afghanistan			55	65	2,608	23,261	1087	15	0	313
Egypt	1.3	1	2	58	794	68,653	1013	97	58	
Iran	49.3	97	129	138	1,970	72,877	1097	7	60	230
Turkey	69	186	227	229	3,171	37,519	550	1	57	697
Canada	370	2840	2850	2902	91,419	45,974	1494	2	78	
USA	1300	1862	2818	3069	10,333	479,293	1682	8	65	1,201
Mexico	139	361	409	457	4,357	78,219	791	11	58	848
Australia	72	440	492	492	24,702	23,932	1250	0	62	1,304

Source: Earth Trends Data Tables: Fresh water Resources
World Resources Institute, www.earthtrends.wri.org

Notes to the tables of 7.5&7.6:

Internal Renewable Water Resources (IRWR) include the average annual flow of rivers and the Recharge of groundwater (aquifers) generated from endogenous precipitation (precipitation occurring within a country's borders). IRWR are measured in cubic kilometers per year (km³/year).

Groundwater Recharge is the total volume of water entering aquifers within a country's borders from endogenous precipitation and surface water flow.

Surface Water produced internally includes the average annual flow of rivers generated from endogenous precipitation (precipitation occurring within a country's borders). Natural incoming flow originating from outside a country's borders are not included in the total. Surface water resources are usually computed by measuring or assessing total river flow occurring in a country on a yearly basis.

Overlap is the volume of water resources common to both surface and groundwater. It is subtracted when calculating IRWR to avoid double counting.

Total Internal Renewable Water Resources is the sum of surface and groundwater resources minus overlap.

Actual Renewable Water Resources, gives the maximum theoretical amount of water actually available for each country, although in reality a portion of this water may be inaccessible to humans. Actual renewable water resources are defined as the sum of internal renewable resources (IRWR) and external renewable resources (ERWR).

Per Capita Actual Renewable Water Resources are measured in cubic meters per person per year (m³/person/year). Per capita actual water resources were calculated by WRI using the United Nations Population Division's World Population Prospects: The 2002 Revision.

Dependency Ratio is the percentage of total renewable water resources originating outside of the country.

Water Withdrawals (annual), measured in million cubic meters, is the gross amount of water extracted from any source, either permanently or temporarily, for a given use. It can be either diverted towards distribution networks or directly used. It includes consumptive use, conveyance losses, and return flow. Total water withdrawal is the sum of estimated water use by the agricultural, domestic, and industrial sectors.

Per Capita Annual Withdrawals were calculated using national population data from the United Nations Population Division for the year 2000.

Ironically Egypt has the lowest water availability in the sample of 794m³ per capita, but consumes highest in terms 17000 m³ per ha. Canada, Malaysia and Australia are super water rich being in excess of 20,000 m³ per capita. China, Indonesia, Canada and have comparable water resources in the range of 2700-2800 Km³. Low population of Malaysia and Australia contribute to their highest per capita water availability. Pakistan lies among the lowest per capita water countries along with India, Germany and Iran. In absolute terms, Egypt and Afghanistan have the lowest of water resources of 58-65 Km³, while Turkey, Pakistan and France have comparable water resources of around 200-229 Km³. Most frequent (medium) size of water resource in the sample is around 400-500 cubic meter per capita. Bangladesh, China, Indonesia, Canada and USA, all have 2200-12000 cubic meter plus per capita water resource, but have different predicaments due to different populations.

High per capita withdrawal of 1250-1682 m³ of Canada, USA and Australia can be explained by high wages and industrial output. In those three countries, raw material processing industries consuming water are preponderant as opposed to Europe. Pakistan's withdrawal of 1187 m³, falling in the same high consuming category is somehow not explainable, except perhaps in terms of its low water use efficiency level. However Afghanistan, Egypt, Iran, also have comparable per capita withdrawals. In these countries per capita water withdrawal is twice that of China, India, Indonesia, France, Germany and Turkey.

High precipitation (1600 mm+) and watershed areas in China, India, Canada, and USA are responsible for high ground water resources of 400-1300 Km³ range. Malaysia, Thailand, Iran and Pakistan have comparable ground water sources of 40-50 km³, among one of the lowest. Pakistan has one of the lowest precipitations in the world, 218mm, as opposed to 2168mm of India and 2366 mm of Malaysia, 1400 of Japan and 1201 mm of USA. No wonder Pakistan is classified among arid/semi arid countries, despite claims of our patriots classifying Pakistan among resourceful countries. What is their criterion or source of confidence? It is mind boggling. The net message is that Pakistan should improve its water productivity and efficiency, which is lower than comparable countries and thus offers a lot of scope for increasing agricultural output and food availability for the ever increasing population and for decreasing malnourishment.

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8 Energy: crises and options

Energy sector in Pakistan suffers from a host of problems like the lack of efficiency, competition and investments; some of the problems could be avoided and for some nothing can be done, at least presently. Energy sector is essentially based on a cost-plus environment. Utilities are natural monopolies. Efficient and transparent regulation can mitigate some of the negative aspects of the cost-plus /monopolistic regime.

Regulatory institutions in Pakistan like NEPRA and OGRA need more teeth, muscle, spine and brains and brawn all of it. The problem is that even in highly competitive sectors of sugar and cement, where 50-60 parties operate, cartels and monopolies have been created and it has been difficult to fight them. However some competition could be brought by auctioning prepared or identified projects, which has a potential of bringing down the capital costs. Technical and commercial losses both in electricity and gas distribution are a drain, which could be significantly reduced. Energy conservation is a big resource, for all sectors especially, building sector where a lot of energy could be saved in improving lighting and illumination, space heating and cooling. For a poor economy, this kind of waste is back-breaking. Some of the good steps that the authorities have done ought to be acknowledged and appreciated e.g., free distribution of energy savers.

Lately there has been a trend in acquiring short term solutions like Rental Power, which could be condoned to some extent e.g., 1000-1500 MW. Now expensive LNG is being contracted and a rental LNG plant is being acquired. LNG is coming out to be very expensive, as much as oil. If LNG is to be so expensive, why not import more flexible oil. Coal gasification and making fertilizer out of it is a mature technology that would replace 200 Billion cft of annual consumption of gas by the fertilizer sector.

There is an urgent need to put Thar Coal project on the fast track. Certain policy and preparatory issues are to be still decided upon which are slowing down the project e.g., Rate of Return, coal pricing , coal royalty,

coal electricity pricing, streamlining the interaction of Thar Coal Energy Board (TCEB), with Private Power and Infrastructure Board (PPIB) and National Electric Power Regulatory Authority (NEPRA). While provincial autonomy is to be respected and Thar Coal Energy Board, reportedly has been given the requisite autonomy, opportunities for mobilizing expertise and know how should be created for a more cosmopolitan environment that would be required for a fast track implementation of such a large resource and project. There is no substitute for Thar Coal. Somehow, skepticism and a question mark for some unknown reasons prevail throughout the country and even among foreign investors about Thar Coal, which the authorities should look into. Also TCEB may be encouraged to develop an attractive, encouraging and open style and profile. Its continued operation as a section of department of Sindh Secretariat has perhaps something to do with the misgivings that prevail.

By teeth, I mean authority, sincerity and integrity. By muscle I mean technical and organizational strength, depth of expertise, skill and breadth of scope and horizons of knowledge. By brains, I mean intellect of the leadership and higher strata of the organization to lead and pursue common goals and objectives.

This is not to say that these elements are not there, but certainly these characteristics are not very abundant in the regulatory set up of the country. Enrichment and strengthening and care in choosing leadership should be exercised by the ministers and the cabinet/PM. Such bodies should not become a parking place or last stop for powerful secretaries or a prized five year comfortable and cozy appointment. More work, efficiency, energy, judgment, knowledge and wisdom are required in these organizations, than line-jobs elsewhere. The very best through competitive process, should be selected.

Pakistan is facing a dual menace of gas and electricity shortages. Pakistan is heavily dependant on imported oil, both for meeting transport sector demand and for running electricity power plants. While there is currently no substitute of petrol and diesel, Pakistan could have diversified its fuel requirements for power generation away from imported oil.

Two thirds of the known natural gas reserves have been consumed, while the remaining gas reserves have been consumed, while the remaining gas reserves could last another 10-15 years. No new allocations for gas use

are being done. Pakistan's oil production is limited to 69,954 barrels per day (2007-08). 5000 MW plus of electrical capacity has been installed on oil and more oil based projects are being planned due to lack of other short term options.

Gas has the highest market share (47.48%) in Pakistan's energy market oil accounts for 30.58% of Pakistan's total energy consumption. Hydro contributes 10.88% and amazingly coal 9.20%, almost equal to hydro, but is hardly visible. It is mostly consumed by cement & Brick kiln industry. Local production of crude oil is 3.4 million tons, which caters to only 170% of the domestic demand. Some two-third (63%) of the local and imported crude is processed in local refineries, while some one – third (37%) of finished petroleum products are imported.

Table 8.1: Pakistan's energy supplies and trade 2007-2008

	Production	Imports	Exports	Total	(TOE) % Market share
Crude oil	3,434,811	8,708,331	---	12,061,865	19.16
Petroleum	Crude	9,159,914	1,716,041	7,183,645	11.42
Production	processed				
Gas	29,872,685	---	---	29,872,685	47.45
LPG	392,677	25,711	---	418,952	0.66
Coal	1,845,030	3,938,808	---	5,783,844	9.20
Hydro	6,851,955	---	---	6,851,955	10.88
Nuclear	734,537	---	---	734,537	1.17
Total	43,131,794	21,878,315	1,716,041	6,295,384	100
Percentage	68.55	34.77	(2.7)	100	---

Source: HDIP

Table 8.2: Pakistan Energy Potential and Resources

Resource	Potential	Known Reserves	Installed/ Consumed already	Net available
Oil (million Barrels)	22,000	936	609	327
Gas (TCF)	282	53	23	30
Hydro	40,000	20,000	6,447	Renewable
Coal (billion tons)	200	185	Nil	200
Wind (MW)	110,000	20,000	Nil	Renewable
Solar	Unlimited	20,000	Nil	Renewable
Coal base methane (TCF)	25-50	-	-	-

Source: HDIP, others

Table 8.3: Energy consumption, growth rates and major sectoral distribution

	ACGR %	Current Level Mn Tons	% share	Key Consuming Sectors
Oil	1.3	16.483	30.2	Transport 44% utility 36%
Gas	7.7	27.35	47.4	Industry (31%) utility (30.1) Domestic (17%)
Coal	18.0	5.40	9.2	Cement 5% Brick-kiln (30%)
(hydro)	5.1	8.97	11.9	Domestic 40% Industry 25% Agri 10%
electricity				
Losses		3.00		
Total		62.995	100	

Source: HDIP data, reorganized by the author; there may be minor discrepancies due to shortening of the table and summarization

In order to achieve self sufficiency in energy, coal and hydro sectors would have to be enlarged to 50-60% of the total energy consumption, reducing 37% reliance on oil, and 47% reliance on dwindling gas sector, unless an improbable break through occurs in oil and gas sector.

A lot of time has been wasted on Kalabagh controversy, and new projects like Bhasha (4500 MW) and Bunji (4000MW) are being initiated and may take a decade to complete. There is potential of 40,000 MW hydro-electric capacities.

Pakistan's electrical power capacity to date is around 25000 MW, which is expected to grow to 100,000 MW by 2030. Thus the energy requirements are doubling every ten years. Energy Security Plan (ESP) of Planning Commission predicts even higher, though, improbable generation capacity requirements, that is, up to 150,000 MW.

Energy production is an expensive business. Every MW of electrical capacity requires 1.6 to 2 million US\$. A low MW plant costs 1.6-2.0 billion US\$. An equal amount of investment is required for primary energy production, transmission and distribution. For a 100,000MW capacity, ultimately 300 billion US\$ of investment would be required. Prognostication of large oil and gas resources, more than ten times of the existing level has been made. However the matching drilling activities and investments of (100 drills per year requirement vs actual of 30) could not be made due to lack of financial and physical resources. FDI in oil and gas could not have been attracted due to a variety of reasons,

including the poor law and order situation. The province of Baluchistan totally remains closed to exploration activities.

Oil and gas output can be increased if the afore-mentioned problems are resolved, which is a big if. Reliance cannot be made on conjectural potentials and possibilities. Only a modest discovery rate can be expected and relied upon.

Coal power

However, Thar coal remains unutilized for more than two decades after its discovery. All kinds of investigations and studies have been made. It has been found feasible to install large scale electricity at mine-mouth to the tune of 50,000 MW which is well within our two decades demand. Deposits of 200, billion tons of lignite coal are there, which can last for more than two centuries, fulfilling present and projected future demand. Coal fired electricity is going to be cheap, 5-7 cents per unit as opposed to 17.00 cents per unit for oil based electricity generation. Cheaper coal based electricity would not only save precious foreign exchange, but would also bring down the ever rising electricity tariff due to expensive oil. Coal is the only option both in short term to long term.

While Hydro-power projects started to move, there is still no breakthrough on Thar Coal, despite claims of Sindh government. Pakistan's deliverance from energy crises lies in Thar Coal. A national initiative is required, while respecting the provincial autonomy issues. However provincial autonomy should not be reduced to the monopoly of a few officials in Sindh government. A 30-50,000 MW Thar Coal initiative in the next twenty years is required. This obviously cannot be implemented from and within the boundaries of Sindh secretariat. Support and initiative from the highest order in the country by President Zardari himself is required to break the ice. Thar Coal project cannot be implemented without involving China in a significant way. Only they would have the nerves to stay in the Thar heat and convert Thar Desert into an oasis. Today Tharparkar is the poorest and least developed district of Pakistan. Chinese would be sympathetic towards improving the lot of this area as well. A respectable Chinese company Senhua spent two years in Thar field and offered a reasonable tariff of 5-6 cents per unit, which was turned down, annoying the Chinese who went away, and have not returned despite efforts by certain quarters. Perhaps they are waiting for the right signals that Pakistan is ready and really means business this time.

Thar Coal is the only option, other than hydro, which is cheap and abundant. Pakistan's energy portfolio today is based on a very risky dependency on oil. Cheap gas is no more. What are we waiting for, another round of crippling price hike of oil?

Wind power

Wind power could have filled in some demand supply gap of 2-3,000MW, while there is a potential of 20,000 MW in Sindh alone, and more than a 100,000MW in other parts of Pakistan. There are several approved wind power projects which could not be implemented due to lack of supplies of wind turbine equipment, and with ever rising cost reaching a rather unaffordable level of 2500 US\$ per KW. By contrast, in India due to indigenous manufacturing capability, capital costs of wind power remain within one-half of the afore-mentioned figure. Consequently next door India could install wind power capacity of more than 7000 MW. Supply bottlenecks may go away in a few years, but it appears that some local manufacturing nucleus and base may have to be established in the country to benefit adequately from this environmentally friendly energy source.

Solar PV power has been projected to be commercially competitive around 2020. Pakistan has unlimited potential for solar energy with 2200 hours per year of sunlight, one of the highest solar duration and intensity in the world.

In the long run either for Pakistan or generally for the world, no problem or crises of energy is expected as the sun will always be there. However, the next 2-3 decades would be very crucial and problematic for which stringent planning and implementation is required to save oneself from darkness of economic dislocation and social unrest, if not chaos and catastrophe.

Nuclear Power

Nuclear power is yet another option, which has been on the table for the last several decades. With the availability of local uranium resources, and a large pool of trained manpower in the field, nuclear power could have taken some share of the market, however at world level, nuclear power had been shun due to safety, waste disposal and non proliferation and seventy risks. However interest in nuclear power has been revived in the wake of greenhouse effect of fossil fuel. For Pakistan, nuclear weapons

programme has been of vital importance, and practically speaking, a choice had to be made between nuclear weapons or nuclear power. Due to non-proliferation concerns, there have been difficulties in acquiring nuclear reactors. Only Chinese could supply Chashma I (300 MW) which is under operation and Chashma II (600 MW) under construction. The recent ADB review report has made a disturbing revelation regarding the capacity utilization (factor) of 40%, which is less than half of the normal and usual rating and does not speak well of the Chinese technology. The capital cost of nuclear power plant is more than twice that of the conventional power plant at 4000 US\$ per KW. Hence its capacity utilization is vitally important, which otherwise can be a liability than an asset.

Keeping in view the political problems due to the nuclear weapons programme, any large scale reliance on nuclear power may not be advisable, as it may compromise our nuclear weapons programme. For similar reasons, India's Nuclear Power Program also remains stunted.

Conservation and Efficiency

Conservations and efficiency is yet another largely unexplored resource. Almost every body would be convinced of the beneficial role the energy savers (CFLs) are playing in their electricity bill. PEPCOs program of distributing free energy savers to the poor is expected to cost 0-28 cents per kWh, as opposed to the electricity cost of 17 cents per kWh. However, conservation has its limits and energy conservation measure may not be as lucrative as has been just mentioned. Finally conservation has attitudinal aspects, which change rather slowly, but may change fast as the electricity rates go up.

There is a much larger scope in energy efficiency. Average thermal efficiency of power plants installed today is 30%, which hides lower efficiencies of 15-20% of old plants and good cases of over 40% in gas fired combined cycle plants. Renovating and replacing the low efficiency power plants offers a great opportunity to save expensive oil and gas. Today primary energy is being used in a triple cycle. The waste energy from combined (double cycle) power plants is used in supplying hot water for homes through public piping network to homes for heating purposes. This is called district heating. Similarly chilled water is produced through waste heat of power plants for supplying cooling, thus replacing expensive on-site cooling. District heating is being practiced for many decades by now, while district cooling is a relatively new

phenomenon. Thermally in-efficient buildings in Pakistan waste a lot of air-conditioning energy. Improvements and energy legislation in building codes could bring considerable impact of energy conservation and efficiency.

T & D losses and theft is yet another drain. In Pakistan 25% electricity is lost in this way; a 50% reduction in this should be feasible in short term future, which NEPRA's regulatory action and leadership of Ministry of Water and Power could bring about. Although eliminating electricity theft is not exactly conservation or efficiency, stolen electricity is much cruelly and liberally, wasted and hence its elimination has a potential for conservation. Put together there is scope of saving 30-35% of energy, which either to goes wasted, saving capital investments and fuel costs.

Institutional Reform & Reorganization

Keeping in view, the enormity of challenge in energy sector and the continuing crisis, some organizational reforms may have to be considered. A simple yet disturbing episode will indicate the need for reforms. It has been revealed in one of the ADB reports that the two Rental power Plants (RPPs) implemented in Musharraf regime, are being paid a hefty sum of 6.03 million US\$ per month over the last two years, and the plants are not being able to supply electricity due to lack of supply of promised gas allocations to these projects. The contract period is nearing its end, and the two projects costing 200-300 million US\$ in rental would be closed without ever producing electricity.

Apart from financial loss, this episode points to the in-adequate coordination between the Ministry of Petroleum & National Resources (MPNR) and Ministry of Water & Power (MOWP). This lack of coordination would further affect energy supplies and costs. It has been widely reported that MPNR has not been very forthcoming and supportive. Oil Ministries throughout the world are in the habit of working for vested interests. Private interests are accommodated by informally allocating gas resources or hiding them or through soft pedaling. We have elsewhere recommended a merger of the two ministries into one Ministry of Energy and similar consolidation of NEPRA and OGRA as one body. The natural resources (mineral) section may be divested to the provinces, as is being demanded under provincial autonomy performance of MPNR in minerals have not been exemplary any way.

A classic case in point is Uch field. Existing Uch Power has submitted a project Uch-2, for installing another low-Btu gas fired plant, adjacent to the existing one, utilizing the unallocated Uch gas. They have asked for an unreasonably high tariff, with a capital investment of 1600 US\$ per KW, which NEPRA has reportedly refused to oblige, despite various pressures. Consequently, the project is in limbo, and the Uch gas remains unutilized, which could have been used for producing cheap rental power. This can still be done. Rental power plant based on Uch gas could later be converted into an IPP. A 500 MW potential exists.

Table 8.4: Electrical power generation, capacity and sources

	Energy Gwh	Installed Capacity MW	Share %	ROG % p.a.
Hydel (WAPDA)	28,707	6,480	29.0	8.7%
Thermal ^o / _w	63,877	12,478	66.63	4.4%
WAPDA	20,427	4,900	21.31	+0.9%
KESC	8,219	1,756	8.57	-1.4%
IPPs	35,231	5,822	36.75	8.7%
Nuclear	3,077	462	3.21	12.1%
Imported	199	---	---	---
Total	95,860	19,420	100	4.8%
Thermal ^o / _w	63,877	---	---	4.4%
Coal	1,363	100	0.2	-10%
Oil	30,818	6378	48.25	4.8%
Gas	32,923	6000	61.54	4.0%

Source: HDIP, WAPDA

Immediately after the reinstatement of Mr. Iftikhar Chaudry as Chief Justice of Pakistan, a judicial complication took place regarding the petrol prices and the role of petroleum development levy. Supreme Court declared PDC as illegal, which was replaced by Petroleum Levy, a change of semantics. There was a general misconception in Pakistan, which permeated the courts that Petroleum prices were high in Pakistan, as compared to other countries, and “superfluous” taxation was levied under the “Petroleum Development Levy”. As the rumors and chatter mills churn in Pakistan, it was doubted that, PDL fund had been eaten away in “corruption”. The fact was that, it went into the consolidated fund as is usual practice, and separate funds are maintained, even if taxation or levy may have a specified head.

Energy & Petroleum Pricing

We would like to take account of the Petroleum prices and taxation in Pakistan, and analyze it in the perspective of other countries. The fact, as

Table 8.5: Proposed energy plan 2010 – 2030, Salient Features.

Current level of primary energy demand (PE) =	62 MTOE
Projected (PE) demand 2020 =	131 MTOE
Projected (PE) demand 2030 =	247 MTOE

- Oil production doubles itself every 10 year (ROG 7%) to reach a level of 280,000 barrels per day.
 - Gas production doubles itself by 2020 and then stabilize at 2.308 TCF level
 - Addition of 7000 MW hydro by 2020 and another 13000 MW by 2030 total 2700
 - Addition of 7500 MW of domestic Thar coal power by 2020 and another 7500 MW in (2030) to total 15000 MW.
 - Addition of 8000 MW nuclear power by 2030.
 - Addition of 5000 MW renewable by 2030 and another 5000 MW in (2020-2030) Total 10,000 MW.
 - Addition of 9000 MW of gas power by 2020 and another 15000 MW in 2020-2030, to total 30,000 MW by 2030.
 - Addition of 4000 MW of oil-fired power by 2030.
 - Total installed electrical generation capacity by 2020 to be 50,000 MW and 100,000 MW by 2030.
 - Additional capacity (2010-2020) 25000 MW; (2020-2030) 50,000 MW
 - Current import level 30% of demand, 2020 import level 10% of demand, and 2030 import level 25% of demand basis.
-

Source: Author's Estimates

it emerges, is that in Pakistan a moderate amount of tax (Ley+GST) is levied on petrol and diesel which represents only 10% of the sales price, as compared to 63-67% in European countries, where current sales price of petrol (super), on the average exceeds Rs 150/- per liter, as opposed to Rs 71.25 per liter in Pakistan. Only in the US, the price is Rs 57-65 per liter, about 80-85% of Pakistan price. Let us see how.

Fuel and energy pricing is a politically sensitive issue, as it affects cost of production and cost of living. Energy cost in the economies vary from 10-20% of GDP. Should one subsidize petrol or diesel, pass it on without taxation, and tax in a moderate to heavy taxation are the difficult policy choices faced by governments throughout the world. Although inter-fuel

subsidy is common (subsidizing diesel and taxing gasoline in compensation), net fuel subsidies are rare, and are found in rich oil producing countries like Iran and Saudi Arabia. In Venezuela, it is virtually distributed free at 1 cent per liter, which would not cover even transportation cost. Fuel costs fuel inflation both ways; through subsidies and hike in cost of production. There are various user costs (road building and maintenance) and other indirect costs of foreign exchange, congestion and pollution. Costs have been considered a consumer luxury item, and there has been a classical pressure on taxing gasoline, while there is a classic pressure on subsidizing diesel, as it is used in public transportation.

In Pakistan, a total of Rs 19.82 per liter are charged as tax (Rs 10 Petroleum levy and 9.82 GST), which comes out to be 27% of the retail price of Super Gasoline (Petrol) which is Rs 71.21 per liter. In France, Germany, Netherlands and UK, Rs 96-116 per liter are charged as tax, amounting to 63-67% of the retail price of Super which varies between Rs 151.96 for France and Rs 171.68 per liter for Netherlands. In Europe Spain has the lowest retail price of gasoline at Rs 127.60, with a tax component of 53%. In the industrialized OECD countries, the US offers the lowest retail price of Rs 57.06 per liter, with a tax component of 15% of sales price. In Saudi Arabia, the super gasoline is sold at Rs 13.60 per liter, In Iran Rs 8.50 and in Venezuela; it is virtually free at Rs 1.60 per liter.

Electricity rates

The average electricity tariff of US as a whole, and weighted across all sector stands at 10.07 cents per kWh (unit). This weighted average figure, however, hides a lot of variation from the high of 17.37 cents per unit for residential sector in New England to 9.47 cents per unit in East South Central zone of the US. Industrial tariff, however, is much lower; 5.30 cents in East South Central zone to a maximum of 11.41 cents in New England.

In Europe, as in petroleum, the electrical tariff is quite high. In Denmark, the residential tariff is at Rs 26.6 – 31 (0.23-2671 Euro cents) and in Germany Rs 23-24 per unit (0.20 -0.21 Euro cents). In France, Sweden, Finland, Latvia, Lithuania, Industrial tariff is the lowest of the order of 7-8 Euro cents. In Germany and Denmark, Netherlands, UK the industrial tariff is the highest at 12-14 Euro cents, due to higher share of oil/gas and higher costs / taxation of alternative energy sources. Thus the lowest

industrial tariff is around Rs 19.00 per unit. In the US highest Industrial tariff is around Rs 10.00 and lowest around Rs 4.50.

There is no particular reason or rationale that energy should be cheap in Pakistan, except that the purchasing power argument. All energy that goes into energy production comes abroad, involving importing costs and other inefficiencies and leakages. Imported oil costs the same everywhere including one locally produced oil. As we shall see, we have been getting cheaper energy, due to two reasons. Natural gas tariff were kept low, at less than 50% of the world market prices, which are going up now due to higher royalties, gas development surcharges etc., under producer provinces pressure and protestations.

Hydro-electricity is coming out of older investments (Tarbela/Mangla) and costing only 1.30 per unit. However, the oil based electricity is costing Rs. 14-15 per unit. Oil based electricity is 25% of the total, and the rest comes from still cheap natural gas and cheapest hydro. The average production cost thus comes at Rs. 7-8 per unit including 25% T&D losses including power theft.

In industrialized countries, these losses are less than 5%. In industrialized countries, there are at most two slabs for domestic users and two for industrial users. Larger consumers get cheaper energy. In Pakistan and most developing countries, reverse is the case. There are many more slabs, and the larger consumers subsidize the smaller ones, for socio-economic reasons. For the domestic consumer of 100 units per month, the rates are Rs. 2/ unit, possibly cheapest in the world, and one third of the corresponding rate in India. In Maharashtra the corresponding rate is IRs 2.76/unit and in Gujarat IRs 3.48/unit (IRs.1=1.84 Pak Rs.). However the brunt, perhaps rightly, is to be borne by those who are rich and large consumers, having air conditioners, who have to pay Rs. 13.80 per unit, which is 22% higher than India.

It should be noted that domestic tariffs are very high throughout the world. In the US which is recognized as energy abundant the cheapest domestic tariff is 11.76 cents. In Europe, these rates are atrociously high, except France, Spain and UK, where domestic rates are around 18 cents/unit. Elsewhere in Germany, Netherlands, and Denmark, the corresponding rates exceed US\$ 0.30/unit (Rs. 25). These rates include a very high degree of taxation, subsidizing more costly wind and solar energy sources.

In India (Maharashtra), industrial tariff for large industry is 12.4 cents/unit, as opposed to Pakistan of 8.80 cents. Average US industrial tariff is lower than that in Pakistan (6.68 cents), although there are places in the US, where electricity sells at 5.3 cents /unit, and also at 12-15 cents per unit. Industrial electricity in Europe is cheapest in France and Spain at 8-10 cents, but elsewhere in Germany, Italy, UK, Netherlands, these rates exceed 17 cents (Rs. 14-15/unit).

Natural Gas Tariff

Similarly natural gas is very cheap in Pakistan than most places in the world. Industrial tariff is half that of the US, the latter is the cheapest gas country in the OECD. In Europe industrial tariff is 3-4 times that in Pakistan. Residential tariff in Pakistan for the small/ poor consumer is practically free at 1.10US\$ /1000cft, while the large consumer pays about 6.00US\$ for the same amount of gas which is still less than 50% cheaper than the cheapest in USA.

Except for UK and Netherlands, where industrial tariff is relatively low (2-3 times that of Pakistan), the industrial gas tariff in Europe is 4-6 times higher than it is in Pakistan. Gas will not remain at the rate it is for very long. Iran has offered a gas price at 75 % of oil, which at current oil prices amounts to 10.29 US\$ per thousand cft (more than twice the currently prevailing gas prices in Pakistan). The LNG tenders that have been negotiated are at prices higher than Iranian prices, almost approximating oil. As we have mentioned earlier, the cheapest and the most abundant source for Pakistan is Thar coal, which can produce electricity, oil and gas, all of these. Finally, the good days of cheap energy are almost over. Consumers and the country would tremendous by benefit from conservation.

An update on Thar Coal: Royalty and incentive issues

To the pleasure and surprise of all Pakistanis, some movement seems to be taking place on Thar Coal, as is evidenced by the recent board meeting of Thar Coal Energy Board, in the month of January, wherein heavy weights like Shoukat Tareen, the then finance minister and federal minister of Water and Power, Raja Parvez Ashraf participated.

Agenda and deliberations indicate that things are reaching implementation stage. Engro group has reported progress, and other

Table 8.6: Energy prices in various countries in US dollars (dated 5/2010)

Countries	US Dollars					
	Gasoline	Diesel	Residential Electricity	Industrial Electricity	Industrial Gas	Residential Gas
	Per liter	Per liter	Per kwh	Per kwh	Per 1000 Cft	Per 1000 Cft
France	1.7816	1.4688	0.1794	0.0897 - 1.0404	12.2320	26.4572
Germany	1.8088	1.5504	0.2890	0.1731 - 0.1889	15.8274	33.2180
Spain	1.4960	0	0.1817	0.1033 - 0.1196	11.6068	24.3859
Italy	1.7816	1.5504	0.3473	0.1904 - 0.2312	13.4044	28.5284
UK	1.7680	1.8088	0.1871	0.1360 - 0.1700	15.4366	16.3354
Netherlands	2.0128	1.5232	0.3233	0.1224 - 0.1822	18.3285	18.4458
Denmark	1.8768	1.5096	0.3633	0.17 - 0.17	19.7745	45.8408
Sweden	1.6864	1.5368	0.2547	0.0816 - 0.0938	15.0067	46.9742
USA	0.77		9.2 - 17.27	5.30 - 8.65	9.58	13.68
Japan	1.164	0.866				
Korea			0.0886	0.06		
Malaysia						4.25
Singapore			0.0165			4.05
India	1.06	0.79783	0.06 - 0.13	0.075 - 0.126		
Pakistan	0.8378	0.7185	0.0206 - 0.1590	0.0880	4.4050	1.0957 - 5.7439

* USD per 1000 cft (2008 prices) 1 USD = 85 PkRs = 46 IRs = 0.7352 Euro

Source: Compiled by the Author from various sources, EIA, IEA, EU, IOC, SSGC, OGRA, NEPRA, CEA

groups are moving in. There are two policy issues which reportedly came under discussion; one being of rate of return on Coal power/mining investments, the other issue being coal pricing. Besides, role of PPIB and NEPRA also came under discussion. It is the rate of return (ROR) and coal pricing and some organizational issues that I would focus here to brief the readers and draw attention of policy makers on some crucial aspects and finally make some recommendations on the issue.

The issue of rate of return is of crucial importance, in capital intensive coal mining and coal power, to cost in excess of US\$ 1600 per KW. About 50% of the cost of generation of the coal power is expected to be the capital cost. Almost all of the energy sector works on cost-plus environment, yet the ROR issue has not been meaningfully studied and deliberated. NEPRA as a general rule offers 15% ROR on thermal and 16% on hydro projects, which is quite competitive and sustainable. Yet, some foreign project proponents especially based on imported coal asked for higher ROR, and NEPRA acceded marginally to such requests. SSGC and SNGPL get a ROA of 18% (Return on Assets i.e., both equity and debt), as World Bank extended the expensive loans, and managed to get higher ROA approved by the regulatory bodies. Similarly DISCOs also get a ROA of 18% from NEPRA.

In India, ROR of 15-16% is given, and that is in local currency, which when subtracting Rupee depreciation is reduced to 12%. In North America also, average utility returns are in the range of 12% after tax, which is a hefty 35%. NEPRA ROR is in foreign currency, which when currency depreciation effect is added, climbs up to 18% already. Yet there may be a case for compensating additional risks involved in new projects and territories like Thar Coal. However enthusiasm to fast-track Thar Coal should not be modified by other constraints of affordability. Consideration may be given to linking ROE with LIBOR, and providing a 50% margin over LIBOR. Although LIBOR is trading currently at a low of 1-2%, and has traded at under 5-6% in the last decade, it has also traded around 10% in the previous decades. Over the lifetime of a project of 30 years or so, a LIBOR average of 7-10% can be assumed. However a risk/ROR study done by credible international financial institutions would be acceptable to all and it would be worth its expense to commission such studies without loss of time.

Yet ROR issue remains adhoc, fluid and unstructured. While this axiom is logical, that more returns or incentives would attract more investors. However there is the other side of the issue i.e., cost of production and

the ability to pay both by GOP (foreign exchange for profit and debt repayment) and by consumers. The circular debt problem is well known. Higher ROR increases project risks and thus dilutes the advantage/incentive offered by higher ROR.

In the light of 50-100 billion US\$ of investment that is required to be done in the next two decades, a serious study of the issue involving credible foreign consultants is overdue, which should tell as to how much ROR is sufficient to attract investment and how much is counter productive. Shoukat Tareen (past finance minister) has argued for 18% pa but TCEB management and Sindh government emphasized 20%, even 25%, which would be really excessive if not egregious. Only a study as proposed can put to rest the confusion, if not controversy.

On Coal Pricing, there could be a number of approaches; firstly, is coal price fixing essentially required or can coal prices be subsumed in electricity price. Secondly, Thar Coal is price based on some reference international price of lignite, with reference to comparable coal/lignite. Thirdly, cost-plus formula is to be adopted. And fourthly net back value of Thar Coal is to be calculated. The option of subsuming coal price into the coal power price may appear to be a referable one

NEPRA has quite a stable system of providing escalation to operating (O&M) costs and combined with the (fixed) cost of production data, a viable framework could be developed for such cost escalations for Thar Coal as well. For netback value of Thar Coal, a reference price of coal power (the end-product) would have to be taken, which in the absence of a local market, would be a contentious issue. However, it may be less problematic to link coal power than to link lignite prices, as more comparable data is available in that respect.

Sindh government's concern and sensitivity to the issue could be taken care of by assuming ex-ante royalty of around 1.00US\$ per tonne, as is the practice in several states of Australia and Canada. Their royalty rates could be normalized on heat content basis. Once Sindh government becomes satisfied and settled on the royalty issue, coal pricing issue would become less political and more amenable to technical determinations. A notional coal price and its fixed and operating cost components would also be required, to cater for escalation issues. Price escalation based on local inflation in the long run would be much more preferable from Pakistan's and consumer point of view than indexation with international prices, as in the long run, energy would be scarce and

it's prices including those of coal would go up. Let us not convert the local coal advantage into a long term disadvantage, due to local distribution issues including royalty. Reducing policy and political uncertainties and provision of infrastructure would be a bigger incentive for foreign investors than unaffordably high rates of return.

Also some efforts should be initiated for the strategic physical planning of coal area, so that an orderly development takes place and implementation is not bottle necked later in the day. The lingering lacunae in final determinations of the role of NEPRA and PPIB should be removed. Role of NEPRA would be finally settled, once coal pricing approach is finalized including royalty issues. On the promotional side, TCEB management should make up its mind whether it would like to develop its own framework and structure ala PPIB. Such determinations should be done sooner than later.

Some fresh thinking is in order as to the role of Private Power Infrastructure Board (PPIB), which had filled a vacuum in the IPPs start up phase, when there was no experience or exposure in dealing with power business in private sector. PPIB role is a promotional role and not a statutory one. Other countries are doing without such boards. LOIs and LOSs are managed by the power purchasers, which in our case is PEPCO. Time has come to evaluate the continuing need or justification of PPIB in general and extending its role to Thar Coal in particular. Too many cooks spoil the broth, as they say. There is nothing too technical about it. However, Thar Coal Energy Board should develop necessary expertise and capacity in this respect. There can be other alternatives like LOIs to be issued by the power purchaser PEPCO itself. Similarly, by entrusting underground coal gasification to an Islamabad based organization is wasteful and un-necessary fragmentation. Atomic energy has nothing to do with coal. In any case, there is only one company in the world, which is handling such projects. TCEB itself can negotiate with such companies. Sindh Coal Authority probably has more relevant experts in this respect than any other organization. Other ways should be found to accommodate and discipline the retired executives of sensitive organizations.

However there is a legitimate statutory role of NEPRA which cannot be compromised or diluted for more than one reasons. And I do not think that in Sindh, there should be any reservation about that. Finally, it is Chinese who are capable to deliver and lead to a break- through into Thar Desert. They can give both technology and credit under one-

window of their own. And they have the most data and information on Thar due to their earlier two years involvement in Thar field. Every effort should be made to bring them back, which can only be done at the highest level in the country.

Costly LNG or Cheap Thar Coal Gas and Fertilizer

Another rental controversy seems to be in offing. While I supported Rental Power, I am not sure of the rental LNG project, which detail I intend to elaborate in these passages, after a little background information. My essential thesis is that instead of importing expensive LNG, almost as expensive as oil and paying heavy rentals for a LNG project, one could get the same or more gas by replacing gas consumed in fertilizer plants (200 BCF per year) with Thar coal produced synthetic gas (SNG), Hydrogen or Ammonia. The gas so replaced from fertilizer sector would be available for domestic and industrial sector. Electricity of course remains the forte of Thar Coal. It is to be mentioned that this proposal is not a piped dream but is actually being practiced in China and South Africa in a significant proportion.

Pakistan's annual gas consumption is around 1400 billion cubic feet (BCF) per year out of which 200 BCF goes to fertilizer sector and 200BCF to domestic sector. Country is facing a shortfall of 25% of its demand. Iran-Pakistan gas pipeline project has been on board for more than a decade. It used to be called IPI, Iran- Pakistan-India Gas Pipeline project. India withdrew from the project, apparently for the price reasons, combined with US pressure. Two –thirds of the world's natural gas is in two countries, Iran and Qatar, which are far away from the demand countries in Europe or South East Asia. Thus both countries are stuck with their large gas resources. Qatar has made huge investments in LNG infrastructure.

Energy: crises and options

Table 8.7: LIBOR (three months) rates from 1989 to 2009.

											Percent P.A.
Year	0	1	2	3	4	5	6	7	8	9	10years Average
1980										9.125	
1990	8.375	5.688	3.281	3.375	5.438	5.993	5.649	5.782	5.422	6.083	5.5086
2000	6.816	2.597	1.806	1.1598	2.0054	4.0551	5.3725	5.4939	3.1217	0.298	3.2725
Average 20 years											4.3905

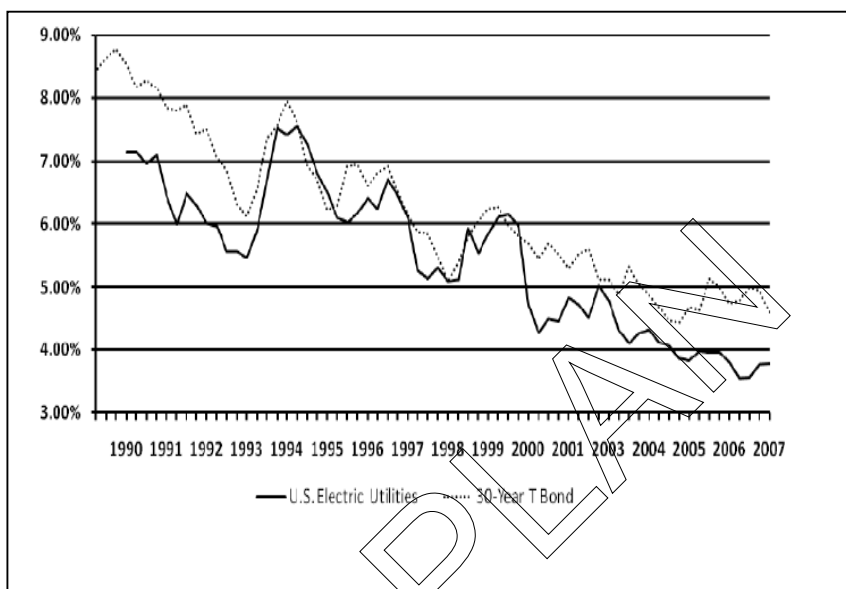
Source: LIBOR

Table 8.8: International Cost of Capital

Morningstar Methodology	U.S. Return	Canadian Return	Difference
International CAPM	12.41%	11.73%	0.68%
Country Specific Risk Premia	9.59%	8.02%	1.57%
Country Risk Rating Model	10.60%	10.76%	0.16%
Country Spread Model	11.97%	11.44%	0.53%
Relative Standard Deviation Model	11.97%	13.22%	1.25%
Average	11.30%	11.03%	0.27%

Source: James M. Coyne, a Comparative Analysis of Return on Equity for Utilities in Canada and the U.S. April 22, 2008.

Fig 8.1: Comparison of U.S. Electric Utility Dividend Yields and U.S. 30-Year Bond Yields for the Period 1990 – 2007.



Source: Bloomberg

Table 8.9: Broader Market Comparisons of Returns

Periods	S&P/TSX (TSE 300)	S&P 500
25-Year Average	8.72	10.73
10-Year Average	8.58	5.76
05-Year Average	15.46	11.12

Source: Bloomberg

Iran is promoting pipeline projects to Europe and South East Asia including China, besides IP/IPI project for South Asia. However, Iran has severe political problems with Western powers and the US over its nuclear enrichment activities and involvement in Iraq. The US appears to be in no mood of supporting Iran's gas sale furthering the latter's cash flow and prosperity.

However, Iran's rather hard bargaining on gas prices insisting on 75% of oil price is partly to blame. Iran could have offered an alternate enough

prices, which both Pakistan and India could not have refused. But it did not. Pakistan agreed to the price, never-the-less, due to lack of other options, but reportedly the progress is too slow. It may prove to be a non-starter once financing stage comes up.

Recently considerable progress has been made on LNG project, promoted by Mashaal Group and facilitated by SSGC as buyers. GdF (Gas du France) has been awarded the contract for supplying LNG for six years, based on rather intriguing and complicated pricing formula, amounting to US\$ 9.3 per MMBtu, which comes out to be 75% of the oil price, the same as Iran has demanded. This is about twice the current domestic price of gas in Pakistan. Another pre-contract agreement has been signed with 4Gas of Netherlands for the supply of LNG storage and regasification facility. This would be a floating facility that in all probabilities would be built in Dutch shipyards, and would be tugged down to port Qasim by 2011. A US\$0.50 per MMBtu tariff has been agreed to, which would mean 175-200 million US\$ rental per year for next 5-6 years. Capital costs for installing such facility may be 600-800 million US\$ or even more. Iran-Pakistan gas pipeline probably costs the same as well.

I and many of us keep wondering as why we do not develop our domestic resources, which may be cheaper and more reliable and sustainable. Local production of gas is an example, which is 50% cheaper than international price. Gas resources are dwindling and no new discoveries have been made, although there is significant potential to make discoveries and increase the output, if investments and domestic climate improves. However, it is a big if. The second more feasible option is Thar coal route. Both gas and power could be produced from Thar coal.

Two-third of Pakistan's electrical requirements is being met from oil and gas. 30% of natural gas production goes to the power sector. Power and fertilizer sector together consume almost 50% of domestic production of gas. Due to imported oil, energy is getting expensive and out of purchasing power of most consumers. GOP does not have the money to pay for subsidies of the energy sector and circular debt problem is creating supply and liquidity problems. Higher energy import bill also contributed to currency devaluation.

Coal Gasification may be a little further away in terms of commercialization of gasification technology. Both underground and

above ground gasification are on the cards. Underground gasification is 30% cheaper than conventional gas reactor based gasification. Recent cost studies in the US based on Powder River Basin load, has indicated prices of 2-4 US\$ per MMBtu, which is half of the international gas price, and equal to our domestic production cost or even slightly lesser.

Alaska and China are facing the same problem as Pakistan due to dwindling gas supplies. In both the places, existing gas fed fertilizer plants have been converted to coal. Instead of cracking natural gas and producing Hydrogen, Hydrogen is produced from burning coal with steam and Oxygen under high pressure and temperature, under sub-stoichiometric conditions (constrained supply of Oxygen). With full or excessive air/oxygen, coal burns to CO₂, while with lesser Oxygen, a mixture of CO + H₂ is produced in the presence of steam.

South African Company under Lurgi and other licenses and technology has produced gas and as well as gasoline from coal and markets the products competitively. China has more than 15 plants producing Ammonia/ fertilizer from coal, utilizing GE and Shell technologies. These plants would cost the same as pipelines (Iran) and LNG regasification, but would result in lesser product cost due to cheap local coal. Engro and even other fertilizer plants are in an enviable situation, as Engro is located close to Thar area (100-200 kms) and also has interests in energy production. An ideal combination is a 600 MW pulverized coal power plant and a two to three million tons per year of coal conversion into Hydrogen and Ammonia. Fauji Fertilizer should also consider entering in Coal Gas business ala Engro, as they have the same portfolio.

Fortunately, government circles are aware of the Thar gasification potential and an underground coal gas project is operating "underground" from Islamabad. It should come out and locate itself in Sindh to be productive and meaningful. Sindh Coal Authority (SCA) and Thar Coal Energy Board (TCEB) should take more interest in the project, and get control of the project as well. It is heartening to note that TCEB is in the process of getting membership of Clean Coal Center of IEA. It should also get into the gasification partnership, a similar organization meant to share and promote coal gasification technology. Fauji fertilizer should also consider entering in coal business ala Engro as they have the same portfolios.

Finally transparency and regulatory process appears to be in short supply in LNG sector. While poor NEPRA brings most power projects under its

purview, even bilateral Rental Power, OGRA sits back watching big business getting approved without its consent and oversight. I found it very difficult to get credible data on these transactions; no data or information has been posted either at Ministry of Petroleum (MPNR), SSGC or OGRA websites and I had to rely on fragmented non-technical press reports. In a cost-plus environment, all steps in the process ought to be regulated and not only the final distributor, as seems to be the actual case. SSGC, the final customer /distributor, will turn up in a fait-accompli manner, in the public hearing for the approval of its tariff. OGRA would after some brow-beating will willy-nilly approve the SSGC sought tariff. It is high time OGRA gets some muscles which have to be strong enough against a well-entrenched Ministry of Petroleum, which in most third world countries prefer to operate in the dark.

Rental Power

Rental Power has attracted a lot of controversy due to ignorance and lack of credible data available to the general public. Rental Power in reasonable quantities (1000-1500 MW) could have offered a cost effective compromise solution between expensive electricity and the hidden and non hidden cost of unavailability of electricity. Under controversy, Asian development bank had been requested to provide its technical and impartial input to end the controversy. ADB submitted its report and at least partially supported the idea of Rental Power. This writer has been all-along a supporter of Rental Power.

Laymen and partisan comments have appeared on the subject of Rental Power and on the findings of ADB report. It is the purpose of this section to inform the reader technically on the major conclusion of the ADB report, avoiding polemics, and suggest the ways ahead. A positive outcome of the report has been that the controversy over RPPs, has practically ended, at least the government infighting, Ministry of finance vs Ministry of water and power Raja Parvez Ashraf emerges out as a winner, although every body would come out being a winner, if some dent is made in the demoralizing and excruciating load shedding.

The major objection of the ADB report are on 7-10% advances, changes in contracts vis-à-vis RFP, and insufficient guarantees. Ministry of water and power has replied to these objections, most of which appear to be reasonable. The increase in advance from 7% initial to 14% has been defended by the ministry to be a substitute for sovereign guarantees.

There is no denying the fact that RPPs are expensive, but how expensive had been a controversial issue, which has been settled, as we will discuss in the following passages. RPPs are expensive as compared to gas run IPPs or hydro power, but not very expensive as compared to existing IPPs on RFOs and even more comparable with the new oil based and RFOs. Used diesel engines have been found to be the only feasible technical option, as these are available readily in the market and can be installed in a few months. For new plants, the delivery alone is two years, and takes another two years for implementation. Used or new, its performance issues are guaranteed by the project promoters.

ADB report does not find fault with used diesel engines. The new IPPs on diesel engines are being installed at US\$ 1000 per KW while the ADB report does not find fault with US\$ 6.0 per kW for old and used plants. In Pakistan, there is a general trend of 25-30% higher capital costs, due to a variety of reasons including leakages, lack of equity capital on the part of investors in appropriate regulatory capability at NEPRA etc. I have our own reservations on the subject, irrespective of IPPs or RPPs. This merits a separate discussion, and would be taken up later.

The most disturbing aspect, however, is the ADB reports revelation that the two RPPs implemented in Musharraf regime, are being paid a hefty sum of 6.03 million US\$ per month over the last two years, and the plants are not being able to supply electricity due to lack of supply of promised gas allocations to these projects. The contract period is nearing its end, and the two projects costing 200-300 million US\$ in rental would be closed without our producing electricity. Apart from financial loss, this episode points to the inadequate coordination between the Ministry of Petroleum & National Resources (MPNR) and Ministry of Water & Power (MOWP). This lack of coordination would further affect energy supplies and costs. It has been widely reported that MPNR has not been very forthcoming and supportive. Oil Ministries throughout the world are in habit of working for vested interests. Private interests are accommodated by informally allocating gas resources or hiding them or through soft pedaling. We have elsewhere recommended a merger of the two ministries into one Ministry of Energy and similar consolidation of NEPRA and OGRA as one body. The natural resources (mineral) section may be divested to the provinces, as is being demanded under provincial autonomy, as performance of MPNR in minerals has not been exemplary any way.

A classic case in point is Uch field. Existing UCH Power has submitted a project UCH-2, for installing another low-Btu gas fired plant, adjacent to the existing one, utilizing the unallocated Uch- gas. They have asked for an unreasonably high tariff, with a capital investment of 1600 US\$ per KW, which NEPRA has reportedly refused to oblige, despite various pressures. Consequently, the project is in limbo, and the Uch gas remains unutilized, which could have been used for producing cheap rental power. This can still be done. Rental Power plant based on Uch gas could later be converted into an IPP. A 500 MW potential exists.

The ADB report has made an analysis of the IPP costs vs RPP (what would have been the IPP costs, had these been installed in place of RPPs). RPPs on oil fired plants are found to be 7-9% more expensive than a comparable IPP, not a very big difference in cost for avoiding load shedding. Infact one of the projects even costs 9% less, as per ADB report. However, these are bad projects (Karkey, Walter Power) which cost 21-29% more and have been advised to be dropped. The annual return of "good RPP projects" varies from 17-21%, which is quite reasonable, if compared with going rates. However, the "bad projects", have a hefty return of 33-49%, and have been rightly recommended to be dropped. Existing IPPs on oil (RFO) are costing from 12-31 cents units (Kohinoor) to 14.20 cents (AES Pak Gen). The new IPPs to be constructed have been estimated to cost 17-31 cents, and taken as a reference for comparison; Existing IPPs on gas are costing 5.72 – 6.19 cents per unit.

Amazingly energy conservation & efficiency emerges to be the cheapest option. It would cost only 0.37 cents per unit to save one unit of electricity. One unit saved means one unit produced. PEPCO is in the process of distribution of free energy savers (CFLs). However the outcomes of these measures are always doubtful for a variety of reasons. None-the-less, even at 50% achievement of the target, it is not a bad deal and should be pursued irrespective of RPPs, as a continuing effort. Admittedly all conservation options are not as cheap as energy savers, and every option has a limit, and also may take a longer time horizon.

A total of 19 projects (2734 MW) are in the pipeline; 8 projects are at an advanced stage of implementation (1156 MW), while 6 projects have only been signed (738 MW) and not contracted yet. Most of the plants except one run on oil / Diesel engines.

The annual increase in tariff for FY 2010 has been estimated to increase by 6.3-6.8% (incidence of RPPs would be limited due to partial implementation in 2010), and the projected tariff increase for 2011 would be 22.1-31.5%. This increase would be over and above the 22% increase that is already in pipeline and decided upon. However, all these increases are not due to RPPs. The 22% increase (already in pipeline, 6% increase already done) is essentially the foreign exchange effect (devaluation) which has been covered by subsidies and are destined to be eliminated by FY 2011, under agreement with IMF. The higher costs and servicing of the new IPPs as compared to the old / existing IPPs would also be responsible for the increase in tariff in the same period. RPPs impact should be around 33% of this increase in tariff.

Table 8.10: RPP vs IPP costs and rate of return of RPPs (60% Plant Factor).

RPP Name	Fuel	Tot RPP Cost) *	Tot IPP Cost *	Difference *	ROR (% p.a.)
Techno Rental Power Project, Faisalabad	RFO	18.64	17.31	1.03 (7%)	17%
Pakistan Power Resources, Guddu	Low BTU gas	8.02	7.06	0.96 (13%)	3%
Chiao Rental Power Project, Sialkot	RFO	18.70	17.31	1.39 (8%)	-
Pakistan Power Resources, Multan	RFO	18.96	17.31	1.65 (9%)	20%
Young Gen Power, Faisalabad	RFO	15.96	17.31	(1.72) (9%)	-2%
Karkey Karadeiz, Karachi	RFO	22.36	17.31	5.04 (29%)	61%
Waller Power international, Karachi	RFO	21.01	17.31	3.70 (21%)	33%
Gulf Rental Power, Gujranwala	RFO	17.82	17.31	0.51	26%
Sialkot Rental Power, Eminabad	RFO	19.16	17.31	1.85	37%

* (Cents kWh)

Source: ADB Report, Table 3 & 7 merged

It appears that the GOP/MOWP would drop the six extra power plants which have not been contracted yet (advances not paid), and would only implement the eight more efficient and reasonable deals, catering to 1156 MW. This would be highly recommended as load-shedding would

Table 8.11: Total Tariff Increase required beyond agreed 24% adjustment.

Criteria	Without RPPS	With 8 RPPS	With 14 RPPS
Low demand with CFLs / RPPs must run			
FY 2010	-	6.4	6.6
FY 2011	-	22.5	26.3
FY 2012	-	-9.7	-9
FY 2013	-	-7.8	-6.3
Low demand without CFLs			
FY 2010	6.8	6.5	6.7
FY 2011	18.4	22.1	25.9
FY 2012	-10.8	-10.4	-10.2
FY 2013	-8.6	-8.6	-8.3
High demand with CFLs / Low gas			
FY 2010		6.4	6.6
FY 2011		31.5	35.5
FY 2012		-7.3	-6.7
FY 2013		-5.8	-5.6

Source: ADB Report: Rental Power Review, P 49-50-51.

remain and it is unavoidable, and can only be expected to go away in a period of five years and even then not totally eliminated table two provides details.

As things stand, the progress towards new IPPs is not satisfactory, as foreign investment does not appear to be very keen, in the short run due to law and order situation and in the long run for a variety of other reasons. It would be an achievement if further backlog of unmet demand is not created and accumulated. It would be in fitness of things if the officials and the Minister of Water and Power concentrate on new IPP capacity, bringing in more investors and speed up the existing ones.

Thar Coal Briquettes for Industrial and Residential Fuel

Apart from producing electricity from Thar Coal, there are other significant uses as well. Most important among these are;

- Coal Gas as a substitute of natural gas for household and industry.
- Producing fertilizers and chemicals by replacing natural gas as feed stock.
- Lignite / Brown Coal briquettes for urban house hold heating, rural household cooking and heating and as industrial fuel.

In this section we will discuss the last one (Lignite Briquettes), which normally escapes discussion and attention. There are about 15 European countries which use Lignite Briquettes in small or large quantities. Although the Lignite Briquette use is on the decline, it is still very significant. In former East Germany it used to be 46 million tons per year, as late as 1990. Even now the (unified) Germany uses 5 million tons of Lignite Briquettes, for the end uses that have been mentioned above. In Central Europe, where there is significant lignite resource, Poland, Belarus, Bulgaria, Czechoslovakia consume 1.2 million tons each per year. In our neighborhood India, where lignite is not in abundance and is found in South or Gujarat and Rajasthan, Lignite Briquettes are used to the tune of 0.5-0.6 million tons.

There is even an export market. About 40 countries including France, Sweden, Belgium, Turkey, Austria, Greece, USA, and Spain import their briquettes as well. Canada, Germany, Belgium, Russia, Latvia, Lithuania and Australia are even significant exporters of Lignite Briquettes.

Lignite briquettes are used in the following mode:

- As heating fuel in urban homes.
- As cooking and heating fuel in rural areas.
- As fuel in industry, especially cement, metallurgical, brick making and other construction materials industry etc.

The manufacturing process is simple; after drying as received Lignite from mines, especially the waste and small sized left over, it is crushed, ground and mixed with a binder and pressed in the form of bricks/briquettes. Often agricultural wastes like rice husk, straws and bagasse are mixed along with molasses. Natural gas in Pakistan is tapering out and expensive LNG import projects are in pipeline, which will make Natural Gas unaffordably expensive especially for poor domestic end users. In winters due to heavy heating demand especially in

Punjab and upwards in the country, Natural Gas load shedding has to be resorted to, which has become a permanent trend. Lignite briquettes can easily fill this gap. Infact Lignite briquettes heating are more aesthetic and scenic. Especially large houses, 400 square yards and upwards which have a high heating demand may be the ready candidates for switch-over as would be the rural households for both heating and cooling needs.

Felling trees for cooking and heating needs in Northern areas has been a perennial problem even before the shortage of Gas, as none was available to them at all. This has caused massive erosion and land sliding, which finds its way into rivers and ends up as silt in the dams, reducing the water storage capacity and electricity generation. Lignite briquettes would also promote investments in SMEs and employment in Thar and adjoining districts. Waste Lignite, Chooria and the undersize material would be generated in large quantities and should be made available to the briquette industry to be brought about. In fact there may be a case for legislation to provide the waste material as free of cost quota to poor Thar residents on the lines of Coal ash distribution legislation in India. Thus the conversion of waste would be facilitated apart from improving the incomes of the adjoining areas, which would otherwise be taken away by the wind and pollute the environment and may even be injurious to the power plants' machinery especially the water storage facilities, fans, compressors, turbines and transformers. Thar sand would be more than a challenge in this respect. Additional challenges will have to be tamed and reduced such as emanating from coal waste and ash. Thar Coal Energy Board and Sindh Coal Authority should start thinking in this respect. It is yet another reason to put Thar Coal on fast track.

Shale gas and other non-conventional natural gas sources

The Oil prices went up to 150US\$ per barrel in 2008, almost destroying Pakistan's economy and of other countries in a similarly precious oil dependant condition. There is no guarantee that it would not peak again. After having a dip it is continuously on the rise. Before another peak arrives, which is generally projected not before several ears from now, Pakistan should take adequate measures to reduce dependency on imported oil, which can be done by adopting mix of the following measures;

- Increase local supply of energy like utilizing Thar coal, installing some fuel less energy sources like Wind if and when feasible and implement Hydro-projects on fast track basis.

- Be ready with Fuel-rationing plan and procedures, once oil prices cross 100US\$ per barrel mark.
- Attract foreign investment and foreign companies in local Oil and Gas exploration, and facilitate local companies like PPL and OGDC in this respect.
- Lastly explore non-conventional fossil fuels like Shale Gas and Coal based Methane (CBM), which is the subject of this section, as the two are relatively new and less known and understood by many people in the public and even in industry.

We will take up Fuel rationing elsewhere. Fuel rationing is not an unknown or impossible issue. It has been practiced by Europe and many other countries in the past during emergencies.

The advent of shale gas has at least partially brought about a dramatic situation in the US Gas market, resulting in reduction of natural gas price, which are hovering around 5.0US\$ as opposed to average price of 8.0US\$ per thousand cubic feet (Cft) last year, and notwithstanding the peak price of 12-15 US\$ per thousand Cft in 2008. There may be other factors at work as well to bring about low gas prices in the US market, but the prospects of a large supply of gas at reasonable prices has applied psychological pressure on natural gas market prices in the US. Production costs of 2.50US\$ per Thousand Cft are being predicted.

Shale gas comes from Shale deposits, which are found at much lower depth than ordinary oil and gas. Shale is a fine-grained sedimentary rock composed of mud that is a mix of flakes of clay and other minerals and organic matter (up to 25%). Organic matter and petroleum material under high pressure during the rock formation periods gave rise to Shale deposits. Shale deposits are known for more than a century, but have not been considered economic under low gas price regime prevailing in most parts of last century. With the depletion of gas resources and rising gas prices and lower Carbon foot-print., Shale gas has attracted interest of investors and gas companies. Although Shale Gas is not yet exploited outside North America, Shale deposits have been speculated world wide including Europe, Australia and Asia. Shale deposits are expected to be found usually where oil and gas is found. Various estimates put world gas supplies to be enhanced from 20-50% over the next two decades.

In North America, 6-8% of natural gas is already being produced from Shale. Exploration is underway in Europe including China, while India

and Indonesia are also reportedly going ahead with similar projects. Exploration of / Gas is much less riskier due to shallower depth of wells and ease of locating Shale mass. Drilling costs are however, higher due to high pressure water blasting and fracturing effort required to fracture the Shale rocks. Pakistan's geology is also oil and gas prone and it is a producer of both. There is no reason that Shale deposits may not be found in Pakistan. Unfortunately there is not much experience of Shale outside USA. Europeans are visiting the US Shale sites and learning of the Shale gas exploration and production.

Chinese have entered into an agreement with US companies for getting the technical assistance with Shale gas. The US government has recently issued statements for helping Pakistan in solving Energy problems and crises. It would be an opportune time for the GOP to make a formal request to the US government for technical and financial assistance. Geological Survey of Pakistan and other institutions should be asked to develop the required projects and start their implementation for creating the capacity and capability to absorb the technologies that would be made available in the process. Also the petroleum policy should incorporate and announce Shale gas features in its Exploration and Production Bidding processes.

Coal Based Methane (CBM) is another potential source of gas supplies. Methane is usually found trapped in coal formation and has often been posing fire risk in underground coal mines. These days many mining companies extract methane (CBM) before attempt to extract Coal. There are many strong possibilities of funding CBM under Thar Coal fields. This is the right time to start Thar Coal exploration projects, while coal exploitation still appears to be taking place in 5-7 years.

Similarly there is quite some scope for putting stranded gas to use. Some gas wells are so located that gas output cannot be transported to the gathering system or transmission and distribution system. Also stranded gas is small in quantity. Normally a thirty years' consumption equivalent of gas is to be there to justify installation of a power plant at gas field site or nearby. Then there maybe electricity transmission infrastructure issues also. Thus for a variety of reasons, a considerable amount of gas remains unutilized and is thus called stranded gas. This is also the case in Pakistan. Stranded gas can be utilized through a number of alternative technologies e. g. a) installing temporary rental power like power plants suited for small gas reservoirs for 5-7 yrs b) liquefying gas through small sized liquefaction facilities and subsequently transporting LNG

through LNG bowlers to consumption points or networks, where regasification facilities can be installed. This may be an ideal arrangement for rural gas supplies. Reportedly Private Power and Infrastructure Board (PIIB) had hired a Spanish consultant to study the possibilities of utilizing such stranded gas.

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9 Federalism and Provincial Autonomy

Federalism is practiced in twenty four countries of the world having 40% of the world population. All large and populous countries with democratic dispensations are federations. But only four or five of the 30 plus prosperous democracies are running on a federal system. However, there is no unified theory or even concept of federalism. All countries have shaped their system according to their conditions and mutual agreement. In Pakistan many parties and individuals idealize British system and want to replicate that in Pakistan. Britain is not a federation, and it practices the parliamentary system of governance. The US is a federation but has Presidential system. Germany, India, and Australia have a federal parliamentary system. These three countries should be kept in mind while trying to replicate or borrow from the external models of democracies, as to be the most relevant vis-à-vis Pakistan's constitutional system.

Pakistan's 1973 constitution heavily resembles Australian constitution, with the only difference that the senate members are directly elected in Australia. There is a provision of referendum in the Australian constitution, and in Pakistan referendum has been frequently resorted to, although not being provided in the constitution. Germany has some peculiarities of Bundesrat (senate), with provisions of parliamentary ratifications of judicial appointments and a few other features. India's similar socio-economic conditions make it very useful for us to benefit from its experience. In Pakistan provincial boundaries are sacrosanct, while in India states' boundaries have been redefined on the basis of languages, and thus more states have been added and the process continues. In Pakistan the institution and definition of provinces has been stuck to very rigidly, although recently the elections in Gilgit and Baltistan assembly indicate a new trend, along with stronger voices of Seraiki province.

In Pakistan, provincial autonomy is being perceived by many as a panacea for growth, development and democracy. Some are reviving debate on Mujibul Rehman's six point formula. For some it is a symbol

of liberation from local "samraj", and for others it may be a recipe for disaster and disintegration. In India this issue of separation of powers has long been more or less settled and does not invite much of a debate. They have three long lists of subjects; Union, Concurrent and States. There is no parliamentary or constitutional pledge there to withdraw the Concurrent List neither is there any demand to do so. Despite all this India is perceived as more plural democracy, within and outside, than Pakistan is generally perceived.

Concurrent List has been a source of contention, although it provides for an efficient and workable joint performance. The Concurrent List provides a vehicle for defining the distribution of powers, functions and responsibility without loss of economic efficiency and order. Concurrent List may have been abused in the past for which evidence ought to be studied. It should not be the excuse for federal preponderance on the subject, but should serve as a common and joint mechanism to share functions and responsibilities in an amicable and negotiated manner. Although 1973 constitution provided for 25 years limit for the life of the Concurrent List, it has been successively extended by legislation.

If one examines the Concurrent List from economic or income's point of view, out of 47 subjects on the Concurrent List only three have any potential for income which is electricity, tourism and Zakat. On electricity, federation is giving subsidy of billions of rupees. Zakat, however, should be a provincial and even local government subject, as Zakat in Islam is to the close-ones. All other 44 subjects have no potential for income. It will only add to the functions and responsibility, even if expense is self-financed by the stakeholders. So if the grievance is economic, why insist on assuming the liability of expense items in the Concurrent List.

If at all the concurrent list may have to be expanded and not reduced or eliminated to affect more provincial autonomy, by shifting some subjects on center's list to the concurrent list. A case in point is Oil and Gas, where in exploitation is complained of by Balochistan. With the reforms under discussion and demands on the street on the subject, it appears that oil and gas would have to go to concurrent list, and perhaps eventually to the provinces. In almost all the relevant federations, Canada, Australia and US etc, oil and gas including natural resources are provincial subjects. Concurrent list provides a flexible option, whereby apportioning of the roles and responsibility could be negotiated among

the respective federal and provincial ministries on a daily basis and decided upon on the basis of merit, efficiency and welfare.

Nationalists demand of a confederal structure based on 1940 Lahore resolution is not feasible on reality grounds. There is no working model in favor of this concept, even the oft- repeated Switzerland. UAE, for whatever it is worth, may not be called a confederation. One can not run countries of population of 170 million on the style of tiny islands and fiefdoms. Neither is there a single model of six-point or five points revolving around limited federal powers to currency, defense, foreign trade, foreign affairs. Most countries and federations or otherwise have substantial lists of exclusive and shared powers.

Concurrent Powers and Provincial Autonomy

In almost all constitutions, defense, foreign affairs, currency, commerce and communication are exclusive federal subjects. In the US, the federal list covers 18 heads out of which, defense, foreign affairs and currency are exclusive federal domain and other 15 heads are under shared/concurrent domain; all other subjects are under provincial/ state domain, without any specific state list.

In India on the other hand there are three long lists; federal (union), concurrent and state. There are 97 heads in the federal list, 47 heads in concurrent list and 67 in state list. In Australian constitution, 39 heads of power are defined as federal and rest of powers with the state, with no specific list. Many federal powers are exercised as shared/ concurrent powers. In the German constitution, federal list is limited to only 11 heads, and there is a large concurrent list of 24 heads. Implementation of most federal powers and all concurrent powers fall in the domain of provinces. In Pakistan, 67 heads of power are awarded to federation (less than India) and 47 heads are in concurrent list (equal to India); all others residual subjects to provinces. Canadian federation includes currency, defense, foreign affairs, foreign trade, public debt, Banking & Interest, Coastal areas fishing, transport, postal service, patents, copy rights etc. Australian federal involvement pertains to a long list of 37 items, including defense, foreign affairs, currency, banking, inter and foreign trade, taxation, public debt, post and communication, and other miscellaneous as census, marriage, railways, water ways, ports and light houses etc.

American Federalism is a unique one. The constitution is too old to have defined the subject lists as thoroughly as is done in the new modern and later constitutions. Only defense and foreign affairs, currency and commerce are explicitly mentioned, but federal courts have successively defined and interpreted "Commerce" clause so widely to include many functions. All under the spirit and domain of shared and concurrent powers provided or interpreted into the constitution and the federalism continues despite strong and independent state administrations. Although it is true that in the US, significant powers have been granted to the states, yet the federation's direct and indirect involvement even in health, agriculture, commerce and energy is significant, to the extent of federation launching programs in education and health at the local government level competing with the provincial programs. The dichotomy has been lucidly expressed by a US constitutional expert Robert G. Natelson, in his land mark essay as;

Federal Powers in the U.S. Constitution and its continued expansion

In constitutional form, the federal government is one of enumerated powers, and all powers not enumerated are reserved exclusively to the states and the people. The federal government's enumerated powers have been construed so broadly, however, that that the modern student may be pardoned for asking if anything really has been reserved. Even forty years ago, Professor Lindsey Cowen could say, "As things now stand, there may not be any powers which are not delegated to the United States by the Constitution", and of course, the federal government has grown a good deal since then. Over the past century, the power to regulate commerce has come to include the power to regulate agriculture, the power to tax has become the power to control inheritances, and the power to spend for the "general welfare" has enabled the federal government to create programs to inculcate and educate, as well as for many other purposes.

Source: Robert G. Natelson, The Enumerated Powers of States, Nevada Law Journal Vol.3:469, Undated,

Broadly speaking, there is nothing wrong with the Constitution of Pakistan and the separation of federal and provincial powers enshrined therein, or the concurrent list. Most federal powers listed in Pakistan constitution match with many federal democratic countries plus/minus a few issues or subjects. The biggest problem has been dictatorship and lack of freedom. There is no meaning of any provincial power in a

dictatorship. Take the case of China and Russia, which are federal countries, reputedly having given significant powers to regions and provinces. In effect, there is one central dictatorial power, call it federal or provincial or whatever. So it is lack of freedom and democracy in Pakistan which has led to centralization of power, across all domains. However, there are two main issues that federation of Pakistan has to resolve and make these more favorable to provinces. One is taxation and the other is natural / mineral resources. More studies and careful thought should go into it.

Federation/ centre should narrow down the list of taxes it collects and except for Income tax and, custom duty possibly, all other taxes should devolve to the provinces, which by the way should not cause a major disturbance due to the low incidences of these items, but would bring the taxation more in line with other countries.

With respect to the natural / mineral resources, the provincial ownership and control rights have to be accepted. Significant progress has already been done, and a lot seems to be in the pipeline under the Balochistan package. Despite serious efforts and campaign by federal bureaucracy, Thar Coal has been given in the provincial domain and it is the Sindh Govt. which is in command on the subject and is reportedly going on Thar Coal on fast-track. Oil and Gas remains an exclusive federal subject for all practical purposes although it is listed as both concurrent and federal subject. We have discussed elsewhere that the concurrent list offers a very good mechanism through which federal and provincial cooperation can be flexibly practiced and optimum combination brought about with a view to equity and economic and administrative efficiency. Concurrence of power does not mean only paramountcy of federal power. It can be, where required, the other way round i.e., paramountcy of provincial power. Germans have made good use of the institution of concurrent share powers, which perhaps have the largest of such list. Germany is much better and relevant model of federal democracy than the unitary UK, which our politicians and people in general wrongly idealize as a model system for themselves.

Policy vs Implementation

Another way of slicing the cake is reserving implementation for provinces. For example, highways are a federal subject in the US, however these are actually built by the state governments, in so far as the portion of highways fall in individual state boundaries. Federal US only

plans and provides money. This is not to suggest that provinces become only implementers, while policy in all or most of the cases is to be made by the center. Provinces should make policies in the subject allocated to them, consistent with national policies. It is the federal or concurrent subjects, where it is proposed that implementation be done by the provinces, whereby currently federal government in Pakistan gets thoroughly involved in implementation.

Hence the notion of doing away with the concurrent list is untenable and impractical. It is a useful and indispensable tool of federal and provincial government coordination. The culprits have been the dictatorial centrist regimes, which have mostly ruled Pakistan for long continuous periods. Civilian rules have been short, intermittent, unstable and often victims of shadow powers. Also concurrent powers do not always mean federal paramountcy. It can be a variable which need not be defined rigidly in the constitution and the matters should be decided through the democratic process and executive support on a case to case basis taking into account economic and administrative efficiency and regional equality.

Whatever be the choice of dispensation, it should be a well thought through and planned implementation and not a hasty decapitation. GOP should commission studies by external consultants and ask the respective ministries to submit proposals, consequences and the required arrangements that have to be made for a selected approach of provincial autonomy. In the current dispensation, most of the economic structure is centrally organized and managed. Overnight or hasty withdrawal of concurrent list without adequate preparation would be potentially disruptive and disastrous. Instead of bringing a large comprehensive package, a gradual approach may be considered. Surely there may be a few cases, where near and immediate actions can be taken such as is the case of the powers and domain of the federal ministry of Petroleum and Natural Resources, wherein Baloch demands are the loudest. Government of Pakistan has already announced several concessions in the Balochistan package, which initiative should be sustained for further reforms.

A lot of provincial disharmony and grievances may have been the direct result of dictatorial rule in Pakistan over a long period of time, both in pre and post 1973 constitution era. Consultation and participation can sometimes yield better result than the iron-clad rules of the constitution. Another issue is of size and capability. Already in Balochistan most of

Table 9.1: Enumeration of Federal, Concurrent & Provincial Powers (Subjects) in major federations

Countries	Federal powers	Concurrent Powers	Provinces Powers
USA	18	* all federal powers concurrent with federal paramountcy	rest
Canada	29	-	19
Australia	39	Most federal powers concurrent	rest
Spain	32	Significant concurrency	22
Germany	11	24	rest
India	97	47	66
Pakistan	59+8= 67	47	rest

* Exclusive federal powers only foreign affairs, defense, commerce and currency.

Table 9.2: Relative distribution of Revenue & Expense in some federal countries.

Category	Federal Income Share*	Federal share in expenditure	Central Transfer to Provinces/states as a% of provincial expenditure
Low	Canada & Switzerland 45% USA 54%	Switzerland, Canada, Belgium, Germany (30-40%)	Canada, Switzerland, USA (13-26)
Medium	Austria, Australia, Belgium, Brazil, India, Germany, Spain, Pakistan (60-75%)	Argentina, Australia, Austria, Brazil, India, Mexico, Spain, South Africa & US 45-60%	Russia & Malaysia 23-30%
High	Argentina, Malaysia, Mexico, Russia, South Africa, Venezuela 78%	Pakistan (72%)	Germany (44%) Australia (45%) India (46%) Pakistan (46%)
Very High	Nigeria, Venezuela, (98%)	Malaysia (84%) Venezuela (78%)	Spain (73%) Belgium (68%)

* % of total taxes and Income (% of collection)

Source: Federalism primer series 1-6, Oxford University Press Canada.

the civil service comes from outside the province, due to shortage of supply of cadre. In NWFP the situation is not very different. An open question is the ability and capability of the smaller provinces, to

practically exercise the functions and powers allocated to them under a future dispensation of provincial autonomy.

Table 9.3: Forms of Government in various democratic countries

Country	Strongly federal?	Strongly bicameral?	Upper house unequal?	Strong judicial review?	Electoral system	Party system	Structure
United States	Yes	Yes	Yes	Yes	FPTP	Two	Pres
Austria	No	No	No	No	PR (list)	Multi	Parl.
Australia	Yes	Yes	Yes	No	PR (AV)	Two	Parl.
Belgium	Yes (since 1993)	No	No	No	PR (list)	Multi	Parl.
Canada	Yes	No	Yes	Yes	FPTP	Multi	Parl.
Costa Rica	No	No	No	No	PR (list)	Multi	Parl.
Denmark	No	No	No	No	PR (list)	Multi	Parl.
Finland	No	No	No	No	PR (list)	Multi	Parl.
France	No	No	No	No	2 round	Multi	Parl.
Germany	Yes	Yes	Yes	Yes	PR (MMP)	Multi	Parl.
Iceland	No	No	No	No	PR (list)	Multi	Parl.
Ireland	No	No	No	No	PR (STV)	Multi	Parl.
Israel	No	No	No	No	PR (list)	Multi	Parl.
Italy	No	No	No	No	PR (MMP)	Multi	Parl.
Japan	No	No	No	No	Semi-PR	Multi	Parl.
Luxembourg	No	No	No	No	PR (list)	Multi	Parl.
Netherlands	No	No	No	No	PR (list)	Multi	Parl.
New Zealand	No	No	No	No	PR (MMP) since 1993	Two (until 2000)	Parl.
Norway	No	No	No	No	PR (list)	Multi	Parl.
Sweden	No	No	No	No	PR (list)	Multi	Parl.
Switzerland	Yes	Yes	Yes	No	PR (list)	Multi	Parl.
United Kingdom	No	No	No	No	FPTP	Multi	Parl.
Totals	Yes:6, No:16	Yes:4, No:18	Yes:5, No:17	Yes:3, No:19	FPTP:3, PR-st:12,	Two:3, Multi:19	Pres:1, Parl.:21

Source: Wikipedia

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10 Selected issues in Provincial Autonomy

In the following analysis, we elaborate on some specific issues as are relevant to provincial autonomy. This is not an exhaustive list but is yet indicative. The issues are:

- 1) Natural resources ownership & control
- 2) Foreign Direct Investment
- 3) Electricity
- 4) Public debt provinces income & rights and limitations to borrow
- 5) Public income & expenditure
- 6) Taxation
- 7) Profits / Dividend Sharing and ownership of public sector investments in oil and gas

Natural (Mineral) resources

Sindh Parliament has through a unanimous resolution demanded transfer of ownership and control of oil & gas to provinces (Sindh). Currently oil and gas are included in federal government list of subjects, and is handled accordingly. The resolution has not cited any monitory grievances, but would like to “have control”. Apparently, oil and gas royalty system has been working well at least for Sindh, if not for Balochistan. Nationalists want control and would not be satisfied with equitable financial arrangements alone. Control has inherent appeal and advantages. All people would want to have direct control of their resources, in order to be able to utilize and optimize those to their best advantage, and may not like to leave the same to the whims or initiative of select individuals sitting in federal capital who may not have the required incentive and rationales as the provincial people may have.

Although a counter arrangement can be built and infact practiced in many centrist and non-centrist countries which make a case for scale economies, optimization, capability, experience and know-how, the nationalist demand has been accepted in case of mineral resources including coal. It is a matter of extending the list to oil and gas which after all fall in the category of mineral resources.

While most other federal countries recognize provincial rights on natural resources, Canadian constitution in the most specific and elaborate on it section 92A states;

(1) In each province, the legislature may exclusively make laws in relation to

(a) Exploration for non-renewable natural resources in the province;

(b) Development, conservation and management of non-renewable natural resources and forestry resources in the province, including laws in relation to the rate of primary production there from; and

(c) Development, conservation and management of sites and facilities in the province for the generation and production of electrical energy.

Export from provinces of resources

(2) In each province, the legislature may make laws in relation to the export from the province to another part of Canada of the primary production from non-renewable natural resources and forestry resources in the province and the production from facilities in the province for the generation of electrical energy, but such laws may not authorize or provide for discrimination in prices or in supplies exported to another part of Canada.

Authority of Parliament

(3) Nothing in subsection (2) derogates from the authority of Parliament to enact laws in relation to the matters referred to in that subsection and, where such a law of Parliament and a law of a province conflict, the law of Parliament prevail to the extent of the conflict.

Taxation of resources

(4) In each province, the legislature may make laws in relation to the raising of money by any mode or system of taxation in respect of

(a) Non-renewable natural resources and forestry resources in the province and the primary production there from, and

(b) Sites and facilities in the province for the generation of electrical energy and the production there from,

Whether or not such production is exported in whole or in part from the province, but such laws may not authorize or provide for taxation that differentiates between production exported to another part of Canada and production not exported from the province.

Similarly Australian federal constitution (which defines only; federal power in subject list of 39 items in section 51; the unlisted subjects are deemed to fall in provincial domain) puts all natural resources like oil, gas, coal, minerals etc in provincial domain by not listing it in federal list. Consequently in Australia, provincial/state governments exercise

complete control over these heads (oil, gas, coal etc) subject to overall federal constraints and requirements. Similar is the case of US, although American system has many peculiarities. First of all complete private sector role, creates an altogether different orientation of the relevant sectors, despite identical laws elsewhere where role of private sector is not so paramount and supreme. The US law even recognizes personal rights on natural resources found on private lands. This builds an argument for share of local neighborhoods in the royalties and revenues, along with the provincial or federal incomes.

German constitution has a small exclusive federal list of "items and a large concurrent list of 24 items; both the lists do not include energy (oil and gas) or minerals in these two lists and thus by matter of exclusion, falls in the domain of provinces (Landers). Only nuclear energy is included in the concurrent list. In Spain, however, the federal exclusive list includes energy and minerals as federal subjects.

Reorganization of the Ministry of Petroleum & Natural Resources

MPNR is a major bone of contention in Pakistan's federal system and a lot of graveness and some malpractices have been attributed to it. Firstly, it has tried to function as a non-federal entity and monopolize powers and functions. While corruption is a common issue and not peculiar to this ministry, throughout the world petroleum ministries are known to be corrupt and adept at secret and behind the door dealings. This aspect has received international attention, and major reform effort is being focused on it.

Balochistan package and the accumulated royalty of Rs 120 billion is an indirect admission of inefficiency and anti-federal behavior, although this ministry alone is not the culprit, but certainly a major contributor to the problem. What was the justification for paying 1/4th of the normal royalty dues to Balochistan; sheer opportunism, lack of vision. The successive top bosses of the ministry are responsible. The blame cannot be passed on to the politicians, as most of the times bureaucracy and the military have been hand-in-glove against the politicians and civil rule. We do not see in the annals of the history of this ministry to put an end to the unfairness and injustice of the prevailing royalty and pricing system.

Thar Coal has been an un-justified victim of the centralization attempts which has for long thwarted the development of Thar Coal. Only a politically powerful provincial chief minister like Qaim Ali Shah could

have arrested and maintained control on Thar coal. Sindh is not an under-developed province; neither does it lack manpower of adequate quality, although some other issue hampers its adequate utilization.

In the mineral sector, no major project has been launched and this story of exploitation can be legitimately made on this, despite uninformed public perception; especially among Baloch nationalists, that mineral resources have been exploited. No large scale mineral project has ever been launched yet. Saindak has been a begging-bowl project, in which GOP has consistently lost money. Chinese have generously helped the project and are now recouping their investment through export-pay-back arrangement. Regodeq, deal yet to be implemented in full, appears to have been done under secrecy. No proceedings or details have been made public adequately. GOP has taken a share along with provincial BDA (Balochistan Development Authority). Balochistan package announced recently promises to devolve these shares to provincial government as and when the new agreements are negotiated. A number of steps need to be taken to correct the situation, alleviating doubts of the provinces and preventing such policy lapses as have occurred in the past and have been partly described in the following;

- a) Firstly, MNPR may be totally divested of the natural resources section. Let provinces handle the issue on their own. If some profits are to exchange hands, let it enrich the Balochi leaders and citizens than the federal bureaucracy and polity.
- b) Directorate General of oil and gas may be merged, and converted into an independent board or authority, under federal oversight; well-head pricing, E&P contracts, royalties etc to come under the oversight of OGRA.

Safeguards against provincial discrimination

While ownership of natural resources (non-renewable) is reverted to the provinces, it would be essential to build safeguards against restrictive practices or discrimination in supplies, pricing or taxation that may put other provinces in economic disadvantage. Canadian constitution while most liberal and generous in favor of provincial ownership and control, does provide for specific safeguards. In the absence of such safeguards, there may be room for mischief on the part of immature and irresponsible politicians and separatist circles, causing provincial disharmony and economic losses.

Role of the Council of Common Interest (CCI) may have to be provided on such issues, as reportedly has been considered in the deliberations on the proposed 18th amendment. Provisions of the Canadian constitution in this respect have been typed in bold in the foregoing passages.

Foreign Direct Investment (FDI)

FDI is another area, where shared power and cooperative federation may be allowed to function, than the present system of control by the centre. FDI can be major instrument for economic progress in today's economic life, where provinces may better attract direct investment and economic activity. Labyrinths of bureaucratic controls dampen and dilute the tempo of projects and proposals. It is usually complained by the nationalists, with or without merit, that the larger province gets more than its due in this respect, as there is no formal allocation process in FDI, nor is it desirable to do so. FDI ought to be driven by economic efficiency and market forces. Federal exclusive domain on this subject works against competition and thus could be replaced by provincial involvement and federal cooperation in a shared / concurrent mode.

Electricity

Let us take the case of energy sector and in particular of electricity. Electricity is on concurrent list, but there is no sign of provincial involvement, except for SHYDO which is responsible for small Hydro development and is under provincial ownership of the NWFP government. Also, the GoNWFP has powers to levy water user charge on private hydro projects. Royalty is payable, although its quantum is under dispute, on hydro-electric production. Two factors are responsible for the apparent non-involvement of the provinces. Erst-while WAPDA, a public sector corporation has been largely handling the sector, which in its decentralized form is now working as PEPCO, NTDC and GENCOs, (generation, transmission and distribution companies), although owned and managed by federal government.

Secondly, the objective of keeping the electricity prices uniform throughout Pakistan has led to significant centralization in the form of subsidies, regulation etc. Economy of Pakistan is working on the principle of uniform pricing of major commodities. There is a lot of sense and political support among people and business for this practice. In the 1988 PPP tenure, considerable electricity tariff reduction was given to Swabi, the narcotics district, which was widely opposed.

Businessmen initially transferred their electricity intensive industries to Swabi, but could not sustain those there. Ultimately policy had to be dropped. Incidentally, provincial autonomy does not mean price discrimination. Infact in Canada, the most liberal country favoring provincial domain on natural resources, price discrimination towards or against other provinces is not permitted under the constitution.

Public debt; Provinces income & rights and limitations to borrow

It has been alleged that the government of Punjab has become bankrupt, which the latter has denied. Previous finance minister, Mr. Shoukat Tareen had however, confirmed that (excessive) overdraft had been converted into a long term loan at an undisclosed rate of interest. Nevertheless this is a debt. The figures on government of Punjab's borrowing have not been released. What is bankruptcy, simply speaking, when you cannot pay your immediate dues, and your cheques are dishonored? By this yard stick, Punjab government is not bankrupt.

However it may have busted its borrowing limit. State bank of Pakistan is responsible to define and enforce such limits, which is keeping mum on the controversy. It should release the factual details. In an article published some time back, former deputy governor Ashraf Janjua had detailed the modus operandi of State Bank of Pakistan in this respect. However what seems to be lacking is a clear cut formula. Borrowing should be related to the assets or size of the economy. In Germany, maximum borrowing of federal government has remained under 2.9 % of GNP over the years and in the US this limit is 1.8%. In India, states and provinces borrowing limit is 4% of the state's GDP, and seems to be working well. Why do not we define such a straight forward formula?

Budgeting; Income and expenditure

Let us measure the federation in Pakistan through the lenses of budgetary income and expenditure; 23% of total expenditure (current) is by provinces and 77% by Federation. However most federal items of expenditure appear to be legitimately federal; defense interest and current subsidies constitute two-third of the current expenditure. Some devolution of federal power could reduce General& Administration (G&A) expenditure (federal) up to one-third. G&A accounts for 16.2%; roughly half of it is in federal domain and half in combined provincial.

Depending on the capability of the provinces and nature of activity, some creative devolution could be made in federal public sector development programme, where in resources can come from federation, but bulk of the physical implementation is done by the provincial administration. However, the question of capability comes up, which is the weakest in Balochistan, where from the loudest voices are emanating for provincial autonomy. Will provincial autonomy emancipate and deliver Punjab (the most capable and efficient) from the “clutches of federalism”, which ironically is the most ambivalent in provincial autonomy.

Most taxes and charges are federally collected in Pakistan, which are divided into divisible and non-divisible resources. Divisible resources are divided among the federation and four provinces by a formula determined by National Finance Commission. Direct provincial revenue is less than 10% of the total.

NFC has to meet every five years to determine these allocations by consensus. After more than seventeen years, NFC award was determined by consensus in Dec 2009, a PPP success by all measures buttressed by PML (N) provincial government in Punjab which showed wisdom and agreed to most concessions which came from Punjab. A new formula, incorporating other non-population criteria, for revenue distribution was accepted, which benefits less developed and small provinces like Balochistan and NWFP.

Some creative reforms could be done in order to improve provincial revenues and autonomy; these areas are of excise duty, sales tax and non-tax revenue. Federal collection may continue, but straight transfers could be done in these areas depending on location of the income. Federal taxes may be restricted to income tax and custom duties. Provinces have already been given the task of levying and collection sales tax / GST on services; whether the provinces would adequately handle tax collection in this respect is an open question. Let us wait and see, and let the provinces take the requisite initiative.

Taxation

The following six federal subjects that merit transfer to the provinces are the following.

1. Oil & Gas.
2. Excise duty.
3. Estate duty in respect of property.

4. Taxes on oil & gas.
5. Terminal taxes on goods & passengers.
6. Duties in respect of succession to the property.

Out of the above mentioned six subjects, items 3, 5 and 6 may be readily accepted by the federation, being of lesser consequence. Major issues of contention would be 1, 2&4. There is a trend towards maximizing Oil and Gas revenues to the provinces. Only the corporate tax is to be left with the centre.

Profits / Dividend Sharing and ownership of public sector investments in oil and gas

There are five sources of income from mineral and oil / gas resources.

1. Royalties & Surcharges.
2. Corporate Tax.
3. GST.
4. Excise duty.
5. Profit / dividends.

**Table 10.1: Federal & Provincial Budgetary expenditures
(Consolidated) 2007 – 2008**

Expense Item	Federal	Provincial	Total
I. Current Exp o/w	1416 (77)	437 (23)	1853 (100)
Defense	277	-	277 (12.2)
Interest	490	33	523 (23)
Current subsidies	407	17	424 (18.6)
General Admin	76	192	368 (16.2)
All others	-	452	452 (11.5)
II. Development Exp	446	200	452 (18.6)
Total Exp			2277 (100%)

Source: Table 4.4 Federal & Provincial Govt. expenditures, Ministry of Finance, Govt. of Pakistan

1. Royalties and gas development surcharges are already being paid to the provinces, although there are some gas pricing problems of gas from Balochistan which have been partly resolved and partly needs to be still taken care of. Retrospective correction has been agreed to and a sum of Rs 120 billion has been agreed to be paid to Balochistan.

2. Corporate tax is a legitimate Federal subject in almost all countries, although provinces are also authorized to levy some income tax as well in a number of countries e.g. USA.
3. Excise duty is also being transferred in full to the producer provinces as per receipts.
4. GST and profits are still unresolved issues. Generally GST in general is a provincial subject and more so on natural resources. We will focus on the issue of dividends / profit, which is normally, paid to the investor, in private sector, foreign companies and provincial or federal govt. which ever being the investor. While royalty is only 12% of the sales price, the total income from natural sources can add up to about 50% of sales value.
5. Dividends from Natural Resource sector (oil, gas, and mineral)

OGDCL	=	36000
PMDC	=	30
PPL	=	6500
Saindak	=	2200
Sub Total	=	44736 (59%)
Total Federal dividend	=	75228 (100%)

Table 10.2: Federal & Provincial Consolidated Budgetary Revenues (2007-2008)

	Federal	Provincial	Total
Total Revenue other	1662	147	1809
A. Tax revenues o/w	1251	66	1318
Direct taxes	496	9	505
Indirect taxes			
Excise duty	84	3	87
Sales Tax	385	-	385
Tax on Int. trade	151	-	151
Surcharge (Oil & Gas)	35	-	35
Others (vehicle tax, stamp duties)	-	37	37
B. Non tax revenue	411	80	491
Total			

Source: Table 4.3 Consolidated Federal & Provincial Govt. Revenues, economic survey, MOF, GOP 2008-09

59% of the total dividend income of the federation (in federal budget 2009-10), came from oil, gas and mineral resources, major item of which is OGDCL profit of Rs 36.00 billion. Dividend is to the investor and in

this case investor is the federal government. Total royalty on oil, gas including minerals amounts to Rs 50.00 billion. Dividend income is 75-80% of these royalties. It may be only fair to propose that GDP reduces its investment to the 50% of the current level initially, and transfer the 50% ownership to the provinces, according to some criteria, such as current and cumulate production of various provinces. It should also be studied as to what portion of equity has been financed from internal revenue generation, and how much of external equity had been injected by GOP. Revenue of 25 billion Rs would be generated for the producing provinces. Currently Sindh and Balochistan have major share in oil and gas production. Bulk of these proceeds would go to Sindh and Balochistan at the moment. Eventually NWFP would also benefit from it. Punjab does not seem to have much of an oil and gas potential, present or future. Agriculture and industry is Punjab's forte.

Table 10.3: Oil and Gas Production in Pakistan provinces (Physical Quantities)

	OIL		GAS	
	Cumulative production	Current Production	Cumulative production	Current Production
	Oil Mn Barrels	Oil Mn Barrels	Gas TCF	Gas (TCF)
Sindh	182	11.18	8.75	1.033
Balochistan	-	-	11.28	0.319
NWFP	8.04	2.96	0.054	0.029
Punjab	260	4.48	0.40	0.022
Pakistan	450.04	18.62	20.484	1.403

Source: Compiled by the Author; Basic data from HDIP.

Balochistan Package and the issue of Resource ownership & Income

Government has announced the Balochistan package, in which significant steps have been initiated towards accepting provincial domain and ownership on natural resources such as oil, gas and minerals etc. Following are the most significant ones;

- Bringing a more equitable royalty system of uniform pricing.
- Retrospective correction of past mistakes and underpayment of royalties, by announcing to pay Rs 120 billion in terms of royalty receivables of the past..
- Dilution of federal ownership of the mineral projects such as Gold and Copper project of Rekadeq and Saindak.

- d) Bringing federal character in the boards of oil and gas companies by appointing representatives of Balochistan in the boards of the respective companies.

These reforms were overdue, and a lame start had been made by General Musharraf in 2002 by instituting a more favorable General Purchase Agreement (GTA) of the Sui Gas, owned and managed by PPL, a GOP owned company to the extent of 78%. NFC award negotiations have terminated in a favorable determination for Balochistan with a consensus by all the provinces. For the first time other factor such as poverty and land size of the province have been factored in the NFC award. In this article, we would trace the context and background of the underlying issues and propose some mechanisms and means of implementation of the already announced steps and other measures to enrich the policy initiative towards fulfillment of justice and fairness to the troubled and poor province of Balochistan.

Although the economic reforms are to be accompanied by proportional political reforms, the crux of the problem is economic. Without money and resources, no amount of political freedom and justice can bring improvements in the lives of the ordinary people in Balochistan. In that respect, announcement of Rs 120 billion in terms of the payment for gas royalty dues is a monumental step that has been welcome far and wide in the country. Out of every Rupee of oil / gas sales of production, about 40% goes towards cost of production including 12% royalty, 37% profit after tax, and 21% tax. GOP would keep earning an income of 81-82 million US\$ per year as income tax.

Under new royalty regime, the province is expected to get about 2.5 US\$ per thousand cft. At 1 Bcf of gas production per day, this could amount to royalty income of half a million US\$ per day or 182 million US\$ per annum, which prior to 2005 was only one-fifth as much. Under 1982 Gas Price Agreement (GPA) which had been replaced by a more realistic GPA in 2002, would be further improved. The 1982 GPA provided for very low gas prices thus low royalties. Total income of Balochistan from the package would be 328 Million US\$ or 26.73 billion Rs, while the current year's total budget of the Government of Balochistan, Rs 55 Billion o/w Rs 11.44 Billion is for gas royalties and taxes.

Table 10.4: Oil and Gas Production in Pakistan provinces

Provinces	OIL		GAS		Total Oil & Gas	
	Cumulative production	Current Production	Cumulative production	Cumulative production	Current Production	Cumulative production
	Oil Mn Barrels	Oil Mn Barrels	Gas TCF	Gas (TCF)	Value: Million USD	
Sindh	12740	782.6	35000	4132	47740	4914.6
Balochistan	0	0	45120	1276	45120	1276
NWFP	562.8	207.2	216	116	778.8	323.2
Punjab	18200	313.6	1600	88	19800	401.6
Pakistan	31502.8	1303.4	81936	5612	113438.8	6915.4

Table 10.5: Oil and Gas Production in Pakistan provinces (%)

Provinces	OIL		GAS		Total Oil & Gas	
	Cumulative production	Current Production	Cumulative production	Current Production	Cumulative production	Current Production
Sindh	40.44	60.04	42.72	73.63	42.08	71.07
Balochistan	0.00	0.00	55.07	22.74	39.77	18.45
NWFP	1.79	15.90	0.26	2.07	0.69	4.67
Punjab	57.77	24.06	1.95	1.57	17.45	5.81
Pakistan	100.00	100.00	100.00	100.00	100.00	100.00

Note: Based on oil price of 70 USD per bbl and 4 USD per 1000cft for gas

Source: Author's estimates based on primary data from HDIP

There are two issues of implementational nature; a) the accurate and credible assessment of royalty dues b) mode and scheduling of payment. There are some views indicating a higher calculation of royalty dues. In a separate paper, I have made estimate of the same which are 25-50% higher, and then there may be issues of accumulated interest and other factors. Present award of Rs 120 Billion should be considered an interim relief. Irrespective of the correctness of these claims, a credible mode of assessment of these dues should be adopted with the participation of the stake-holders. OGRA is a specialized body which has requisite knowledge and procedure of incorporating open and public participation on such issue. OGRA should be entrusted with the task of fair and accurate assessment. The second issue is of modalities of payment. An immediate payment of a significant amount of 10-15% should be made in the next year's budget starting July 2010.

In a separate paper, I have evaluated the present worth of PPL; the company which was partly responsible and may have been the beneficiary of the underpayment. PPL's net worth is almost the same as the royalty dues of Balochistan. GOP holds 78% shares in PPL, which can be transferred to Government of Balochistan. This solves many problems. The political issue of ownership of resources and the payment of royalty due at a rate that should be is affordable by the GOP. GOP could compensate its loss of revenue through enhancing the gas price by levying the royalty payable surcharge which would not be very high (less than 5%).

If transferring the ownership (78% of GOP Shares) of PPL to Govt. of Balochistan (GoB) appears to be difficult for political and strategic reasons, and due to the weakness of the provincial government, this could be done gradually by keeping the majority share of 51% and diverting the rest to GoB. However, a decision should be announced that all GOP profits from PPL hence forth would go to Balochistan. It should be understood that no new or additional monetary concession is being proposed. It is just a more dramatic and politically acceptable and understandable implementation of Balochistan package already announced by GOP. Baloch nationalists would realize that they are getting a fair deal and would calm down, allowing peaceful access to further oil and gas exploration activities, resulting in much needed energy for the country and income for the Balochi people.

The larger issue of sustainable and enduring provincial control on resources would remain to be deliberated and would include re-

organization of Ministry of Petroleum and Natural resources, perhaps including the divestment of natural resources altogether from the parent ministry. Federalization of petroleum companies is already in process. The Directorate General of Oil and Gas may be converted into federal independent boards or authorities so that an economically fruitful and sustainable decentralization is brought about. These proposals are to be debated upon in the parliament, civil society and media including the Ministry of Petroleum itself. The latter ought to be assigned the task of suggesting the ways and means of federalization of itself from tightly controlled centrist organization into an organ in keeping with the constitutional requirements, political expediency and will of the people as have been expressed time and again through media and political process. A thousand mile journey starts with the first step. A number of steps have already been traveled through Balochistan package.

Balochistan produces gas only, with insignificant amount of oil. Almost half of the natural gas consumed since 1950 till to-date has come from Balochistan, depleting latter's three-fourth known gas reserves in lieu of meager royalties. On the other hand, Baloch pride has been injured by budgetary juggleries of subventions and grants. Unfortunately all Balochistan has is its mineral resources, apart from some limited agricultural potential. Equitable, if not liberal, transfer of resource income from mineral resources (mostly gas currently), Balochistan would go a long way towards alleviating the feelings of injustice prevailing in that province.

One of many political problems of Balochistan having economic dimensions is the issue of mineral resources exploitation especially oil and gas. While the oil production, despite tremendous potential, in Balochistan is practically none, Balochistan currently provides 25% of gas requirements of Pakistan. It used to be the sole source of gas from 1950s to 1970s when the gas was originally discovered at Sui, the home of Late Akbar Bugti. There is a fair formula of 12% royalty, along with other surcharges that is payable to the producer provinces. Except Balochistan, all provinces have been treated fairly under the prescribed formula.

Balochistan is currently getting Rs 32.71 per unit on account of gas revenues which includes a royalty of Rs 13.90, excise duty of Rs 5.09 and Gas Development Surcharge of Rs 13.72. Total gas receipts amount to 25.53% of the total value of gas which has been priced at Rs 140 per unit. The situation is far better than only a few years back when

Balochistan gas was priced at about one-third of the present price. It should be clarified here that gas price goes to the producer, not to any government agency, provincial or federal. Governments receive royalties and taxes.

Under the current budget, Balochistan's income from gas royalties and taxes has been estimated at Rs 11.44 Billion against Balochistan's total budgetary receipt of Rs 55 billion, almost 20%. The province has been suffering due to resource (financial) gap, and a highly dispersed population. These problems can however be solved to some extent. In fact by correcting some historical errors and technical adjustments, a lot of financial resources could be generated.

In the past, separatists used to make a general claim of exploitation of Balochistan's resources. This time Balochistan government has issued a white paper, in which it has quantified the level of so-called exploitation. It claims and rightly that Balochistan is paid less than its royalty dues to the extent of Rs 15.00 billion, which is a lot of money for Balochistan; 27% of its budget, and Rs 1875 per capita for a small population of 8 million. Few people may know that until a few years ago, gas from Sui (Dera Bugti had been priced only at Rs 47 per unit) versus Rs 171 of Dhodhak or Rs 122 of Badin, and ZamZama of Rs 240. Only recently, the gas prices of Sui have been raised to Rs 140.00 per unit, and remain low even now as compared to Rs 202 for Dhodhak, Rs 263 for Mari and the median / average of around 4.00 US dollar per unit. The Balochistan government has rightly demanded compensation for under payments of the past. This need not scare any body. Royalty payments are only a small part of the total gas price. To enhance the royalty payments, it is not at all necessary to increase the gas price by a huge amount. I am sure the intention of successive governments has not been one of exploitation of Balochistan. Even the military led governments, not to talk of the political governments which always had a soft corner for Balochistan, not with standing the fact that none could do much towards the betterment of Balochistan.

Retail and whole sale gas prices are kept low in Pakistan, keeping in view the purchasing power of people, as is done generally in our region. Objectives of low consumer prices could have still been achieved without doing injustice to Balochistan. Low gas prices from an old source and from public sector (OGDC, PPL) could have been maintained by separating royalties from gas prices. An absolute royalty rate of say Rs 30.00 or 12% which ever is more could be adopted which would not

have significantly impacted the overall price of the gas. If this approach is implemented, Balochistan's gas related income would increase to Rs 26.00 billion as against Rs 11.00 billion of today. If this amount is spread over the total gas consumption, its impact on gas prices would not be more than Rs 10/12 per unit, which would be less than 5% of the average gas retail price.

Let us be clear, we would not be doing a favor to Balochistan, but would be correcting an error or injustice, if you will. In 2008-09, the production value of oil and gas output in that year was 6915 Mn US\$, out of which 71% came from Sindh, 19% from Balochistan, 5% from NWFP and 6% from Punjab. By the same year (2008-09) cumulative oil and gas production from day zero, for the whole of Pakistan stood at 113,439 Mn US\$, o/w Sindh had a share of 42%, Balochistan 40%, NWFP 0.69% and Punjab 17%. It should be noted that Balochistan has no share in oil production and most of its gas comes from Sui which concession is operated by PPL, a 75% GOP Company.

In the adjoining table, we propose a transfer arrangement of ownership to provinces, in the form of a joint sharing 50% share for GOP and 50% shares for the provinces; provincial share to be distributed among provinces on their share in cumulative production, for company value has been created by the cumulative output. Ordinarily, either way, it would not have made much difference, but due to wide difference in population, smaller provinces remain, especially Balochistan & NWFP, at a disadvantage in the federal distribution (of dividend income) among provinces on population basis. It is only fair that 50% of shares of GOP be transferred under payment to the provinces, so that population effect is partially mitigated. The problem is that Balochistan has no other source but the minerals and oil and gas. And now Sindh has started feeling uneasy, because of its major share in oil and gas output, but practically no influence, say or control, hence a recent Sindh assembly resolution in this respect, which otherwise is quite happy with PPP government in the centre and its coalitions elsewhere. There could be two options:

- I. Provincial shares in PPL & OGDCL of all the four provinces.
- II. Balochistan shares in PPL only and shares of Punjab, Sindh and NWFP in OGDCL with a token share of 1% for Balochistan. These shares percentage may have to be adjusted, as the contribution of each province towards oil and gas output changes. The shares can be transferred at break-up value of Rs Rs.29.34 per share, or average market

Table 10.6: OGDCL Financial Data 2008 – 09 (Billion Rupees except stated otherwise)

Net sales	130.83	
Profit before taxation	=	80.93
Profit for the year	=	55.54
Dividend declared	=	35.48
Share Capital	=	43.01
Reserves	=	83.16
Non current liabilities	=	30.53
Current liabilities	=	21.29
Total Equities and Liabilities	=	177.99
Share capital	=	43.01
Numbers of shares	=	
Breakup value per share	=	Rs 29.34
Market Price High	=	Rs 125.49
Market Price Low	=	Rs 40.56

Source: OGDCL

price. The share transfer to provinces can be gradual as per cash flow provision of the provinces. Table 10.7 provides the results of the share distribution. Under option I, Balochistan gets 37.5% of PPL shares, while 37.5% remain with Federal Govt. and 25% with private sector. Balochistan may also get a token 1% share in OGDC. However option II where PPL shares are awarded to all the provinces may cost confusion

Table 10.7: Proposed scheme for transfer of 50% of GOP shares in OGDCL and PPL to the provinces.

	Existing		Proposal I		Proposal II	
	PPL	OGDC	PPL	OGDC	PPL	OGDC
Private sector	25%	-	25%	-	25%	-
Govt. of Sindh	-	-	-	31	26.25	35
Balochistan	-	-	37.5	1%	6.75	9
NWFP	-	-	-	3	2.25	3
Punjab	-	-	-	13	2.25	3
GOP	75%	100	37.5	50	37.5	50
Others	-	-	-	-	-	-
Total	100	100	100	100	100	100

Source: Author's proposal

and could be exploited by the vested interest. Proposal I may be preferable wherein 50% of the GOP shares go to Balochistan and no shares to any other province in PPL. However Balochistan may be given 1% token share in OGDC initially, keeping in view the potential activities and output of the OGDCL. Table 10.8 and Table 10.9 provide the details of results shown in table 10.7.

New Province(s): Balance or Disintegration

In Pakistan provincial boundaries are an article of faith and no adjustments or rationalization can possibly be made. In next door India, the state boundaries are not so sacrosanct. New states are added almost routinely, by taking populations and areas off from the existing ones. A major reorganization of states was made in 1956, under India States Reorganization Act, 1956, which reorganized states on linguistic basis. India had 10-12 states at the time of partition, and now has 28 states and several union territories. Even as late as the year 2000, two states of Chattisgarh and Uttarkhand have been added, and the process continues. There is now thinking of breaking the difficult U.P. into several states for administrative reasons.

In Pakistan, linguistic and heritage problems have been that severe. The country was already organized around linguistic lines at the time of partition. There are still two major linguistic groups within every province, which occasionally create dissension and problems e.g. naming issue of NWFP as Pakhtoonkhwah etc. As discussed elsewhere, Seraiki province demand has become more vocal or even more acceptable. Both PML (N) and PPP leaders are hearing the demand with interest and have shown inclination to accommodate. In the adjoining table 10.10 and table 10.11 we provide data on India's state re-organization and a potential breakup of Pakistan Punjab in the three provinces.

The new power balance; Politics of coalitions

Punjab already lost about 5% from its total share of population from its initial level of 60.88% share in 1951 to 55.59% in 1998 census. Punjab's loss of share has almost been totally passed on to Sindh, which increased its share during the same period from 17.93% to 22.97%. Balochistan also increased its share from 3.46% to 4.99%. NWFP's share of 13.51% practically remained constant at 13.44%, due to large scale migration to Karachi.

Selected issues in Provincial Autonomy

Table 10.8: Changes in provincial income due to 50% divestment of GOP shares in OGDCL/ PPL to provinces (Rs Million)

Recipient	Existing			Proposed			Change		NFC 2009 Share	Proposed Share	
	PPL	OGDCL	Total	PPL	OGDCL	Total	Amount	%		PPL	OGDCL
Dividend	6500	36000	42500						-		
Sindh	917	5080	5997	0	11268	11268	5271	87.90	14	0	31.30
Balochistan	339	1879	2219	3250	432	3682	1464	65.97	5	50	1.20
NWFP	546	3024	3570	0	3600	3600	30	0.84	8	0	10.00
Punjab	1934	10710	12644	0	5400	5400	-7244	-57.29	30	0	15.00
GOP	2763	15300	18063	3250	15300	18550	488	2.70	43	50	42.50
Private Sector	0		0	0	0	0	0	0.00	-	0	0.00
Total	6499	35993	42492	78484	120976	199460	156969	369.41	100	100	100.00

Source: Author's proposal; Primary data from HDIP

Table 10.9: Changes in provincial income due to 50% divestment of GOP shares in OGDCL to provinces and 100% shares of PPL to Balochistan provinces (Rs Million).

Recipient	Existing			Proposed			Change		NFC 2009 Share	Proposed Share	
	PPL	OGDCL	Total	PPL	OGDCL	Total	Amount	%		PPL	OGDCL
Dividend	6500	36000	42500						-		
Sindh	917	5080	5997	0	11268	11268	5271	87.90	14	0	31.30
Balochistan	339	1879	2219	6500	432	6932	4714	212.46	5	100	1.20
NWFP	546	3024	3570	0	3600	3600	30	0.84	8	0	10.00
Punjab	1934	10710	12644	0	5400	5400	-7244	-57.29	30	0	15.00
GOP	2763	15300	18063	0	15300	15300	-2763	-15.29	43	0	42.50
Private Sector	0		0	0	0	0	0	0.00	-	0	0.00
Total	6499	35993	42492	78484	120976	199460	156969	369.41	100	100	100.00

Source: Author's proposal; Primary data from HDIP

Table 10.10: Indian States and their population data vis-à-vis year of establishment.

States or Union Territory	Population	Percent (15)	Area	Year
Bihar	82,998,509	8.07	94,163	1541
Maharashtra	96,878,627	9.42	307,713	1818
Uttar Pradesh	166,197,921	16.16	240,928	1937
Manipur	2,166,788	0.21	22,327	1947
West Bengal	80,176,197	7.79	88,752	1947
Himachal Pradesh	6,077,900	0.59	55,673	1948
Jammu	10,143,700	0.99	222,236	1948
Orissa	36,804,660	3.58	155,707	1948
Rajasthan	56,507,188	5.49	342,239	1948
Pondicherry	974,345	0.09	479	1954
Andhra Pradesh	76,210,007	7.41	275,045	1956
Delhi	13,850,507	1.35	1,483	1956
Karnataka	52,850,562	5.14	191,791	1956
Kerala	31,841,374	3.1	38,863	1956
Madhya Pradesh	60,348,023	5.87	308,245	1956
Tamil Nadu	62,405,679	6.07	130,058	1956
Tripura	3,199,203	0.31	10,486	1956
Dadra and Nagar Haveli	220,490	0.02	491	1961
Goa	1,347,668	0.13	3,702	1961
Nagaland	1,990,036	0.19	16,579	1963
Chandigarh	900,635	0.09	114	1966
Haryana	21,144,564	2.06	44,212	1966
Gujarat	50,671,017	4.93	196,024	1970
Meghalaya	2,318,822	0.23	22,429	1970
Arunachal Pradesh	1,097,968	0.11	83,743	1972
Assam	26,655,528	2.59	78,438	1972
Mizoram	888,573	0.09	21,081	1972
Sikkim	540,851	0.05	7,096	1975
Chattisgarh	20,833,803	2.03	135,191	2000
Uttarkhand	8,489,349	0.83	53,483	2000
India	1,028,610,328	100%	3,287,240	

Source: Wikipedia

Notes:

1. Andhra Pradesh was formed combining erstwhile Andhra Rashtram and Telugu speaking regions of Madras Presidency and Hyderabad princely state.
2. Shillong was the joint capital of Meghalaya and Assam in 1971, after Meghalaya split from Assam.
3. Chandigarh is the capital of the states of Punjab and Haryana, and is a Union Territory, separate from the two states.
4. Panaji was the capital of Goa from 1843 when it was ruled by the Portuguese.
5. Nagpur was the capital of Central Provinces and Berar which was a province from 1861 until 1950. It became the major constituent of Madhya Pradesh, after it was formed in 1950. Nagpur remained the capital of the new state. In 1956, Berar (Vidarbha) was separated from Madhya Pradesh, and merged with the Bombay State.
6. Mumbai (Bombay) was the capital of Bombay Presidency which was a province until 1950. After that it became the capital of Bombay State, which was split into Gujarat and Maharashtra in 1960.
7. In 1960, under the Nagpur pact, Nagpur became the second capital of Maharashtra. Although an official notification to this effect was only given in 1988.
8. Lahore was the capital of Punjab when the state was created in 1936. It is now a part of Pakistan.
9. Chennai (Madras) was the capital of the Madras Presidency since 1839, which was redrawn as Tamil Nadu in 1956.
10. Chennai (Madras) was the capital of the Madras Presidency since 1839, which was redrawn as Tamil Nadu in 1956.
11. Dehradun is the provisional capital of Uttaranchal. The town of Gairsen is being built as the state's new capital. Orissa's previous name was Kalinga.

The Seraiki province would add an interesting dimension to the balance of power and add to the dynamism and flexibility of the system. There are three Seraiki divisions in Punjab, namely Bahawalpur, DG Khan and Multan, with a population of 25.348 million. If this population goes to the potential Seraiki province, its population share would come up to be 19.14% of Pakistan's population, while Punjab's existing share would go down from 55.59% to 36.17%. Population share of all other provinces would remain the same. There would be five provinces, Sindh would remain as second largest 22.9%, and Seraiki province would be the third largest 19.16%, NWFP is existing share of 13.44% would become fourth largest, and Balochistan with 4.99% to the smallest province.

Punjab's dreaded largeness would come down to a manageable level from the perspective of smaller provinces. Currently Punjab is 250% larger (in terms of population) than the next smaller Sindh and 300% larger than NWFP. In the new situation, Punjab would be only 150% larger than Sindh. Sindh and Seraiki provinces voting strength together would be larger than Punjab. Other combinations would also be comparable with Punjab. The present situation of Punjab against all others would go away with its 55.59% existing population share.

Table 10.11: Relative Population Shares of the provinces between 1951 – 1998.

Province	1951	%	Thousand	
			1998	%
Pakistan	33740	100.00	130580	100.00
Punjab	20541	60.88	72585	55.59
Sindh	6048	17.93	29992	22.97
NWFP	4557	13.51	17555	13.44
Balochistan	1167	3.46	6511	4.99
FATA	1332	3.95	3138	2.40
Islamabad	96	0.28	799	0.61

Source: Statistical Year Book 2008, Govt. of Pakistan

Adjoining table shows very interesting conditions, in which Punjab may often be a winner in numbers game, but in a permutation and combination of coalitions, Punjab's numerical strength may become lesser. Thus a classical static and impossible situation may go away, where in, it may always be certain that nothing is feasible without Punjab's support. And the classical all against Punjab may go away. But will it be more stable or breed further dissension; most probably, not.

Table 10.12 : Potential voting coalitions vis-à-vis Punjab with Seraiki province

Coalitions	Population Percentage
Seraiki – Sindh	42.11
Seraiki – NWFP	32.58
Seraiki – NWFP – Balochistan	37.55
Sindh – NWFP	36.41
Punjab	36.17
Sindh – Balochistan	27.96
Sindh – Balochistan – NWFP	41.40
Punjab – Balochistan vs Seraiki Sindh	41.16
Punjab NWFP vs all others	49.61
Seraiki - Punjab vs all others	55.59

Source: Author's Estimates based on population data from FBS/GOP

New Provinces vs Provincial autonomy

Recent controversy and even uprising of Hazara division people against naming NWFP as Khyber-Pakhtoonkhwah, and sudden demand for a separate province has a lesson for majority ethnic groups which come to power as result of democratic electoral process. Instead of using brute majority, consensus-seeking policies, sensitive to minority values aspirations and sense of participation, would have to be adopted by majority based provincial governments. Otherwise if classical polarization is pursued and not shun, pressure would mount to divide provinces along ethnic / linguistic lines.

Table 10.13: Population ratios of provinces with Potential Seraiki Province (based on 1998 Census)

Province	Existing Distribution		Potential Distribution	
	Population	%	Population	%
Pakistan	130580		130580	
Bahawalpur Div.	7518		7518	
D.G.Khan Div.	6402		6402	
Multan Div.	11428		11428	
Seraiki Province.	-		25348	19.14
Faisalabad Div.	9735		9735	
Gujranwala Div.	11115		11115	
Lahore Div.	13986		13986	
Rawalpindi Div.	6780		6780	
Sargodha Div.	5622		5622	
Punjab	72585	55.59	47238	36.17
Sindh	29992	22.97	29992	22.97
NWFP	17555	13.44	17555	13.44
Balochistan	6511	4.99	6511	4.99
FATA	3138	2.40	3138	2.40
Islamabad	799	0.61	799	0.61

Source: Author's Estimates: Population data from Statistical Year Book 2008, GOP

These issues can be very contentions and embittered struggles and movements would emanate sapping national energies, diluting cohesion and further aggravating the already existing polarization. Strengthening

the local governments is a happy bypass and compromise; reversing the process of decentralizing and devolution of power in the provinces by weakening local governments would be counter productive in the long run for these who may apparently benefit from centralization in the provinces.

Dividing Punjab into smaller provinces especially making of Seraiki province seems to have larger and broader popular support through out the nation, and not just in the Seraiki belt. National and centrist forces would oppose the Seraiki province and ironically countervailing national consensus seems to be supporting it. Division of other provinces may not be that sanguine. As provincial autonomy is enhanced, ironically, sections of people within the province may feel aggrieved, who otherwise in a powerful federation, may have felt comfortable with existing provincial boundaries. Existing provincial boundaries do not reflect the ethnic and cultural unity or cohesion within the provinces. In most provinces there are, at least, two or more ethnically and linguistically distinct entities. Federation's main fountain head is based on such distinctions and increasingly the federation may have to eventually come to terms with these realities. We have cited the Indian example, where provinces have been continually reorganized based on efficiency and cultural and linguistic identities. An act of parliament has been provided to deal with the issue in India.

Constitution of Germany provides more elaborate provisions, including provisions for referendum within the affected territories. We reproduce here some relevant clauses of the constitution of Federal Republic of Germany.

Germany

Article 29 (New delimitation of Laender boundaries) (Amended 19 August 1969 and 23 August 1976)

(1) A new delimitation of federal territory may be made to ensure that the Laender by the size and capacity are able effectively to fulfill the functions incumbent upon them. Due regard shall be given to regional, historical and cultural ties, economic expediency, and the requirements of regional policy and planning.

(2) Measures for a new delimitation of federal territory shall be effected by federal statutes which shall require confirmation by referendum. The Laender thus affected shall be consulted.

(3) A referendum shall be held in the laender from whose territories or partial territories a new Land or a Land which redefined boundaries is to be formed

(affected Laender). The referendum shall be held on the question whether the affected Laender are to remain within their existing boundaries or whether the new Land or Land with redefined boundaries should be formed. The referendum shall be deemed to be in favor of the formation of a new Land or of a Land with redefined boundaries where approval is given to the change by a majority in all the territories or partial territories of an affected Land whose assignment to a Land is to be changed in the same sense. The referendum shall be deemed not to be in favor where change; such rejection shall, however, be of no consequence where in one part of the territory whose assignment of the affected Land is to be changed a majority of two-thirds approve of the change, unless in the entire territory of the affected Land a majority of two-thirds reject the change.

(4) Where in a clearly definable area of interconnected population and economic settlement, the parts of which lie in several Laender and which has a population of at least one million, one tenth of those of its population entitled to vote in Bundestag elections petition by popular initiative for the assignment of that area to one Land, provision shall be made within two years in a federal statute determining whether the delimitation of the affected Laender shall be changed pursuant to paragraph 2 of this Article or determining that a plebiscite shall be held in the affected Laender. (5) The plebiscite shall establish whether approval is given to a change of Laender delimitation to be proposed in the statute. The statute may put forward different proposals, not exceeding two in number, for the plebiscite Where approval is given by a majority to a proposed change of Laender delimitation, provision shall be made within two years in a federal statute determining whether the delimitation of the Laender concerned shall be changed pursuant to paragraph 2 of this Article. Where approval is given, in accordance with the third and fourth sentences of paragraph 3 of this Article, to a proposal put forward for the plebiscite, a federal statute providing for the formation of the proposed Land shall be enacted within two years of the plebiscite and shall no longer require confirmation by referendum. (6) A majority in a referendum or in a plebiscite shall consist of a majority of the votes cast, provided that they amount to at least one quarter of the population entitled to vote in Bundestag elections. Other detailed provisions concerning referendums, popular petitions and plebiscites (Volksentscheide, Volksbefragungen) shall be made in a federal statute; such statute may also provide that popular petitions may not be repeated within a period of five years. (7) Other changes concerning the territory of the Laender may be effected by state agreements between the Laender concerned or by a federal statute with the approval of the Bundesrat where the territory which is to be the subject of a new delimitation does not have more than 10,000 inhabitants. Detailed provision shall be made in a federal statute requiring the approval of the Bundesrat and the majority of the members of the Bundestag. It shall make provision for the affected communes and districts to be heard.

Source: FRG government website

Post Script: Impact of the 18th amendment or provincial autonomy

- Concurrent list has been abolished, under popular pressure and misconception. As mentioned earlier it has shifted 47 subjects to provincial domain, adding expenses and liabilities. Provinces may eventually discover that they cannot cope with the load due to lack of financial and technical/ manpower resources. Some kind of inter-provincial coordination may develop on the “abolished subjects” of the concurrent list. It is a classic case of how uninformed popular pressures can be and how detrimental can these become. Ironically, the parliamentary committee on 18th amendment did not, for the same reasons, promote public debate on the subjects of the amendment, neither was full debate in the parliament allowed, which was possibly dictated by other factors and subjects, and not necessarily related to provincial autonomy.
- On the issue of natural resources ownership, nothing has happened. Oil and gas continue to be under the federal domain. A negative effect is of transfer of electricity in exclusive federal domain, rather than being in the concurrent list in earlier dispensation. However, if one notices the recent statements made by important politicians, Sindh’s gas is being consumed in Punjab etc, one tends to feel safe in the existing dispensation of oil and gas being in the federal domain. It would not be surprising if tomorrow, ANP and Pakhtunkhawa leaders may start demanding that Tarbela’s electricity would be sold to Afghanistan at higher prices than be transmitted to Punjab. Power and authority brings responsibility. We may not have reached the political maturity and that may commensurate with such devolution.
- Local governments are now under full control of the provinces. Provincial leadership now would have full authority to dilute, debilitate and destroy the very local government system that has potential to play a very useful role in quelling disquiet in ethnically diverse provinces and efficient delivery of services.

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PROPLAN

11 Political Economy of Mineral Resources

Resource Curse

Natural resource is a curse, especially the mineral resources particularly when these are exploited by large foreign mining interests for export purposes without any linkage to the local host economy. Royalties of 2-4% are a mere pittance, as compared to the environmental degradation that is caused to local lands often depriving the poor communities of their livelihood. Resources have typically invited occupations, invasions and colonialism. Mineral resources generate local conflict and instability by promoting unrealistic dreams and ideologies bordering secession from other federating political entities. The empirical evidence is abundant. Only a few countries have positively benefited from mineral resources, which are Chile, Botswana and Malaysia etc. On the other hand, there is a long list of failed states and near-failed states that have mineral based economies. Do countries like Angola, Bolivia, Congo, Zaire, Mali, Chad and Sudan have an image of prosperity, growth and development, far from it?

A resource rich Kuwait invited aggression from greedy Saddam of Iraq, which many argue, was done to keep oil supplies intact. Iraq is on course to dismemberment, as oil rich Kurdish areas want to go it alone with their oil and have already started exporting oil without central government's concurrence. Late Mujibur-Rehman laid the foundations of Bengali nationalism on "jute", once considered golden fiber and now forgotten as a dirty and coarse item, resulting in much repressive and retrogressive regimes of Major Zia similar to Zia-ul-Haque of the parent country Pakistan. Nigeria was divided under factional fights. Almost all African mineral countries are suffering from one or the other kind of factional fight largely originated by quarrels over the exaggerated perceptions of mineral incomes and benefits.

Europe benefited from its coal, because it utilized its coal and fired its industry and power plants on it. Had they exported coal and depended on its export revenue, the face of Europe would have been different. Similar

is the story of Australia and the USA. China and India consume their iron and coal in an integrated industry with forward and backward linkages. In the colonial period, the two countries were commodity exporters. Economists have discovered many other side-effects of the resource-disease. One of it is Dutch effect. The steady stream of commodity exports, strengthen the currency and thus discourage exports of competitive local products, which require a continuously depreciating and competing currency. The non-resource sector suffers and does not develop.

Based on new found wealth, in the form of oil price increase in 1973, Shah of Iran entered into a hasty and unprecedented militarization consuming petrodollars in weapons purchase. His lopsided economic policies and accompanied repression resulted in a revolution which again pursued un-economic policies due to resource abundance with the result of a bad economy, high inflation, stunted growth and persisting poverty. Similar may be the case of other oil rich states of Arabia.

In Pakistan, people think that Pakistan is a resource abundant country. In the hay days of communism, the popular myth was that the foreign countries were stealing our wealth. In the more enlightened period that followed and now, the myth is that Pakistan is a rich country but its rulers have looted it and do not let the country benefit from its resource richness. Far from truth, Pakistan is a poor country in terms of resource endowment. Water and land two basic resources are highly limited. Half the area is covered by troubled Balochistan where only 8 million people live, and on the remaining half bulk of the population of 180 million is cramped. Baloch nationalists harp the mantra of exploitation, when Pakistan has not emerged on the map as a mineral country. There is very little mineral activity. Only Sui gas has been produced. In the Saindak Copper Project GOP lost a lot of money and had to beg Chinese to take it over. Balochistan resources would benefit Balochistan and rest of Pakistan due to the utilization of these resources in Pakistan economy creating jobs and skills for both Balochies and other Pakistanis. Other wise it would be the same as happened to mineral rich Africa. I would strongly urge the GOP to arrange trips and visits of our nationalist leaders to Bolivia, Angola, Zaire, Congo and other mineral rich countries so that they can vividly see the worth of so called natural or mineral resources.

The perception of income from resource is ill founded. As mentioned earlier 2-4% royalty is a pittance. The market is structured around this

pittance; you cannot insist on more, in view of prevailing competitive price and the over eagerness of host countries and their leadership, tribal and national, for easy money and the loot that usually follows. However there is a pending case of correcting the gas royalty situation of Balochistan and paying the royalty arrears due to unrealistically low well head prices that were applied to Sui Gas. I have made a strong case in favor of Balochistan in a separate article.

Worlds' 30 Poorest Nations are Mineral Producers

In Table 11.1, we provide a list of 30 mineral countries, along with their per capita GDP. One finds that most resource countries, barring limited exception and industrialized countries, lie at the bottom of the list, be it of per capita GDP or HDI. Almost all countries in the list of the resource rich countries have a per capita GDP of less than 1500 US\$ going down to 200 US\$ of Zimbabwe. They also happen to be the lowest HDI countries as well. There cannot be a more apt and credible evidence than this. Is that where the “well-wishers” of Balochistan want it to be. Balochistan even now is much better off than most of these countries.

Minerals Politics and Transparency

Young Baloch nationalists have many misgivings and misperceptions about the mineral wealth of Balochistan, as seen on their websites. They often refer to the existing and past mineral activity as the so-called “exploitation”. Even other more informed people are confused about it and are victims of lack of correct information. A classical case is the Rekodiq Copper project on which a lot of discontentment is out there. Although the project has not yet started, there are accusations of a sell out.

There is a trust deficit in Balochistan in particular and Pakistan in general regarding public interest being protected by the relevant bureaucracy. And for good reasons Pakistan has been classified among the most corrupt in the world. Even I had to do considerable struggle on the internet to get some data on Rekodiq and most of the data that I could retrieve was from international sources. The problem is however, not specific to Pakistan. In a lot of other countries especially of Africa, lack of transparency has caused internal feuds.

Table 11.1: Some minerals countries of the world along with their per capita GDP

Rank	Countries	GDP per capita (PPP) US\$
197	Zambia	1500
198	Chad	1500
199	Ghana	1500
201	Tanzania	1400
202	Gambia	1300
204	Uganda	1300
208	Guinea	1100
209	Mali	1100
210	Comoros	1000
211	Madagascar	1000
212	Rwanda	1000
213	Tokelau	1000
214	Ethiopia	900
215	Malawi	900
216	Sierra Leone	900
217	Togo	900
218	Mozambique	900
220	C. African Republic	700
221	Niger	700
223	Guinea-Bissau	600
224	Somalia	600
225	Liberia	500
226	Burundi	300
227	Congo	300
228	Zimbabwe	200

Source: GDP data from World Bank

Mineral industry has classically operated in the dark, on both sides; companies and host countries. Both country officials and companies have indulged in corrupt practices to the detriment of public interest. International community has recognized this problem and several reformatory frameworks have been introduced.

A 2% royalty has been agreed to as per website of the government of Balochistan and GoB has 25% share in the mineral company. It is however, not known whether 25% share is funded i.e., paid by the GoB or the shares would be awarded "gratis", i.e., without payment. A 3% royalty is more common, although there are cases of 1% royalty also. There is now a general trend of variable royalty i.e., royalty increasing

with increasing mineral prices and vice versa, which aims to share in the windfall profits of the international companies. We do not know if we have such a clause in Rekodeq contract. There are many other such important issues on which public would like to be informed, primarily Baloch people, especially the young activists and the people of Pakistan. It is highly uncertain that Balochistan Development Agency (BDA) would have the requisite expertise for dealing with projects of such magnitude and complexity. Even GOP and its Ministry of Petroleum and Natural Resources (MNPR) would have problems of adequate capacity and capability in this respect. One would have liked to see the involvement of multi-lateral institutions like the World Bank, Asian Development Bank or IMF in the form of technical assistance.

Governments and officials need not be wary of and skeptic of public exposure and third party involvement as has been suggested. Rental Power is a classic case. There was a lot of controversy about it and eventually Asian Development Bank (ADB) was requested to give its opinion. ADB report mostly favored the government position and provided generally acceptable information content and cleared the projects. Thus transparency should not be such a taboo, or a bottleneck or a hurdle. It can save time and morale.

Rental power was delayed due to controversy and could not benefit the country had it been implemented in a timely manner. It was unique for rental power. All major projects in Pakistan are delayed due to controversy and rather late in the day.

Government of Balochistan is visibly under pressure of the nationalist circles and has reportedly threatened to cancel the Rekodeq contract with Tethyan Copper; apparent reason is the disagreement on a level of local value added. There may be other under currents as well. It is highly recommended that the GoB/ GOP adopt and subscribe to the international transparency initiative and bring about more structure in the mineral sector.

Contract cancellation may send wrong signals to the international investor community. Pakistan and especially Balochistan is not very attractive destination for foreign investments. Efforts should be made to solve the issues through reasonable negotiations, by bringing in international third party experts from the multilateral agencies.

Revenue Watch has reviewed 150 extractive industry contracts including oil, gas and mineral industries and concludes that most government and private sector objections against contract disclosure are unwarranted. An RW report counsels the civil society organizations on “how to better confront the challenges of secret deals”. RW report further argues that “contract transparency is surely needed...When contracts are publicly available, government officials have an incentive to stop negotiating bad deals with industry and citizens can allay their suspicion over hidden abuses. The result is better contracts, greater public trust and more stable investment climate.”

Pakistan's mineral politics and sociology is different from India and more akin to Africa, where there is dispute, polarization and strife. In Pakistan this is happening before any major mineral project has been even initiated and launched, except for natural gas. India has not yet subscribed to EITI and other initiatives and should not be a basis for our inaction on this issue. EITI has been subscribed by 25 nations. EITI and contract transparency along with energizing freedom of information, would promote involvement and participation. This would also remove a lot of confusion and bring about a stable mineral regime which would be beneficial to all stake holders.

Towards a natural resource accord

Recently National Finance Commission (NFC) award was unanimously agreed to with induction of new multi-criteria system in which financial resource distribution has been based on poverty, under-development, and the needs, in addition to the classical singular basis of population. While the PPP government has been the main architect, PML- N support has been vital in the government of Punjab's acceptance of the new formula and the associated concessions. People are pleased to see the concord and unity.

Despite many political problems and divisive tendencies, Pakistan and its leaders have been able to muster enough intellectual courage and political wisdom in solving one of the most crucial and basic problems with consensus and unity. In addition, to the recent NFC award, the unanimous approval of the 1973 constitution, persistence and sustenance of Pakistan's nuclear programme, despite political changes from one end of the spectrum to the other, Bhutto, Zia, Nawaz Sharif, Benazir, Musharraf and the Water Accord of 1991 pioneered by Mr. Nawaz Sharif are the demonstrated examples in support of such an assertion. Maybe

there are other achievements of this nature, which I have not included in this small list of major achievements.

I would like to draw the attention of the present government, and our national leaders, intelligentsia and the bureaucracy to the problems and difficulties in the natural resource sector which have not only divided the nation but is also preventing output and economic growth of the provinces and of the country. We must architect a "National Natural Resource Accord", in the same cooperative and collaborative spirit which has enabled the federation to achieve consensus in the aforementioned areas. Present government has already taken a number of steps in this direction in the form of Baluchistan package, payment of royalties and surcharge, and arrears of hydro-profits of NWFP and a few other ground breaking steps. Present government has also promised more concessions to the provinces in this area.

Most of the contentious issues are in the area of natural resources like oil, gas, coal, minerals, and hydropower. There are issues which go way beyond the oft repeated provincial autonomy which is generally understood as the panacea. These issues pertain, among others, to the following four areas; ownership, control, royalties and taxation. These are quite complicated issues whose federal and provincial domains clash. An orderly and efficient resolution of which is the call of the hour.

Thar Coal issue has been only partly resolved due to the PPP governments in the province and the centre. The protagonists and antagonists are waiting in the sidelines, and the problems are simmering. Some formula for federal and provincial interactions on the subject has to be evolved; otherwise it is highly unlikely that the required goals and targets of billions of dollars of foreign investment could be achieved out of the Sindh Secretariat building. NWFP government has raised the issue of oil royalties. Sindh Assembly has recently passed a resolution demanding more say in oil and gas issues. Khattak tribe attacked and took over oil installations in NWFP in support of their reasonable and unreasonable demands. Tribes in Balochistan, especially, the Bugtis have been reportedly demanding share in royalties, which have been met through unofficial arrangements. Baluchistan has a longstanding complaint over control of natural resources.

Although arrears of hydro-profit have been promised to be paid, there is no agreed formula for the coming years. The present settlement has been based on a tribunal's specific award and the AGN Kazi formula, which

proved to be no formula at all with the benefit of hindsight. NWFP complains of high electricity tariff charged to its consumers despite its cheap hydropower located in Tarbela, while Balochistan complains that no benefit is given to it in electrical tariff for its cheaper gas from Sui gas field. There are other issues as well pertaining to policy, control and management. These issues, although being difficult, are nevertheless resolvable.

Other federations have evolved formulae and solutions in the light of their own circumstances and conditions. With respect to hydro profits or royalties on hydro power, different countries have controversy. In Pakistan in the past, late A.G.N. Kazi tried to resolve this controversy with only partial success.. India has introduced a novel approach of giving 12% free electricity to hydro power producing province and an additional 100 units of electricity free of cost to the affected and adjoining households in the district. The formula avoids the issue of valuing and pricing electricity, which has created many differences among the stakeholders in Pakistan. This Indian approach appears to be a good candidate for replication in Pakistan.

New problems and issues have arisen which have to be debated and sorted out in the context of some rationale and international practice elsewhere. Some of the demands may appear to be untutored and rather immature, while the others may have a scope for contention or discussion.

Ports are, elsewhere owned by city, province or national governments and also the private sector. How should Balochistan government benefit from the Gawadar port, while the revenues and profits go to the investor? Is change in the board of management or governors sufficient? Preference to locals in the employment is a usual demand which is often ignored by the private sector managers on account of merit and efficiency and the non-availability of suitably qualified locals.

The demand is variously handled to buy local peace, and the managers adopt a mid-course policy. However, the issue of benefiting the locals remains high on the agenda, in a variety of ways such as employment, improvement in social and physical structure or revenues to the local government which is thus enabled to provide the latter services. Local communities often suffer from the development of projects which involve changes in the land-use, and degradation of the local environment and resources. What portion of revenues of income,

taxation or of profit should be shared with the locals by the provincial and national governments is a valid question. And sometimes, the dominant tribes of the area are to be accommodated, officially or unofficially. The issue of the rights of the land-owners on whose land the resource lies also comes up.

We should listen to the stake -holders, however, primitive or untutored they may appear in their arguments and demeanor. Extremism and even immaturity has not only been the hallmark of nationalists. It has also been practiced by our bureaucracy and establishment. Otherwise how would one defend paying only one-fourth of the royalty dues to Balochistan for more than two decades, for which arrears are being paid now. A dialogue, comprehensive and multi faceted, time bound, sincere and led by people of knowledge, intellect and maturity and supported by sincere bureaucratic input, would lead to an accord that would be long lasting, consensus- building and economically viable and fruitful.

This would not only solve the political problems among the federation and provinces, but would also create a positive, stable and encouraging environment for the exploitation of natural resources , resulting in the production and output on much needed energy and other products. The choices, though, are not easy for political governments. There is no free lunch. Supporters of fair and due payments to Balochistan and NWFP also complain of high prices of gas and electricity in the same breath. As to our efforts in the past in this direction, the glass is half full syndrome seems to apply. Bits and pieces are there which could serve as a starting point. Musharraf regime did increase the Sui royalties, although it could have been done without increasing gas prices .Balochistan Package is another sincere effort in the same direction.

It is suggested that the government establish a “Natural Resource Commission”, to study the problems and generate consensus solutions in this respect over the next 12- 18 months. It would be a pursuit worth while pursuing and would be a feather in the cap of both the present government and the “constructive opposition” led by PML-N. It is a rare opportunity that the two major parties are willing to leave behind their political calculus and differences for bringing about stability and solidarity in the country.

Table 11.2: EITI (Extractive Industry Transparency Initiative) Principles

- 1. We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.*
- 2. We affirm that management of natural resource wealth for the benefits of a country's citizens is in the domain of sovereign governments to be exercised in the interests of their national development.*
- 3. We recognize that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.*
- 4. We recognize that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.*
- 5. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.*
- 6. We recognize that achievement of greater transparency must be set in the context of respect for contracts and laws.*
- 7. We recognize the enhanced environment for domestic and foreign direct investment that financial transparency may bring.*
- 8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.*
- 9. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.*
- 10. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required, which is simple to undertake and to use.*
- 11. We believe that payments' disclosure in a given country should involve all extractive industry companies operating in that country.*
- 12. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make—including governments and their agencies, extractive industry companies, service companies, multilateral organizations, financial organizations, investors and non-governmental organizations.*

Source: EITI: The Civil Society Guide of Extractive Industry Revenues and the EITI, Edited by David L. Goldwyn

Royalty, Taxation and Transparency

The problem is with the exploitative and inequitable character of international mining industry, which has traditionally operated in weak and under developed countries of Africa and Latin America. A royalty of 2-3% (on sales revenue) as opposed to 12% in oil and gas is an indicator. Profits before tax can be as much as 50% of the sales, which would mean corporate tax proceeds of 15% on sales (30% on Profit before Tax). Royalty goes to the producing region/province and corporate taxes go to the national/ central governments including Pakistan. In some countries like USA, Canada, provinces can also levy Income/ Corporate tax and thus producing provincial share in the mineral income is enhanced, in addition to the royalty proceeds.

A similar arrangement may have to be made in Pakistan as well. Another typical problem is transfer pricing and under brokering the true sales value of the mineral outputs/ exports, which result in lower royalty and tax proceeds. The problem became apparent in Chile, when it was found that smaller public sector companies provided more royalty and other income those larger private and multinational companies. Zambia and other countries have introduced reforms in this respect where in transfer pricing has been forbidden and replaced by international prices or some construct of these, quoted and traded at metal /mineral exchanges of New York and London.

All irregularities are done under the cloak of “sanctity and confidentiality of commercial contracts”, between international companies and national/provincial mining agencies and departments with the connivance of bureaucracy and politicians, and to the detriment of the local people. This is not restricted to only royalties but many other issues such as “Environmental Mitigation Plans”, which are not adequately prepared or implemented or both. Destruction of the livelihood of the locals through environmental degradation, forcible ejection without adequate compensation, implementing security arrangements that interfere with the movements and social and economic activities of the local people and many more, are the issues that put local communities pay the costs and consequences of the mineral projects, which ought to be paid for and compensated by the mining companies, all of which is normally to be taken care of in Environmental Mitigation Plan and environmental management Plan, which are to be prepared and implemented with the involvement of local communities. Unfortunately consultants, EPAs and government functionaries and local politicians

and community leaders collude to compromise and dilute such provisions. Often local mafias themselves are big bottlenecks, which take control of local community's leadership and siphon off the company budget of mitigation activity.

Role of GOP

While launching his ill-advised and ill-fated action against Nawab Akbar Bugti of Sui, Baluchistan, General Musharraf claimed and rightly so that all welfare payments made by PPL in connection with "Sui Gas" had been appropriated by the tribal leadership and not spent on the welfare of the people, but spent on buying weapons to fight and black mail the government. It would be very essential to prevent and ward off such possibilities in future major mineral projects like Rekodeq etc.

Often national leadership not the system is blame by the victim communities' joint responsibilities and roles under concurrent list could have provided for a role for Federal Government of Pakistan to get involved in a regulatory process. It is not certain that under the new constitutional dispensation, there would be scope for such a role with the GOP.

Table 11.3: RWI Recommendations on Contracts Transparency in Mineral Sector

Natural Resource States (Host)

Host states should incorporate contract transparency into law and practice. One effective practice employed by some states has been to adopt and publish a model contract that is vetted by the legislature. Some states require the legislature to approve major contracts. A full public vetting would include approval of both model and final contracts by the legislature.

Host states should create robust legal regimes to govern relationships with investors instead of individual contracts. Model contracts with as few variables as possible should be adopted, and the allowable modifications should be specified. This reduces suspicion about contracts and simplifies individual contract review by civil society. It reduces transaction costs by reducing the number of costly negotiations. It further reduces the technically difficult and costly regulatory oversight required for states to fully benefit from natural resource endowments.

Future confidentiality provisions in agreements should be carefully tailored in scope and duration in order to privilege public access to the contract and the information that it generates.

With regard to existing contracts, states should consider options for disclosure. States should give notice to investing companies and give them the opportunity to propose redactions. But states should use their leverage to limit any such redactions. Companies are not likely to resist, as the DRC and Liberia examples demonstrate, particularly since many claim that secrecy is for the benefit of the state party.

Extractive Companies

Companies should review their confidentiality policies, including the language in confidentiality clauses. Where companies have concerns about disclosure, they should define them narrowly and avoid recourse to blanket confidentiality.

Industry associations, including, for example, the International Council on Mining and Metals, can continue to play a constructive role in developing sector-wide strategies that embrace transparency. Complete contract transparency should be adopted in position statements. Industry associations are well-placed to provide valuable help with crafting confidentiality clauses that are narrowly tailored. Companies and industry associations should refrain from advocacy and lobbying in opposition.

Source: Revenue Watch Institute (RWI): Contracts Confidential: Ending Secret Deals in the Extractive Industries, Peter Rosenblum & Susan Maples

Pre-mature exploitation mantra

Some political activists have protested against the agreement and have protested against the agreement and have termed it as “exploitation” as usual. Their expectations are to get more out of Rekodeq, but this is the reality of international markets, which may be even harsher in a free Balochistan context. That is why we advise that the nationalists should not expect too much from the natural/ mineral resources. Economists have started calling it the “Resource Curse”, as these cause political instability, in fighting, invite foreign domination and usurpation and abuse of power and consumption of benefits by dominant tribes.

The second major issue is the misplaced Baluch sensitivities in the area of mineral resource projects. There is hardly anything on a reasonably major scale going on in the mineral sector in Baluchistan and one keeps hearing of exploitation of mineral resources of Baluchistan. It is not very difficult to find out facts. Download the mineral map of the world, and you will see that Pakistan and Afghanistan show up as blanks because of negligible activity in the sector in the two countries. In terms of the so called exploitation, there was a case of low royalties of Sui gas, which has now been corrected by the present government and the arrears are being paid including the steps to transfer the ownership of companies to Baluchistan under the Baluchistan package.

GOP has always lost money, year after year on Saindak Copper project, which in any case is a very small project in comparative terms on world scale. So where is Baluch exploitation, for God's sake? It would be in the interest of all in Baluchistan, rich and poor, and weak and powerful to remove political problems from the implementation of the mining projects in the province and adopt a positive attitude in this respect. Minerals are nothing but useless stones and debris, until investors put in a lot of money, technology and efforts to bring those from down under the earth, process and market so as to be able to finally fetch the money. It is usually along cycle and one has to be patient and wait till the streams of cash flow start pouring in. the problem is, it is usually complained by investors, that some people are more inclined to eat up the seeds and do not have the patience to wait for the harvest.

It should be acknowledged that a lot of money, effort and technology goes into bringing the minerals from 1000 meters below the surface to the ground and has to be cleaned; 100 tons of ore often gives less than 1 ton of metal. At current rates, it costs 2500 US\$ in cash alone to produce one ton of copper.

Without the involvement of large multinationals the buried resources would remain of no value or purpose at all. The option of small scale and artisan mining is always there, and nobody stops anyone in indulging in that, so long it is viable for those who do it. The two are not mutually exclusive.

Afghan –Pakistan joint investments in mineral sector in bordering areas

The need for a harmonious relationship and economic cooperation between Afghanistan has perhaps been finally acknowledged, and talks

are going on in this respect between the two countries with some sense of earnestness. While discussing such possibilities, there is a need to identify projects and investments for border areas between Afghanistan and Pakistan along FATA and NWFP.

Mineral resources are one area, where a joint approach can be adopted for Afghan-Pakistan border areas. Afghanistan is land locked; hence the mineral exports prospects are very limited, except to meet the Pakistan market demand. Afghanistan has significant mineral resources, while oil and gas resources are only at a speculative stage. There are large proven deposits of good quality ores of Iron, Copper etc. Rare earths (Lithium, Tantalum) have also been reported. Recently Chinese have won a contract worth more than 3 billion US\$ for exploitation of Aynak copper deposits, which are reported larger than Rekoded. Work is preceding ahead smoothly, under strong US support and encouragement, amusingly even security support also.

Soviet Union, UK and the US have provided considerable technical assistance, in their respective periods towards exploring and proving mineral deposits. Today the website of Afghan Geological Survey (AGS) is much more impressive, informative and purposeful than of our related institutions e.g. Geological Survey of Pakistan (GSP) and board of investment (BOI). The officials of these two Pakistani organizations are strongly urged to visit AGS sight and see for themselves. The policy framework in terms of a new mining law has also been reorganized on new footings. However, in our land of the pure (Pakistan) there is the familiar “One step forward and two backward “process goes on. The Rekoded project involving Copper and Gold mining has reportedly run into snags again. Pakistan side wants to renegotiate it and has threatened to cancel the contract to protect National Interest. What is National Interest is usually a very vague and slippery, but convenient term. It may serve a variety of purposes and have all kinds of meanings and connotations attached to it.

Coming back to the joint development of Afghan-Pakistan border areas and the role of mineral industries there of, the possibilities of utilization of iron-ore deposits of Afghanistan should be explored. Afghanistan has a very large deposit of good quality iron (60% iron content and 1.8 billion tones) in its Bamiyan province (Hajigak) .There is a supply of coke-grade coal nearby. Both are essential inputs for producing pig / blast furnace iron. Pakistan does not have similar iron ore deposits of comparative quality and quantity. Pakistan currently imports iron –ore

and coke-grade coal from Australia for Pakistan Steel Mills' requirements in Karachi. Another Steel Mill is coming up in the vicinity of Pakistan Steel. Development of Pakistan's iron and steel industry has suffered because of local availability of raw materials. A considerable portion of Pakistan's steel demand is imported and the demand is growing. Steel industry is bound to expand due to persistent demand creating significant demand for iron ore and raw materials. Afghanistan can be a good source of import of this ore from the mines as mentioned earlier for iron and steel projects to be located in the joint border areas of Afghanistan-Pakistan. Such projects would create employment and economic activity. Iron and steel production and mining industry is quite compatible with the proposed rusty/ dusty region and would be compatible with the rough and tough workforce, as opposed to other industries that have been proposed now and then and have not reached the stage of materialization. USAID which is groping for the projects should pay attention to this. For Pakistan, it may also be useful from other perspectives as well. This should be a trilateral project between Pakistan- Afghanistan and United States. The proposed iron ore deposits of Afghanistan may invite quite some interest from India, which has the entire where withal to implement such a project. This would promote and expand Indian economic and other interests in Afghanistan requiring some input and initiative from our political apparatchik.

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Annexure Chapter 11

A Review of the Mineral Sector

In Pakistan 40-50 minerals existence has been indicated, out of which following are note worthy,

- 1) Copper deposit, in Saindak & Chaghi, with associated Gold deposits.
- 2) Lead & Zinc in Duddar.
- 3) Iron ore in Punjab, NWFP & Balochistan.
- 4) HCV coal in Balochistan & Punjab, and huge deposits of lignite-coal (LCV) in Thar.
- 5) Marble in NWFP & Balochistan.
- 6) Gemstone in NWFP.
- 7) Oil & Gas in Sindh, Gas in Balochistan, Oil in Punjab.

Except for Chaghi / Rekodeq Project and the lignite coal in Thar, no other mineral deposit / resource is at world scale. In oil and gas sector, no major discovery is expected, yet production could be increased many fold through requisite exploration and development activity. It is

prognosticated that Pakistan / Balochistan geology is more gas prone than oil prone. Existing mineral activity is largely restricted to meeting limited domestic demand mostly in building sector, Except for Saindak which is a very small project and production, no mineral project has reached production stage, even the much awaited small lead and zinc project at Duddar, being handled by Chinese.

Ironically Chinese have signed a major contract for developing copper deposits in Afghanistan recently. Pakistan is virtually not on the mineral map of the world. However, the regional controversy and exploitation mantra has reached a disproportionately high level. However these controversies, even if premature, are common with resource extraction industry. In many countries controversy over mineral resources have done more harm and less benefit, and have destroyed national unity resulting in un-ending feuds and political dissent and instability. Pakistan can do well to avoid it by following the recommendations of international community and regulatory framework, practicing transparency and fairness with the local communities and regional / provincial stake holders. To support our contention, we are providing comparative data of mineral production in Pakistan and that in India.

Table 11.4: INDIA: Estimated reserves of major mineral commodities in 2008.

(Thousand metric tons unless otherwise specified)

Commodity	Unit	Reserves
Barite		32,000
Bauxite		539,000
Chromium, in ore		31,000
Coal:		
Bituminous		96,000,000
Lignite		38,000,000
Copper, in ore		135,000
Gold, in metal	kilograms	67,000
Manganese, in ore		77,000
Talc and pyrophyllite		74,600

Source: US Geological Survey, Mineral Year Book, 2008

Table 11.5: Minerals production in Pakistan and the contribution of provinces thereof, Year 2007-08

Items	Pakistan	Punjab	Sindh	N.W.F.P.	Balochistan
	Tonnes	%	%	%	%
Antimony	245	0.00	0.00	0.00	100.00
Aragonite/Marble	1536808	2.73	0.10	75.25	21.93
Barytes	49933	0.00	0.00	1.33	98.67
Bauxite	35635	100.00	0.00	0.00	0.00
Celestite	1310	100.00	0.00	0.00	0.00
China Clay	31512	43.17	26.58	30.25	0.00
Chromite	114884	0.00	0.00	73.16	26.84
Coal	4066409	13.61	25.95	5.98	54.46
Ebry stone	0	0.00	0.00	0.00	0.00
Fire clay	660144	48.34	0.00	1.66	50.00
Fluorite	2612	0.00	0.00	86.83	13.17
Fuller's earth	10998	32.01	64.68	3.32	0.00
Gravel	44952	0.00	100.00	0.00	0.00
Gypsum	660473	99.56	0.00	0.44	0.00
Lime stone	31789073	53.56	15.51	28.64	2.29
Magnetite	3940	0.00	0.00	79.95	20.05
Manganese	1229	0.00	0.00	0.00	100.00
Ochres	46215	100.00	0.00	0.00	0.00
Rock salt	1849199	100.00	0.00	0.00	0.00
Silica Sand	403124	81.23	12.75	6.02	0.00
Soap stone	37999	0.00	0.00	100.00	0.00
Sulphur	29485	98.78	0.00	0.00	1.22
Crude oil (a)	25603	25.46	56.13	18.31	0.10
Natural gas (b)	1454194	4.94	71.04	2.04	21.98

a =Unit in '000' Barrels.

b =Unit in MMCFT.

Source: Federal Bureau of Statistics: Statistical year book 2007-08

Table 11.6: INDIA: Estimated production of mineral Commodities (Metals)

(Metric tons unless otherwise specified)

Commodity ³		2006	2007	2008
Aluminum:				
Bauxite, gross weight	thousand tons	13,940	20,343	21,210
Alumina, Al ₂ O ₃ equivalent	do.	2,800	2,900	3,000
Metal, primary		1,105,100	1,221,800	1,307,500
Cadmium metal		457	580	599
Chromium, chromite, gross weight		3,600,400	3,320,000	3,900,000
Cobalt metal		1,184	980	858
Copper:				
Mine output, Cu content		27,400	33,900	30,600
Total		629,000	729,000	684,000
Gold metal, smelter	kilograms	2,300	3,000	2,700
Iron and steel:				
Gross weight	thousand tons	177,000	207,000	220,000
Fe content	do.	113,000	126,000	141,000
Pig iron	do.	28,300	28,800	29,000
Direct-reduced iron	do.	14,740	18,100	20,200
Steel, crude	thousand tons	49,500	53,100	55,200
Lead Total		105,200	123,800	138,000
Manganese:				
Ore and concentrate, gross weight	thousand tons	2,084	2,300	2,400
Mn content	do.	844	900	960
Rare-earth metals, monazite concentrate, gross weight		5,000	5,000	5,000
Selenium	kilograms	13,000	14,000	14,000
Silver, mine and smelter output	do.	30,900	82,300	96,000
Titanium mineral concentrates, gross weight:				
Ilmenite		690,000	700,000	720,000
Rutile		21,000	21,000	21,000
Zinc:				
Mine output, concentrate:				
Gross weight		501,700	538,900	613,600
Zn content		294,000	314,000	337,000
Total		444,000	454,000	568,000
Zirconium concentrate, zircon, gross weight		28,000	29,000	30,000

Source: US Geological Survey, Mineral Year Book, 2008

Table 11.7: Metallic Mineral Reserves & Location in Balochistan

Mineral	Location	Estimated Reserves M. Tonnes
Chromite	K. Saifullah, Pishin,	10
Iron	Khuzdar, Chaghi,	273
Copper / Gold	Dalbandin Mustung	412 (Saindak 2.4 Btonnes Rekodeq)
Lead - Zinc	Chaghi (Saindak, Rekodeq)	27
	Duddor, Gunga,	
	Surmai, Lasbella,	
	Quetta	
Titanium	Ziarat	Unknown

Source: Department of Mines, GoB, www.balochistan.gov.pk

The global distribution of mineral resources and the outlook for future discoveries

The global distribution of mineral resources and reserves are essentially differ in the different types of minerals. For example, gold deposits are known in more than 100 countries, the largest reserves are concentrated in Republic of South Africa. It makes up 27-28% of world's reserves, and 70% of world's reserves of gold is fallen to 10 countries. On the other side, PMG deposits are known in 16 countries only, the share of the largest one is 83% of world's reserves, and the share of two largest countries (Republic of South Africa and Russia) is 97% of world's reserves. According to this principle it is possible to classify minerals in 3 groups. Wide spread minerals form numerous deposits in many countries around the World, rare minerals are concentrated in limited number of deposits and countries; and there are a lot of minerals, which occupy an intermediate position.

The first group includes gold, coals, iron ores, construction materials, and also oil and gas. All deposits of this group have a special feature: they were formed in the ordinary conditions, which took place on the Earth very often. Therefore we can suppose that a lot of this type deposits will be discovered in the foreseeable future in the different countries. The second group includes MPG, apatite, chromites, rare elements. Deposits of this group were formed in the unique geological situations, therefore there is a great probability, that new deposits of Khibini, Bushveld or Norilsk types will not be found no matter where.

Certainly, there are some exceptions from this rule. 50 years ago diamond-bearing kimberlites were seemed as a unique formation in South Africa. Then

the kimberlite province in Africa was extended. Moreover, the world class diamond-bearing provinces were found in Yakutiya (Russia) and in Canada. Today the new large province in Russian platform and Baltic shield shows up before our eyes. In future new diamonds deposits can be found in other regions of the Earth. As a rule, the global distribution of the mining production is connected with the global distribution of mineral reserves. For example, coal mines are known in more than 60 countries, 37% of world coal is mined in China and more than 50% - in next 10 countries. On the other side, niobium mines are in 7 countries only; more than 91% of the world production is fallen on Brazil and nearly 8% - on Canada.

Australia is the continent with the world's largest uranium reserves. Canada is the largest exporter of Uranium Ore. Mexico is the largest silver exporter in the world. Earlier diamonds were found only in alluvial deposits of southern India. At present Diamond deposits are also found in Africa, South Africa, Namibia, Botswana, the Democratic Republic of Congo, Tanzania and Congo. The most common element found on earth is Iron. The five largest producers of iron ore are China, Brazil, Australia, Russia and India. These five countries account for about 70% of the world's iron ore production. Huge chunk of Gold supply comes from South Africa. Canada, United States and Western Australia are also major producers of gold. Interestingly, the world's oceans also hold vast amounts of gold. Copper-ore can be found in Chile, Mexico, United States, Indonesia, Australia, Peru, Russia, Canada, China, Poland and Kazakhstan.

The global distribution of mineral resources is very conservative; practically it was not changed over a long time. The global distribution of mining production is more mobile. For example, today world's reserves of tin are distributed on the same countries and regions as 30 years ago. However in 2006 China and Indonesia ensured 73% of the world tin production, while in 1970 seven countries ensured 75%. It is obvious that these changes are related to the world economic development and situation on the world raw material markets.

Courtesy: Anatoly Stavskiy, Irina Egorova, Kirill Florenskiy, The global distribution of mineral resources and the outlook for future discoveries, International Geological Congress OSLO 2008

Copper Rekodeq

Copper is being mined in 26 countries of the world, with Chile providing 33% of the world output. Other important producers are USA, Rome, Russia, Zambia, Canada, Poland and Congo. Largest reserves are in Chile (160 million tons), Peru (60 Mt), Mexico (38Mt), Indonesia (36 Mt), USA (35Mt) and Pakistan Rekodeq (12.3Mt). World production of copper in 2008 stood at 15Mt+ per year. Six largest producers are Russia

(705,000t/a), Canada (606,999), Zambia (575,000t/a), Poland (429,400t/a), Congo (229000t/a) and South Africa (110,000t/a).

Table 11.8: Major Mineral Resources of Balochistan

Mineral	Reserves (in metric tones)	Quality
Barite	> 300,000	Medium to High
Chromite	200,000	Low to medium grade
Coal	> 200,000,000 Lower grade	Lower grade lig-A to bit-C
Copper Ore (Saindak and Reko Diq)	>1,230,000,000	Low to medium grade
Fluorite	Small deposits	Low to medium grade
Gold (with Copper)	>300 (M. ounces)	Low grade
Iron Ore (Dilband & Chagai)	>275,000,000	Low to medium grade
Zinc/Lead (Duddar & Gunga)	> 16,000,000	Low to medium grade

Source: Geological survey of Pakistan

Saindak Metals Ltd. currently produces 16000 tons of Copper. Saindak metals Ltd., is currently under lease to Chinese, MCC, (metallurgic Construction Corporation). MCC pays an annual rent of 500,000 US\$ and a 50% share of copper sales. Copper prices have been fluctuating under varying demand-supply situations, from 3000 per ton to 7000US\$ per ton. Current prices are at a low of 3500UD\$ per ton.

Rekodeq Cu-gold deposit is a large one with 12.3 million tons of Copper and 650 metric tons of Gold. Government of Baluchistan has contracted with the joint venture of Chilean Angosta and Canadian, Berrick, Which have 37.5% each of share, and 25% of the shares go to GoB.

An investment of 3.5 billion US\$ has been projected. Annual sales of the company would be 2.345 billion US\$, with an expected mine-life of 50 years at a rate of 200,000 t/year of copper production and 12 t/year of gold. Royalty rates on copper in the world vary from 1-3% of sales. Royalty rates are higher, when prices are high and vice versa. Balochistan government is expected to receive US\$ 110 million yearly; 70 million UD\$ as royalty and 40 million US\$ as profit from its 25% share holding.

Under the existing tax regime, federal government is expected to have an income of 70 million US\$, which may cause resentment among locals, vis-à-vis 110 million US\$ of GoB income.

It is recommended that 30-40% of corporate income tax be shared with the GoB, which may generate another 23-28 million US\$ for GoB. It is not uncommon in North America (USA, Canada) that states /provinces also levy income tax, especially on mineral production. Our proposal is in line with Canadian practice in this respect.

It is thus legitimate on the part of the host nations to insist on higher value added and processing at home, to fetch higher foreign exchange and other benefits as mentioned. In troubled areas, however, the investors may prefer to restrict their investments and thus a minimal level of processing. A lot of mineral equipment like shovels and trucks and crushers are transportable and thus can be shifted away, without much loss, if and when conditions become unbearable or unsustainable. A good compromise could be a phased programme of progressive increase of domestic value added, as is being successfully done in Pakistan and elsewhere in the automotive sector.

Table 11.9: Estimated Physical and Financial parameters of Rekodeq Copper and Gold project.

(All financial figures in Million USD unless otherwise specified)

<hr/>		
Rekodeq deposit		
Copper	=	12.3Mt (Millions tons)
Gold		650 Metric tons
Expected production		
Copper	=	250,000 Tons/yr
Gold	=	12 tons Au
Saindak production	=	18000 tons (2008)
Average copper price	=	7000 \$ per tonne
Gold price	=	1100\$ per Oz
Estimated Turnover Cu	=	1925
Estimated Turnover Gold	=	420
Total Turnover	=	2345
Royalty (2%)	=	47
Profit (10%) of sales	=	234

Corporate Income Tax	=	70
GoB profit share (25%)	=	40
Total GoB Income (Royalty + Profit)	=	87
Mine Life	=	50 yrs

Source: Author's Estimates

There are three forms in which mineral ores can be exported; a) concentrate b) Blister Copper c) Cu-cathode. Although environmental impact assessment (EIA), and an Environmental management plan (EMP) and subsequent implementation and enforcement mitigation and remediation is an absolute must. We have mentioned earlier that there isn't as it is much income from mineral production and exports, which may be easily over shadowed by environmental costs and losses due to the unmitigated mineral activity. There are usually severe air, water and soil pollution and degradation issues, which have to be adequately provided for. Unfortunately, in the most developing countries, environmental protections agencies are weak and corrupt and inefficient and do not usually insist on adequate measure, usually under pressure from higher bureaucracy and ministers. In case of Rekodeq, we do not see or hear of EIA proceedings which are required to be undertaken in a transparent and public manner. Consultation with commitments at Rekodeq might be theoretically correct, but it ought to be discussed and evaluated in the informed community in Karachi, Quetta and Islamabad and published on websites. We understand that the full scope feasibility study is already near completion, and no EIA signs are visible. Most probably, EIA may be approved without much scrutiny and the risk is that environmental sustainability may get a short shrift in the process, resulting in losses (environmental) much more than the paltry gain from royalty and taxation.

Scope and potential of Iron Ore

Occurrences of iron ore are widespread in Pakistan; however, the maiden steel mill in Karachi is based on imported Iron Ore. Significant and known iron ores relate to unconformities, volcanogenic sedimentary and sedimentary origin. Iron ore deposits near Chiniot town in Jhang district of Punjab Province, were discovered in 1989 after geophysical survey by GSP. During 1999-2000, a public sector organization through consultants carried out detailed exploration & assessed 109 million tonnes of resource potential. A pre-feasibility study conducted by the consultants

declared the deposit to be economical for use in Karachi Steel Mill and also in a new proposed steel mill, to be located at the mine site. However, prior to undertake commercial exploitation of deposit a detailed techno-economic feasibility study has to be prepared.

A recent discovery of Iron Ore at Dalbandin by Geological Survey of Pakistan is of significant economic importance. It is located at a distance of 100 km for Kolpur railway station (near Quetta) and 70 km from National Highway and RCD Highway. Average thickness of ore horizon is almost 2 meters with maximum thickness up to 7 metres with initially estimated reserves of 200 million tons. The ore comprises of hematite, calcite, quartz and chlorite and is Olivitic with Fe content of 45-48%. Due to proximity to rail/road, ore characteristics, open cast mine ability and acceptable grade Dalbandin Iron Ore deposits is considered as better than rest of iron ores so far discovered in Pakistan. Pakistan Steel Mills have successfully blended 15% of this ore with the imported to produce sinter and pig iron. The ore indicates that the ratio of blending Dalbandin ore could be raised gradually to more than 50%.

M/s Balochistan Mining Enterprises (BME), a joint venture organization of Balochistan Government and Pakistan Petroleum Limited, Pak Steel have signed a five year agreement for supply & use of 100,000 tons of Dalbandin iron ore annually. It has also been decided that BME would initiate a feasibility study to ascertain commercial viability of commissioning a beneficiation plant to upgrade the Dalbandin iron ore aiming to cater for total requirement of 1.8 million tons iron ore with 60% FeO contents for Pak Steel. Commissioning of a beneficiation plant to upgrade the Dalbandin iron ore is being offered as an investment opportunity for international investment.

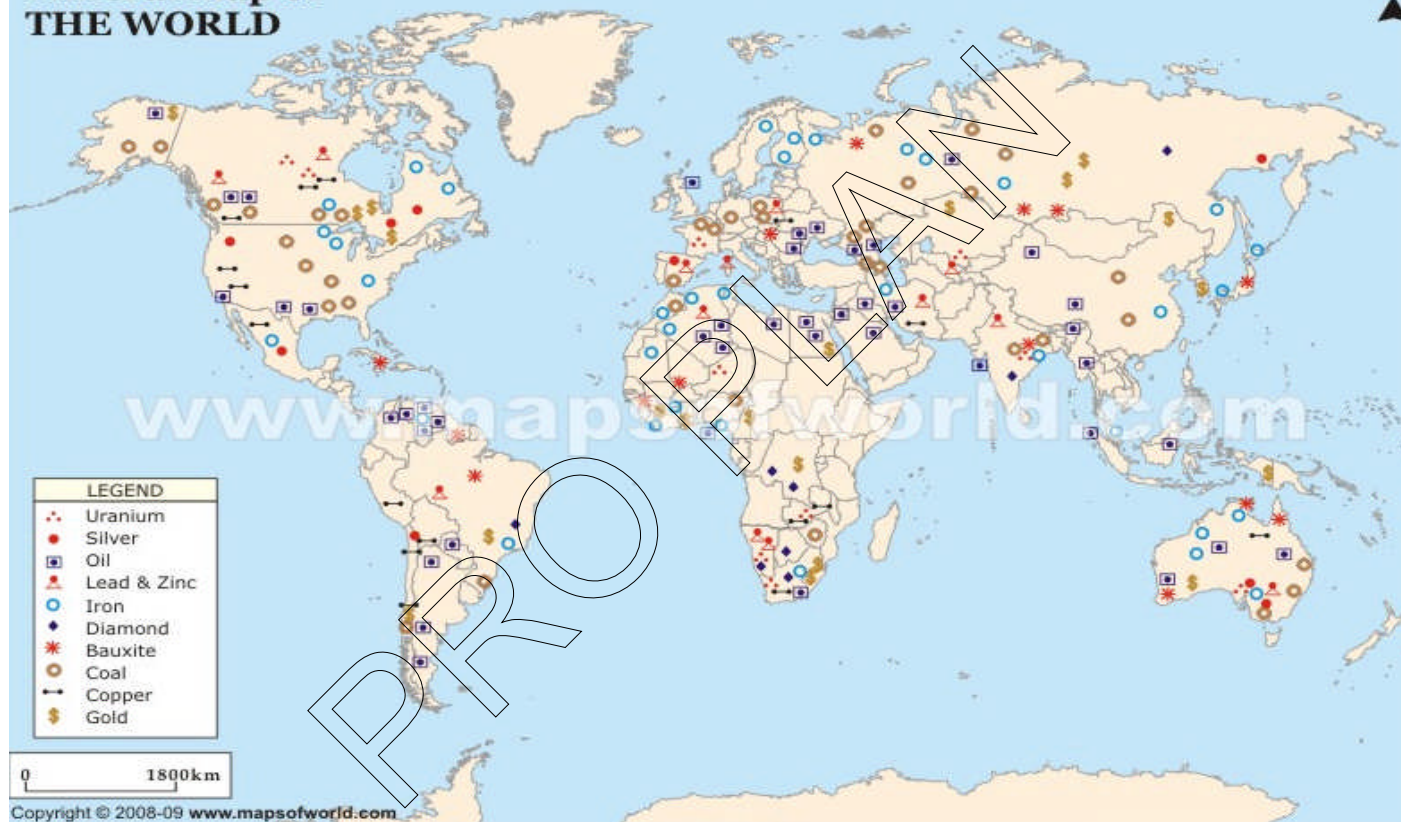
The Kalabagh iron ore deposit is the largest iron ore deposit, located near Kalabagh. The deposit is around 300 million tons and occurs in Cretaceous Chichali Formation largely made up of glauconitic sandstone and shale. The ore is low grade, varies in mineralogical composition. The main ore minerals are Chamosite Siderite and Glauconite. Fe content varies between 32 to 34%. Tests on Kalabagh iron ore carried out in USA, Germany and Sweden suggested this ore type is not amenable to physical beneficiation. Later, tests carried out by on a 1500 tonnes ore after blending with high grade imported ore by Institute de Recherches de la Sierrugi Francaise (IRSID) in 1964 at conventional blast furnace at Liege, Belgium suggested this ore could be beneficiated through Acid Blast Furnace Process (PMDC 1970). After the above studies no further

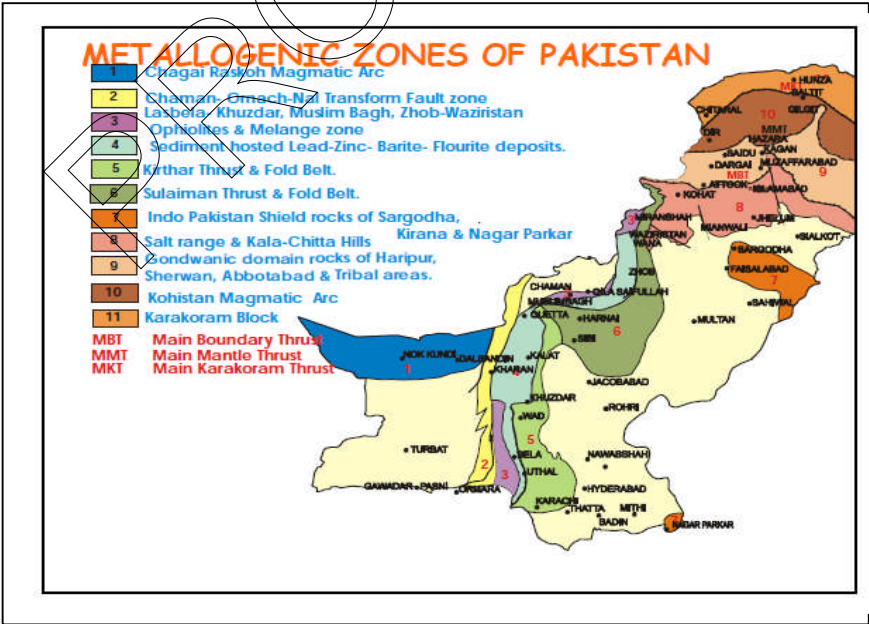
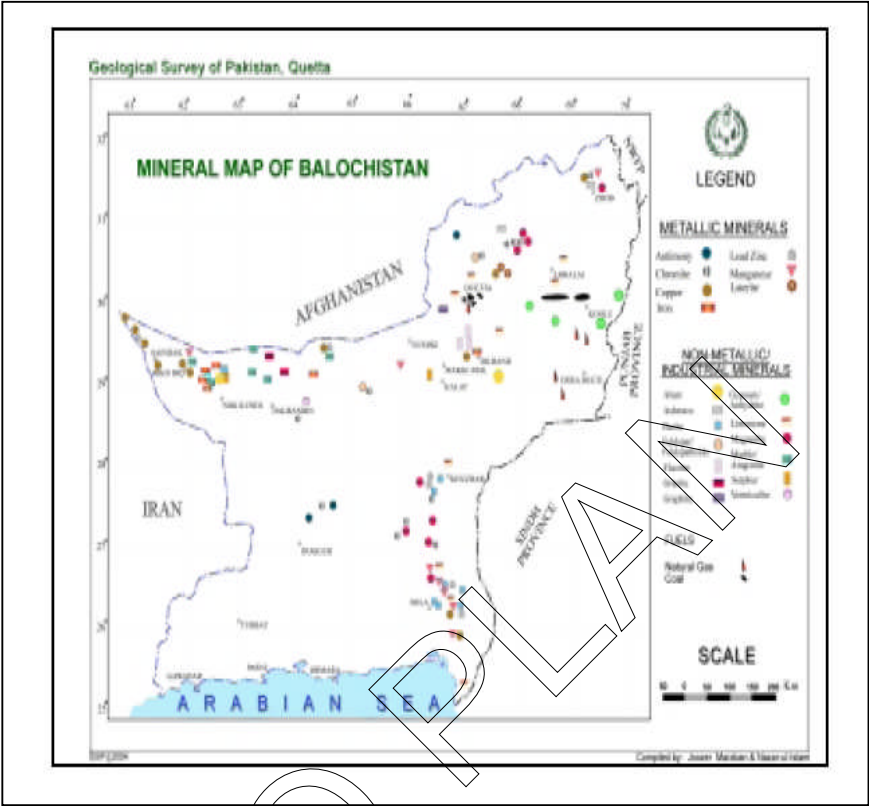
serious studies were made for development of this ore (Kazmi & Abbas 2000).

Pachin Koh-Chigendik iron ore deposits are located near the town of Nokundi, district Chagai, Balochistan. The deposits are associated with Sanjrani volcanics. The ores are made up of magnetite and hematite accompanying magmatic flows. The ore reserves are estimated at 5 million tones at Chigendik and 45 million tones at Pachin Koh. Geological and geophysical investigations suggest the reserves may exceed 100 million tones. Metallurgical tests carried out on Chigendik-Pachin Koh ores in Pakistan and abroad suggest suitability of this ore in Pakistan Steel Mills, Karachi. This ore is also suitable for direct reduction/electric ore process combination, which can produce billets at 30% low cost (Kazmi & Abbas 2000).

Source: Mundi: Country mineral profile - Pakistan

Mineral Map of THE WORLD





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12 Tarbela Hydro profits and royalty issue

The issue of Tarbela royalty or Net Hydel Profit (NHP) is assuming emotional dimensions, so much so that a NWFP (now Pakhtunkhawa) politician has recently warned that another Bangladesh can or will be made, if the issue is not suitably resolved. Irrespective of the merit or desirability of such statement, the issue deserves serious attention by the parties involved including the general public. Federal government has recently agreed to pay Rs 110 Billion towards royalty arrears and has at least partly resolved the issue. However there is no agreement or formula available for future payments.

While our constitutional forefathers did their every bit to leave no ambiguity in defining what net hydel profit would be, but they left the issue of “Sales Price” of electricity for Council of Common Interest. The issue has evaded a satisfactory resolution and no meaningful head way has been made in that direction leading to a dead end and deadlock, with diverse positions of the stake-holders, one asking half a trillion rupees in arrears, and the other alleging that there is no over due and even overpayments have been made.

No formula is ever-lasting and one need not be a slave of calculations made two-decades ago. Fortunately, we have in the meantime, recourse to more data, facts, methodologies and institutions, which enable us to take a fresh look into the issue with open mind and objectivity. Also constitutional interpretations need to be applied with flexibility, and dynamism, keeping in view new circumstances, not seeking a license to deny the producer provinces of their legitimate dues, but with a view to enhance the latter e.g. inclusion of IPP in NHP/royalty net and sharing of Ghazi Barotha.

Unfortunately the AGKN formula has created unreasonable expectations through following a “half-baked” methodology of selective shadow pricing by valuing hydro-energy at thermal costs in NWFP circles. Demand of Rs 27.00 billion per annum only for Tarbela electricity, as opposed to total WAPDA revenue of Rs 12 billion, is clearly

unsustainable. Current WAPDA payments of Rs 6-7 billion per annum, amounts to a royalty/NHP of Rs 0.40 per unit, as opposed to Rs 1.80/- royalty/NHP as per AGKN formula and demanded by GoNWFP. The current revenue per unit is Rs 0.78 per unit (Tarbela hydro.). It excludes NHP / royalty which is already being paid by WAPDA).

It is therefore recommended to adopt an approach of providing 12% free electricity to the producer province like in India. This can be done with the buy-back option for WAPDA at adjusted CPPA prices to be announced by NEPRA annually. Let us review the merit and usefulness of this approach in the following.

In order to adopt this recommendation, either a constitutional amendment may be required or CCI concurrence arrived on determining Net Hydel Profit (NHP) to be identical with 12% royalty. While expecting flexibility from NWFP, reciprocity should also be shown by other parties, especially in the case of royalties from Ghazi Barotha (GB) plant. Going strictly by the book, GB royalties should go to Punjab, where the hydro-electric plant is located. However logically and technically speaking, the GB project depends on the geology and terrain characteristics of Tarbela and NWFP. It can have considerable environment and physical consequences to NWFP. Hence, the case of sharing Ghazi Barotha royalties among Punjab and NWFP may be 50-50.

Thus the positions of the two sides are wide-apart. GoNWFP draws strength from the constitution, AGNK formula and arbitration tribunal's ruling in its favor. WAPDA questions the methodology and the inclusion of some extraneous items in the calculation. WAPDA's major argument is its incapacity to pay, either the claimed arrear or the annual due. Federal government is stuck as both WAPDA and the NWFP are and should be dear to it. Its budgetary resources are already under stress and strains of recession, and the law and order situation. It has been giving a subsidy of Rs 100 billion plus to the electricity sector.

Under the terms of agreement with IMF, this subsidy is to be withdrawn and the circular debt of utilities of Rs 160 billion is to be paid off. In less than one year, the tariff has to be enhanced by 25%, which is politically a very sensitive issue, as the buying power of ordinary people has been reduced considerably due to the recession. Any payments made by WAPDA have to finally come from the consumers. In view of the impending 25% increase in electricity tariff, the royalty surcharge would be an additional burden. Federal government has appointed several

committees and the issue was also discussed under NFC award 2010 proceedings. Although an interim payment has been agreed to and reportedly being paid based on arbitrator's award, no permanent formula or solution has been arrived at.

NHP depends, adopting the approach mentioned in the 1973 Constitution, on sales price which in turn depends on NHP. There is a circulatory problem. There is no electricity market in Pakistan, as compared to the West, where electricity is auctioned in an electricity exchange, which can determine an acceptable sales price. There are other approaches, however, which can solve the NHP problem without going into the issue of sales price, but are not according to the 1973 constitutional stipulation. For example NEPRA awards "Revenue Requirements" based on which NHP can be computed applying financial ratios of regional hydro-utilities (Indian); more on this elsewhere.

Let us take the AGNK formula, wherein, selling price has been taken as consumer tariff minus T&D costs. However in the search of an equitable selling price, late AGNK strayed into the domain of economic analysis, while royalties are computed in commercial domain involving company balance sheet. AGKNF took a price that was a mix of hydro and thermal energy, which at that time had a 50-50 share. Such notional pricing is valid, as mentioned earlier in the domain of what economists call as "Cost-Benefit Analysis" or "Economic Analysis", which attempts to capture the total benefits as compared to the alternative cost/prices. In that line of analysis, World Commission on Dams (WCD) computed economic benefits of US\$ 1841 Million for power and an equal amount for water. This means a net benefit from power of 1413 million US\$, which amounts to Rs 113 billion at current exchange rate. But that is "Economic Analysis" dealing with imputed benefits, justifying economic value of Tarbela project including power.

AGKNF's shadow price approach (adopted perhaps unknowingly) is faulty, as it shadow prices only the output. If inputs are also priced in shadow terms, NHP of AGKNF would be drastically reduced; shadow prices of investment, scarcity value of foreign exchange, the value of Punjab Rivers exchanged in Tarbela deal etc. It may become intractable. The language of 1973 constitution /CCI is clearly in favor and style of commercial prices; terms like reserves, obsolescence etc.

The absurdity of mixing thermal with hydel prices ala AGKNF approach becomes more vivid if the same approach is repeated on new data.

Energy mix has since changed enhancing the contribution of thermal energy to three times that of hydel, magnifying the conceptual error of AGNKF approach. With improved thermal efficiency of today, NHP of AGNKF works out to be Rs 3.92, in our short-cut approach. Exact replay of AGNKF would enhance NHP by at least Rs 1.00 to Rs 4.92, making hydro energy at historical cost to be Rs 5.60 per unit, clearly an absurdity.

It is not realistic to expect royalty increases in direct proportion to the increasing thermal (gas) energy prices. Over the years, since the AGNKF calculations were made, technology has improved, reducing fuel consumption by one hundred percent, and capacity (factor) of thermal energy (80%) vs hydro (40-50%), further reduces the differential between hydro and thermal. If Tarbela COGE (cost of generation) is calculated on replacement cost basis, and new construction cost such as of Suki Kinari (1600 \$ per KW) is taken into consideration, the differential would go down even further. You cannot add benefits at current costs and cost at the historical level, to get a favorable arithmetic for royalty calculations. That is why; a four-time increase in royalties as claimed by protagonists is not feasible. The Truth, as always, is in between, where most figures and approaches are converging.

Actually tying royalty to typically low priced resources causes income losses to the producing province. In case of Balochistan, under pricing of gas from Sui and consequent application of royalty formula causes a similar problem as is faced in the case of Tarbela royalties. On the other hand, if you price everything at its real international market value, in a country where personal incomes are so low; there would be no market at all. The system will collapse. On the other hand, unduly low prices cause many problems of pilferage, smuggling, waste and inequities and disparities among producers and consumers.

The issue of a reasonable and acceptable selling price of electricity has not been resolved by AGNKF formula and neither has the council of common Interest (CCI) commissioned any serious study in this respect. The arbitration tribunal headed by Justice Ajmal Mian who has had not much understanding or background in the issue, wrote and announced a decision, based on 50-50 split among four members; two members agreed and two disagreed with the award. Normally one is familiar with the experts of the discipline heading tribunals of this nature; take the case of Sales tax, Income tax, and Environment. The tribunal did not make any serious effort, and adopted AGNKF calculations. Prof. Khursheed

(Senator JI) in his supporting statement dealt more with generalities and Islamic system. Even the tribunal members opposing the verdict did not provide for an alternative and restricted to a critique of judgment. What is an appropriate, reasonable and seemingly expectable selling price of Tarbela /hydro electricity remains to be a thorny issue, which should be resolved, if a settlement has to be reached in the light of the constitutional provisions.

There are other approaches which we are going to describe which can give a better deal to NWFP and may be acceptable to all parties. They do not exactly meet the constitutional requirements in letter, but do so in spirit. In a nut shell, complications of AGKN approach aside, the tribunal has further complicated the issue, and has created a difficult situation by making a “wind fall reward” creating unreasonable expectations on the part of one party of the dispute and the issue has spilled into public as a political problem. Ironically, and rather interestingly AGKN calculations were considered so cumbersome, that it was considered rather impractical to repeat the same for the next twenty years. Hence an increase of 10% was proposed. A formula should be simple and replicable, besides being based on logic, realism and fair play.

All said, the approach of 12% free electricity as royalty to the producer province, along with equity options, emerges as the most suitable (as it is done in India).It bypasses the thorny sales price issue and offers the highest royalty of 12% in the world, on which a satisfactory agreement among parties may be feasible. A share of royalties to adjoining districts/ division, already brought into practice by Go NWFP, may be further enriched and strengthened, along with 100units free electricity per month to the affected households for the next 10-20 years.

It is recommended that a study mission comprising of stake holders is sent to India to have first hand information about the royalty practices in India. This would create a common basis for an amicable and sustainable solution. Also it may not be a bad idea to invite foreign experts / consultants from ADB/ World Bank to give an impartial opinion or advice in this respect, as all of us Pakistanis may be suspected to have a bias of one sort or the other. Furthermore, after a successful resolution of the issue, a formula should be standardized and brought under the jurisdiction of NEPRA for determining yearly royalty award.

Table 12.1: Summary of various approaches to compute royalty / net hydel profit NHP)

Basis	Rate	Royalty Estimates
AGKF	Rs. 1.80 per unit at present to grow at 10% p.a.	Royalty 2008-09, Rs 27 Billion **
WAPDA payment		Capped at Rs 6000 Million; Rs 0.40 per unit
Asset base of Rs 132.758 billion; 50% Tarbela share	5.5% profit, Rate (18%-12.45%)	Rs 3.65 billion
CPPA at bus-bar Rs 5.00 per unit	Less T & D cost	Rs 7.74 billion
Production cost at busbar+100% profit margin as NHP	Revenue Requirement of Tarbela = Rs 7.00 billion excl royalty	Rs 7.00 billion
India model 12% royalty on selling price or production cost	Production cost of Rs 7.00 billion excl royalty	Rs 0.84 billion
12% free electricity (Indian Model)	12% of Tarbela generation of 15000 Gwh = 1800 Gwh*	1,800 Gwh x Rs 7.0 per unit = Rs 12.60 billion

* 21% of NWFP total consumption 8223 Gwh

** As opposed to Tarbela total revenue of Rs 16.52 Billion

Source: Author's Estimates

Table 12.2: Hydel Royalty Rates in various countries

India	12% free electricity
Nepal	2% in the first 15 years, 20% in 15-30 years plus capacity charges of 1000-1500 Rs / KW
Turkey	No royalty
Other Countries	4%
Brazil	6%; 10% of royalties to federal; 45% province; 45% local government
Pakistan IPP	3-4%: Water charges of Rs. 0.15/KWH
Pakistan (AGKN)	(Rs. 1.80 per unit at present to grow at disputed formula 10% p.a.; royalty 2008-09,) Rs 27 Billion per annum

Source: World Bank, various reports

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13 Good Governance or Failed States?

In this Chapter, we would like to examine the issue of governance and its constituents, and the role of freedom and transparency in it. We would reproduce Pakistan's rating on these issues, issued by such international agencies as World Bank, Freedom House and Transparency International, Fund for World Governance, Fund for Peace.

Governance: Introduction

Governance essentially is “the decision making process and its implementation”, and in the context of this book, it is of government. A good governance system is expected to be effective and efficient in overseeing, guiding and regulating economic activity and social development, with democracy, consensus, participation of the people, in a transparent manner, keeping people informed of its decision, under a set of rules and laws to be adjudicated by an independent judiciary, and having a role for media, NGOs, civil society etc. Good government has to be protective and mindful of the religious and ethnic minorities. It should not rule by brute majority and force. It should be sensitive to the historical and heritage issues of its people. It should also be able to conduct itself with its neighboring countries and participate constructively in the international system, meet its obligations under conventions, treaties and UN resolutions.

Progress, development, improvement in socio-economic conditions, internal and external peace etc are outputs of good governance system and not the good governance itself. As has been proved by international experience, those countries and societies which are high in economic and competitiveness ranking and are socially more developed and are advanced than those which rank low in governance scales. Because governance is an input to the socio-economic development process and activities and not the output, and pertains to many aspects, most often qualitative in nature, it is difficult to measure it, as one is used to measure and define GDP, literacy, growth rates etc.

Flagrant Indicators of Bad Governance

Systematic and Systemic compromise of public interest and rule of law, ghosts schools and health facilities; teachers and doctors who do not turn up for duty and operate their private facilities; massive leakage of free medicine into commercial market; organized cheating in the examinations and massive corruption in the examination boards changing results and awarding certificates; persistent bonded labor and lack of prosecution against offenders; one-third of the population under severe malnutrition and hunger; rising street children, unattended old and beggary; massive corruption in all sectors and all levels of government, judiciary, police, bureaucracy and even in the armed forces procurement departments so as to be consistently and persistently listed among top corrupt countries of the world over the years; lack of civil liberties; illegal confinement and torture by state institutions and similarly private jails of the powerful rural estates; homicide; organized murder and extortion under protection or connivance of the state institutions; factionalisation; lack of accommodation flexibility, compromise, accommodation on the post of individuals, groups, sub-nationalists; lack of peaceful continuing dialogue, violence against women; child abuse and exploitation, white flesh trade, *begaar* and bonded labor, child labor, gender discrimination, religious and racial discrimination; high rate of unemployment and under-employment; inadequate implementation of labor laws; poor working conditions, careless avoidance of environmental responsibility by business, with the collusion of regulatory agencies, absence or non-implementation of the controls and regulatory framework, cartelization, smuggling, overpricing, black marketing with impunity despite recent efforts of judiciary and government; frequent sugar and wheat crises, misuse and abuse of authority for material gain or risking the life, property and safety and welfare of the common man, operation of phony financial companies, bank frauds and organized loan default.

Source: Compiled by the author

However, in order to be able to judge performance of governments and their governance, there has to be some measure, coefficient rating etc.

On most of such issues, opinion surveys of the stake holders, business executives, social and political actors, media, civil society, NGOs etc. have become very popular and found a broad acceptance at various national and international levels. UN system has also started taking interest in these issues, as it has discovered that its success in fostering and promoting economic development and implementing its various programs and projects, Bad governance in recipient countries has remained a major bottleneck and good governance a good partner.

Opinions are, however, perceptions and may have a bias, international or otherwise, intrinsic or individual and may not represent full reality. Various techniques have been developed to eliminate sample biases, and other shortcomings and assistance has also been taken from hard data where it is available and has relevance.

While all such governance measures may be taken with some skepticism, but should not be used by bad governments to utilize these weaknesses in belittling it's data and results, simply because it puts them on the spot and cause uneasiness and be a source and basis of criticism of it's own people and political opponents, which infact is the reason-detre for such measurements and indices.

Roots of Bad Governance

Governance is an input of societal processes to produce people's welfare. Pakistan has been beset by governance failure from its very beginning period. While most comparable countries of Asia which have prospered started from a comparable low initial levels of socio economic conditions, but have over the period of several decades, created much more sound and stable society conditions. Even India has managed to come out of the classic image of low performance and governance ills, while Pakistan deteriorates on a continuing basis, despite claims of successes (military) regimes of good performance and success little do such regimes understand that their very existence and recurrence is a governance failure. The starkest reminder is the eruption of terrorism menace and the apparent inability of the government and the military to deal with it.

At first there was great reluctance by the military to move against the terrorists and extremists amidst some plausible allegations of inside support of these groups but eventually it moved to eliminate the more obvious manifestations and strong holds of terrorists of tribal areas. However, the systemic failure is indicated by successively deadly terrorist attacks in the Punjab sponsored and claimed by Punjab based terrorists and Talibans, originally the sectarian groups which were initially fed and supported allegedly by the intelligence agencies. A recent speech by Punjab Chief Minister (dated 14 March 2010) while addressing clerics in Lahore, asking Taliban not to attack Punjab "because of commonalty of purpose against foreign domination", is a clear initial sign of a possible eventual capitulation by the State.

Terrorism can only be partly traced to sources and conditions in Afghanistan, a major portion of it is rooted in poor governance in Pakistan itself, characterised by poor state controls, general deterioration in law and order, long term systemic corruption in the state organs and machinery and faltering socio-economic conditions.

No wonder Pakistan state and society has been successively classified at best among “worst governance performers” and at worst among Failed States, and at the bottom side of such lists. The evidence is so massive that it would be preposterous to hide behind conspiracy theories and patriotic appeals. Yet, such discussions need not create despondency and pessimism, but should incite debate, discussion, introspection and result in consensus approaches towards improvement.

State structure is still intact, although beset by problems; strong military, adequate bureaucratic structure if not performance, a rejuvenated judiciary and healthy trends of cooperation among mainstream political parties are the positive elements, on which hope can be placed, to initiate the reform process.

In this chapter, we will discuss and evaluate various ratings of governance prepared routinely by credible international institutions; not only to prove the obvious failure in governance, but to trace the evidence and parameters of bad governance which are measurements are supported to be objective and not mired by domestic rivalries. What leads to such a mess? We will also examine strength, weaknesses, opportunities and threats of our state institutions and outline a broad agenda of their priorities and course of action for improved delivery.

Failed States – an in appropriate term

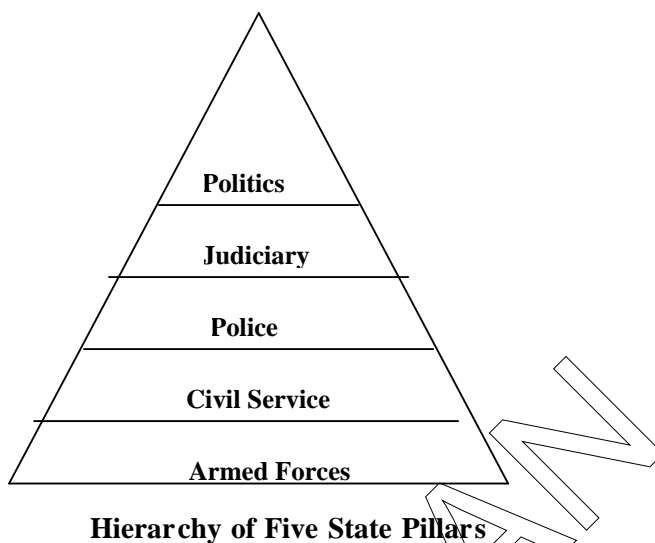
Some of the assessments like those of the World Bank are minimalist, restrained and conservative, while other measures have a more extensive inputs and definitions so as to include civil liberties, service delivery, socio-economic conditions etc. While there are some which we reject, such as “Failed States Index”, which causes despondency and defensive reactions such as characterization does not serve any purpose. Failed State is a vague term, and categorized by a still vaguer “methodology”. While some of the inclusions in such a list like Somalia might be understandable, including Iran in such a list is certainly biased. Iran could have done better, but is not a failed state.

While the broad message of all government indices is correct, the notion of Failed States, its outputs and even conclusions are dangerous and careless, based on fallacious and immature assumption, even presumption, that the model perfectly captures the reality. Data scarcity is typical in the Third World, and models have some cultural biases. There is a softer side of religion as well and not only extremism and fundamentalism are not the offshoots. There is an immense cultural capital that is overlooked. Societies do not service simply on physical infrastructure, and eclipse due to lack of these (important) inputs. The literatures, poetry, arts, drama, folklore, music, are also the foundations, even if soft, of societies, which often compensate more material failures.

In Pakistan's poor areas like Korangi in Karachi, there is a poet in every tenth house, and its evenings and weekends are frequently filled with "mushairas" (poetic recital gatherings). While beggars are seen, and it is unfortunate, but it is forgotten that there are those who give them. There are hundreds and thousands of NGOs and charities which run highly equipped hospitals. More than a million students of religious madressah schools are boarded and lodged through private giving. There is vibrant Sufi culture, which fosters forbearance, forgiving and virtue in a light manner of music and dance amidst scorching heat. So if models cannot be changed for whatever reasons, conclusions can be balanced and adjusted and extreme assessments avoided. These are incorrect and counter-productive. The freezing, however, should not be utilized by the "conspiracy theorists" and "super-patriots" to obfuscate the fundamental marriage of poor performance, which is largely correct.

Governance can be improved, piecemeal, maybe slowly but inexorably under a stable, committed and sustainable programme with a target based and performance monitoring framework. Policy works and improvements do occur. The biggest constraint to improvement in governance is the hope and despair on the part of the leaders that the system is too big and too wieldy to reform and improve upon. No revolution is required. Revolutionary and impulsive politics often host and work against long term improvements. Adopt process orientation along with a sense of targets and time bound programs. This is the time for all leaders, in politics, bureaucracy, judiciary, police and the armed forces. "You can do it, it can be done" kind of air in the system should be infused in all sectors and at all levels and not only in government but in private sector and communities.

The assessment is in the following categories; weak, moderate,



good and excellent in increasing order of strength and efficiency as the terms imply. However, the assessments are relative to departments within a country. A weak police in Pakistan is in comparison to moderate civil bureaucracy or good rating of armed forces. A weak police of Pakistan is not comparable with weak police of India i.e. the commonality does not equate the two.

The assessment of India and Pakistan of four institutions are the same; Police gets “weak”, Judiciary and Civil Service get “moderate” and armed forces get “good” ratings. The difference is, as per FFP/FSI, in the leadership ratings (political, government and civil society); in Pakistan leadership has been assessed as weak, and for India, it has been given a rating of “good”. Due to frequent military coups and interruption of the political process, there is now a consensus in Pakistan and elsewhere that the political system and the political parties could not develop and political culture did not mature, giving rise to rigidity and polarization. We have discussed these issues in other chapters. We have undertaken “SWOT” analysis of the five institutions, which evaluates the strength, weaknesses, opportunities and threats faced by these institutions. We have also outlined the course of action and improvements to be adopted by these institutions and facilitated by others.

Leadership: SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none">• Heroism & sacrifice• Courage• Two-party system• Ideology	<ul style="list-style-type: none">• Poor organization and structure• Lack of internal democracy• Hereditary & personalized and often dictatorial• Opportunism• Lack of stability and structure• Poor and limited civil society• Lack of resources• Poor stake holders and people
Opportunities	Threat
<ul style="list-style-type: none">• World commitment to democracy & civil society.• Internal & external aversion to Military rule.• Lingering optimism and hope among people.	<ul style="list-style-type: none">• Extreme polarization.• Fragmentation• Perpetual threat from the army of being superseded.• Estrangement of people.• Image issues.• Lack of agenda.• Nepotism.
Action & improvement required	
<ul style="list-style-type: none">• Strive to build and maintain consensus and harmony ,hope and national cohesion• Eliminate corruption, nepotism and favoritism?• Work towards national contract with armed forces, reforming and improving intelligence agencies with a view to fight terrorism.• Build social sector and concentrate on removing object poverty (MDG).• Strengthen politics, political institutions, civil society and promote rule of law.• Stick to Charter of Democracy.• Bring powerful institutions under the ambit of law, enforce civil liberties as enshrined in the constitution; exemptions under extreme demonstrated emergent conditions.• Respect the work and programs of the predecessors, and do not demolish or dilute past achievements.• Promote participation, devolution and self-rule, strengthening and improving local governments.	

Judiciary: SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none"> • Legal system. • Legal fraternity. 	<ul style="list-style-type: none"> • Elitist and colonial moorings. • Internal control. • Corruption. • Efficiency. • Lack of controls & oversight. • Opportunism.
Opportunities	Threat
<ul style="list-style-type: none"> • Increased public support and expectations. • Recent improvement of image. 	<ul style="list-style-type: none"> • Overbearing & excessive interference in administration. • Conflict with legislature. • Lack of sensitivity towards federalism. • Over-doing. • Over looking of grass root district judiciary. • Excessive corruption at lower levels.
Action & improvement required	
<ul style="list-style-type: none"> • Reform & improve grass root judiciary (Tehsil & District) • Introduce performance monitoring. • Remove corruption • Be sensitive to federalism and national cohesion • Remove elitism from judicial system and bias against poor and the resource -less. 	

Police: SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none">• Low cost.• Low budget.• Self financing?	<ul style="list-style-type: none">• Corruption• Discipline• Organization.• Communication• Performance measurement• Innovation• Output
Opportunities	Threat
<ul style="list-style-type: none">• Societies extreme needs for security against crime & terrorism.	<ul style="list-style-type: none">• Total loss of effectiveness control & discipline.• Fragmentation and possible emergence of parallel organizations e.g. rangers, militia, common.• Being reduced to security company status.• Excessive corruption.• Absolute lack of innovation.
Action & improvement required	
<ul style="list-style-type: none">• Reorganize structures and processes to manage and eliminate terrorism.• Remove corruption.• Improve service conditions.• Improve internal controls, performance monitoring and appraisal.	

Civil Service: SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none"> • Rules • Discipline • Stability • Structure • Operational day-to-day management 	<ul style="list-style-type: none"> • Planning and reporting • Internal management • Departmental performance • Evaluation • Innovation • Corruption
Opportunities	Threat
<ul style="list-style-type: none"> • Strong internal and external demands on improvement of governance 	<ul style="list-style-type: none"> • Stagnation • Lack of innovation. • Lack of Renewal, • Inadequate skills and training. • Excessive corruption. • Lack of reform.
Action & improvement required	
<ul style="list-style-type: none"> • Bring innovation & creativity, • Improve working methods, annual plans and annual reports for departments, divisions and ministries. • Remove corruption • Introduce and enforce code of conduct. • Reemploy recently retired senior officers, to work on developmental, Reform and innovation proposals. • Encourage input from private sector, and stake holders. • Introduce and encourage merit based lateral entrant system. 	

Armed Forces: SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none"> • Training. • Performance measurement. • Internal Cohesion. • Organization. • Technology & weapons. • Adequate resources. 	<ul style="list-style-type: none"> • Internal controls. • Weak commitment to democracy. • Elitism. • Extravagancy. • Lack of cost consciousness. • Inability to submit to external controls and authority.
Opportunities	Threat
<ul style="list-style-type: none"> • Nuclear weapons. • Current Strategic. • Environment in the region. • Still time to correct problem areas. 	<ul style="list-style-type: none"> • Terrorism & extremism. • Tendency towards becoming an interest group. • Becoming too soft and sophisticated to fight or involved in politics or business. • Lack of public support and respect; image issues.
Action & improvement required	
<ul style="list-style-type: none"> • Discourage Bonapartism and cultivate abhorrence and consensus against military rule. • Improve cost consciousness. • Let civilian institutions work and improve. • Reform intelligence agencies. • Improve image. • Cultivate virtues of an austere Muslim fighting force committed to jihad and sacrifice. • Cultivate consciousness of the times and world issues. • Bring powerful institution under the ambit of law, enforce civil liberties as enshrined in the constitutions; exemptions under extreme demonstrated emergent conditions. 	

Table 13.1: FSI/ Fund for Peace Evaluation of the Five State Pillars for selected Countries

Countries	Leadership	Military	Public	Judiciary	Civil Service
Pakistan	Weak	Good	Weak	Moderate	Moderate
USA	Excellent	Excellent	Excellent	Good	Excellent
Indonesia	Good	Moderate	Weak	Weak	Weak
Malaysia	Moderate	Good	Moderate	Weak	Weak
India	Good	Good	Weak	Moderate	Moderate
Turkey	Good	Good	Moderate	Moderate	Good
Sri Lanka	Moderate	Moderate	Weak	Weak	Moderate

Source: Fund for Peace

Table 13.2: Management & Control Environment of the five institutions in Pakistan

	Accountability	HRM Performance Measurement	Internal Control	External
Police	NAB	?	Weak	Yes
Civil Service	NAB	?	Yes?	Yes
Judiciary	None	?	Weak	?
Leadership	NAB	Weak, Elections	None	People international system
Army	None?	Strong	Yes weak	None?

Source: Fund for Peace

Governance Defined

World Bank defines governance as “the exercise of political authority and the use of the initial resources to manage society’s problems and affairs. Others make a distinction between government and politics. As Wikipedia puts it; *Politics involves processes by which a group of people with initially divergent opinions or interests reach collective decisions generally regarded as binding on the group and enforced as common policy. Governance, on the other hand, conveys the administrative and process oriented elements of governing..*

Good governance, as defined by UNESCAP, has the following eight aspects;

- Rule of law
- Transparency
- Responsive
- Equitable and inclusive
- Effective and efficient
- Participatory
- Consensus oriented
- Accountable

World Bank Governance Indicators defined

1. Voice and Accountability (VA) – capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

2. Political Stability and Absence of Violence (PV) – capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

3. Government Effectiveness (GE) – capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

4. Regulatory Quality (RQ) – capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

5. Rule of Law (RL) – capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

6. Control of Corruption (CC) – capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Source: Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi, *Governance Matters VIII: Aggregate and Individual Governance Indicators 1996-2008*, Brookings Institution, the World Bank

Why measure governance?

Objectives of measurements of governance from our perspective, is not to prove an absolutely proven point, that there are problems in governance, and that it is bad or in shambles. Although often there is a need to silence a lot of zealots who speak from a high pedestal and are not prepared to accept that something is wrong in their domain. It may appear preposterous, but in Pakistan and other similar countries in the region, one does have to face such stalwarts of self praise. The objective is to compare i.e., to find out how good or how bad it is, for there is no conceptual formula to prove otherwise. It is only comparative approaches that may indicate problems. Thirdly, it is to trace the origins of weaknesses and to identify which variables are contributing to a lower rating or ranking in an indicator; also an impartial monitoring of trends over the years, performance vis-à-vis last period (not the other countries) is made possible. This can otherwise be a very costly and impossible exercise, which is made available to countries, free of cost, by so many

Measurements of governance

UNESCAP, World Bank and recently World Governance Initiative have done major work to measure good and bad governance. UNESCAP did not go beyond definition and elaboration of issues and did not quite go into developing indicators and data collection issues. World Bank, however, had a sustained interest on the subject and has been compiling indicators in this respect over the last ten years.

FnWG, a new organization based in France, has also released its governance indices, although their main purpose is to draw lessons at world policy level and draw proposals for global framework. Nevertheless, national agencies and entities can utilize their data for self-evaluation of their own societies. There is a common theme and some commonality of sub-indices and the data is drawn from familiar sources like IMF, UNDP, Transparency International, Freedom House etc. However, FnWG (Fund for new World Governance) has done more extensive work and has been drawn upon some non-traditional sources as well.

Most of these assessments have commonalities as well as differences. They mostly draw upon similar if not same, data sources. However, their concepts of governance can be either minimalist (World Bank Governance Indicators), limited to government issues such as regulatory quality, effectiveness, etc. in addition to the rule of law. Others such as FnWG adopt a more inclusive, expensive and maximalist approach to include questions of human rights, civil liberties, environment sustainability, human resource development etc. On methodologies, usually there are set of questions under each variable or criterion, and there is a well defined and structured points-rating system. Thus there is no arbitrariness or direction except where the respondents themselves are free to give their opinion and assign certain fundamental ratings. FSI/FFP does not; however, seem to have adopted a very structured approach. They seem to rely more on information than data: neither do they seem to share their ratings with public, and tend to “hide” behind the vastness of the database (40000 sources and articles). However, their ratings are not outlandish or out of line with others, and are perhaps significantly influenced by the latter as well.

In the following we compare the main variables employed by World Bank and FnWG.

World Bank and FnWG models compared

World Bank	FnWG
Accountability	Peace and Security
Political Stability	Rule of Law
Violence/Terrorism	Human Rights
Government Effectiveness	Sustainable Development.
Regulatory Quality	Human Development
Rule of Law	
Control of Corruption	

Source: World Bank, FnWG.

In the following, we would reproduce the details, methodology and index measurements made by the two organizations.

Table 13.3: Criterion for FnWG methodology

1. PEACE AND SECURITY		
Indicator	Sub-indicator	Index
Peace and Security Indicator	National Security	Conflicts
		Refugees and Asylum Seekers
		Displaced Persons
	Public Security	Political Climate
		Degree of Trust among Citizens
		Violent Crime
		Homicides per 100,000 Inhabitants
2. RULE OF LAW		
Indicator	Sub-indicator	Index
Rule of Law Indicator	Body of Laws	Ratification of Treaties
		Property Rights
	Judicial System	Independence
		Effectiveness
		Settlement of Contractual Disputes
Corruption	Corruption Perception Index	
3. HUMAN RIGHTS AND PARTICIPATION		
Indicator	Sub-indicator	Index
Human Rights and Participation	Civil and Political Rights	Respect for Civil Rights
		Respect for Physical Integrity Rights
		Freedom of the Press
		Violence against the Press
	Participation	Participation in Political Life
		Electoral Process and Pluralism
		Political Culture
	Gender Discrimination / Inequality	Women's Political Rights
		Women's Social Rights
		Women's Economic Rights
	Rate of Representation in National Parliaments	

Table 13.3: Criterion for FnWG methodology (continued)

4. SUSTAINABLE DEVELOPMENT		
Indicator	Sub-indicator	Index
Sustainable Development	Economic Sector	GDP at PPP per capita
		GDP growth rate
		Ease in Starting a Business
	Social Dimension	GINI coefficient (poverty and inequality)
		Basic Capacities
		Ratification of International Labor Rights Texts
	Environmental Dimension	Ecological Footprint and Bio-capacity
		Environmental Sustainability
		Environmental Performance
5. HUMAN DEVELOPMENT		
Indicator	Sub-indicator	Index
Human Development	Development	Human Development
	Well-being and Happiness	Subjective Well-being
		Happiness
		Quality of life

Source: FnWG

credible institutions. While we would be discussing the governance indicators maintained by two or three organizations, the basic data comes about from more than 100+ organizations, agencies and even commercial enterprises like risk rating companies.

FnWG Methodology

The ultimate goal of this study on the WGI is part of a long-term process. On the basis of the situation described by the WGI and of its diagnosis, it must enable actors in charge of governance to raise the right questions in order to consider solutions. In the end, the idea is to materialize world governance that is capable of taking up the global challenges of the coming years in compliance with the big principles defined in the Guide to Developing Proposals for World Governance.

Producing the WGI is a first step in that direction. The indicators, sub-indicators, and indexes used for this study point exactly in the direction of these principles. The indexes that constitute the Peace and Security, Rule of Law, and Human Rights and Participation indicators, for instance, clearly refer to the Legitimacy of the exercise of power principle and to that of conformity with the democratic ideal and with principles of citizenship. The deep consent of peoples to the way in which they are governed, the trust they place in those exercising authority, the importance given to the necessities of the common good, and an organization of society based on an ethical foundation that is recognized and respected are concepts that the indexes surveyed illustrate and evaluate. Those of Sustainable Development point to the principle of competence and efficacy and survey public and private institutions in the way they are designed, their way of working, as well as the competence, the pertinence, and the capacities of those in charge of their operations. As for the indices of the Human Development indicators, they underscore the principle of cooperation and partnership.

One of the perverse effects of indicators is that very often their purpose is eclipsed by a final ranking that for some becomes obsessive, whereas for others, it seems to have no value. The point is not, therefore, when this survey is complete, to establish a ranking of countries or actors, or to use the results to hand out good or bad points. What is essential is to show the state of world governance through the selected survey criteria and to rouse the actors into taking advantage of the educational value of the WGI in order to raise the questions that are fundamental to their governance. Beyond the ranking, what is of the essence is the questioning that ensues. The ranking, or rather its constituent elements, should lead to in-depth thinking on the strengths and weaknesses of this or that nation-state. This should then lead in turn to implementing measures, seeking initiatives, and changing behavior in order to achieve, in the end, a world that is better because it is governed better.

Overall governance rankings

All the agencies compiling governance indicators have avoided, to compile an overall rating, and have restricted to ratings in individual factors e.g. rule of law, government effectiveness etc. Such reluctance and omission is perhaps deliberate, so as to avoid the rather unsavory determination regarding individual state. This may also be in recognition of the fact that the model may not be capturing the reality for a variety of reasons, to the extent required for such overall rating and classification.

World Bank and Fund for World Governance (FnWG) has avoided issuing an overall rating, but Fund for Peace (Foreign Policy Journal) has ventured to issue the classification and overall rankings and has issued the unfortunate term of “Failed States”, that we have differed with elsewhere in other sections in this chapter.

However, we have ventured to compile overall ratings and provide results in Tables 13.5-13.9. There are discrepancies in rankings for two major reasons a) there are differences in basket size of the countries evaluated. World Bank has 212 countries, while FnWG 178. Very small timing countries like Luxemburg and Leicester? Complicate the rankings. We have removed these countries from our listing, although have maintained the original rankings.

Discussion on FnWG assessment

FnWG has not computed the rankings and has only awarded estimated values for the variables involved. This book has calculated the rankings on its own, the result of which has been provided in the adjoining tables. In Table 13.6, out of the bottom 40 countries in governance performance, some 15 countries are tiny, and thus in reality this is a list of 25 bottom countries. Iraq has the lowest ranking and comes at the very bottom, followed by Sudan. Iraq may improve its ranking in the coming years due to stabilization and installation of new government after the elections. Sudan may not improve its ranking in the coming years due to stabilization and installation of new goal after the elections. Sudan may not improve in near future. Both countries have great potential for development.

Pakistan's ranking of 162 (out of 178) from the top, and 17 from bottom may also improve, as democratic rule sets in, as this index also includes Peace & Security parameters as well. The on-going tussle with terrorists has also contributed to Pakistan's low ranking. It may improve over the next years, if success is achieved on terrorism.

India is a border line case, with a ranking of 38 from the bottom. Due to recent faster economic growth and better performance, India is on the verge of being declared success-story of coming out from the so-called “Failed States Syndrome”. Surprisingly Singapore is included in the list of bottom 40, just after India. Singapore got a low ranking due to poor achievements in “rule of law”, and Human Development”. Perhaps there is some mistake. Apparently Singapore does not deserve to get such low

ranking. Bangladesh, contrary to expectations, has done well to merit a ranking close to India.

Iran despite high social and economic numbers due to oil and natural resources, got listed in bottom 40, due to poor human rights conditions. Other oil rich countries are not included generally among the bottom 40s. Perhaps due to the same reasons as of Iran and comparatively lower economic achievements, 12 Islamic countries are included in the bottom 40s.

In Table 13.5 Top Forty countries in Governance, 15 are tiny island countries; hence, in effect, it is top 25 countries of the world on governance. Relatively smaller countries Iceland, Finland and Scandinavian countries like Norway, Sweden, and Denmark are at the top of the list. UK and USA got low ratings respectively of 16 and 22, due to the "realities of life and international system". These countries are cited to be gendarmes of international system, and are involved in major conflicts and warfare in Iraq and Afghanistan. Human rights have been compromised, and civil liberties diluted, due to the recent hike in international terrorism. USA got a particularly low ranking in sustainable development as it has signed only two international treaties and instruments on environment. The US ranking, and even of the UK may improve due to the new incumbent President Obama, replacing Mr Bush as the latter's policies have been disliked and opposed and are perhaps largely responsible for the low rankings.

Failed States Index (FSI)

Failed States Index is a rather stringent classification and divides countries as following;

1. Failed States; including Pakistan , Afghanistan, Iraq, Iran, Bangladesh , Sri Lanka, North Korea, Yemen, Sudan , Ethiopia, Kenya and many other Central African republics are among the Red countries having the most risk of failure or countries already failed (38 countries).
2. Grey Countries; In this category fall India, China, Russia, most of the Middle East , most of Africa except Central Africa (which is classified , worst), Brazil, Cuba, Venezuela , virtually the whole of South America, except Chile, and Argentina, which are grouped in the higher class among USA and Europe (93 countries).

3. Yellow countries; USA, most of European Union (not all of it), Argentina, Iceland and Chile are included in this category. (32 countries).
4. Green Countries; only Australia, Canada, Scandinavia, Finland and Iceland merit their inclusion in this category. (13 countries).

FSI base sites classification on the following twelve criteria;

1. Social Indicators

- Mounting demographic pressures.
- Massive movement of refugees or internally displaced persons creating complex human emergencies.
- Legacy of vengeance- seeking group grievance or group paranoia.
- Chronic or sustained human flight.

2. Economic Indicators

- Uneven economic development along group lines.
- Sharpened and/or severe economic decline.

3. Political Indicators

- Criminalization and/or de-legitimizing of the state.
- Progressive deterioration of public services.
- Suspension or arbitrary application of the rule of law and widespread violation of human rights.
- Security apparatus operates as a “state within state”.
- Rise of factional elites.
- Intervention of other states or external political actors.

Evaluation of FSI Results

It is broadly in keeping with the World Bank and FnWG in the following respects;

1. All the three WB, FnWG, FSI come up with the small rich country syndrome, which appears on top of the successful high governance countries. Broadly there is no difference in the inclusions in such lists of the three agencies.

2. Similarly, the small poor countries which end up at the bottom of any classification and have questions on the very sustainability of these states. Frankly, in my opinion there maybe a case for merger, if not acquisition for such countries.
3. There are poor performers. Large countries which carry much grave consequences of their failure on the populace, region and on the world. Pakistan, Iran and Iraq are such countries. Pakistan with nuclear weapons and large army poses highest threat perceptions to the world community, the same two factors may however, prove to be its source of survival and bargaining weapons, as Madelaine Albright (former US secretary of state) conveyed the feelings that Pakistan was an "International Migraine". What to do with a country which is smart enough to make nuclear weapons and yet weak and incapable of managing itself on a satisfactory level as demonstrated by all listings.
4. The yellow countries include the most significant and powerful, UK, USA, EU/NATO, OECD countries etc, the 13 highly stable green countries. As has been mentioned elsewhere, it has not been possible for these large countries to earn the green classification due to their involvement in "controlling the world", often requiring the use of military force and participation in such moves, dilution of human rights and civil liberties, and in the case of US, a rather unhealthy lack of compliance on international norms in the area of environment and its opposition to major international treaties.
5. The bulk of the countries (93 out of 177), a majority of good 52% falls in the grey area, only slightly better than the red countries. This is also in general agreement with the other ratings/ rankings of the World Bank and FnWG.

What is a Failed State?

The word or term "failed states" may have a number of connotations. The one which appears more apt here is the states which "failed" to perform the functions entrusted to them and expected of them "as per certain reasonable criteria, generally accepted universally". This characterization may be acceptable to the elites of the "Failed States". However, if it implies a sense of states which may soon fall down and would be extinct, it may be rather far fetched, although extinction or

break down might be a way of revival and renewal, as happened in Eastern Europe, which was replaced by a better democratic and more egalitarian order.

Festering into a Somalia like chaos may, however, be no less or may be less preferable than extinction. The international community tried its best to assist the third world including the failed and less-failed countries, over the last several decades. Is there a system to deal with the failing or falling states? After all more than one-billion people live in countries, which are in the precarious conditions.

On the other hand, it appears from FSI (Failed States Index), that the authors of the index are a bit too stringent or idealistic. In their view only the 13 states are really “sustainable”, as they term it. Most of the EU (OECD) countries i.e. bulk of the developed countries were not considered good enough to be given a positive certificate of being sustainable_ the highest rating of the index, but are given only the “Moderate” classification i.e. “not good enough”. Then a very large number of countries are put on the watch list that may likely descend into the “Failed” states category. This includes borderline countries like India and thriving China, Malaysia and Singapore.

Foreign Policy comment on FSI-2009

Following are the excerpts from Foreign-Policy introduction / evaluation of the FSI-2009 report, which excerpts are produced in the following.

Somalia was too failed even for Al-Qaeda

Figuring out which faltering states to help depends in large part on what they need. After all, as Tolstoy might have put it, every failing state is failing in its own way. Georgia, for example, jumped places in this year's index due to a substantial spike in that elusive indicator, “Invaded by Russia.” Somalia and the Democratic Republic of the Congo are failing because their governments are chronically weak to nonexistent; Zimbabwe and Burma are failing because their governments are strong enough to choke the life out of their societies. Iraq is failing, but its trajectory may be towards greater success, while Haiti is failing as well, and it is hard to imagine success around the corner.

It is also a harsh fact that a greater risk of failure is not always synonymous with greater consequences of failure. For example, Zimbabwe (No. 2 on the index) is technically failing more than Iraq (6), but the geopolitical implications of state failure in Iraq would be far greater than in Zimbabwe. It's why we

Pakistan's development challenges

worry more about Pakistan (10) than Guinea (9), and North Korea (17) more than the Ivory Coast (11) Then take the paradoxical case of Iran, which jumped 11 spots in the rankings this year. With an already faulty economy, a vampire state mismanaging it further, and a global recession on top of all that, it is no surprise that Iran is faltering. But the state is not failing; indeed, it is succeeding quite well, in one rather important respect: the pursuit of nuclear weapons. And it is this "success," more than Iran's myriad failings, that keeps it above the fold of other worrying news.

Answering the question of which failed states demand attention might well come down to which are deemed to pose the biggest threat to the world at large. But even the widely presumed linkage between failing states and terrorism is less clear than many have come to assume since the Sept. 11, 2001, terrorist attacks sounded the alarm about the consequences of governments not in control of their territory. Take Somalia, once again the No. 1 failed state on this year's index. A recent report by West Point's Combating Terrorism Center, drawing on captured al Qaeda documents, revealed that Osama bin Laden's outfit had an awful experience trying to operate out of Somalia, for all the same reasons that international peacekeepers found Somalia unmanageable in the 1990s: terrible infrastructure, excessive violence and criminality, and few basic services, among other factors. In short, Somalia was too failed even for al Qaeda.

Source: FSI-2009, Foreign Policy Journal

Table 13.4: Comparative Bottom Forty Countries: World Bank, FnWG & Foreign Policy (Failed States Index)

World Bank		FnWG		FSI	
Countries	%Rank	Countries	%Rank	Countries	%Rank
Azerbaijan	158				
Bolivia	159			Guinea-Bissau	27
Libya	161			Cameroon	26
Algeria	162			Nepal	25
Cambodia	163			Burundi	24
Lebanon	164			Niger	23
Kyrgyzstan	165			Sri Lanka	22
Cuba	166			Uganda	21
Belarus	170			East Timor	20
Nepal	171	Syria	139	Bangladesh	19
Bangladesh	174	India	141	Yemen	18
Ethiopia	175	Kenya	143	North Korea	17
Syria	176	Nepal	144	Ethiopia	16
Tajikistan	180	Bangladesh	145	Nigeria	15
Nigeria	182	Iran	147	Kenya	14
Iran	183	Yemen	148	Burma	13
Yemen	184	Niger	150	Haiti	12
Pakistan	185	Ethiopia	152	Ivory Coast	11
Venezuela	190	Afghanistan	158	Pakistan	10
Uzbekistan	192	Turkmenistan	159	Guinea	9
Turkmenistan	193	Pakistan	161	CAR	8
Korea, North	199	Nigeria	163	Afghanistan	7
Iraq	201	South Africa	168	Iraq	6
Sudan	202	Zimbabwe	171	Congo	5
Zimbabwe	203	Myanmar	172	Chad	4
Afghanistan	205	North Korea	174	Sudan	3
Myanmar	206	Sudan	177	Zimbabwe	2
Somalia	207	Iraq	178	Somalia	1

Source: From Table No. 13.5 & 13.6 also from failed states index; compiled by the author

Notes:

1. For Failed States Index (FSI), 1 is the lowest rank and in others (World Bank, FnWG) 1 is the highest ranking for governance measurement.
2. Somalias higher ranking than Pakistan appears to be a mistake on the part of compilers of FnWG; otherwise in two other models World Bank and FSI, Somalia is at the bottom and Pakistan not in a very enviable position/ranking of 10th from the bottom.
3. Rankings vary also due to the varying number of countries in the three models. If very small / tiny countries are removed; results are roughly quite comparable and compatible.

Table 13.5: World Governance Indicators: Top Forty Countries (FnWG methodology)

Rank	Peace and Security Indicator	Rule of Law Indicator	Human Rights Indicator	Sustainable Development Indicator	Human Development	Rankings Aggregate
1	Iceland	Finland	Sweden	Norway	Switzerland	Iceland
2	Mauritius	New Zealand	Netherlands	Finland	Iceland	Norway
3	Luxemburg	Iceland	Norway	Sweden	Austria	Sweden
4	Norway	Sweden	Iceland	Luxemburg	Luxemburg	Finland
5	Denmark	Denmark	Finland	Australia	Costa Rica	Denmark
6	Slovenia	Norway	Denmark	Iceland	Netherlands	Luxemburg
7	Bahamas	Australia	Grenada	New Zealand	Denmark	New Zealand
8	Ireland	Switzerland	Austria	Canada	Italy	Netherlands
9	Germany	UK	Belgium	Ireland	Canada	Austria
10	Australia	Luxemburg	New Zealand	Austria	Malta	Australia
11	Austria	Austria	Luxemburg	Denmark	Germany	Switzerland
12	Netherlands	Canada	Germany	Switzerland	New Zealand	Germany
13	New Zealand	Germany	Costa Rica	Lithuania	Belgium	Canada
14	Finland	Netherlands	Spain	Uruguay	Norway	Ireland
15	Sweden	Chile	Australia	Estonia	Sweden	Belgium
16	Japan	Ireland	Barbados	France	Finland	U.K.
17	Salomon Islands	U.S.	Canada	Netherlands	Ireland	Barbados
18	Czech	Slovakia	Switzerland	Slovenia	Australia	France
19	Switzerland	Japan	Bahamas	Germany	Dominica	Japan
20	Canada	Estonia	Saint Lucia	U.K.	Barbados	Malta
21	Belgium	France	Ireland	Hungary	France	Costa Rica
22	Portugal	Belgium	Portugal	Slovakia	U.S.	U.S.
23	Barbados	Barbados	U.K.	Cyprus	U.K.	Bahamas
24	Malta	Cyprus	France	Belgium	Japan	Portugal
25	UK	Portugal	Lithuania	Mauritius	Cyprus	Slovakia
26	Estonia	Malta	Czech	Japan	Chile	Chile
27	France	Hungary	Malta	Chile	Bahamas	Cyprus
28	Saint Lucia	Uruguay	U.S.	Czech	Saint Lucia	Mauritius
29	Grenada	Salomon Islands	Dominica	Portugal	Uruguay	Czech
30	Italy	Mauritius	Italy	Salomon Islands	Salomon Islands	Uruguay

Source: Basic data from FnWG; compiled by the author

Table 13.6: World Governance Indicators: Bottom Forty Countries (FnWG methodology)

Countries	Peace and Security Indicator	Rule of Law Indicator	Human Rights Indicator	Sustainable Development Indicator	Human Development	Rankings Aggregate
Syria	110	148	171	116	111	139
Guinea	101	116	137	146	151	140
India	172	119	100	150	117	141
Singapore	34	152	88	169	173	142
Kenya	145	126	113	161	139	143
Nepal	126	137	165	119	128	144
Bangladesh	151	162	127	131	121	145
Swaziland	95	115	143	155	155	146
Iran	122	153	175	115	89	147
Yemen	79	147	170	154	131	148
Somalia	177	39	179	16	30	149
Niger	74	129	115	164	170	150
Togo	94	146	149	162	146	151
Ethiopia	130	150	116	126	163	152
Djibouti	113	158	126	168	150	153
Cameroon	131	161	138	125	145	154
Guinea Bissau	88	155	120	172	156	155
Equatorial Guinea	121	159	159	158	142	156
East Timor	155	168	107	176	124	157
Afghanistan	170	40	130	165	174	158
Turkmenistan	86	176	163	156	141	159
Burundi	163	144	85	151	176	160
Pakistan	160	164	153	127	144	161
Ivory Coast	166	142	144	147	164	162
Nigeria	169	149	160	112	149	163
Haiti	136	177	128	175	136	164
Angola	144	174	136	152	161	165
Uganda	158	111	90	179	153	166
Eritrea	139	163	167	167	154	167
South Africa	154	178	25	178	178	168
Liberia	173	166	61	173	169	169
Central Africa Republic	167	165	166	128	168	170
Zimbabwe	164	154	161	160	171	171
Myanmar	157	173	178	166	132	172
Chad	147	170	172	174	172	173
North Korea	119	169	174	177	177	174
DRC	174	171	157	157	175	176
Sudan	178	160	164	134	165	177
Iraq	179	175	142	163	166	178

Source: Basic data from FnWG; compiled by the author

Table 13.7: World Governance Indicator (WGI) for Asia Pacific Regions (FnWG methodology)

Countries	Peace and Security Indicator	Rule of Law Indicator	Human Rights Indicator	Sustainable Development Indicator	Human Development	Rankings Aggregate
Sri Lanka	171	22	135	26	16	55
Mongolia	73	66	95	18	86	56
Malaysia	69	90	104	69	40	61
Indonesia	128	132	96	90	76	100
Thailand	152	84	118	79	59	103
Philippines	137	131	92	120	61	105
China	127	94	154	138	64	118
India	172	119	100	150	117	141
Singapore	34	152	88	169	173	142
Nepal	126	137	165	119	128	144
Bangladesh	151	162	127	131	121	145
Iran	122	153	175	115	89	147
Afghanistan	170	40	130	165	174	158
Pakistan	160	164	153	127	144	161
North Korea	119	169	174	177	177	174

Source: Basic data from FnWG; compiled by the author

Table 13.8: World Governance Indicator (WGI) for Muslim Countries (FnWG methodology)

Countries	Peace and Security Indicator	Rule of Law Indicator	Human Rights Indicator	Sustainable Development Indicator	Human Development	Rankings Top Down
Malaysia	69	90	104	69	40	61
Turkey	125	62	129	66	98	94
Morocco	81	86	121	84	107	97
Indonesia	128	132	96	90	76	100
Egypt	67	92	158	64	116	115
Algeria	133	85	155	87	110	126
Saudi Arabia	107	104	177	133	83	137
Bangladesh	151	162	127	131	121	145
Iran	122	153	175	115	89	147
Afghanistan	170	40	130	165	174	158
Pakistan	160	164	153	127	144	161
Nigeria	169	149	160	112	149	163
Sudan	178	160	164	134	165	177
Iraq	179	175	142	163	166	178

Source: Basic data from FnWG; compiled by the author

World Bank Governance Indicators

World Bank has developed “Governance Indicators” based on some intellectual work done by three social scientists of considerable international standing. Data on parameters have been collected regularly since mid-nineties, by 22 major organizations and NGOs, in 200+ countries of the world, involving 6000+ respondents, backed by stringent and immaculate data analysis.

From the adjoining data, that we have been able to put together from those veritable sources, there are two conclusions that emerge;

1. Pakistan’s rating is low on most scales, compared to its neighbors and other countries at a similar stage of economic development. We have also reproduced data on some successful countries like Malaysia and Turkey, and conclude that they are also higher on governance scale. It may be a chicken and egg problem, economic development enabling the governments to employ the required resources and tools in improving governance, which in turn boosted economic development and upward spiral continued.
2. Pakistan’s performance and ratings over the years has been erratic, one step forward and two steps backwards; successive governments overturning previous governments’ policies and decisions, rather than building upon the work of the past. A classical and current example is of how the provincial governments are trying to deface and even defeat the local government system which has been developed by a ‘dictatorial regime’, but nevertheless, a lot of time, effort and resources and international assistance has gone into it, of people, experts and representatives, which may not necessarily have anything to do with dictator’s interest. Infact most and many of the existing local government representatives are from one or the other party. Erratic performance and lack of meaningful improvements may have other reasons also, which all of us need to consider and ponder over, and more specifically, our political parties and governments.

Comments on World Bank governance data

1. Broadly speaking World Bank and FnWG data is comparable, giving identical results. a) top forty countries are roughly the same i.e., EU/OECD countries. b) bottom forty countries are also comparable.
2. The only difference, however, is that World Bank classified Venezuela very low and India very high, while FnWG does the opposite.
3. The trend of small countries is the same in the World Bank data. Small countries like Iceland, Finland, Norway, Denmark etc get the top 10 rankings. Similarly very small and poor countries also are found at the very bottom, questioning their viability as states.
4. Large countries and powers get lower rankings than small rich countries (Norway, Sweden, Iceland, and Finland) due to their military involvements and consequent compromise of civil liberties, especially these days, in the wake of post 9/11 terrorism.
5. Much as we may dislike it, Pakistan consistently gets low ranking, be it world listing, Asia -Pacific listing or Muslim countries listing. In the World ranking, it comes to acquire a seat among the bottom 10-15 countries, ignoring small countries like Cameroon and Brunei etc. Fund for Peace classifies Pakistan among Failed States. One may not like it, as we have differed with such characterization, but the plain fact is that Pakistan's governance is in a rather pathetic situation, and needs urgent and sustained effort in improving it. That is perhaps the useful aspect in issuing such rankings, that it sends the required signals to the countries, societies, their government and elite. In Asia -Pacific listing, of 15 large counties (Table13.7), Pakistan is only third from the bottom, only better than North Korea and Afghanistan. Countries like Sri Lanka, Nepal and Bangladesh are rated higher. Similarly in the ratings of Muslim countries, Pakistan gets fourth seat from the bottom. Only Iraq, Sudan and Afghanistan are lower. Malaysia, Turkey and Saudi Arabia top in the countries of Muslim (large) countries. We have excluded smaller countries like Qatar, Kuwait, UAE, from our listing, as shown in the Table13.4. Either one has too little of Nigeria, of which higher ranking than Pakistan creates some doubts in my mind. However, the poor rating of Pakistan is also due to terrorism problem, which

hopefully is temporary, and eventually Pakistan's ranking maybe better than Nigeria, but would still be far lower than satisfactory, warranting care and attention by the elite, government and people at large.

Country Data Report for PAKISTAN, 1996-2008

This Data Report provides a summary of the six aggregate governance indicators, together with all of the publicly-available disaggregated data on which the aggregate indicators are based. The underlying data as well as methodological issues are described more fully in "Governance Matters VIII: Governance Indicators for 1996-2008" (June 2009).

The Report displays the country's performance for all available years between 1996 and 2008 in six governance dimensions: i) Voice & Accountability, ii) Political Stability and Lack of Violence/Terrorism, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law, and vi) Control of Corruption. Each page shows the country's percentile rank on one of the six governance indicators.

Percentile ranks indicate the percentage of countries worldwide that rate below the selected country. Higher values thus indicate better governance ratings. The graph also reports the margins of error displayed in the line charts by dashed lines, and corresponding to a 90% confidence interval. This means that there is a 90 percent probability that governance is within the indicated range.

Underneath the line charts, the Report also displays data from all the underlying sources used for that indicator. Individual ratings have been rescaled to run from 0 (low) to 1 (high). These scores are comparable over time and across countries since most individual measures are based on similar methodologies over time. Scores from different individual indicators are not however directly comparable with each other since the different data sources use different units and cover different sets of countries. The data from the individual indicators are in fact further rescaled to make them comparable across data sources before constructing the aggregate governance indicators. Note that for some variables we present an "NP", where "NP" stands for "Not Public", because the data is confidential and cannot be publicly disclosed at the request of the organizations producing the data.

Table 13.9: World Bank Governance Indicator: Top Forty Countries

Countries	Political Stability No Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	Overall
Denmark	82	100	99	100	99	1
Finland	97	98	94	98	100	2
Sweden	88	99	96	98	98	3
Switzerland	94	99	95	97	97	4
New Zealand	89	95	97	97	98	5
Netherlands	80	96	97	95	97	7
Norway	97	98	89	100	95	8
Australia	85	97	98	95	96	9
Canada	84	97	95	96	96	10
Austria	96	94	94	99	94	11
Iceland	94	91	84	99	99	12
Singapore	96	100	100	94	100	14
Germany	86	93	91	93	93	15
U.K.	66	94	98	92	93	16
Hong Kong	86	95	100	91	94	17
U.S.	68	93	93	92	92	21
Belgium	69	89	93	89	90	22
France	67	90	87	90	91	24
Japan	79	89	86	89	86	25
Chile	66	85	93	88	87	27
Portugal	84	82	84	84	83	30
Spain	43	80	88	85	85	36
Czech	79	82	83	77	67	39
Spain	43	80	88	85	85	36
Czech	79	82	82	77	67	39
Hungary	68	73	88	76	72	44
Taiwan	72	79	82	74	73	46
Slovakia	78	77	85	67	69	48
Botswana	81	73	67	69	80	52
Korea, South	60	86	73	74	70	55
Poland	74	68	74	65	68	59
Greece	57	71	75	73	61	63
Italy	60	66	79	62	62	65

Source: Basic data from World Bank; compiled by the author

Table 13.10: World Bank Governance Indicator: Bottom Forty Countries

Countries	Political Stability No Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	Overall
China	33	64	46	45	41	135
Philippines	11	55	52	40	26	136
Indonesia	16	47	45	29	31	138
Kazakhstan	64	39	40	24	16	140
Egypt	23	43	49	53	29	143
Sri Lanka	3	47	44	55	54	145
Vietnam	56	45	32	42	25	148
Kenya	12	32	51	18	14	154
Russia	24	45	31	20	15	157
Azerbaijan	29	31	43	25	14	158
Bolivia	15	19	16	12	38	159
Libya	63	18	18	29	22	161
Algeria	13	37	21	27	41	162
Cambodia	34	19	34	13	9	163
Lebanon	4	31	48	26	20	164
Kyrgyzstan	22	27	42	8	13	165
Cuba	46	36	3	22	56	166
Belarus	61	12	10	17	24	170
Nepal	8	24	27	25	29	171
Bangladesh	10	23	21	27	11	174
Ethiopia	6	40	20	33	30	175
Syria	27	28	13	34	12	176
Tajikistan	21	17	16	12	14	180
Nigeria	3	13	29	11	18	182
Iran	14	25	3	23	29	183
Yemen	6	13	24	19	27	184
Pakistan	1	26	35	19	25	185
Congo	25	8	12	11	8	188
Venezuela	12	17	5	3	9	190
Uzbekistan	18	27	6	10	11	192
Turkmenistan	53	11	2	7	5	193
Korea, North	58	0	0	14	0	199
Chad	4	3	9	3	3	200
Iraq	0	6	15	1	3	201
Sudan	2	5	7	4	2	202
Zimbabwe	9	2	1	1	4	203
Afghanistan	1	9	4	0	1	205
Myanmar	9	2	1	5	1	206
Somalia	0	0	0	0	0	207

Source: Basic data from World Bank; compiled by the author

Table 13.11: World Bank Governance Indicator of Muslim Countries

Countries	Political Stability No Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	Overall
Malaysia	50	84	60	65	63	77
Turkey	22	63	59	56	60	98
Saudi Arabia	31	56	57	60	61	112
Morocco	29	52	53	52	49	117
Indonesia	16	47	45	29	31	138
Egypt	23	43	49	53	29	143
Algeria	13	37	21	27	41	162
Bangladesh	10	23	21	27	11	174
Nigeria	3	13	29	11	18	182
Iran	14	25	3	23	29	183
Pakistan	1	26	35	19	25	185
Iraq	0	6	15	1	3	201
Sudan	2	5	7	4	2	202
Afghanistan	1	9	4	0	1	205

Source: Basic data from World Bank; compiled by the author

Table 13.12: World Bank Governance Indicator of Asia Pacific Regions

Countries	Political Stability No Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption	Overall
Singapore	96	100	100	94	100	14
Malaysia	50	84	60	65	63	77
India	17	54	47	56	44	104
Mongolia	58	27	43	35	32	113
Thailand	13	59	60	54	43	121
China	33	64	46	45	41	135
Philippines	11	55	52	40	26	136
Indonesia	16	47	45	29	31	138
Sri Lanka	3	47	44	55	54	145
Nepal	8	24	27	25	29	171
Bangladesh	10	23	21	27	11	174
Iran	14	25	3	23	29	183
Pakistan	1	26	35	19	25	185
Korea, North	58	0	0	14	0	199
Afghanistan	1	9	4	0	1	205

Source: Basic data from World Bank; compiled by the author

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PROPLAN

PROPLAN

14 Freedom, Liberty and Transparency

14.1 Freedom and Liberty

Freedom has many aspects and meanings to it. Zulfikar Ali Bhutto wrote his most influential book, “The Myth of Independence”, in late sixties, in which he exposed the myth that we are a free, independent nation and decried the role of foreign powers in the affairs of small and poor countries of the third world. What he essentially said that it is a myth, that we are free or independent. We are neither free nor independent as we shall see later in this chapter.

Merriam Webster dictionary defines freedom as:

*the quality or state of being free: as **a** : the absence of necessity, coercion, or constraint in choice or action **b** : liberation from slavery or restraint or from the power of another : INDEPENDENCE **c** : the quality or state of being exempt or released usually from something onerous <freedom from care> **d** : EASE, FACILITY <spoke the language with freedom> **e** : the quality of being frank, open, or outspoken <answered with freedom> **f** : improper familiarity **g** : boldness of conception or execution **h** : unrestricted use <gave him the freedom of their home>*

2 a : a political right **b** : FRANCHISE, PRIVILEGE

Synonyms FREEDOM, LIBERTY, LICENSE mean the power or condition of acting without compulsion. FREEDOM has a broad range of application from total absence of restraint to merely a sense of not being unduly hampered or frustrated <freedom of the press>. LIBERTY suggests release from former restraint or compulsion <the released prisoner had difficulty adjusting to his new liberty>. LICENSE implies freedom specially granted or conceded and may connote an abuse of freedom <freedom without responsibility may degenerate into license>.

The notions of Freedom in human societies these days are reaching the limits and into controversial areas; sexual freedom going to the limit in giving cover to homosexuality, gay marriages, pornography. They call it a “chilling effect”. If the afore-mentioned sexuality issues are opposed or constrained, general freedom gets a chill or compromised. Another

controversial area of religious sensitivities and sacrilege, while the freedom is allowed generally to the extent that it does not infringe on the convenience of other people, the same is not applied to sensitivities especially religious sensitivities of Muslims.

Every now and then, especially in Norway and Denmark, some freedom adventurers attack Prophet Muhammad in one way or the other, which enrages Muslims and also creates problems for international peace and harmony. And then there is no freedom to commit “denial of Holocaust”. If somebody casts a doubt on the claimed magnitude of atrocities and wants to examine its realities, it is immediately decried and stopped. I am not sure whether, the holocaust denial has also been declared illegal in some countries.

With these exceptions, there is a general consensus among humans as to what freedom and its constituents. Freedom House, an international NGO, has developed an elaborate system for objective measurement of freedom prevailing in all countries of the world. Their current coverage extends to 191 countries of the world, and they are in this business of measurement since 1971.

As we will see later, our ratings have been consistently low throughout the last four decades, civilian or military rule. Having democracy or some elements of it like general elections and assemblies, as it turns out, is not freedom. It is only freedom only partially, as we have been classed throughout as “Partially Free” during democratic rule and “Not Free” during dictatorships.

Despite democracy, we are not amongst one of the 89 countries which have been declared Free. Those who think that conditions in Pakistan and India are the same, may be hurt by knowing that India has always been grouped under “Free” countries with high ratings on political rights and civil liberties. We are reproducing comparative trend of freedom data for several countries, in which mirror one could see his image. No wonder the issue of missing persons could not be adequately handled, even by current Supreme Court, the most independent ever of judiciary in Pakistan and is continuously applying pressure to grapple with the issue. In fact, one of the “sins” of Iftikhar Chaudry, the chief justice, has been his “principled and hard” stance on the missing persons and the role of intelligence agencies. It does not, however, mean that intelligence agencies cannot peruse and perform their genuine professional work in a free and democratic system.

In the Third World, intelligence agencies have been found to be brutal and lawless and have often indulged in collusion with the powerful resolving personal vendettas and issues. Information obtained through torture or illegal confinement has hardly some real value. The current lack of performance in combating terrorism speaks volumes on the efficiency of our intelligence agencies. Only the political cells, with questionable legal status, have performed well, making and breaking political parties and procuring majorities in assemblies in favor of preferred coalitions.

Freedom rating of Pakistan

Journey from military bondage to democracy

Fortunately, after the elections in 2008, removal of general Musharraf and assumption of office by a democratically elected government, Pakistan has been classified as a “partly free country”, by Freedom House. For half of the life of the country, we have been under military rule, and in those periods earned the stigma and disgrace of living in a “not-free” class of country, although we struggled for our independence and believed that we got it in 1947. We neither were (are) free nor independent. But partly we are, and should pray that we continue to enjoy this without break or discontinuity in the coming days. Freedom House measures “domestic freedom” in a society on the basis of a structured set of rules and criteria. These criteria are mostly non-value based and do not include such freedoms as of homosexuality or drugs etc.

Political rights and civil liberties in a country are measured and rated on scale of 1-7; 1 represents highest freedom and 7 represents lowest level of freedom. For political rights measurement and rating, there are 10 questions, and for civil liberties 15. Freedom House divides countries in three broad categories; Free, Partly free and not free. There are 4-5 subcategories in many categories. Category / Rank 1.0 represent the freest and 7.0 represents the most not free.

Pakistan falls in the category of partly free countries with a rating category of 4.5 vis-à-vis 2.5 for India; 1 represents the highest and 7 represents the lowest. In the category 1.0 came the expected OECD countries, with the exception of Japan and Italy, which are given a lower ranking of 1.5. Ironically Ghana got a seat in that category.

Table 14.1: FH Broad Freedom Ranking of Countries

Free	1.0, 1.5, 2.0 and 2.5 OECD, India, Indonesia, Brazil and South Africa.
Partly Free	3.0, 3.50, 4.0, 4.50, 5.0 Pakistan, Bangladesh, Turkey, Philippine, Sri Lanka, Nepal and Malaysia.
Not Free	5.50, 6.0, 6.50 and 7.0 Afghanistan, Algeria, Egypt, Iran, Iraq, China, Libya, Russia and Saudi Arabia.

Freedom House ranking # 2009

Free Countries

- 1.0 Australia, Austria, France, Germany, UK, USA, most OECD countries.
- 2.5 Japan, Italy, Greece, Israel, South Korea, Taiwan, Ghana.
- 2.0 Argentina, Brazil, Romania, South Africa and Namibia.
- 2.5 India, Indonesia, Mexico, Peru, Ukraine.

Partly Free Countries

- 3.0 Bolivia, Turkey, Cambodia, Paraguay, Mozambique.
- 3.5 Columbia, Kenya, Nicaragua, Philippines, Tanzania,
- 4.0 Bangladesh, Kuwait, Malawi, Malaysia, Nepal, Sri Lanka.
- 4.5 Uganda, Thailand, Singapore, Pakistan, Nigeria, Lebanon, Morocco
- 5.0 Ethiopia, Jordan, Yemen, Bahrain, Gabon,

Not Free

- 5.5 Afghanistan, Algeria, Egypt, Oman, Qatar, Russia, UAE
- 6.0 Iran, Iraq, Swaziland, Tunisia, Vietnam
- 6.5 China, Cuba, Saudi Arabia, Syria,
- 7.0 Burma, Libya, North Korea, Somalia, Sudan.

The Lowest rating of 7 with virtually no freedom does not surprise many in case of countries like Burma, Libya, North Korea, Somalia and Sudan. There is a long list of countries who have same freedom as compared to the afore-mentioned unfortunate countries, but are essentially “Not Free” These are; Egypt, Iran, Iraq, China, Russia and Saudi Arabia. Egypt, Oman and Russia with a trickle more liberalization and freedom, could

have earned a seat in “Partly Free” countries A ranking of 5.5 is included in “Not Free” and of 5.0 as “Partly free”. After all lines have to be drawn some where.

However, I feel that Pakistan deserved a better rating than 4.5 in the company of Nigeria, Morocco and Uganda. Perhaps it is too early since 2008 elections. With time, and the democratic setup in saddle and further constitutional reforms and democratization, this rating would improve. However there are some social difficulties of lingering bigotry and fundamentalism, racial and linguistic conflicts, extremism and violent groups trying to dictate and enforce their system. Let us look, how Freedom House analysts view us. There are excerpts from their Pakistan cremation report.

Pakistan Freedom Trends

Since 1972, Pakistan has never been classified among free countries; for only 13 years it got a place among partially free countries, and for 12 (dictatorship) years, a not free (NF) status. Pakistan’s rating throughout 25 years of analysis period, has remained static at a poor rating of 5 (1-7 scale; 1 best, 7 worst) irrespective of democracy or dictatorship. Ratings on political rights have been comparatively better, and Pakistan got ratings of 3& 4 in democracy periods and 6-7 in dictatorships. A total of 89 countries today are free, and we are even in democracy (2009) not classified as Free. We are only Partly Free.

World Freedom Trends

World has become a better place in terms of status of Freedom, since 1972, when 44 countries (29 % of 151 countries) were classified as Free, 25% Partially Free and 46% Not Free. In year 2000, 45% countries (86 out of 192) were classed as Free, 30% as Partially Free and 25% as Not Free.

In 2009, the situation remained almost static; 46% countries are Free, 32% partially free and 22% Not Free. Full Free countries are 89 as opposed to 44 in 1972. Partially Free are 62 as opposed to 32 in 1972. Not Free are 22 as opposed to 46 in 1972.

Freedom of Information (FOI)

Freedom of Information (FOI) Act 2002 was issued as an ordinance. Its status is not known, as the Supreme Court overturned the ordinance of

Table 14.2: World trend of freedom

Year	No. of Countries	Free countries		Partially Free		Not Free	
		No.	%	No.	%	No.	%
1972	151	44	29	38	25	69	46
2000	192	86	45	58	30	48	25
2009	193	89	46	62	32	42	22

Source: Freedom House

the Musharraf regime, and asked the new government to retain or redraw certain ordinances, subject to ratification by the legislature.

FOI 2002 is modeled on similar acts in other countries. Its contents have not been rated as one of the ideal ones, if compared to advanced countries e.g., USA, Norway etc. The law provides for the public right to access to information from government bodies and corporations. Under the law, upon payment of a fee (Rs. 5 per page photocopy) and filling a prescribed form, submitted to the information officer of the government organization, one can acquire access to facts and data pertaining to facts, data, policies, contracts, allotments etc. Such data must be made available by the government organization in a specified time (21 days). If data is not provided, a representation is to be made to the head of that organization for providing the same; otherwise the applicant can approach the federal ombudsman, for adjudication.

There are a number of issues with FOI and its implementation:

1. The Act has not been legislated at provincial level.
2. Most people are not aware of such law, although NGOs and donor agencies have made effort in this direction.
3. Not many applications have been filed under FOI.
4. Appointments /designation of Freedom of Information Officers (grade 19 under the law) have not been made by departments and bodies.
5. Libertarians would criticize certain exclusions that have been made regarding the application of the law, for countries like Pakistan especially facing insurgencies and terrorism, such exceptions may be justified.

Freedom, Liberty and Transparency

Table 14.3: Freedom in the World 2008: Country Sub-scores

Country	Political Rights	Civil Liberties	Status	Political Rights			Civil Liberties			
				Electoral Process	Political Pluralism and Participation	Functioning of Government	Freedom of Expression and Belief	Associational and Organizational Rights	Rule of Law	Personal Autonomy and Individual Rights
Pakistan	6	5	NF	2	4	2	5	4	3	6
India	2	3	F	11	14	9	13	10	9	10
Bangladesh	5	4	PF	3	5	4	7	6	6	9
Egypt	6	5	NF	1	4	2	5	2	4	7
Malaysia	4	4	PF	6	7	6	8	5	6	8
Indonesia	2	3	F	11	13	6	12	9	7	9
Turkey	3	3	PF	10	12	7	12	7	8	10
USA	1	1	F	11	16	11	16	11	14	15

Notes: Status: F-Free; PF-Partly Free; NF-Not Free

Source: Freedom House

Freedom House Methodology

Introduction

The Freedom in the World survey provides an annual evaluation of the state of global freedom as experienced by individuals. The survey measures freedom--the opportunity to act spontaneously in a variety of fields outside the control of the government and other centers of potential domination--according to two broad categories: political rights and civil liberties. Political rights enable people to participate freely in the political process, including the right to vote freely for distinct alternatives in legitimate elections, compete for public office, join political parties and organizations, and elect representatives who have a decisive impact on public policies and are accountable to the electorate. Civil liberties allow for the freedoms of expression and belief, associational and organizational rights, rule of law, and personal autonomy without interference from the state.

Freedom House does not maintain a culture-bound view of freedom. The methodology of the survey is grounded in basic standards of political rights and civil liberties, derived in large measure from relevant portions of the Universal Declaration of Human Rights. These standards apply to all countries and territories, irrespective of geographical location, ethnic or religious composition, or level of economic development. The survey operates from the assumption that freedom for all peoples is best achieved in liberal democratic societies.

The survey does not rate governments or government performance per se, but rather the real-world rights and social freedoms enjoyed by individuals. Freedoms can be affected by state actions, as well as by non-state actors, including insurgents and other armed groups. Thus, the survey ratings generally reflect the interplay of a variety of actors, both governmental and nongovernmental.

The survey includes both analytical reports and numerical ratings for 192 countries and 14 select territories. Each country and territory report includes an overview section, which provides historical background and a brief description of the year's major developments, as well as a section summarizing the current state of political rights and civil liberties. In addition, each country and territory is assigned a numerical rating, on a scale of 1 to 7, for political rights and an analogous rating for civil liberties; a rating of 1 indicates the highest degree of freedom and 7 the least amount of freedom. These ratings, calculated based on the methodological process described below, determine whether a country is classified as Free, Partly Free, or Not Free by the survey.

Electoral Issues and Reforms

The survey findings are reached after a multilayered process of analysis and evaluation by a team of regional experts and scholars (see below). Although there is an element of subjectivity inherent in the survey findings, the ratings process emphasizes intellectual rigor and balanced and unbiased judgments.

Ratings Process

(NOTE: See the full checklists and keys to political rights and civil liberties ratings and status at the end of the methodology essay.)

Raw Points -- The ratings process is based on a checklist of 10 political rights questions and 15 civil liberties questions. The political rights questions are grouped into the three subcategories: Electoral Process (3 questions), Political Pluralism and Participation (4), and Functioning of Government (3). The civil liberties questions are grouped into four subcategories: Freedom of Expression and Belief (4 questions), Associational and Organizational Rights (3), Rule of Law (4), and Personal Autonomy and Individual Rights (4). Raw points are awarded to each of these questions on a scale of 0 to 4, where 0 points represents the smallest degree and 4 points the greatest degree of rights or liberties present. The only exception to the addition of 0 to 4 points per checklist item is Additional Discretionary Question B in the Political Rights Checklist, for which 1 to 4 points are subtracted depending on the severity of the situation. The highest number of points that can be awarded to the political rights checklist is 40 (or a total of up to 4 points for each of the 10 questions). The highest number of points that can be awarded to the civil liberties checklist is 60 (or a total of up to 4 points for each of the 15 questions).

In answering both the political rights and civil liberties questions, Freedom House does not equate constitutional or other legal guarantees of rights with the on-the-ground fulfillment of these rights. While both laws and actual practices are factored into the ratings decisions, greater emphasis is placed on the latter.

In addition, for states and territories with small populations, the absence of pluralism in the political system or civil society is not necessarily viewed as a negative situation unless the government or other centers of domination are deliberately blocking its establishment or operation. For example, a small country without diverse political parties or media outlets or significant trade unions are not penalized if these limitations are determined to be a function of size and not overt restrictions.

Political Rights and Civil Liberties Ratings -- The total number of points awarded to the political rights and civil liberties checklists determines the political rights and civil liberties ratings. Each point total corresponds to a rating of 1 through 7, with 1 representing the highest and 7 the lowest level of freedom (see Tables 1 and 2).

Pakistan's development challenges

Status of Free, Partly Free, Not Free -- Each pair of political rights and civil liberties ratings is averaged to determine an overall status of "Free," "Partly Free," or "Not Free." Those whose ratings average 1.0 to 2.5 are considered free, 3.0 to 5.0 partly free, and 5.5 to 7.0 Not Free (see Table 3).

The designations of Free, Partly Free, and Not Free each cover a broad third of the available raw points. Therefore, countries and territories within any one category, especially those at either end of the category, can have quite different human rights situations. In order to see the distinctions within each category, a country or territory's political rights and civil liberties ratings should be examined. For example, countries at the lowest end of the Free category (2 in political rights and 3 in civil liberties, or 3 in political rights and 2 in civil liberties) differ from those at the upper end of the Free group (1 for both political rights and civil liberties). Also, a designation of Free does not mean that a country enjoys perfect freedom or lacks serious problems, only that it enjoys comparably more freedom than Partly Free or Not Free (or some other Free) countries.

Indications of Ratings and/or Status Changes -- Each country or territory's political rights rating, civil liberties rating, and status is included in the statistics section that precedes each country or territory report. A change in a political rights or civil liberties rating since the previous survey edition is indicated with an asterisk next to the rating that has changed. A brief ratings change explanation is included in the statistics section.

Table 14.4: Key to Raw Points, Political Rights and Civil Liberties Ratings, And Status

Political Rights (PR) Total Raw Points	PR Rating	Civil Liberties (CL) Total Raw Points	CL Rating
36-40	1	53-60	1
30-35	2	44-52	2
24-29	3	34-43	3
18-23	4	26-34	4
12-17	5	17-25	5
6-11	6	8-16	6
0-5	7	0-7	7
Combined Average of the PR and CL Ratings		Country Status	
1.0 - 2.5		Free	
3.0 - 5.0		Partly Free	
5.5 - 7.0		Not Free	

Courtesy Freedom House

14.2 Transparency & Corruption

Corruption Ranking – Where are we?

Fortunately, Pakistan this time did not fall in the bottom 10 countries in the transparency international list. The top ten corrupt countries are topped by Chad and include Bangladesh, Nigeria, and Burma etc. Pakistan being 11th slipped into the next echelon of the thoroughly corrupt countries, and at the top of that echelon as can be readily seen in the adjoining table. There is good company in it with Russia, Venezuela Iraq, Indonesia and Ethiopia.

Then the list of very corrupt countries include Yemen, Vietnam, Philippine, Libya and the West Bank. Most countries having revolutionary credentials are there too. There some what less corrupt, but corrupt anyway, including the puritan Saudis, liberal Turkey, Democratic India, socialist Syria, and high human development ranker Sri Lanka. The top twenty honest and transparent, as would have been expected, are most of EEC / OECD countries of North America & Europe. One would be pleasantly surprised to find Singapore in this top rank. Japan is still in this august list despite news of corruptions of its prime-ministers.

Table 14.5: Corruption Index and Ranking Transparency International

Very Honest	
Top Twenty Countries Rank (1-21)	Iceland, Finland, Singapore, Sweden, Switzerland, Australia, UK, US, Netherlands, Germany, France, Belgium and Japan.
Honest	
Next Twenty Rank (22-40)	Chile, Spain, Oman, Israel, UAE, Qatar, Jordan, Malaysia, South Korea, Italy.
Border Line Cases	
Next Twenty Rank (43-63)	Tunisia, Kuwait, South Africa, Greece, Bulgaria, Columbia, Thailand, Cuba and Brazil.
Corrupt	
Next Twenty Rank (64-88)	Peru, Mexico, Turkey, Egypt, Saudi Arabia, Poland. Syria, Sri Lanka, China, Morocco and India.

Very Corrupt	
Next Twenty Rank (97-118)	Yemen, Vietnam, Zambia, Nepal, Ukraine, Libya and Philippine.
Thoroughly Corrupt	
Next Twenty Rank (127-145)	Russia, Congo, Venezuela, Iraq Indonesia, Ethiopia, Kenya, Sudan, Somalia and Pakistan
Top Ten Rank (152-159)	Bangladesh, Burma, Nigeria, Turkmenistan, Chad and Angola

Source: Transparency International

Puritan and ideological claims can be skin deep only (Saudi Arabia, Pakistan) and presently can make it worse (Pakistan). Ironically Spain and Italy are in the next rank and did not qualify for the top ranking. And surprisingly they are in the company of UAE, Qatar, Jordan and Malaysia. The border line cases, as one would have expected, include South Africa, Brazil, Greece, Thailand and Cuba.

The ranking is of Transparency International and the following broad classification is mine, based on TI data:

Very Honest	TI Rank (1-21)
Honest	TI Rank (22-40)
Borderline Cases	TI Rank (43-63)
Corrupt	TI Rank (64-84)
Very Corrupt	TI Rank (97-118)
Thoroughly Corrupt	TI Rank (127-145)
Top Ten Most Corrupt	TI Rank (152-159)

Major Conclusions

- Development goes with honesty and transparency, possibly democracy and freedom.
- Democracy does not eliminate corruption, necessarily (India).
- Fast growing countries can be corrupt (China); large population and communist baggage.
- Liberation and independence does not improve honesty credentials (Bangladesh).
- Oil has some thing in common with corruption (Russia, Iraq, Venezuela, Indonesia and Saudi Arabia).

- Being in Europe does not guarantee enlistment in the top honest list (Spain, Italy) and not being in Europe may not be such a disadvantage (Singapore).

Wall Street Journal (WSJ) index of Economic Freedom

WSJ index measures economic freedom on a scale of 0-100; zero denoting no freedom and 100 denoting the most economically free nation. No country could earn a rating of 100, which perhaps indicates the ideal conditions. The latest ranking puts Hong Kong at the top, with rank # 1 and score 90, to be immediately followed by Singapore. Tiny Island states can perhaps drop all trend barriers and thrive on it. The real surprise, however, is that Australia (826) has earned the top score among the industrially developed economies, leaving behind the hope and champion of economic freedom, the USA (80.5). Bahrain, Mauritius Barbados, Cyprus and Luxemburg being high on the list repeats the tiny Island syndrome. Germany, Japan, Norway, Sweden, UK, Austria

Comparative ratings & rankings

Table 14.3 offers very interesting comparisons. In developing countries, India legitimately gets higher ratings in terms of political and press freedom, democracy etc. But it is still high on corruption (3.3) and low in HDI rank (134). One would have hoped that more freedom and democracy would have brought its dividends. Perhaps, typical low growth rates of the economy in the past contributed to this and possibly the recent higher growth rates may endure into the future on the foundations of democracy. In Pakistan, also higher growth rates are found during military rule, and corruption remains high, irrespective of civilian or military rule. South Asian experience tells us rather ironically, that corruption is the most enduring element, Stable democracy or unstable one, do not make a dent. However, slightly better rating of India in corruption indices; partially vindicate the value of democracy and freedom.

It is rather annoying and saddening to find low ratings on freedom and democracy for Pakistan. The world did not take Pakistan's elections of 2002 seriously and PML-Q government did not get any benefit due to the umbrella of general Musharraf. With the advent of PPP government in the wake of 2008 elections and the exit of general Musharraf better ratings are expected from 2010 and onwards for another few years.

Among the Muslim countries, Malaysia gets highest rankings in terms of political and press freedom and democracy, while her economic achievements and performance is highly known; highest HDI ranking of 66 (excluding the oil rich) and an ambivalent rating of 5 (midway) on corruption index. That's as high as a Muslim country can go?

Turkey also gets a bad rating on corruption, although its rating on economic development and HDI are good (HDI rank of 79). With the installation of Islamists in Turkey and their continuing democratic struggle, Turkey's democratic credentials are now comparable with India. This is a rather amazing progress of Turks towards democracy despite a traditional and preponderant role of large and powerful army. Proximity to Europe and access conditions for entry into EU seem to be working in the right direction. However, in the same vein, Pakistan's geographical proximity to India does help towards freedom and democracy. In fact converse is true. Conflict with India promotes militarization, polarization and fragmentation in Pakistan.

Iran, China and Saudi Arabia get identical ratings in terms of democracy and freedom. Ideological puritanism despite diverse thoughts and values, have a common thread in these countries. Chinese contradictions are well known, as are the reasons for higher HDI ratings of oil-rich Iran and Saudi Arabia. HDI ratings and MDGs can be good yardsticks for measuring government performance. Pakistan's civil society should consider bringing these indices in focus in political and media debates. Why does freedom and democracy flourish in cold weather, and die down with temperate temperature would be an interesting question. Russians and East Europeans have broken the Berlin wall to usher democracy.

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15 Local Government: a victim of new democrats!

The new claimants to power, the Pakistan Peoples Party, the Muslim League (Nawaz), and the Awami National Party have shown hostility to local government dispensation as architected by the Musharraf regime. Traditionally the military dictatorships have patronized the local government to legitimize their rule and tried to replace the provincial and national leaders by the local smaller leaders and new entrants. This hostility of politicians to the local government system is understandable and natural but is misplaced for obvious reasons recounted in the latter passages. The main objections of the new provincial governments and the major parties are as follows:

1. Local governments are corrupt.
2. Provincial governments' writ in the districts has been limited by the new LG system.
3. Due to lack of executive magistracy (which they are proposing), it has become very difficult to exercise administrative powers in law and order, curtailing smuggling etc.
4. Police has become more or less independent or autonomous due to confused control by Nazims and Public Safety Commissions.
5. Overall provincial powers have been reduced.
6. Performance and efficiency in the new LG system has been limited to specific sectors such as roads, and other devolved functions in education and health have suffered. Also all districts have not been able to perform well.

The new LG system seems to enjoy passive support from a wider circle of stake holders. The earlier criticism starting from total catapulting of the system has been replaced by a more balanced desire for meaningful modification of the system.

The ultra-new system has been negotiated over the past many months among the supporters and the opponents. Reportedly the proposed changes are to include the following:

1. Curtailing the power and visibility of Nazims wherever possible.
2. Only including the classical functions of municipal domain like roads, water, sewerage, solid waste, excluding health and education.
3. Somehow reviving the executive magistracy and bringing in a provincial official in the districts, equal in power or more powerful than the elected Nazim.
4. Slow down financial transfer to Local government, making it financially dependant on a daily basis .Thus paying way to partial throttling, a real destructive feature, but may be popular among the new parliamentarians.
5. Bring in police function under total and direct control of the provincial home department.

One may tend to agree with the opponents that in the area of education and health no significant achievements have been noted. Perhaps it is part of the general apathy to these two vital sectors despite proclamations to the contrary. Provincial governments may restore the formal system. But would that improve performance and service delivery. In both these sectors of education and health, policies as well as implementation are equally important. A creative combination of shared powers and functions may be developed to recognize the realities of policy versus implementation. On corruption, no argument can be won or lost on this basis. All are equally corrupt, more or less, although there could be many exceptions. Various groups vie for powers to benefit from corruption.

Executive magistracy is an anachronistic colonial instrument regrettably supported by democratic forces. It is against the constitution and would not be permitted by the judicial challenges. Revival of the DMG (District Management Group) as DCs, and making the elected Nazims subservient to the former, is sweet music for the DMG. With the passage of time perhaps, the democratic forces, ruling and not ruling, would realize that it is not in the interest of democracy and political power to make such changes. It has always been debatable that the police power should be entrusted to a partisan political leader, although police commissioners are elected officials in the US system. However, the local conditions are different. It is hard to find a comparable, independence, maturity and integrity in one person.

Police could be reverted to the earlier system, but with oversight of stakeholders at the local (police station), district and provincial level, be

it Public Safety Commissions or Panchayats or Committees, to thwart misuse of power by individuals or government itself.

Citizen Community Boards (CCB) have not proved to be either effective or without stigma. Citizens are not really “citizens” usually; they are special vested interest groups which manage to be inducted in the system and monopolize and exploit power and finances. Involving “people” directly in finance or execution of projects having money in it, never works. People can be good for oversight and their role should be restricted to that. These may either be done away with, or modified to be oversight bodies without financial handling.

Finally and most importantly, popularly elected Local Governments are a part and parcel of the democratic system. It broadens, deepens and strengthens democracy, freedom and self rule. All democratic institutions including independent media and judiciary may at times appear to be uncomfortable to deal with, but are part of the democratic whole. Politicians and political parties should take a long term view, devoid of current and temporary loss or benefit, own the local government system and build their stakes in it.

A fundamental issue that has emerged is the primacy of power between an elected Nazim and the appointed official called DC/DCO, i.e., who reports to whom or who fires whom. In previous local body rules, the mayor used to be fired by provincial chief executive under the recommendations of the deputy commissioner (DC). Why is there so much interest in bringing the bureaucracy back by the politicians who complain to have suffered at the hands of bureaucracy and the establishment? From the point of view of the provincial governments, Nazim is a discontinuity and impediment in their power continuum leading to the districts and tehsils. A bureaucrat like a DC or DCO can be completely subservient to the dictates and directives from the CM's or ministers' offices, even on sundry and routine matters. The true power that is much enjoyed by our governing elites is to be able to muddle at the UC or Tehsil level for awarding favors to the supporters and retributions to the opponents and getting involved in the hiring, firing and transfers of teachers, low level officials, doctors and nurses employed by the government. A Nazim is at best an inconvenience at his best and a hurdle at worst. Nazim can be from another party or may be too independent in his working style, even if he belongs to the same party. Nazim is elected by people and does not depend on the powerful, as usually DCs and DCOs do, for their promotions and assignments. A

lot of structure has come to exist at the local government system which would resist and oppose domination and interference from outside.

In the NWFP and Sindh, the local bodies or government issue is a political one, while in Punjab, it has probably more to do with the personal style of governance of the present Chief Minister Punjab than any political preference of PML(N), which may in fact suffer politically due to an unwarranted opposition to an elected institution. In fact in the province of Sindh, with a coalition government in the saddle, there are significant chances of emergence of a compromise formula, and a fair and a balanced deal, taking care of the points of view of both the coalition partners. However in the other two provinces, the local government system appears to be at the mercy of the provincial governments who have been given the powers to architect their own versions of the system, they seem to be hell bent to pervert and dilute the system, as there is no viable force in support of the system. At the end of the day, there may be two or more versions of the system, which may not be as bad as it may sound. There would be competition. Eventually one would win and the other will lose and go down with its supporters.

The notion that provincial governments have no role or power in the functioning of the system is not correct. They have a lot of financial and administrative power. Most of the local government employees and officials like Executive District Officers (EDOs) are the employees of the provincial government, although ideally there should have been a local government service cadre, which would also have been under provincial control for the economy of scale reasons. Provincial governments can enhance their role by taking interest in the monitoring and evaluation of projects and the line departments, even though they may not be formally involved in the execution of the projects. Monitoring and Evaluation (M&E) is an important function which can make a very useful and vital contribution to the operations of the departments and their programme and projects. Although there are all kinds of forms, the practice of M&E is not very established in the provincial and federal governments. Only the foreign funded projects receive a modicum of M&E.

It is widely known and accepted that the local governments with some possible exceptions have not been able to do any headway in the social sector, or the local governments have not been as vocal in recounting their contribution in this respect, as they have been in other areas. Education is a classical loser in this country, no matter who rules at what level. Either we are not sufficiently interested in it, or are at a loss as to

how to improve performance and achievement in this sector. Comparatively, perhaps, health sector gets a slightly better deal, because the patients' sufferings and pressures manage to eke performance out of the respective departments. Instead of trying to take over the classical functions of the local bodies system, it is in the social and even economic sector that provincial governments can deliver comparatively better than the former. Some creative apportionment of functions could also be developed in these sectors, like supervision of school committees etc.

DC-the Development Commissioner and not the Deputy Commissioner

Instead of attempting to revive the rather anachronistic executive magistracy and the deputy commissioners, it is suggested that the provincial governments appoint development commissioners in the districts, which ironically have the same rhyme and acronyms as the erstwhile DC. The function of this new DC is proposed to serve as eyes and ears of the provincial government, coordinating, horizontally and vertically among various tiers of the government, local, provincial and federal, mostly in connection with the development projects, but occasionally entrusted for some duties of operational nature. This DC would not be a part of the local government but would be a provincial official. Development projects of small and backward districts have traditionally suffered due to the lack of a supporting institution as has been proposed. It would be a great way of boosting development activity, simultaneously keeping the provincial governments informed of the performance of the local governments, albeit in the development sector. Are we ready for some creative and innovative additions?

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16 Electoral Issues and Reforms

Section one: Voter turn-out in Pakistan

Electoral reform

Voter turn-out in elections is normally taken as an indicator of voters' interest and political mobilization. It measures the level of hope and expectations voters and people of a society attach to the electoral process. It also is a measure of credibility people attach to the integrity of the election process. Several international organizations have collected international data from national election authorities. Currently 119 countries in the world claim to be electoral democracies, where elections are regularly or intermittently held.

Table 16.1 provides history of voter turn-out over the last two to three decades for the parliamentary elections in Pakistan.

Table 16.1: Pakistan voter turn-out

Year	Voter Turn-out (%)
2008	44.55
2002	41.8
1997	35.17
1993	40.28
1990	45.46
1988	43.07
1985	52.93
1977	55.02

There was a 20% drop in the voter turn-out percentage in the period 1977 and 2008, although the percentage has improved from the lowest of 35.17% in 1997 to 44.55% in 2008, an increase of 25%. In the 2008 elections, there were 79.93 million registered voters against a population of 164.74 million; 35.6 million votes were caste, giving a voter turn-out percentage of 44.5%. In Pakistan the turn-out percentage has been

constantly low, infact one of the lowest as compared to the world average of 68.9%.

International voting turnout pattern is rather mixed, and no generalization can be made regarding the reasons for low or high turn-out; estrangement or hope, interest or lack of it; faith in democracy; performance and output of the system; level of democratic values , all of this could be contributors. In the lowest turn-out category, Pakistan is in good company of Switzerland, an established democracy. In the highest turnout category of 90-100%, one finds Australia, in company with Niger, Ethiopia and Indonesia. France, Japan, Canada, US and Spain fall in the average turnout category of (60-70%), sharing the place with Malaysia and Thailand. India and UK fall in the below average category. The only commonality appears to be the colonial equation. Denmark, Italy and Sweden are high turn-out countries in the range of 80-90%, and so are Nigeria, China and South Africa.

Table 16.2: Voter Turn-out in the latest elections of selected countries.

Poor Up to 50%	Pakistan (41.8) Switzerland(43.2) Jordan (47.4), Poland (46.2)
Below Average 50-60%	India (59.7), UK (59.9) Mexico (57.2) South Korea (57.2) and Venezuela (56.6),
Average 60-70%	France (60.3), Japan (60.6), Canada (61.2), US (63.8), Kenya (65.5), Spain (68.7), Malaysia (68.7) and Thailand (69.6)
Above Average 70-80%	Sudan (72.2), Norway (75), Greece (75), Bangladesh (75), Argentina (75.2), Sri Lanka (75.6), Turkey (76.9) and Germany (79.1)
High 80-90%	South Africa (89), Denmark (87.1), Chile (86.6), Nigeria (84.8), Italy (81.4), Philippine (81.1) and Sweden (80.1)
Very High 90-100%	Niger (99.4), Australia (94.9), Indonesia (93.4), Ethiopia (90), Tunisia (91.5) and Uzbekistan (93.7)
Average 68.9%	

Source: IDEA.

Apparently and ironically high turnout of 90-100% (with some exception of Australia), could be a result of fascism, dictatorial orders or were falsification of results, as the list tends to indicate. Most developed democracies, however, fall in the category of 60-80% voter turn-out. In Pakistan low turn-out can be traced to transport difficulties in the rural and far-flung areas; women, infirm and the old find it difficult to reach the polling station and nor do the rich and powerful who find the voting process too uncomfortable and away from cozy and cool drawing rooms.

Section two: Constituency Delimitation

Population clusters are defined for the election constituencies of national and provincial assemblies. Last such delimitation was done in the year 2001, immediately before the elections of 2002. This delimitation was done based on 1998 population census. There is otherwise an elaborate procedure of constituency delimitation, which is subject to question and review by the public. And such delimitations are finalized after the due process.

However, there is a fundamental flaw in the basic procedure. Let me first elaborate the procedure itself. Firstly, provinces are allocated the number of NA constituencies, in proportion to their share in the population, which is correct and fair. As a second step, districts are allocated the seats, which is neither correct nor fair. Why?

Assuming that a district has a population of 749,000, while a population of 300,000 gets an assembly seat, this district would get 2 seats if the population is 749,000 and 3 seats if the population is 751,000. With a population difference of just 2000, a district can get an additional seat, depending on the coincidence and circumstances, which are not rare. This violates the fundamental principles of human rights of one man-one vote. In this system one-man does have one-vote, but has unequal effect on electoral outcomes.

How to correct the flaw? The notion of taking district as a fundamental and sacrosanct unit has to be abandoned. Define independent clusters, with only some regard to Tehsil and districts. All NA & PA constituencies should have equal population. Only a village should not be divisible for logistics reasons which mean a margin of ± 1000 person's. Currently the NA & PA constituencies have a large variation in sizes. District is too large a cluster to be considered indivisible. This is

unprecedented anywhere in the established democracies. Electoral districts are independent of administrative districts.

I had made these submissions to the former secretary Election Commission and the Provincial Election Commission (Sindh) at the time of last constituency delimitation in 2001. He appeared to be in agreement. At that time, I made this submission in a commercial context and offered my technical services for the same. After a lapse of ten years, I am making these submissions as a citizen.

Word goes by, that the delimitations' basic work was done by the security / intelligence agencies, which usually have all the data, even on voting patterns of Mohallas. When I was in touch with the election commission, I saw no signs of work of this nature within the commission itself. There was a capacity building project of UNDP, which was at its initial stages. There appears to be some merit in the word that goes by. A recent international study has included this aspect as one of its major recommendations, under equality claims. I quote; "Constituency populations are not permitted to vary more than a set of percentage from the population quota." We reproduce here their main table, which provides other useful recommendations.

PPP on its website, related to proposed electoral reforms, makes a similar demand under item 17 on constituency delimitations. "Constituencies should be compact and of uniform voter strength." However, in the same passage, they argue for maintaining and not breaking (or modifying) the established constituencies, which contradicts the requirement of uniformity of voter strength in the constituency delimitation. In a country with a high population growth and high migration, the notion of established constituencies can at best be clung to only partly, if at all. There have been practical and wrongful implications of this policy of constituency delimitation. If I remember correctly and I think I do, the case of Swat-Dir area which got 2 NA seats instead of the three they would have got, had the district sacrosanct policy not been applied. It would be farfetched to trace the current political problems in these areas to such issues, but certainly democracy is throttled and compromised, in numerous similar ways, which results in socio-political conflicts.

Liz Hadley's (USAID) study shows that 53% countries used population as basis, and 34% used voter strength as the corresponding basis. Voter lists are more dynamic than population census, and are subject to error and inadequacies and are never reported to be complete or error-free.

In the US, strict adherence to equal population principle is applied but a tolerance of $\pm 0.5\%$ has been tolerated in limited cases. In Australia, the allowed deviation margin is 3.5% and in Germany 15%. In Germany due to proportional representation system, the issue has much less relevance and intensity. In the UK and Canada the maximum allowed deviation is 25 percent. Venice commission on code of good electoral practices, recommends maximum deviation to be 10% with an occasional allowance of 15% in exceptional circumstances European Commission report on Pakistan elections 2008, has also recommended equalizing the constituency populations by modifying the constituency boundaries.

In a sample of seventeen districts and 150 National Assembly constituencies in Punjab, we analyzed the constituency delimitation of the seats of the National Assembly. Average population per constituency in the sample was 490,808, while average number of voters per constituency came out to be 296578. Hafizabad with average voter strength of 201328 got two NA seats, while Vehari with more than twice the voter strength got one NA seat for that many votes. This variation in constituency size is mind boggling, from 201328 to 441,879 voters per constituency. Similar variations should be there in other provinces and also in the provincial constituencies, for the formula is the same. There ought to be some limit to the arithmetic simplification and the sacrosanctity of the districts' indivisibility.

Constituency delimitation would have to be done anyway again in the wake of the new population census 2008 which is going to be done rather belatedly in the current year of 2010. New population data should be available by mid-2011, which would be the right time to undertake the exercise of delimitation. The next elections are to be held in 2013. This time it ought to be done more scientifically and fairly respecting the voting strengths of the constituencies and minimizing the variations in size as has been discussed. Modern tools of GIS technology should be employed, which afford an interactive design of constituencies with the possible involvement of the stake-holders. This would minimize later objections and would save time, effort and resources.

Table 16.3: Average population & registered voters per constituency in some Punjab Districts & the degree of non-uniformity therein

	District Population	District Voters	Avg. Population per constituency	Avg. Voters per constituency	no of constituency	no of persons disenfranchised
Toba Tek Singh	1621593	890742	540531	296914	3	49723
Hafiz Abad		402656		201328	2	
Mandi Bahauddin	1160552	648547	580276	324273	2	89468
Sialkot	2723481	1483856	544696	296771	5	53885
Narowal	1265097	640517	421699	213505	3	69112
Lahore	6318745	3671089	486057	282391	13	4754
Sheikhupura	3321029	866808	830257	216702	4	339445
Nankana Saheb	1210000	691203	476000	227068	3	14811
Okara	2232992	1501832	446598	300366	5	44213
Multan	3116851	2210463	519475	368910	6	28663
Lodhran	1171800	532511	585900	266256	2	95088
Sahiwal	1843194	954640	460799	238660	4	30012
Pakpattan	1286680	651190	643340	325930	2	152532
Vehari	2090416	1325636	522604	441879	4	31792
Rajanpur	1103618	577266	551809	288633	2	60997
Layyah	1120951	558726	560475	279633	2	69663
	73621290	44486626	490808	296578	150	

Source: Compiled by the author

Table 16.4: Province wise registered voters and population average per constituency

	No of registered voters	no of constituencies	Average No of Voters X_{avg}	X_{max}	X_{min}	X_{max} / X_{min}
Punjab	49969427	150	299796	482801	198007	2.43
Sindh	19504473	61	319778	428846	148797	2.88
NWFP	12671538	47	256841	484252	151437	3.19
Balochistan	-	-	-	-	-	-

Source: Compiled by the author

Section three: High time to reform population census

New population census is about to be undertaken shortly. The last census was undertaken in 1998. Census is held after every ten years, as per constitutional requirement. I would like to draw the attention of Federal Bureau of Statistics (FBS) and the associated census officials to one of the major shortcomings in the census output, which is published in 100 + volumes, one volume per district.

Purpose of the census publishing is to let all and sundry know the population and other characteristics of the smallest of population clusters in the country. The Census data is used by myriads of local, national and international agencies, development personnel and private sector businesses.

However, the data published is highly cryptic, at least, in so far as the urban clusters are concerned. Instead of referring the urban clusters by their names as Nazimabad, Saeedabad, Model Town etc it refers to the clusters as a number, which no body knows. To find out what the number refers to, one has to visit the local or regional Federal Bureau of Statistics (FBS) or census office, which is very time consuming and wasteful. Population Census Organization (PCO) could do one or more or all of the following to addressing the situation.

1. Replace the numbers by area names wherever feasible; organize and publish data for transparency. The data that is given out by local census office is usually in the form of disjointed list that should be streamlined.
2. Publish census maps, although PCO would face a lot of resistance from Pakistan's security establishment and its archaic security agencies, who shudder to publish any map at all. They can and should be persuaded, as almost every where in the world, census maps are published.
3. Census would become a tremendously efficient tool in development planning and business management for both private and public sector, if it is disseminated as maps, in the frame work of GIS standards.
4. Instead of printing 104 volumes, it should be released as a software data product and also as in web-based, interactive mode. And it should be free.

5. As per current practice, population data on Defence Housing Societies and Cantonment boards and other similar areas is withheld from publishing in the census documents, and these population clusters are treated as security establishments. It is obvious that these societies are populated by civilians and no military facility is installed in these places. Hence no useful purpose is served by withholding the census data of these areas from publishing and public access. Ironically higher consumer classes live in these areas contributing to a significant part of the country's economic life. Business planning activities are hampered due to lack of easy availability of such data. This situation also highlights the need for bringing about a fundamental change in our security establishment regarding what is to be secret and what is not to be secret. If everything is a secret, nothing is secret. And a blatant proof of the inappropriateness of this policy is the recent successful attacks by terrorists and militants in Rawalpindi/ Islamabad through their success in getting through all their security barriers and entering deep inside into the high security areas and taking hostages. Lack of success with adequately tracing and monitoring terrorists can also be traced to archaic and outmoded security thinking, conduct and infrastructure.
6. Population and the associated data should be transformed into other polygons and clusters of the country such as local government, electoral constituencies.
7. Consideration should be given to reorganize census clusters in terms of union Councils, which are more widely known and understood than the existing units of Circles, Patwar and others.

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17 Democracy and Political Parties

Democracy has been a cherished goal for the people of Pakistan, all along the history of sixty years. However, democracy has never been allowed to function with freedom and independence for reasonably sustainable period.

For more than half of Pakistan's history, there has been a military rule for long sustainable periods, only interspersed by short lived democratically elected governments which only served as a breathing space for the demoralized and debunked military rules and a launching pad for the new military dictator. No civilian government survived for more than a few years, except that of ZA Bhutto. And military dictators from Ayub to Musharraf got long periods of unhindered rule extending over full decades. None of them wanted to leave on his own. They had to be pushed out by massive public protests and campaigns or removed by God Almighty through tragic accident.

Military dictators have tried to cultivate an idea that somehow the people of Pakistan are not made for standard democracy, and that it has to be tailored to the "genius and temperament" of the people, who prefer strong men if not outright dictatorships. Ayub Khan's basic democracy, Zia's Shura and Musharraf's military-uniformed democracy were variants of the same grape-vine. Although military dictators normally had short term intentions, on assuming power they find that there is an abundant supply of partners e.g. judges, who can take oath under any provisional constitutional disorder, and politicians who unashamedly vow that they would get the military dictators elected in "uniform", time after time, term after term.

People get confused and start lending support to military regimes. Often, military regimes managed to install a semblance of democratic system, through "managed" elections and out right blackmail and sheer force. Pseudo-elections and "compliant" parliaments have functioned, giving a false impression of democratic dispensation. Often elections and parliaments have been misunderstood to be all that democracy is about.

Most authoritarian regimes in the world today organize some kind of direct and indirect elections and install a parliament. However there is a common theme, throughout the dictatorships of today and that is their opposition and dislike of the political parties. Without political parties there is no democracy, as there is no economy today without companies and firms.

In such an atmosphere of consistent opposition and lack of such an important institution, political parties remain under-developed and unstructured. They are "outsiders" and not part of the system. They are at best incorporated as accessories and auxiliaries. As a result, political parties come out more as revolutionary types, of the vantage of independence struggle. Their skills get more honed towards removing an order or system, than building a system.

The party membership especially the lower strata is dominated by street fighters, and not by those who are trained in economy, governance and problem solving. Politics becomes a capital intensive enterprise, where party members are able to live and survive for decades outside the country and manage campaigns of "unrest". Thus only those who have the money or can put it together lead political parties and have a strong incentive and compulsion to make money by unfair means when they come into power, often for brief periods.

In established democracies of today, Congressmen, Senators, and MPs are more of political-bureaucrats than rabble rousers, who engage themselves on daily basis, towards bringing in and blocking legislation, on important aspects of national life. This puts severe demand on politicians to be adequately trained and equipped as to deliver. He is to be adequately equipped as a bureaucrat or a military officer is, in areas and domains of public policy, and yet to be able to speak and mix with people and serve as a link between people and the state.

Political scoundrels or revolutionaries seldom have these characteristics or opportunity to acquire the relevant skills, knowledge and judgment. As a result they cling to often narrowly based, and thinly thought through policies and approaches like nationalization, yellow cabs, Rozgar schemes implemented in frenzy and excessiveness, causing more damage than benefit. On the other hand, a military general is almost trained for taking over the country, than engaging in warfare, through elite military training institutions. He has everything to his advantage; time, patience, resources and support of a powerful institution. As a result, when

military regimes have often delivered more than civilian leaderships, in terms of economic achievements, but often leave behind a plethora of problems of national consensus and integration. Ayub gave rise to Bengali nationalism and provincialism in Sindh and NWFP, Zia caused strong unrest in Sindh, fundamentalism and a drug/weapons mix business nuisance in NWFP and elsewhere and Musharraf left a dangerous political baggage in Baluchistan.

Military dictators have been often lucky in getting international recognition and political support due to the accidental or political developments in the region and the world. Ayub got the benefit of Korean War, Vietnam and Cold War. Zia got the benefit of Soviet invasion of Afghanistan and Musharraf got the benefit of 9/11. On the other hand, civilian leaders got a short shrift; Z. A. Bhutto due to his nationalization and nuclear weapons programme and ironically Nawaz Sharif for demonstration of nuclear capability. The nutshell of my argument is that political party and politicians are as essential and crucial part of the system as military, judiciary and executive are. Political parties should be developed, nurtured and supported to get organized, strong and capable to perform the role that is expected of them.

Today the bulk of the world population lives in some kind of democracy, in some 116 countries. Only one third (35%) live under dedicated, authoritarian regimes in 5 countries. However, only a small percentage (14.4%) of world population lives under full democracy in 30 countries, most of which are European and North American, OECD countries like Japan, Australia. One third of the world population (35%) lives under flawed democracy in 50 countries, with India, Malaysia and Indonesia as notable members of this group.

A small percentage (15.2%) lives under a hybrid system, having characteristics of both democracy and dictatorship in 36 countries with notable membership of Pakistan, Turkey and Iraq in the community. Pakistan's status may be upgraded in future with the consolidation of the democratic PPP government.

As we shall see, there is a long continuum starting with almost ideal democracies of Norway and Sweden to struggling and nascent democracies of Nepal, Pakistan and Iraq. Democracy, simply speaking is "of the people, for the people, and by the people" as expanded by Abraham Lincoln. And certainly as Churchill said "Cure of democracy is more democracy". There may be differences of opinion and approaches

in measuring democracy from a minimalist electoral to a minimalist libertarian, the so called thin and thick models and approaches. However, the common theme revolves around majority rule and the consent of the governed through free and fair elections, respect and protection of basic human rights, rule and equality before law, due process and pluralism, protection of minorities, multi-party competitive political process etc.

A number of attempts have been made by various academicians and institutions to "measure democracies", and build suitable models in this respect. The most important being Freedom House, which for the last several decades is coming out with the release of indices related to governance, freedom and democracy. We have discussed Freedom House Index in a separate chapter and would focus on Democracy Index, developed by Economists' Intelligence Unit (EIU, London) in 2007.

The Economist Intelligence Unit measure

The Economist Intelligence Unit's index is based on the view that measures of democracy that reflect the state of political freedoms and civil liberties are not "thick" enough. They do not encompass sufficiently or at all, some features that determine how substantive democracy is or its quality. Freedom is an essential component of democracy, but not sufficient. In existing measures, the elements of political participation and functioning of government are taken into account only in a marginal and formal way.

The Economist Intelligence Unit's democracy index is based on five categories: electoral process and pluralism; civil liberties; the functioning of government; political participation; and political culture. The five categories are inter-related and form a coherent conceptual whole. The condition of having free and fair competitive elections, and satisfying related aspects of political freedom, is clearly the sine quo-non of all definitions. Most measures also include aspects of the minimum quality of functioning of government. If democratically-based decisions cannot or are not implemented then the concept of democracy is not very meaningful or it becomes an empty shell.

The Index provides a snapshot of the current state of democracy worldwide for 165 independent states and two territories (this covers almost the entire population of the world and the vast majority of the world's independent states (27 micro states are excluded). The Economist Intelligence Unit's democracy index is based on five categories: electoral

process and pluralism, civil liberties, the functioning of government, political participation, and political culture. Countries are placed within one of four types of regimes: full democracies; flawed democracies, hybrid regimes and authoritarian regimes.

EIU Index embodies a wider concept than is the case with some other measures of democracy. Free and fair elections and civil liberties are necessary conditions for democracy, but they are unlikely to be sufficient for a full and consolidated democracy if unaccompanied by transparent and at least minimally efficient government, sufficient political participation and a supportive democratic political culture

What is democracy can be understood in detail by the following 60 questions that the EIU model asks; 12 questions each in the 5 categories of the following;

- Electoral process and pluralization.
- Civil liberties.
- Functioning of the government.
- Political participation.
- Political culture.

Table 17.1: Democracy Index 2008 by Regime Type

	Countries	% of countries	% of world population
Full democracies	30	18	14.4
Flawed democracies	50	29.9	35.5
Hybrid regimes	36	21.6	15.2
Authoritarian regimes	51	30.5	34.9

Source: Economist Intelligence Unit

The most important questions fall into the categories of free and fair elections , independence of political parties, presence of well functioning opposition, ability of elected parties to assume power and govern effectively without internal and external interference of other actors such as military etc,. Accountability, transparency in government, independence of judiciary, public confidence in political parties and government, self- confidence and sense of freedom of individuals and civil society, groups, equality before law, due process, participation of people through membership of political parties, local government, reasonable voter turn-out and election campaigns, interest of the people in the system, opinion on adequacy, suitable performances and desirability of democracy and democratic institutions, lack of support to

military and other forms of dictatorships, freedom of media, press and associations.

Pakistan's Ratings in Democracy Index

To the chagrin of many liberals like this author, Pakistan has been classed under "Hybrid Regime", meaning a combination of democratic and authoritarian characteristics. However, this rating has been done only immediately after the elections of 2008 and the exit of general Musharraf. The full impact of the installation of the PPP democratic government may be reflected in the 2009-2010 ratings. Blossoming of a democratic Pakistan may be facing problems due to insurgency and terrorism in the two provinces and consequently the more practical and unavoidable limits on civil liberties. Pakistan got a very low rating of 1.1 in political participation as opposed to 5.56 for India, Malaysia, Thailand and many other comparable countries. This appears to be a structural and long term issue. We have pointed out elsewhere that Pakistan's political parties are narrowly based having limited number of members. And within parties consultations and discussion are limited. Also voter turn-out has been coming down, which altogether resulted in a low score.

Pakistan's small score of 4.46 earning it a lower rank of 198, below comparable countries of Malaysia (6.36, 68), Indonesia (6.34, 69), Sri Lanka (6.61, 57), Turkey (5.69, 87) and India (7.80, 35). India, Malaysia, Indonesia, Sri Lanka are classified under flawed democracy, and Pakistan, Turkey among "Hybrid".

Singapore earned ranking of (5.89, 91) at the top of hybrids leaving behind Turkey (5.69, 87) and Pakistan (4.46, 108) and Russia (4.46, 107) due to a higher ratings in functioning of government, political culture and civil liberties. Turkish democracy got its rank higher than Pakistan on account of comparatively much higher rating in the area of electoral process and to some extent on functioning of government.

It may be noted that Indian score and rating has also been downgraded due to low score on political participation, indicating still elitist political processes in the two countries. But for this India could have been included in the category of full democracies. Even UK and Italy got low score on political participation. And perhaps due to Mafias operating in Italy and Russia, they were given low scores on functioning of government. Almost all full democracies have scored well on electoral process, political culture and civil liberties, while the lower rank

countries within this category got its lower ranks due to low scores on functioning of government and political participation. We can draw a common theme from the results that democracies have still to improve on governance and political participation.

Strengthening Political Parties

The military often takes over power swiftly and comfortably without any meaningful resistance either during or after the process of the takeover. Prime ministers are put behind bars and sent to gallows through manipulating the judicial process. Military rule is legitimized by referendums and judicial validations. The usurper is easily given powers to amend the constitution.

One of the many reasons for this is the weaker base of political parties in terms of membership cadre and organization. Except for Pakistan Peoples Party which has a large political base, most other parties have a weaker political base. Almost all political parties are dominated by individuals and families. The electoral process also throws up entrenched wealthy individuals, strengthening status quo and thwarting social and political change. In most parties there is a narrow core of formal members, around which is a large number of political supporters. Ironically political parties' leadership is reported to be even discouraging local cadre in launching membership campaigns, perhaps in vain attempt to maintain control of the party or entrenched groups or perhaps thwarting organized take over.

Pakistan Peoples Party (PPP) has a large popular support entrenched by a large number of workers. Successive victimization and eventual murder of Bhutto family has largely been responsible for legitimizing the party control by the Bhutto family. There are some small exceptions. Jamaat –I –Islami is an Islamic ideological party which manages to gather support from far and wide parts of the country. This party also has narrow strength of formal members due to it's doctrine of making the "Muttaqi" (pious) as there member only. The core of the 'Muttaqis' is surrounded by most of its informal members which it calls 'Muttafiq' (agreed). However the party is well organized and is quite capable of organizing resistance movements. Muttahida Qaumi Movement (MQM) is the third largest party in terms of membership in the national assembly. It has a large and active membership and leadership coming from lower party cadre. However due to its initial ethnic basis, located in Karachi and

Table 17.2: Democracy Index 2008 (Full Democracies: Scores 8-10) of selected countries

Full Democracies	Rank	Overall score	Category scores				
			Electoral process and pluralism	Functioning of government	Political participation	Political culture	Civil liberties
Sweden	1	9.88	10.00	10.00	10.00	9.38	10.00
Norway	2	9.68	10.00	9.64	10.00	8.75	10.00
Switzerland	8	9.15	9.58	9.29	7.78	9.38	9.71
Australia	10	9.09	10.00	8.93	7.78	8.75	10.00
Canada	11	9.07	9.17	9.64	7.78	8.75	10.00
Germany	13	8.82	9.58	8.57	7.78	8.75	9.41
Spain	15	8.45	9.58	7.86	6.67	8.75	9.41
Japan	17	8.25	8.75	8.21	6.11	8.75	9.41
United States	18	8.22	8.75	7.86	7.22	8.75	8.53
United Kingdom	21	8.15	9.58	8.57	5.00	8.75	8.82
France	24	8.07	9.58	7.50	6.67	7.50	9.12
South Korea	28	8.01	9.58	7.50	7.22	7.50	8.24
Italy	29	7.98	9.58	6.43	6.67	8.13	9.12

Source: Economist Intelligence Unit

Democracy and Political Parties

Table 17.3: Democracy Index 2008 (Flawed Democracies: Scores 6-8, Hybrid 4-6) of selected countries

Flawed Democracies	Rank	Overall score	Category scores				
			Electoral process and pluralism	Functioning of government	Political participation	Political culture	Civil liberties
South Africa	31	7.91	8.75	7.86	7.22	6.88	8.82
Chile	32	7.89	9.58	8.93	5.00	6.25	9.71
India	35	7.80	9.58	8.21	5.56	6.25	9.41
Israel	38	7.48	8.75	7.50	8.33	7.50	5.29
Brazil	41	7.38	9.58	7.86	4.44	5.63	9.41
Poland	45	7.30	9.58	6.07	6.11	5.63	9.12
Romania	50	7.06	9.58	6.07	6.11	5.00	8.53
Thailand	54	6.81	7.75	6.79	5.56	6.88	7.06
Mexico	55	6.78	7.92	7.14	5.00	5.00	8.82
Argentina	56	6.63	8.75	5.00	5.56	5.63	8.24
Sri Lanka	57	6.61	7.42	4.64	5.56	7.50	7.94
Malaysia	68	6.36	6.50	6.07	5.56	7.50	6.18
Indonesia	69	6.34	6.92	6.79	5.00	6.25	6.76
Hybrids							
Singapore	82	5.89	4.33	7.50	2.78	7.50	7.35
Turkey	87	5.69	7.92	6.07	4.44	5.00	5.00
Bangladesh	91	5.52	7.00	5.07	4.44	3.75	7.35
Kenya	103	4.79	3.50	4.29	5.56	5.63	5.00
Russia	107	4.48	5.25	2.86	5.56	3.75	5.00
Pakistan	108	4.46	6.08	5.71	1.11	4.38	5.00
Nepal	115	4.05	1.33	4.29	2.78	6.25	5.59
Iraq	116	4.00	4.75	0.07	6.67	4.38	4.12

Source: Economist Intelligence Unit

other Sindh's urban areas mostly, it's effectiveness at Pakistan level remains wanting.

Other parties like the Pakistan Muslim League (Nawaz), Pakistan Muslim League (Q), Tehrike Insaaf (Imran Khan's party) are tightly controlled by wealthy individuals like Mr. Nawaz Sharif, Chaudry Shujaat Hussain and Imran Khan. In all these parties a total of less than 100 individuals control. The wealth of these individuals is largely their source of strength. Although participation in the long political process spread over more than two decades is also the part of their political capital.

Ironically there is a typical trend to political induction of party leadership. An aspiring and ambitious politician is first discovered and co-opted by the military rulers. Military rule gets legitimacy and wider political base through such inductions and the individual power, pelf and wealth increases by various transfers and favors made for such cooptees. Typically and eventually, the fate of military dictator goes down after having ruled for an average period of a decade. Dichotomy and contradictions develop amongst the political and military leaders and the co-opted joins the opposition and the democratic forces, suffers for a period in the form of jail or exile and thus gets legitimized and become a bonafide political leader.

ZA Bhutto was executed among unexplainable silence of the masses and supporters and Nawaz Sharif was jailed and exiled with comfortable ease by the two respective military dictators. Both the PPP, PML-N, more so the latter, have suffered due to the lack of an organized large political cadre as is found in most democracies of the world. PML-N should not be afraid of new membership. They should shun their fear and skepticism of the people and masses. A shift towards middle class power may not be able to unseat the top leadership in the short run, which is what matters for political control. In the long run, it would reward them with strength, appeal and vitality.

Financial Assistance to Political Parties

While top leadership and its continuity may be indispensable for most parties, there is no justification of monopoly of landed aristocracy over the political party. Tickets for assembly memberships are awarded based on district power base which largely comes from land power. Overall party finances also come from this core group. If political parties

are provided public funding (government financial support), the influence of this typical core group would be gradually and partly replaced by new forces from the middle classes. An international NGO conducted a survey of practices in various countries, which 28 results are provided in Table 17.4.

Table 17.4: Matrix on Political Finance Laws and Regulations

Question	Yes	No
1: Regulations and Enforcement		
1: Is there a system	71	40
2: What body is responsible of regulation for the financing for administration and enforcement of political parties of the regulations?		
2: Disclosure of Income		
3: Is there provision for disclosure of contributions to political parties?	59	52
4: Do <i>donors</i> have to disclose contributions made?	15	96
5: Do <i>political parties</i> have to disclose contributions received?	58	53
3: Ceilings on Income		
6: Is there a ceiling on contributions to political parties?	32	79
7: Is there a ceiling on how much a donor can contribute?	30	81
8: Is there a ceiling on how much a party can raise?	9	102
4: Bans on Sources of Income I		
9: Is there a ban on any type of donation to political parties?	61	52
10: Is there a ban on foreign donations to political parties?	40	71
11: Is there a ban on corporate donations to political parties?	22	89
12: Is there a ban on donations from government contractors to political parties?	27	82
5: Bans on Sources of Income II		
13: Is there a ban on trade union donations to political parties?	17	94
14: Is there a ban on anonymous donations to political parties?	46	64
15: Is there a ban on in kind donations to political parties?	4	106
16: Is there a ban on any other type of donations to political parties?	29	82
6: Disclosure and Ceilings on Expenditure		

Pakistan's development challenges

17: Is there provision for public disclosure of expenditure by political parties?	53	58
18: Is there a ceiling on party election expenditure?	27	84
7: Direct Public Funding		
19: Do political parties receive direct public funding?	65	64
20: When do political parties receive direct public funding?		
21: What is the purpose of the direct public funding?		
22: What is the basis for the direct public funding?		
8: Indirect Public Funding I: Media Access		
23: Do political parties receive indirect public funding?	79	32
24: Are political parties entitled to free media access?	71	40
25: What are the criteria for allocating broadcast time?		
9: Indirect Public Funding II: Taxation Status		
26: Are political parties entitled to special taxation status?	30	80
27: Are donors to parties entitled to any tax relief?		
28: Are political parties entitled to any other form of indirect public funding?	27	84

Source: IDEA, Funding of Political Parties and Election Campaigns, International Institute for Democracy and Electoral

Q2: 45 countries (63%) Regulatory Body Specially Created for this Purpose: 9 countries (13%) Government Department: 20 countries (28%) Other: 19 countries (27%)

Q20: Election period only: 15 countries (23%) Between elections: 9 countries (14%) Election period and between elections: 38 countries (58%) Other: 1 country (1%) No information available: 2 countries (3%)

Q21: General party administration: 29 countries (45%) Election campaign activities: 45 countries (69%) Non-earmarked: 19 countries (29%) Other: 8 countries (12%) No information available: 1 country (2%)

Q22: Equal funding: 12 countries (18%) Performance at current election: 19 countries (29%) Performance at previous election: 25 countries (38%) Current representation in the legislature: 25 countries (38%) Number of candidates put forward in present election: 8 countries (12%)

Q25: Equal time: 49 countries (69%) Performance at previous election: 8 countries (17%) Current representation in the legislature: 15 countries (21%) Number of candidates put forward at present election: 13 countries (18%) Other: 11 countries (15%)

Q27: Tax credits: 6 countries (5%) Tax deductions: 14 countries (13%) No: 91 countries (82%) Information not available: 1 country (1%)

In most democratic countries of the world especially in South America and Europe funding to political parties is common. Normally funds are given on the basis of votes caste in the elections; about 10 Euros per vote on the average, as straight transfers to political parties' central funds. In Pakistan such support maybe differentiated and targeted to encourage reforms in the political parties. Following criteria and targets maybe kept in view:

1. Number of voters.
2. Number of workers.
3. Direct financial support to eligible candidates for assembly seats.
4. In kind support such as allotment of urban plots and rural land for political parties, to generate income sources and build party offices, meeting halls, libraries etc.

Political parties fund maybe created to be managed by eminent persons, administrative persons and financed by the following:

1. Federal and provincial government budget.
2. Levy on media and advertising.
3. Funding from multilateral and bilateral donors, countries and organizations.

A fund of Rs. 1.00 billion (seed fund) should be initially created and should be feasible. This fund would go a long way towards building strong and organized political party system in the country and fostering new entrants representing a diverse social base.

Political Participation and Party Membership

The common impression is that political parties in Pakistan discouraged general membership, and prefer to have “core workers”. The possible reason for this is the apprehension that the party may be hijacked by some “interest groups” who may manage to mobilize general party workers who may not be as ideologically committed to parties’ mission, characters and ideology, as core workers would be. Nevertheless, large pool of workers is required to maintain party organization and win elections. Thus there is a varying level of motivation to induct party members and launch membership campaigns. Reliance is usually made to induct members through personal contacts.

The ambivalent attitude is also reflected by lack of proper membership registers and databases of party members, and accurate statistics thereof, as we find this in established democracies.

Following estimates of political party membership are usually guessed by commentators;

Pakistan Peoples Party (PPP)	:	20, 000
Pakistan Muslim League (PML(N))	:	100,000

Muttahida Qaumi Movement (MQM) : 50,000
Jamaat E Islami : 25,000

Table 17.5: Required Number of Workers for Political Parties

	% Votes polled 2008	Potentially allied electorate million	Required no of workers @ 4%	Guess estimates no. of workers
PPP	30.6	28.8	1.15	200,000
PML (N).	19.6	16.0	0.64	100,000
PML-Q	23.0	18.4	0.73	50,000
MQM				25,000
ANP				20,000
JI				
Total Registered Voters		80.00	3.20	

Source: ECP data, rest Author's estimate

Admittedly, the political participation in most European countries has come down from a high level in 1960s to a much reduced level in 2005. In 1960s in Austria and Scandinavian countries, political participatory rate used to be between 15-25%, which came down to a level of 5-20% in 2005. In the UK, participation rate in 1960 was 10% and came down to 2% in 2005. In Italy it came down to 4% from 12%, in Germany, the rate increased 4% in 1980s and came down to 3%; in Netherlands from 9% to 3%. A general average for Europe can be taken as 4 % that is 4 political workers out of every 100 electorates (voters). In India, with a population of 1.0 billion and registered voters 671 million have some 60 to 80 million estimated party workers, which is more than 10% of the electorates.

In Pakistan, at a participation rate of 4%, both PPP and PML (N) should have 1.0 million strong party workers, each a slightly more. As against these members, PPP has 2% of the required number and PML 10% of the required number. By comparison in India, BJP had 30 million workers in 1980, Shivsena 5 million and Congress 15 million. Without a strong worker base, the political parties cannot mobilize public opinion and much less resist military coups, which is a frequent requirement of political parties in Pakistan. Infact absence of core workers in required

numbers is one of the major reasons the military dictator is able to assume power so swiftly and amicably without any resistance. Military dictator goes away only when general discontentment against him and his policies becomes too widespread. Recent success of lawyers' movement is a case in point, proving what an organized force can achieve in the context of popular support.

If democracy is to be strengthened and re-enforced and military coups resisted and repulsed, political parties will have to strengthen their cadre by;

- a) enhancing the numbers
- b) training and motivation
- c) indoctrinating the workers with party ideology and programme

Fortunately Pakistan Peoples Party and Pakistan Muslim League (N) have started their membership campaigns under strong competitive pressure. We wish them success. Democracy has started paying dividends and right kinds of incentives have already started operating. It is hoped that the democratic order sustain and flourish.

Broadening the Political Base; Let Teachers and Professors Enter Politics

We have mentioned earlier that the political structure and organization in Pakistan suffers from a narrow social base wherein landed persons dominate and monopolize power. We have examined how the influence of private money could be partially balanced by public funding of political parties.

There are a large number of persons employed by the government in education sector; mostly teachers, lecturers, and professors. They are barred from entering politics because they are government servants. Private sector is also present in education, but in terms of numbers their count is much less. Admittedly there is no bar on their political role.

An important constraint on individuals aspiring to enter politics is availability of time, even if money is provided for their election campaign and other political activities from other sources such as public funds. In the US and other democracies, lawyers have significant presence in politics and the elected institutions such as parliament and senates; the reason being the professional flexibility. A lawyer can plan and apportion his time more flexibly than those employed by the private

and public sector companies and institutions. A lawyer can have his private practice in law firm, engage in full time politics, same as a member and come back to his profession with more distinction, value and acceptability by the legal profession and his former or potential employers. In Pakistan most lawyers have kept away from politics, fallaciously assuming that practice of law is to be independent from politics. There is a sizeable exception. Quite a few prominent lawyers are politicians too as well but the bulk stay away from politics.

There is a similar strain of argument and refrain among the teaching community. They argue that politics is bad and would be potentially divisive and would cast negative shadow on educational activities, and peace and harmony therein. They may have a point there. However, the positive impact of the teaching communities' involvement in politics and representation in parliament are potentially very significant. It would diversify the social base of politics, diluting the preponderance of a few. Politics would benefit from the individuals who are highly specialized and knowledgeable in science, economics, engineering, health etc. As to the divisiveness of politics, that is already there. People and teachers have their ideologies and political views and even informal or sometimes formal and unannounced affiliations.

Fortunately and unfortunately teachers have time. Educational institutions do not open for more than 150 days in a year. There are all kinds of leaves, strikes, and voluntary closures due to law and order situations. Time is a great resource which could be put to public service. Democratic governments and political parties should seriously investigate about encouraging and involving teachers into active politics by

1. Removing legal and employment conditions and constraints against their political participation.
2. Provide for paid and unpaid leaves for teachers and professors for the period of their assignments and elections in the parliament and absorb them back once they return.

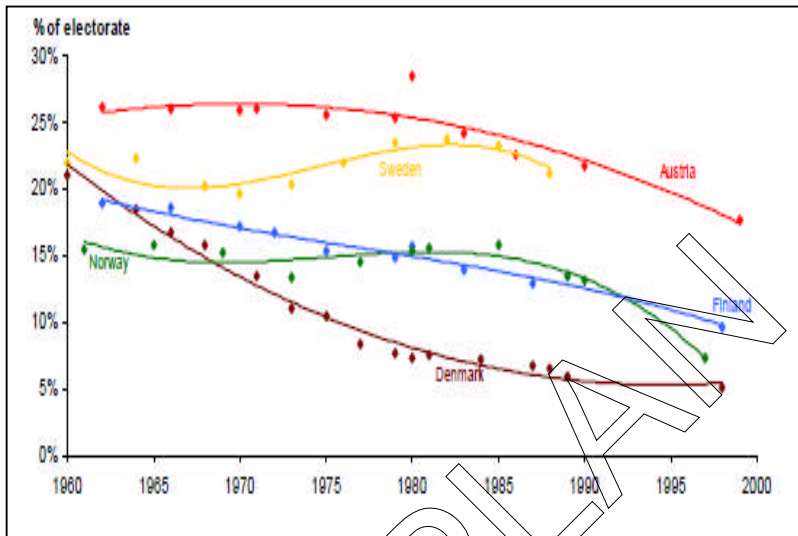
Reportedly Turkey, a not very egalitarian state, relaxed constraints on university professors for entering politics and running for public office, with remarkably positive and softening impact on Turkish political system, so much dominated by the military.

Table 17.6: Party membership as a percentage of the electorate (M/e), late 1990s and 2000

Country	Year	Total party membership	M/E
Austria	1999	1.031.052	17,66
Finland	1998	400.615	9,65
Norway	1997	242.022	7,31
Greece	1998	600.000	6,77
Belgium	1999	480.804	6,55
Switzerland	1997	293.000	6,38
Sweden	1998	365.588	5,54
Denmark	1998	205.382	5,14
Slovakia	2000	165.277	4,11
Italy	1998	1.974.040	4,05
Portugal	2000	346.564	3,99
Czech Republic	1999	319.800	3,94
Spain	2000	1.131.250	3,42
Ireland	1998	86.000	3,14
Germany	1999	1.780.173	2,93
Netherlands	2000	294.469	2,51
Hungary	1999	173.600	2,15
United Kingdom	1998	840.000	1,92
France	1999	615.219	1,57
Poland	2000	326.500	1,15
Mean			4,99

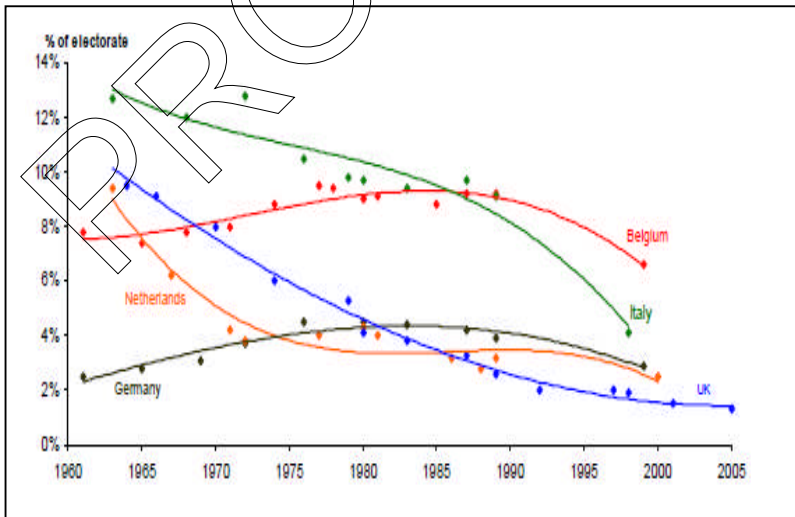
Source: IDEA, Funding of Political Parties and Election Campaigns, International Institute for Democracy and Electoral Assistance 2003

Fig 17.1: Trends in European party membership - high membership countries, 1960-1999



Source: Katz and Mair, 1992; Mair and van Bitzen, 2001.

Fig 17.2: Trends in European party membership – low membership countries, 1961-2005



Source: Katz and Mair, 1992; Mair and van Bitzen, 2001.

The EIU model for Democracy Index

I. Electoral process and pluralism

1. Are elections for the national legislature and head of government free?
2. Are elections for the national legislature and head of government fair?
3. Are municipal elections both free and fair?
4. Is there universal suffrage for all adults?
5. Can citizens cast their vote free of significant threats to their security from state or non-state bodies?
6. Do laws provide for broadly equal campaigning opportunities?
7. Is the process of financing political parties transparent and generally accepted?
8. Following elections, are the constitutional mechanisms for the orderly transfer of power from one government to another clear, established and accepted?
9. Are citizens free to form political parties that are independent of the government?
10. Do opposition parties have a realistic prospect of achieving government?
11. Is potential access to public office open to all citizens?
12. Are citizens free to form political and civic organizations, free of state interference and surveillance?

II. Functioning of government

13. Do freely elected representatives determine government policy?
14. Is the legislature the supreme political body, with a clear supremacy over other branches of government?
15. Is there an effective system of checks and balances on the exercise of government authority?
16. Government is free of undue influence by the military or the security services
17. Foreign powers do not determine important government functions or policies
18. Special economic, religious or other powerful domestic groups do not exercise significant political power, parallel to democratic institutions?
19. Are sufficient mechanisms and institutions in place for assuring government accountability to the electorate in between elections?
20. Does the government's authority extend over the full territory of the country?

21. Is the functioning of government open and transparent, with sufficient public access to information?
22. How pervasive is corruption?
23. Is the civil service willing and capable of implementing government policy?
24. Popular perceptions of the extent to which they have free choice and control over their lives
25. Public confidence in government
26. Public confidence in political parties

III. Political participation

27. Voter participation/turn-out for national elections.
28. Do ethnic, religious and other minorities have a reasonable degree of autonomy and voice in the political process?
29. Women in parliament
30. Extent of political participation. Membership of political parties and political non-governmental organizations.
31. Citizens' engagement with politics
32. The preparedness of population to take part in lawful demonstrations.
33. Adult literacy
34. Extent to which adult population shows an interest in and follows politics in the news.
35. The authorities make a serious effort to promote political participation.

IV. Democratic political culture

36. Is there a sufficient degree of societal consensus and cohesion to underpin a stable, functioning democracy?
37. Perceptions of leadership; proportion of the population that desires a strong leader who bypasses parliament and elections.
38. Perceptions of military rule; proportion of the population that would
39. Perceptions of rule by experts or technocratic government; proportion of the population that would prefer rule by experts or technocrats.
40. Perception of democracy and public order; proportion of the population that believes that democracies are not good at maintaining public order.
41. Perception of democracy and the economic system; proportion of the population that believes that democracy benefits economic performance
42. Degree of popular support for democracy
43. There is a strong tradition of the separation of church and state

V. Civil liberties

44. Is there a free electronic media?
45. Is there a free print media?
46. Is there freedom of expression and protest (bar only generally accepted restrictions such as banning advocacy of violence)?
47. Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions?
48. Are there political restrictions on access to the Internet?
49. Are citizens free to form professional organizations and trade unions?
50. Do institutions provide citizens with the opportunity to successfully petition government to redress grievances?
51. The use of torture by the state
52. The degree to which the judiciary is independent of government influence.
53. The degree of religious tolerance and freedom of religious expression.
54. The degree to which citizens are treated equally under the law.
55. Do citizens enjoy basic security?
56. Extent to which private property rights protected and private business is free from undue government influence
57. Extent to which citizens enjoy personal freedoms
58. Popular perceptions on human rights protection; proportion of the population that think that basic human rights are well-protected.
59. There is no significant discrimination on the basis of people's race, color or creed.
60. Extent to which the government invokes new risks and threats as an excuse for curbing civil liberties

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18 Lagging Social Sector Development

Millennium Development Goals (MDGs) are a grand promise to the poor of the world, made by the governments and head of states, both from developing and developed world, to improve human conditions by reducing poverty and hunger, promoting education and health and environmental sustainability. It was done in 2000, in a meeting of the heads of states under the auspices of the United Nations. Promises and affirmations of improving the lot of the poor by governments and international community is nothing new. This time it is more streamlined, targeted and time bound. For attainment of 8 millennium goals the UN Millennium Declaration had fixed 18 targets and 48 indicators. Pakistan has adopted 16 targets and 37 indicators for monitoring the MDGs. By 2015 following goals and targets are to be achieved:

MDG Goals and Targets

Goal 1: Eradicate Extreme Poverty and Hunger

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Target 2: Halve between 1990 and 2015, the proportion of people who suffer from hunger

Goal 2: Achieve Universal Primary Education

Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Goal 3: Promote Gender Equality and Empower Women

Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.

Goal 4: Reduce Child Mortality

Target 5: Reduce by two-thirds, between 1990 and 2015, the Under-5 Mortality Rate

Goal 5: Improve Maternal Health

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS.

Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.

Goal 7: Ensure Environmental Sustainability

Target 9: Integrate the principles of Sustainable development into country policies and programs and reverse the loss of environmental resources.

Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water

Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million squatter settlement dwellers

Pakistan more or less achieved its MDG target of the first five years, but began faltering after that. It is feared that the 2009-10 targets would not be achieved, although mid-course corrections can be made to enable Pakistan to achieve targets by 2015. Initial success up to 2005, was perhaps due to good economic growth and debt relief provided in the context of 9/11, if not for MDG achievement. Recent slow down in MDG achievement rate for the last several years could be traced to the poor economic growth largely due to world recession, oil price crises, democratic transition and now deteriorating law and order problem due to terrorism. The economic growth is expected to suffer for some time to come, causing a shadow over MDGs and pro-poor expenditure.

However apart from recent economic difficulties, Pakistan has a long term and long standing problem of spending less than required on the social sector. Budgetary allocations have successively and constantly fallen below the required level of 5% of GDP, 4% for education and 1% for health. Public sector expenditure on education could never cross 2.5% of GDP and on health 0.5% of GDP.

The reasons are obvious; poor tax base and high military expenditure. It is highly unlikely that any relief can be there in the short-term on these two accounts. However a marginal improvement on two accounts could release 1% of GDP for social sector. Military expenditure has decreased since 1980s, in terms of percentage of GDP by 2008. In absolute terms however, it has increased. There is a scope of reducing this by 25% releasing 500 million US\$, by economic and doctrinal adjustments. In the last two to three decades, equal emphasis has been given to enhance both conventional and nuclear force, bringing conventional force ratio from a classical 1:3 to 1:2. Infact parity with India has been achieved in battle tanks. The adjustment is long overdue. Unless this adjustment is made, the long term prospect of improvement in human conditions in Pakistan remains dim.

MDGs only partly solve the problem, which would be only reducing the problems by half. The remaining half would have to be achieved also and the ability to maintain MDG levels into the future. If this correction is not made, firstly the achievement of MDG targets is questionable and then the ability to maintain what is to be achieved would be in question. The irony is that this long term deterioration would directly and indirectly affect and weaken Pakistan's national defense and internal cohesion, and with a direct impact on Pakistan's economy and competitiveness, bringing about a spiral chicken and egg syndrome causing dislocation and estrangement.

Soviet dismemberment despite huge conventional and nuclear forces should not be forgotten, along with our own dismemberment which also had economic dimensions. Current law and order problems can at least partly be traced to poverty and underdevelopment which has made an unholy alliance with religious fundamentalism. Military adjustments however, cannot be reduced by rancorous debate and allegations. A track-2 dialogue should be initiated involving retired military generals who may have sympathy and understanding of both sides of the issue.

Resource Gap

A shortage of Rs. 326 billion has been identified for the three years period of 2008 -2010 by PRSP (Poverty Reduction Strategy Paper), if MDG goals are to be achieved. Where will this come from? The US and USAID should be prevailed upon at least partially to meet this resource gap from the hundred million US dollars funds per year of the promised USAID .The US should not spend and waste time and money , in inventing other projects .It can focus on FATA , and NWFP and other backward areas of other three provinces

Are MDGs a “distraction“?

Some cynics have opposed MDGs as a distraction, but that is a minority opinion. Most economists have supported these, as they provide a focus and create pressures for diverting the required resources to the social sector, and also towards implementing projects and activities for achievement of goals and targets. Hitherto, this has been an open - ended as usual activity. Many nations are on track to achieve these targets. Unfortunately, the whole of South Asia may not be able to meet the 2015 targets, for varying reasons; In India and Pakistan due to preponderance of elitist security and political agenda. Pakistan additionally is mired with recession and terrorism. In many ways South Asia where the bulk of poverty of the world resides, having been hijacked by elitist and myopic agenda and pursuit, the two countries would at best keep suffering and at worst may be pushed to chaos and disintegration if corrective steps are not undertaken. It is a big “if”. Only facile targets maybe achieved; gender issues improvements in Bangladesh, and India, which are socially easily achievable in the two societies; similarly in Pakistan HIV / AIDS etc issues which are easy to solve due to its religious context.

Human development Index (HDI)

Where we are and what we have achieved during the last sixty years of our existence. What kinds of changes in our socio-economic conditions have been made; have we improved at all and how much and how does it compare with the achievement of other countries in similar conditions? What are the trends and where these are going to lead us to?

We will use the HDI (Human Development Index) data and economic numbers to answer the questions. We will make comparison, essentially

Lagging Social Sector Development

Table 18.1 :Millennium Development Goals (MDGs)

Goals and Targets	Indicators
Goal 1: Eradicate Extreme Poverty and Hunger	
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1. Proportion of population below the calorie based food plus non-food poverty line 2. Poverty gap ratio (incidence x depth of poverty)
Target 2: Halve between 1990 and 2015, the proportion of people who suffer from hunger	3. Prevalence of underweight children (under 5 years of age)
Goal 2: Achieve Universal Primary Education	
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	4. Net enrolment ratio in primary education 5. Proportion of pupils starting grade 1 who reach grade5 6. Literacy rate of 15-24 years olds
Goal 3: Promote Gender Equality and Empower Women	
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.	7. Literacy (10+) GPI 8. Youth literacy GPI 9. Share of women in wage employment in the non-agricultural sector 10. Proportion of seats held by women in national Parliament
Goal 4: Reduce Child Mortality	
Target 5: Reduce by two-thirds, between 1990 and 2015, the Under-5 Mortality Rate	11. Under-5 Mortality Rate 12. Infant Mortality Rate 13. Fully Immunized children (12-23m) 14. Proportion of children under 5 who suffered from diarrhea in the last 30 days and received ORT 15. Lady Health Workers' coverage
Goal 5: Improve Maternal Health	

Pakistan's development challenges

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	16. Maternal mortality ratio 17. Proportion of births attended by skilled health personnel 18. Total Fertility Rate 19. Contraceptive Prevalence Rate 20. ANC coverage
Goal 6: Combat HIV/AIDS, Malaria and Other Diseases	
Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS.	21. HIV prevalence among 15-24 year old pregnant women 22. HIV prevalence among vulnerable group (%)
Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.	23. Proportion of population in malaria risk areas using effective malaria prevention and treatment measures 24. Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)
	25. Incidence of TB per 100,000 population
Goal 7: Ensure Environmental Sustainability	
Target 9: Integrate the principles of Sustainable development into country policies and programmes and reverse the loss of environmental resources.	26. Proportion of land area covered by forest 27. Land area protected as % of total area 28. No. of vehicles using CNG fuel 29. GDP per unit of energy use (as proxy for energy efficiency)
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water	30. Proportion of population with access to clean water 31. Proportion of people with access to sanitation
Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million squatter settlement dwellers	32. Proportion of katchi abadis regularized

Lagging Social Sector Development

Table 18.2: Status of MDG Achievement in various Countries

	Pakistan	India	Sri Lanka	Bangladesh	Egypt	Malaysia	Mexico	Philippine
Eradicate Extreme Pasty	⊙	⊙	□	⊙	□	⊙	□	□
Achieve universal primary education	⊙	⊙	□	□	□	⊙	⊙	⊙
Promote gender equality and empire women	⊙	⊙	⊙	⊙	⊙	⊙	□	□
Reduce child mortality	⊙	⊙	□	⊙	□	⊙	⊙	□
Improve maternal health	⊙	⊙	□	⊙	□	⊙	⊙	⊙
Combat HIV/AIDS, malaria and other dieses	□	⊖	□	⊙	□	⊖	□	□
Ensure environmental sustainability	⊙	⊖	⊙	⊙	⊖	⊙	□	□
Develop a global partnership for development	⊖	⊖	⊖	⊖	⊖	⊖	⊖	□
Source: MDG monitor.org (UNDP)								
Legend: <div> ⊙ Achieved □ Very likely to be achieved if some changes are made ⊙ Possible to achieve if some changes are made ⊙ Off Track ⊖ Not Enough information </div>								

with two groups of countries; one in South Asia, with India, Srilanka and Bangladesh and the other with selected Muslim countries like Indonesia, Malaysia, Turkey and Egypt. We will also reproduce World Bank Governance Indicators graph to show governance trends over the last ten years (1996-2008).

HDI Ranking

Pakistan's HDI ranking is very low with a ranking of 142. Only Bangladesh is slightly lower at 148, while Srilanka's ranking is the highest in South Asia. Pakistan's socio-economic conditions, as measured by HDI, places it in the company of not very fortunate countries like Bangladesh, whose rate of improvement in HDI is the highest 1.8% p.a. India and Pakistan are improving at 1.3% p.a. only. Adult literacy of Bangladesh and Pakistan are identical at 53-54%. India has a significantly higher adult literacy rate at 66% and Srilanka at 90.8%, the highest in the region, which seems to be the main reason of its highest HDI ranking of 102.

Pakistan District HDI

Pakistan District HDI 1992-2005

Punjab

- Jhelum is the highest HDI district in Punjab.
- Lahore is 9th
- Rawalpindi is one of the 7th bottom HDI districts and with the lowest improvement rate in HDI of 0.9% pa.
- Rajanpur, DG Khan, Muzaffargarh, Khanewal, Pakpattan, Sahiwal, Gujranwala, among the fastest growing in terms of HDI.

Sindh

- Karachi has the highest HDI; Tharparkar has the lowest with negative growth.
- Ghotki is second to Karachi, also fastest growth rate in HDI 3.9%, higher than Hyderabad and Nawabshah.
- Larkana is one of the three bottom HDI districts, with only medium growth rate (27%).
- Hyderabad and Dadu have comparable HDI.

NWFP

- Haripur, Abbotabad and Mardan are top HDI ranking districts in NWFP.
- Peshawar falls 9th in the rank of HDI and with one of the lowest growth rates of 1.7%.
- Lower and Upper Dir improved its HDI fastest at 8.6%-6.8%; Swat, Malakand and Chitral are other fast growing districts in terms of HDI.

Baluchistan

- Quetta has one of the lowest HDI districts, ranking 14th and with slow improvement rate of 1% only.
- Ziarat, Pishin and Turbat are the top three HDI districts, out of which Pishin grew at 4% pa.
- Fastest growing/improving district was Kharan at 6.1%.
- Qila Saifullah and Sibi are two of the lowest eight and having the lowest growth rate of 0.4%.

Pakistan

- At Pakistan level, Punjab had the highest HDI (0.699) and HDI improvement rate of (2.7%), while Baluchistan had the lowest HDI of 0.555 and lowest growth rate of 2.1%.
- NWFP improved fastest at 3.4% pa.

Top ten districts in terms of HDI are:

Karachi	Kasur
Jhelum	Ghotki
Haripur	Bhakkar
Abbotabad	Ziarat
Sheikhupura	Gujranwala

(Lahore, Rawalpindi, Multan are absent from the list).

Bottom Ten districts in terms of HDI are:

Tharparkar	Qilla Abdullah
Hangu	Bolan
Batgram	Gwadar
Kohistan	Jhal Magsi
Awaran	Musa Khel
Sibi	

- Tharparkar, the lowest HDI district with negative growth.
- Except Karachi, no large city of Pakistan is among high HDI ranks and one found in Middle range HDI.
- Ghotki, Bhakkar and Ziarat are among top ten.
- Jhelum is number two, next only to Karachi.

Source, Karachi: SPDC

Comparator countries and their performance

We have selected a group of countries, which for a variety of reasons make a useful and interesting comparison with Pakistan. We have chosen the following; India, as it is our neighbor; we have a historical competition and conflict with it; we are psychologically occupied with; have comparable socio-economic conditions and a common history; although incomparably large in absolute terms, per capita comparisons make a lot of sense, and also the qualitative comparisons.

Bangladesh – was once part of Pakistan and has a comparable stage of development; Bangladesh was created to provide better living conditions for its people, away from the exploitative “West Pakistan”. Srilanka - being a small country offers useful lessons and data on social development side; higher HDI rating under comparable socio-economic and political conditions. Egypt, a leader of Muslim Arab countries suffers from resource scarcity comparable to Pakistan; large population, cotton, irrigation network, makes it a useful comparator country. Malaysia, a possible role-model country for many, soft mild and liberal Muslims, which started from largely similar economic conditions and background. Malaysia has done well for itself under semi-authoritarian rule with ethnic problems due to a large and powerful Chinese minority. Malaysia is resource rich as well producing oil, tin, rubber and palm oil, and considerable industrial goods. Indonesia is the largest Muslim country in terms of population; otherwise poor but resource rich. Like Pakistan Indonesia has suffered from long military rule. As notorious for corruption as Pakistan is, Indonesia has comparable stage of economic development.

Turkey, perhaps the most developed among Muslims with the possible exception of Malaysia has a comparable civil-military status and conditions. It led and ruled nations of the Middle East as a citadel of Ottoman-Usmania Caliphate and sultandom. It was Pakistan's partner in

US led military alliances of CENTO, and latter day US led coalitions, full member of NATO, with significant industrialization, large army and excessive military expenditure, broadly liberal beset by emerging fundamentalism; ethnic and racial problems of Kurd minority ala Baloch in Pakistan, can be a role model in many ways for Pakistan, and a bad example otherwise.

Following observation can be made, while perusing Tables 18.8 and 18.9;

1. The highest HDI ranking in South Asia is of Srilanka (102), significantly higher than of Pakistan (142) and India (134). Srilanka's investment in social sector has enabled it to achieve higher HDI ranking. However, paradoxically, higher HDI rating has not made a comparable impact on economic conditions and output. Recently, only accidentally, the urban guerilla movement came down, but not due to improved literacy, which might have even contributed to racial division and polarization; a good case for sociological investigation. Why Pakistan ranks low? We have lamented about it sufficiently strongly elsewhere, due to a persistent and continuous under-investment in social sector, especially education. Military or civilian rule did not make a difference in resource allocation policy. Civilian rules have been short-lived and intermittent and with their hands tied down; more on this theme elsewhere in the book.

In the second group of comparator countries, Malaysia, Indonesia, Turkey, and Egypt the highest HDI of 66 pertains to Malaysia followed by Turkey (78), and the lowest being Pakistan (142), as against Indonesia (111) and even Egypt (122).

This further establishes that high performing economies are based on high human development, as Global Competitiveness Ratings (GCR) also have confirmed. Malaysia and Turkey deviate from this general axiom slightly i.e. Turkey with a lower HDI has a higher per capita GDP of 8877 US\$ than that of Malaysia with 7033 US\$. Perhaps Turkey's proximity and relationship with Europe, population and size of the economy, and participation in alliances like NATO has played a role in a comparatively better performance. All other countries follow the rule; Pakistan with lowest ranking in HDI has the lowest per capita (875 US\$), while Indonesia and Egypt have comparable per capita GDPs (1729-1918 US\$) with comparable HDI rankings (111-122). A decade or more ago Pakistan's per Capita GDP and HDI ranking used to be higher than

that of India. But no more. India at 1046 US\$ is fast growing ahead both with higher growth rates (9-10% p.a.) and better HDIs. The margin of difference is expected to increase with time, if Pakistan continues to conduct its economy and resources in the way it has been doing. Srilanka, in keeping with its high HDI ranking, has twice higher per capita GDP of 1616 US\$; higher than both India and Pakistan.

If we want to locate the culprit behind Pakistan's poor performance and growth, it is readily discernable and apparent from the adjoining table i.e. state of education in Pakistan. Pakistan's combined enrollment ratio is 39.3% [% of eligible age group population attending educational institutes; it is total enrollment and not gross primary enrollment which (the latter) is 87% in Pakistan, and almost 100% else where]. In Group I (South Asia) and Group II (Turkey, Egypt, Malaysia and Indonesia), this ratio is twice as much as that of Pakistan or slightly lesser, with the exception of Bangladesh at 52.1% which is still 14% percentage higher than Pakistan. Malaysia spends 25% its budget on education, with Indonesia 17.2%. Table 21.2 brings out this difference more adequately. Pakistan's public expenditure on education has dwindled and has come down from 1991 level of 2.6% of GDP to 2.3% of GDP in the period 2002-05, while India has been spending twice as much; 3.7-3.8% constantly and continuously, from 1991 till to date. US spends 5.9%, UK, 5.4% and Egypt, Thailand, Turkey, Singapore spend around 4%, as per recommended UNESCO standard.

Ironically, Pakistan's rating in terms of access to safe water is better than every one in group I; only 10% of population lacks access to safe water than 11% in India and 18% in Srilanka's and 20% in Bangladesh and Indonesia. On the other hand in Malaysia only 1% people suffer from lack of safe water, 2% in Egypt and 3% in Turkey. Perhaps, congestion also has played a role, apart from under-investments in water sector. Another rare opportunity for Pakistan to feel better is in terms of % of under weight children, which being high at 38% is still less than 46% of India and 48% in Bangladesh; but only 29% of Srilanka's. Pakistan's relatively better rating could be traced to genetic factors and as well as lesser poverty incidence. In almost all poverty measures, Pakistan fares better than India and Bangladesh, but worse than Srilanka. In group II, countries Malaysia's poverty level is the least, almost negligible, while Turkey, Egypt and Indonesia have 17-18% of population falling under some indicator of poverty. Pakistan's rate of economic growth in terms of per capita GDP is the most sluggish, which apart from other factors, is also diluted by higher population growth rates.

MDGs had been announced to remove abject poverty and hunger. Unfortunately despite undertakings, required resource allocation has not been made. It is well nigh-impossible that MDG targets could be achieved in time. There are other approaches and instruments available to the government i.e., direct asset transfer to the poor; allotment of public urban and rural land to the poor, if not conventional land reforms; formation of cooperatives and privatization through them are other options as well; water rights to the landless and making agric-water tradable, could also effect resource and asset transfer to the abject poor and reduce poverty. Finally education and employment are the two infallible tools for poverty reduction.

Insuring the Poor

In 1996, I wrote a book, "The Political Economy of Pakistan, An Agenda for Reforms and Restructuring", in which I made some submissions and proposals in this respect. Personal Insurance is not a very popular concept in Pakistan. Mostly industrial assets and vehicles are insured against theft and fire etc., and that for banking reasons mostly. Employees Old Age Benefit Insurance (EOBI) was launched for the benefit of employees in manufacturing and services sector. To date 400,000 workers are benefiting under the scheme with health coverage and old age pension. Mostly large companies have come under the ambit of EOBI. There is massive corruption in EOBI, wherein the EOBI inspectors and officials collude with company owners to under-register and under-pay the annual dues. Still EOBI is providing some benefit and coverage to the poor workers.

Industrial workers in the organized sector form a very small part of the workforce. Bulk of the workforce is engaged in the following sector; a) agriculture, b) construction, c) service and trade, d) domestic workers, e) self employed and informal. Most of the workers in these sectors are not formally employed as company employees. They are mostly paid on contract or daily basis. They should be covered by some sort of Insurance scheme.

In the current economic thinking, in addition to the long drawn trickle down effect, direct support to the poor and building social safety nets have become an accepted approach. Benazir Income Support Program (BISP) has been launched and is being widely acclaimed domestically and by international donor community.

Table 18.3: HDI and other economic development parameters of Pakistan vis-à-vis other South Asian Countries

Criteria	Pakistan	India	Bangladesh	Sri Lanka
Revised HDI rank, 2006	142	134	148	102
Long-term annual growth rate in HDI (%), 1980-2007	1.3	1.33	1.86	0.58
Adult literacy rate (% aged 15 and above), 2007	54.2	66	53.5	90.8
Combined gross enrolment ratio in education (%), 2007	39.3	61	52.1	68.7
GDP per capita (PPP US\$), 2007	2,496	2,753	1,241	4243
Population not using an improved water source (%), 2006	10	11	20	18
Children underweight for age (% under age 5), 2000-2006	38	46	48	29
Population living below \$1.25 a day (%), 2000-2007	22.6	41.6	49.6	14
Population living below \$2 a day (%), 2000-2007	60.3	75.6	81.3	39.7
Population living below the national poverty line (%), 2000-2006	32.6	28.6	40	22.7
Ratio of the richest 10% to the poorest 10%, 1992-2007	6.7	8.6	6.2	11.7
Gini index, 1992-2007	31.2	36.8	31	41.1
Total population (millions), 2007	173.2	1165	157.8	19.9
Annual Population Growth Rate (%) , - ROG	2.3		1.5	1.2
Total GDP (US\$ billions), 2007	142.9	1177	68.4	32.3
GDP per capita (US\$), 2007	879	1046	431	1616
Annual growth rate of GDP per capita (%), 1990-2007	1.6	4.5	3.1	3.9
Government expenditure on health as a percentage of total government expenditure	1.3	3.4	7.4	8.3
Public expenditure on education as a percentage of total government expenditure, 2000-2007	11.2	10.7	14.2	0

Source: UNDP, HDR 2008

Lagging Social Sector Development

Table 18.4: HDI and other economic development parameters of Pakistan vis-à-vis selected Muslim countries and UK

Criteria	Pakistan	Indonesia	Malaysia	Turkey	Egypt	UK
Revised HDI rank, 2006	142	111	66	78	122	21
Long-term annual growth rate in HDI (%), 1980-2007	1.3	1.26	0.81	0.93	1.3	0.35
Adult literacy rate (% aged 15 and above), 2007	54.2	92	91.9	88.7	66.4	
Combined gross enrolment ratio in education (%), 2007	39.3	68.2	71.5	71.1	76.4	89.2
Population not using an improved water source (%), 2006	10	20	1	3	2	
Children underweight for age (% under age 5), 2000-2006	38	28	8	4	6	
Population living below \$1.25 a day (%), 2000-2007	22.6			2.7		
Population living below \$2 a day (%), 2000-2007	60.3		7.8	9	18.4	
Population living below the national poverty line (%), 2000-2006	32.6	16.7		27	16.7	
Ratio of the richest 10% to the poorest 10%, 1992-2007	6.7	10.8	11	17.4	7.2	13.8
Gini index, 1992-2007	31.2	39.4	37.9	43.2	32.1	36
Total population (millions), 2007	173.2	224.7	26.6	73	80.1	60.9
Annual Population Growth Rate (%) , - ROG	2.3	1.2	1.6	1.2	1.9	0.2
Total GDP (US\$ billions), 2007	142.9	432.8	186.7	655.9	131	2772
GDP per capita (PPP US\$), 2007	2,496	3,712	13,518	12955	5349	35130
GDP per capita (US\$), 2007	879	1918	7033	8877	1729	45442
Annual growth rate of GDP per capita (%), 1990-2007	1.6	2.3	3.4	2.2	2.5	2.4
Government expenditure on health as a percentage of total government expenditure	1.3	5.3	7	16.5	7.3	16.5
Public expenditure on education as a percentage of total government expenditure, 2000-2007	11.2	17.2	25.2		12.6	12.5

Source: UNDP, HDR 2008

Lack of formal employer is a major constraint to expanding insurance net to the aforementioned sectors of agriculture, trade, construction etc., wherein the employers are too many to deal with. Levying a modest insurance cess (tax) on agricultural commodities and construction material could be a feasible way of mobilizing resources for this purpose i.e., paying the premium for insurance. Ready candidates for such cess taxation would be cement, steel and fertilizer. A token premium should also be collected from the participating workers i.e., at a rate of Rs. 100-200 per month, and a premium of Rs.4000-5000 per year should be paid from the funds generated from the proposed cess. Private sector insurance companies (large and responsible ones) should be involved; otherwise the scheme would be wasted either by inefficiencies and corruption of the public sector or fraudulent practices of the small insurance companies ala third party vehicle insurance.

Voluntary schemes could also be promoted especially for the domestic workers. They should be 30-40 population clusters in Pakistan of well to do and rich families which employ bulk of the domestic workers, as maids, cooks, chowkidars, gardeners, drivers, and cleaners. At least 1 million domestic workers should be working for the well to do, who may be encouraged to pay insurance premium of Rs. 200 – 300 per month per employee. It could even be made a legal requirement as well. NGOs and large insurance companies should be employed to enlist participants-employers and employees. A token premium could also be charged to the insured workers as mentioned earlier.

Fortunately there are government plans on the anvil to introduce health insurance scheme for the workers in the informal sector. An NGO with financial support from the Clinton Foundation has also started working to promote and establish workers' health insurance. More of such voluntary efforts should be encouraged along with the required initiatives in this respect.

Approximately 6.4 million people benefit from existing GOP projects on direct welfare funding amounting to Rs.50 Billion, giving an average of Rs 7810 per person. This average figure hides the variations; Zakat payments are Rs 2000 per year, Baitulmal Rs 3850 per year and Benazir Income Support Program (BISP), an average of Rs. 10,000 per year. For our proposed scheme, we propose a payment of Rs. 5000/- per year of premium support from the proposed cess revenue. If initially 1 million workers are listed under the programme, a cess support of Rs. 5 Billion per year would be required.

Table 18.5: Estimated output and cess revenue from cement, steel and fertilizer.

Cement	= 26.751 million tons	= Rs 117 Billion
Fertilizer	= 5.6 million tons	= Rs 127 Billion
Steel	= 400,000 tons	= Rs 160 Billion
Total		= Rs 404 Billion
Expected cess revenue @ 5%		= Rs 20 billion
Potential beneficiaries		= 4 Million workers/families

Source: Author's Estimate

Table 18.6: Major assumptions and parameters of the proposed scheme;

Number of insured persons	1.00 million
Gout premium subsidy	Rs 5000 per person.
Individuals own contribution	Rs 3000 per person.
Total premium	Rs 8000 per year.
Twenty years premium	Rs 160,000
Earned profit @ 7% p.a	Rs 640,000
Total dues	Rs 800,000
Ten years payment	Rs 600,000
@ Rs 5000/- p.m.	
Required cess income in subsidy	5.00 billion per years.

Source: Author's Estimate

Construction sector could generate cess revenue of Rs. 13.00 Billion on account of cess on steel and cement. Rs 7.00 billion cess could be generated from fertilizer sales totaling to revenue of Rs.20 billion per year. A total of 4 million workers could benefit from the proposed insurance schemes.

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19 Islami Nizam & Jihad (Islamic Rule & Jihad)

Part ‘A’

19.1 Islami Nizam (Islamic system of governance)

The issue of Islami Nizam is very old and rather contentious in Pakistan. The protagonist claim that struggle for Pakistan was for establishing an Islami Nizam and Islamic state while the antagonists argue that it was made for Muslims of the Muslim majority provinces and not even for Muslims of India in general and that more or less Muslims from the minority province (mohajirs) have rather imposed themselves on Pakistan. Liberals also argue that Quaid-e-Azam desired a secular and liberal state, where religion was to be private matter of individuals.

Most liberals seem to be ready to accept a rather liberal interpretation of Islam and limited involvement of religion in public life. Protagonists cite many of the statements of Quaid-e-Azam for implementations of Islamic laws and system and affirmations that Quran was to be our constitution. We now have another breed of Jihadis, who tend to have a violent, retrogressive and even nihilist interpretation of Islam as is evidenced by their suicidal attacks on girl schools and meena bazaars, and public flogging of women. In their presence, the classical peaceful fundamentalist of the 1960s seems to be acceptable and preferable for many, if a choice is to be made between the two only.

The counter argument is that Islam outlines a broad framework, encouraging and permitting some acts and forbidding some. The list of such “Amr” (ordered and permitted) and “Nahi” (forbidden) is very limited. The fundamental is of Iman (belief) and Amal-e-Saleh (righteousness) and Adl (justice). Those who have belief in Allah (God) and his prophet (pbuh) and the doomsday, when public and private deeds would be accounted for and rewarded and punished would act fairly and justly, within a broad framework and all that they would do, would be Islamic. Any system that caters to these requirements and is run by the

righteous is supposed to be Islamic. Islam would have no quarrel or issue with that.

The religious parties and fundamentalists managed to build in the “Objectives Resolution of Islam” in the 1956 constitution and also managed to make the same resolution as an operative part of the 1973 constitution. That no law would be passed against the dictates of Quran and Sunnah as has been codified into Pakistani legal system, has been a major success for the Islamists and largely conceded by the liberals as a compromise. Institutions of Federal Shariat Court and Council of Islamic Ideology have been founded to safeguard and protect the implementation of the law in letter and spirit. It is kind of “null hypothesis” as one has to prove that the law is not against Quran and Sunnah, and not necessarily in agreement with Islam.

The fundamental question is whether Islam gives a highly structured and rigid system where all provisions for running an organized system and government are provided. If it is so-structured, rigid and well provided, then how does one claim it to be for all times and all places? In that case, is it a recipe of remaining backward and outmoded something which the protagonists of Islami Nizam do not appear to be ready to accept.

Major provisions of Quran for the public life are the following:

1. Abolition of interest, especially the compound one.
2. Encouragement of trade, partnership and business.
3. Encouragement of written contracts and discouragement of verbal understandings.
4. Highly structured law on inheritance.
5. Prohibition of consumption or trade of wine, pork and “haram” (forbidden).
6. Prohibition of immorality, its exhibition or display and all businesses and activities associated with it.
7. Law of marriage, polygamy and encouragement of sexual gratification within marriage and forbiddance of Zina.
8. Capital punishment for murder and manslaughter, adultery, rape, and other heinous crimes.
9. Encouragement (but not permanent prohibition) for freeing slaves.
10. Provision for war and Jihad and provision for standing army and deterrence
11. Five duties of Salah, Saum, Zakat, Hajj and organizing Hajj and Salah.

12. Welfare system based on “Zakat and Sadqat” and looking after the poor, needy, travelers, women, children, old and elderly, weak and sick, prisoners, slaves etc.
13. Democratic and consultative governance, preferring presidential system (Ameer).
14. Protection of private property and discouragement of profligacy and exhibition of money and crass affluence.
15. Prohibition on hoarding of agricultural produce creating short supply and materially benefiting from the same.
16. General support for public interest and organized government.
17. Sanctity of and emphasis on abiding international contracts, protection of emissaries etc.

Lack of a detailed prescription does not merit denigration on that account. Infact brevity is its strength. An all too comprehensive and detailed structure would by definition be rigid and specific to a certain era or time and space. Only a general frame work, with a negative list and a positive list would be for all times and places.

Yet there is an important provision, which is unique to Islam and could be its major limitation. It is based on Iman, Meaad, Amal-e-saleh and Adl on the part of both the rulers and the ruled. There is no concept of Islamic system without Taqwa (fear of Allah) of the individual and society. A morally bankrupt and degenerate society oblivious to Islamic injunctions is not the right and required ingredient of an Islamic System. That is why; any proponents of the system are first required to bring about decent and clean clusters of population. However it is argued that it is a chicken-egg syndrome; good governments (Islamic) can promote righteous behavior and just system and the righteous people, bring about and contribute to the Islamic system. It is thus argued that an expanding spiral of Islamic revolution based on righteousness and good governance can be set into action with a moderate beginning.

Themes of Quran

Quran mainly contains following themes;

- 1) Belief (Iman) on Allah, the holy books including Quran as last guidance, Muhammad (pbuh) as last prophet, angels, doomsday, accountability, after-life, Hell and Paradise;
- 2) Hikayat, stories of prophets.
- 3) Creation, universe, thought and knowledge.

- 4) Doomsday, Hell and Paradise.
- 5) Exhortation to Iman (Faith) and Amal-e-saleh (Righteous deeds).
- 6) Orders (Amr) and forbiddance (Nawahi).
- 7) Exhortation for prayers (ibadaat), Salat, Saum, Zakat and giving (sadeqat) and Hajj.

According to Imam Ghazali only, 500 ayat out of 6700 ayat/ verses in these categories relate to personal laws. Hardly 100 ayat would be relative to business, economy and governance directly. There is exhortation for establishing Salat and Zakat but no mention of Khilafat-e-Ilahia or Islamic state or Nizam of the sort that most Salafist, and fundamentalists are taking about.

Besides there are many problems with the concept of Islamic state in multi-seat countries like Pakistan, Iraq, Lebanon and Syria while countries like Iran can thrive on Shiite Islam and Saudis on Sunni. Lebanese constitution had to provide for Shia, Sunni and Christians. PLO united Muslims and Christians in a similar theme, but had to face emergence of Hamas / Ikhwanul Muslimoon. The future dispensation of Palestine administration would be beset by these issues. In Iraq, Shia vs Sunni has become a very divisive issue, encouraging AL-Qaeda's involvement in Iraqi politics, ironically supported by Saudis who are understood to be staunch allies of the west. In Pakistan, it is highly unlikely that the rule of a fundamentalist Sunni party would be taken lightly by Shiites in general and vice versa. If a fundamentalist Sunni tries to pursue a Shia-Sunni neutral line, he would lose support among Sunnis as Jamaate Islami did due to writing of "Khilafat-o-Mulookiat" by its founder Maulana A Maudoodi, who attempted to present a more balanced view of Islamic history. I wonder, if we may be able to conclude the following from the foregoing; any Nizam or system which has the following characteristics is by definition Islamic;

1. Democratically elected and based on consultation (shura).
2. Its leadership and functionaries are God fearing Saleheen, who refrain from kabeera sins (Major sins such as drinking alcohol and fornication and murder) and offer prayers (Salat, Saum, Zakat, Hajj, and Sacrifice) to their best effort and are honest.
3. Where the system discourages or forbids interest (gradually under – targeted programme of eventual elimination), promotes trade and profit and bans immoral trades.
4. Establishes social justice and Zakat and respects private property, and assures respect for contracts.

5. Promotes moral behaviors, include good things and deeds in life and discourages or forbids immorality.

For these characteristics, ordinary liberal Muslims practicing and trying to practice Islam would be good enough to run such an Islamic state.

The Scope and potential of compromise and national reconciliation

There may be a scope for compromise among well meaning liberals who wish to bring about an egalitarian system replacing the existing unjust and feudalistic order under the garb of democracy, and the Islamists, if not the die-hard terrorists. The common cause among the two, otherwise diverse groups could be a “just socio-economic order”. Liberals may have to forego or postpone their emphasis on Western values of wining and dining, flaunting and exhibitionism, vulgar and obscene media etc.

The Islamists may have to forego or postpone their emphasis on initiating Islamic interpretation and implementation with “cutting hands”, caning the defaulters, mishandling women and restricting their participation in economic life.

Ziaul Haque’s Islamic rule came with trying to impose “hand chopping” punishments without arranging and providing for the poor and hungry (the latter) as enshrined by Islam. Talibans in Afghanistan did violence to women coming out of their homes and interfered with relics of other religions. Pakistani Taliban flogged a girl and routinely destroyed girls’ schools. On the other hand, liberals insist on flaunting sexuality and nudity, even display of sexual acts on television and media, and all that goes with it. Both the diverse penchants can be delayed or if not totally, foresworn permanently, till happy and workable solutions are found.

Elimination of hunger, poverty an injustice can be the compromising agenda, if the two sides are faithful to their ideals. The recent revival of the judiciary should not be confused with the social justice. The former is legislative and even elitist while the latter is real, enduring and all pervasive. Liberals could never have the wherewithal to change the system while the Islamists have a wider base and can mobilize support, mass appeal and street power. Islamists need respectability and acceptability in the corridors of power, national and internal, and a marketable outlook. Jamaat e Islami originally, perhaps, offered a potential vehicle, but has now chosen an extremist path. Many in this country dread a collapse of the system and sudden surrender at the hands

of extremists in the form of a hurriedly organized compromise. The alternative prognosis of a pervading war of attrition with extremists led by TTP is not a good prospect either which may leave us divided and under developed, with our neighboring India looking forward to reap the benefits. An intellectually negotiated consensus should reside as an option of the State of Pakistan.

Profile of a settlement

A conference of Pakistani Deobandi scholars and ulemas had been called recently by the government circles to garner support (and a declaratory supporting statement) against terrorism and suicide attacks. The organizers could not succeed in getting any fatwa or statement against terrorism unleashed by the Taliban, led by TTP and other factions. Indeed as reported by the daily Dawn newspaper and by its editor, everybody else was criticized and condemned for their failures; drone attacks, the US action in Afghanistan and Iraq, and the non-Islamic character of government in Pakistan. The conference reveals confusion in the minds of Deobandi scholars, if not outright support for terrorism. Earlier there was the Lal Masjid episode, in which demand for Islamist system was pushed by the extremists who occupied a children's library and created a severe law and order situation. Unfortunately excessive force was used which resulted in many deaths and disappearances of the female students of the religious seminary. It is often said that this show of force by the rulers at the time resulted in further alienation of the extremists from the existing system and the Pakistan Army and impelled them towards a deadly terror campaign that materialized soon after the Lal Masjid episode.

Subsequently the Swat peace deal did not succeed and was followed by operation Raahe Nijaat, in which the whole city had to be evacuated and the infiltrators and terrorists had to be wiped out after a deadly military campaign. If we look for the common thread in the demands and the conduct of the extremists, and the participants of the Deobandi scholars' conference, we can conclude the following:

1. Resentment against immorality spread through the media and films, CDs etc with the assistance or benign neglect of the government(s) of Pakistan.
2. Establishment of some obvious manifestations of Islamic system especially a fast-track legal system based on Qazi Adalat and Shariat.

3. If they have their way, they would also have demanded several anti-woman initiatives, stress on beard and salaah etc.

On the first two, even liberals may like to support the extremists. Many of us would not like to show us on TV, what is being shown e.g. vulgarity and raw sexuality and almost copulatory acts. All kinds of x-rated films and songs encouraging flesh trade are not the grievances of the extremists but also have a common cause of conflict with an average law abiding and progressive Pakistani.

That the existing legal system of Pakistan is highly inefficient, corrupt and time-consuming and absolutely inadequate for the needs of an average Pakistani is well known and almost undisputed. Without sacrificing the fundamentals of the existing legal doctrine and regime, it may be possible to induct a fast track effective system which is available in the form of a Qazi system on which there are procedures and consensus.

Small cause courts, felonies and personal laws like marriage, divorce, inheritance etc., could be entrusted to Qazi courts, wherein both lawyer and police are avoided and side tracked. Most people cannot afford lawyers and police and want to have immediate recourse to an institution which is readily accessible, without intermediary and unnecessary costs and whose quick adjudication can be achieved. Qazi / Shariat adalat system could be introduced first in NWFP, in the districts where there is excessive demand for the new system. Localized referendum can be organized to ascertain the will of the people. In Punjab and Sindh also initially some rural areas could be given to the Qazi system.

Keeping in view the deteriorating situation and even expanding and intensifying terror campaign by the militants and fundamentalists, the choices before liberal forces are not too many. They may risk a future war of attrition at best and a take-over at worst. Pakistan's states' security cannot be left to the whims of a handful of liberals who may idealize western cultures and values, but are totally out of tune with the minds and attitudes of a largely uneducated populace living in harsh and difficult conditions. Poverty and extremism are usually best friends.

Attempts to force the change in seminaries curriculum and the associated pedagogy would not succeed. However, enmasse induction in these seminaries could be completed away by offering alternative education facilities to the children of the poor. Financial and modernization

assistance such as libraries, computers and internet, provision of teachers of modern sciences such as economics, philosophy and natural sciences could in the medium to long run may dilute extremism and help produce more balanced and seminary graduates and scholars.

Part 'B'

19.2 Theory and practice of Jihad in the context of Terrorism.

Jihad has remained one of the most confusing, elusive and controversial concepts among Muslims. There are various thoughts and shades of opinion as to the meaning of Jihad; when, how and where should it be undertaken.

The Soft View

Jihad is for defensive purposes only. It is true that the Quran has urged the believers to fight and wage war with the infidels. These are mostly Makki Ayah, which were revealed upon the prophet (pbuh) during the period when he and the Muslims were being persecuted. This school says that the battles fought by the prophet (pbuh) and by those fought by his four companions were Jihad. All other battles subsequently were not Jihad or were Jihad of a low quality and order. These were mostly Arab expansionist wars. The school believes that these wars or battles were neither un-Islamic, in the sense that there is no taboo on an Islamic or Muslim state to unseat cruel and tyrant rulers and establish states where order and fair rule is practiced. This school does not consider Afghan and Mughal attacks on India as Jihad. Even Pakistan wars with India by many are not classified as Jihad. It is alleged that Maulana Maudoodi declared the Pakistani incursion of 1949 into Kashmir as not a Jihad.

There is a wide held consensus that 1971 conflict with Bangladeshis and India was not a Jihad at all. Even 1965 war with India has been considered by many as a conspiracy (Air Marshall Asghar Khan) and this by extension was not a Jihad. But a very large section believes that 1965 war was defensive war and thus was a Jihad and Islamic. The defense of a Muslim state which flaunts Islamic laws is not considered a Jihad, although throughout the history of 1400 years, the rulers of most Muslim states have termed their military ventures as Jihad. Arabs claim that

Turkish rule or suzerainty over them was a mere imperialism, while Turk Muslims consider Usmania kingdom Islamic and all its military campaigns as valid and Jihad. Nationalist Sindhis do not consider Mohammad bin Qasim's conquest of Sindh as Islamic, while most people in Pakistan think and regard it as a Jihadi conquest. This they say is because he unseated the rulers who indulged in incest and perpetrated cruelty on Muslim travelers.

Irani Muslims and most Shias do not consider Iran's conquest by Khalid Bin Waleed and caliph Omar as Jihad or Islamic. Otherwise liberal but Shia scholars in Pakistan (see *The Sword of Allah* by Lt., General M.I. Akram), also condemned and derided this conquest. Had this book been written in Urdu, it would have been taken out of the libraries. This would have created a demand for action against the author by the Pakistan army personnel who mostly consider Khalid Bin Waleed in great regard and esteem as a Muslim general. General Agha Ibrahim Akram had done nothing more than vocalize the Iranian Shia view, whether of the Shah or Imam Khomeini's orientation. As for Shias, the rules of Caliph Omar are considered illegal, even usurpation, as in their belief only Ahle-bait, (descendants and family of prophet, pbuh), were entitled to lead and rule.

The Hard View

This view considers Jihad to be a foremost duty and part of the belief. One who does not believe in Jihad, according to this view, may not be a Muslim and for some is certainly not a Muslim. All wars waged by Muslim rulers were Jihad, unless otherwise against which a fatwa has been given by a majority of Muslim scholars.

According to this viewpoint, it is enjoined upon the Muslims to attack nations and countries in order to expand Muslim empires and spread Islam, by force, as people normally follow the religion of the rulers. All non-Muslim rulers and nations, by definition, deserve to be unseated and fought against. Any conflict among Muslims and infidels (non-Muslims) is a Jihad. It can be for stated offensive or defensive purposes.

State and non-state actors can engage in Jihad. Non-state actors and Muslim groups of "true-believers" and Ulema-ul-Saleheen should convince, persuade and force a Muslim or national government to engage in Jihad for a variety of permitted objectives. Jihad is enjoined against bad rulers, which in their opinion may be against Islam. Jihad against such rulers is viewed as sanctimonious as Jihad against infidels. By this

definition, Taliban (TTP) consider Pakistan to be un-Islamic state and Darul Kufr (home of infidels) and its government and army friendly to the enemy of Islam and Allah .People of Pakistan are generally perceived to be supporting their government and they deserve punishment in terms of terrorism and suicide attacks. Pakistan is declared as Darul Kufr. This is not new. West Pakistan military considered killing their Muslim brothers in Bangladesh as Jihad, while Mukti Bahini of Bengalis considered killing Pakistan army soldiers as permissible. The Arab freedom fighters held the Turk rulers in the same esteem.

Largely Muslim masses are confused between these two diametrically opposing versions and concepts of Jihad. Muslim state intellectuals in order to live in peace and harmony with the prevailing international environment have traditionally subscribed to the soft view. The disgruntled, marginalized and estranged non-state actor groups have generally taken to the hard view, which has given them a uniting ideology and a source of power. They are aided and abetted by confused and affluent Muslims in Arab countries and joined by the poor and ignorant as a way of life.

The hard view has not been very active among Muslim societies and nations over the last fourteen hundred years, and non-state actors never mobilized, except in one or two instances; Kharjis at the time of Hazrat Ali, Assassins in Safavid dynasty in Iran, led by Ibne Sabbah, and may be Bakht Khan in the mutiny of 1857. The hard view became popular in the aftermath of Soviet invasion of Afghanistan, wherein the Western powers architected political Islam to organize and galvanize fight against Soviet expansion and eventually managed to repel them. The Western powers especially the US ran away after the victory in an indecent haste. This was done without an organized effort to dismantle the Jihadi infrastructure built by CIA and Arab state and non-state actors. Out of the debris, Osama Bin Laden emerged as an actor filling the vacuum and sustaining the terrorism infrastructure. Certain external factors also helped these elements to forge a sustaining ideology. There were continuing Israeli excesses on Palestinians, and later the US wanton and unjustified attack and destruction of Iraq. India's excesses on Kashmiris also fuelled their ideology.

Many Hadiths (Prophet's sayings) have encouraged internal struggle and resistance against cruel and tyrant rulers. Power struggle started immediately after the death of the prophet (pbuh), but remained a quiet controversy, till the time of Caliph Usman when he was martyred and the

controversy culminated in the Tragedy of Karbala (Martyrdom of Imam Hussain, maternal grandson of the prophet). Later the tribal divide, led to many armed conflicts among the Abbasids and the Umayyad which included strife within boundaries of Kaaba and attack on Kaaba itself.

However, for more than five centuries till the end of colonialism, Muslim masses lived peacefully in the leadership of their religious leaders, away from politics. Politics remained a subject of courtiers and a small group. A distinct thought prevailed that the struggle against the tyrant and usurper of power is useless and counter-productive, because one tyrant is replaced by other. Muslims by and large have lived peacefully under various so called Muslim kingdoms and empires, without active conflict or resistance from religion and religious leaders. Religion professed to be away from politics, engaged in religious research and scholarship. A classical example is the Deobandis' passive role in the Pakistan movement, arguing that nations are made of geography than religion, a view that is subscribed today by secular and liberal forces. However the followers of Deoband and other Salafis these days are struggling for Islamic states in Afghanistan and Pakistan. Among Deobandis, there is a passive yet very vibrant school of Tablighies, who also do not subscribe to the Jihadi syndrome and tend to keep out of politics.

Interestingly among Sunnis there is a large section of Sufistic and Bareilvi School of thought having considerable following among masses in Pakistan, India and Iraq, who do not subscribe to and support Salafist style of Jihad of today. The scholars and leaders of this sect have been wantonly killed by the Tehrik-e- Taliban Pakistan (TTP) Jihadis. It is Saudi support, from official and unofficial circles, that has made Salafist an important sect in Islam of today; otherwise they are in minority in Pakistan.

Although most liberation movements that struggled against colonial rule were secular and liberal in nature, around the same time, political Islam was founded by poet Iqbal, Jamluddin Afghani, Ikhwanul Muslimeen, Maulana Maudoodi and his Jamaat-e-Islami. In Arabia, Ikhwanul Muslimeen indulged in violent struggle, while till 2000 at least, Jamaat-e-Islami believed in peaceful and democratic struggle and worked for a parliamentary democracy. Ikhwanul Muslimeen was forcefully crushed in Egypt and elsewhere, and today it is largely engaged in a peaceful political struggle and has spread beyond Egypt. Violent struggle during and after 1970s was mostly spear-headed by secular forces like PLO of Yasser Arafat which worked against Zionism and Israeli occupation and

struggled for secular self-rule in Palestine. In the wake of assumption of power by clergy (Imam Khomeini) in Iran, religion (Islam) organized itself along Shia-Sunni Muslim divide and started arming itself with the support of Iranian Shiite and Saudi backed Sunni Arab states, resulting in Hizbullah (Shia) in Iran, Iraq, Syria and Lebanon, TNFJ in Pakistan and Sipah Sahaba (Sunni), Lashkare Tayyaba (Sunni) groups. While Hizbullah's support among Shias is largely universal, support among Sunnis for SSP and LT has remained lukewarm.

Political Islam in the 80's was largely nourished by the US and Western powers, initially as a valve against Imam's Khomeini's tide, but mostly and most forcefully in the wake of Soviet occupation of Afghanistan. A whole Jihadi ideology was carved and nurtured under US and Saudi tutelage, with men, money, material and weapons. Pakistan was weaponized and hitherto peaceful Jamaat-e-Islami (Pakistan) learnt the rope of violence and started nursing violent thoughts and ideologies and seems to be on the verge of leaving its peaceful ethos as is evidenced by their support to Tehrik-e-Taliban Pakistan (TTP) and its suicidal attacks and other terrorism. With the loss of Muttahida Majlis-e-Amal (MMA) government in NWFP and assumption of power by secular ANP, this has further diluted their enthusiasm for peaceful democratic struggle.

It is alleged that Jihadi culture and infrastructure was strengthened under MMA's active or passive support and Musharraf's benign neglect. Jihadi literature and texts were introduced both in religious madrasah and government school system during General Ziaul Haq's regime under US encouragement and ironically the reversal started taking place under Musharraf under US pressure. While initial US support for Jihad and Islam is forgotten by masses and clergy alike, the current efforts to expunge Jihadi and non-Jihadi Islam, promoting anti-religious secular ideologies and forces including quiet support for dance and entertainment (labeled immorality) in media, is widely understood as a conspiracy and resented by ordinary Muslims and clergy alike.

While the US withdrew temporarily from Afghanistan, thinking that its worries were over, Saudis and other Arab states continued their support to Jihadi infrastructure in Afghanistan and Pakistan, striking a bargain with its own fundamentalists and encouraged them to have safe havens in Afghanistan and Pakistan. In the intervening period, 9/11 happened with the emergence of Osama Bin Laden.

Current Dilemmas

Territorial disputes, the most important being the Israeli-Palestinian conflict, in which Israeli irrational antagonism and failure to offer meaningful concessions and continuous indulgence in violence against civilians have played a role. In South Asia, India's often violent handling of the Kashmiris and lack of genuine effort to solve the problems has strengthened such groups as Lashkare Tayyaba, Hizbul Tehreer, whose other side of the coin is sectarian groups like Sipah Sahaba. Despite quiet and active support of the peace process by the US, Muslims by and large believe that Israel does what it does with both quiet and active support of the US. Without support of the US, the tiny state of Israel could not have survived. The attack on Iraq, now acknowledged by everyone including the US, to be unjustified and that the bogey of WMD being found baseless, is also widely understood to be an expression of anti-Islam and anti-Muslim policy.

The idea of Muslims to be the natural enemies of the US and Western civilization, was invented in the West itself, when powerful and influential writers like Samuel P. Huntington, wrote the widely published and read book, 'The Clash of Civilizations'. Neocons anti-Muslim thoughts and actions, as implemented by Bush administration are understood to be hacked down from the said book. In the wake of the demise of Communism and fall of Soviet Union, it is argued that West itself needed an 'enemy' and 'adversary' to fill its intellectual vacuum. The rightist forces in the West created an enemy, nurtured it and are fighting with it. Winds of change however are blowing with the advent of Barrack H. Obama and his famous speech in Egypt and his genuine efforts for a rapprochement with Islam and Muslims.

Winds of change have also started blowing in Pakistan with the popular opinion being explicitly against Taliban, replacing a confused and muddled attitude earlier, in the wake of excessively barbarian terrorism unleashed by TTP. Even the Afghan 'True Taliban' have reportedly distanced themselves from TTP. Most fundamentalist scholars of Deoband School seem to have ended their quiet confusion and have condemned terrorism and suicide attacks. Ironically they put the blame on US, India and Israel in a classical allegiance to conspiracy theories. In their Juma prayers sermons they condemn both the government and the unknown perpetrators alike. Perhaps the key lies in releasing and sharing the so called sensitive information to ward off the popular theories which manage to shift the blame away from TTP. On the other hand in addition

to the classical support of ISI for the Jihadis due to their historical nexus, government of Pakistan and the Pak army is also confused because of an oft-repeated possibility of rapprochement of 'good' Taliban with the US. This might be the explanation of not crossing an undefined limit in dealing with Taliban, and thus the cries of do more from the US and other Western powers.

Hamas is a dramatic development in the Palestinian struggle; the latter has been largely secular in approach. Hamas are actually Ikhwanul Mulimeen, as per their own professed claims on their website. For obvious and practical reasons, Hamas are more violence-prone than generally Ikhwan are as Palestine is different than elsewhere. Ikhwan in the Middle East, Jamaate Islami in South Asia and possibly Nahdatul Ulema, have much in common. For better part of their existence their agenda has been internal, that is struggle against the local tyrant and "Taghoot". Compared with Al-Qaeda these organizations have been mostly peaceful, but have increasingly showed varying levels of support to violence and terrorism, most important of which is Jamaate Islami's recently vocal support for Taliban, local and Afghan, despite most cruel terrorist attacks against civilian and non-combatants.

Muslims had always had confusion and difficulty with defining "Taghoot", "Baatil" and "Fitna", which have been too loosely and willfully defined and interpreted by the interest groups. Often it has been so easy to classify the other parties as "Baatil", leading to justify hundreds of internecine internal conflicts. "Fitna" is worst than "Qatl" (Al Quran), has been used to justify most state coercion, the dictators have engaged in. Almost everything undesirable especially by the ruling groups can be and has been often defined and classified as "Fitna", justifying murderous campaigns. Fundamentalists of today also classify Pakistan and its government as "Fitna", justifying their wanton terrorism. Unfortunately in Pakistan, corruption, which is of course more than a Fitna, is also an arrow in their arsenal of arguments.

The fundamentalist clergy is either ambivalent about suicidal attacks and terrorism in Pakistan and elsewhere perhaps due to broad definition of "Fitna", or simply hold US, Israel and India's triad responsible for these acts in a classical adherence to the "conspiracy theory syndrome". Or how would they explain Saudi support to Al-Qaeda vis-à-vis Iran's influence in Iraq. Is it religion or geopolitics or both? These are two major issues which have caused great confusion in Muslim minds; one is the definition of enemy, and the other is of "Fitna" and "Taghoot".

When Islam came in the medieval age, it faced a tussle with existing religions of the world, Christianity and Judaism. Ironically no war took place with Christian nations; indeed the Christians of Ethiopia protected and supported Muslims. There was a problem with traditional Jewish conspiracy. Those who violently and cruelly opposed the prophet of Islam were Arab pagans, who believed in polytheism and worshipped many gods. In most of the condemnation and exhortation to fight repeatedly emphasized in the Quran, the object is these pagans “Mushrikeen-e-Makka”. Unfortunately ordinary Muslims when reading the Quran, tend to mix the injunctions on “Mushrikeen-e-Makka” who had done excesses on Muslims and persecuted them, with all Mushrikeen or polytheists-Christians being polytheists are also referred by the same word “Mushrikeen”. During the times of the Prophet of Islam, and even now among the more educated, it was well understood that those injunctions were directed against the “Makka” compatriots (Mushrikeen).

We have mentioned earlier that no battle or war was fought with Christians or Christianity during the lifetime of the Prophet of Islam and even much after. Crusades occurred much after his death, and according to many had more to do with traditional expansionist minds on both the sides than being an ideological or religious conflict. Quran encourages its followers to live in peace and befriend other people of the world, if they have not harmed them (physically) or engaged in associated machination or campaign. Crusades could have been forgotten and had been forgotten by Muslims, as they had been dealing with the Christian world in a positive and collaborative way.

Muslims and Muslim governments fought against Communist expansion, physically and ideologically, in unison with the Christian West. Muslims migrated from their homelands after adopting Western culture at least partly. This is an indicator that Muslims did not consider, nor do they now, the Christian West as enemy, despite more recent colonial rule.

Crusades have been reinvented only by a select group of fundamentalist-turned-terrorist and the Neocons in the US. Yet the confusion in Muslim mind is there, when reading the Quran, mixing the “Mushrikeen – e – Makka” with other Mushrikeen, such as Christians. There is no fundamental reason that the Muslims should fight the West. The root cause lies in Palestine, where Muslims believe that Israel has been successively and unfairly supported by the US and consequently by most European countries. The situation became compounded with mishandling

of Iran, architecture of Jihad bogey by the US to fight with Soviet Union in Afghanistan and later departure in indecent haste, and finally the unjustified invasion of Iraq in the context of 9/11 episode.

The solution lies in helping resolve the issues of Palestine and possibly Kashmir, withdrawal from Iraq and Afghanistan and replacement by strengthening Muslim governments to take on the local challenges of terrorism and by a positive and constructive engagement with Muslims providing technical and financial assistance to alleviate poverty, disease, hunger and illiteracy. The genie of poverty and religion, has come out of the American bottle, it has to be decomposed and vanished into thin air.

Hamas & PLO

Hamas is a dramatic development in Palestinian struggle, which has been largely secular in approach. Hamas are actually Ikhwanul Muslimeen, as per their own professed claim on their website. For devious or practical reasons, Hamas are more violence prone than generally Ikhwan are, as Palestine is different than elsewhere.

Ikhwan in the Middle East, Jamat-e Islami in South Asia and possibly Nahdatul Ulema have much in common. For better part of their existence, their agenda has been internal struggle against the local tyrants and "Taghoot". Compared with al Qaeda, these organizations have been mostly peaceful, but have increasingly showed varying levels of support to violence and terrorism, most important of which is Jamaat -e - Islami's vocal support to Taliban both in Afghanistan and Pakistan (TTP), despite cruel terrorist attacks against civilians and non-combatants.

What Jihad is for?

- Self defence or offence options or the revenge.
- It can be peaceful as well as violent. (Struggle in Makkah vs Medina).
- It can be internal or external (Jang-e-Jamal vs Jang-e-Suffain).
- Internal against cruel or corrupt rulers, and against the liberals or non-conformists or secular regimes. (Imam Hussain against Yazid).

- It can be for spread of Islam, but not for expansion of Muslim kingdoms and material benefits (according to many most Muslim wars were more expansion of kingdom and not jihad).
 - It also includes providing social services such as education, health, disaster relief.
 - Being a victim of accidents and injury is also jihad and martyrdom, probably in the lowest category.
 - Jihad is also against organized or unorganized rebellion of the Islamic state or violation of Islamic laws and obligations such as not paying Zakat or spree during immorality. (First Caliph's campaign against non-payers of Zakat).
 - Democratic (or violent) internal struggle for removing or replacing corrupt and cruel regimes assumption of power by others or by oneself for establishing Islamic Sharia. (Khomeini against the Shah of Iran).
 - It can be for the maintenance of order in the international sea-lanes, for peaceful travel and commerce etc., against marauders, free loaders and criminals, and in the aid of victims. (Muhammad Bin Qasim's attack on Sindh).
 - Quiet dislike and hatred of the false and unworthy is Jihad like as well.
 - Suffering, oppression of and under non-believers, is also Jihad. (Like Makkah before migration of the prophet, peace be upon him, to Medina).
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What Jihad Is Not?

- Every military campaign by a Muslim ruler or a group of people.
 - Internecine internal conflicts, without arbitration and intervention of third parties are haram (forbidden).
 - Partial or incomplete wars or threat of violence or war for extracting material gains is not permitted. Pecuniary benefits only after full campaign and achievement of objectives is allowed.
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Dos and Don'ts of Jihad;

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- Fighting is for a cause and not for material gains.
 - Fight in open with those that come to fight with you.
 - Do not fight or harm non-combatants.
 - Non-combatants by definition are, “children, women, sick and infirm, and the old and those in their homes”.
 - Fight and continue the campaign till the ends are achieved; do not stop at the sight of material gain.
 - Principle of deterrence.
 - Principle of proportionality of response in qualitative or quantitative terms.
 - Abhorrence for weapons of fire and mass destruction except in reaction and for deterrence.
 - Saving of agriculture, granaries, greenery and trees.
 - Sanctity for peace and war agreements.
 - Rights for absorption of war prisoners.
 - Forced conscription of all able bodied men; organized paid and volunteer fighting force.
 - Rights and protection of vanquished people in lieu of Jizya/ Poll Tax.
 - There is no guerilla warfare precedence in Islamic history; its permission is highly contentious.
 - Role of arbitration in internal conflicts.
 - Pursuit of common themes with other nations and ideology and not “clash of civilizations”.
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We are suffering today under diametrically opposing “Khaarjites” like pursuit of the absolute truth and justice. On the other hand, we have Taliban (TTP), Lashkare Tayyaba, Kharjis- Takfiris for whom there is no role of moderation and compromise; either you are wrong (Baatil) or we are wrong(Baatil) and only one can survive and the other eliminated. (Khaarjites was a sect in Hazrat Ali's time, which opposed Hazrat Ali's compromise with Muawiya and caused a lot of bloodshed. They divided in three sub-sects and most extremists of them are called Takfiris, according to whom all deviation is Kufr and deserves death punishment. They had a short lived state for some time in North Africa. Later day Salafists have been influenced by some of their thoughts.)

Can we tame Al Qaeda and the Taliban menace? Wishful thinking? Halakoos were finally tamed and they started contributing and rebuilding what they had destroyed. Perhaps there is no harm in talking to “good Taliban”, if they are willing to shun violence and respect generally accepted human values vis-à-vis their fundamentalism. If this can happen, Afghanistan can find lasting peace with the withdrawal of foreign forces and elimination of symbolically democratic but corrupt Karzai government. But you cannot expect Malaysian or Turkish Islam in Afghanistan. The most they can be expected to come to is the social milieu of NWFP, and may improve with time.

Verses from Holy Quran on Jihad

Rationale for Jihad

Fight If your are wronged

To those against whom war is made, permission is given (to fight), because they are wronged;- and verily, God is most powerful for their aid;- (Al Haj, 22:39)

Fight against persecution

(They are) those who have been expelled from their homes in defiance of right, -(for no cause) except that they say, "our Lord is God". Did not God check one set of people by means of another, there would surely have been pulled down monasteries, churches, synagogues, and mosques, in which the name of God is commemorated in abundant measure. God will certainly aid those who aid his (cause);- for verily God is full of Strength, Exalted in Might, (able to enforce His Will). (Al Haj, 22:40)

Fight in support of weak and against oppression

And why should ye not fight in the cause of God and of those who, being weak, are ill-treated (and oppressed)?- Men, women, and children, whose cry is: "Our Lord! Rescue us from this town, whose people are oppressors; and raise for us from thee one who will protect; and raise for us from thee one who will help!" (Al Nisaa, 04:75)

Fight with combatants only, those who turn up to fight

Fight in the cause of God those who fight you, but do not transgress limits; for God loveth not transgressors. (Al Baqarah, 02:190)

Fight to finish till achievement of the objective

And fight them on until there is no more Tumult or oppression, and there prevail justice and faith in God; but if they cease, Let there be no hostility except to those who practise oppression. (Al-Baqarah, 02:193)

Fight those who break treaty

But if they violate their oaths after their covenant, and taunt you for your Faith, - fight ye the chiefs of Unfaith: for their oaths are nothing to them; that thus they may be restrained. (At-Tawba, 09:12)

Will ye not fight people who violated their oaths, plotted to expel the Apostle, and took the aggressive by being the first (to assault) you? Do ye fear them? Nay, it is God Whom ye should more justly fear, if ye believe! (At-Tawba, 09:13)

Fight against mischief and oppression

The punishment of those who wage war against God and His Apostle, and strive with might and main for mischief through the land is: execution, or crucifixion, or the cutting off of hands and feet from opposite sides, or exile from the land: that is their disgrace in this world, and a heavy punishment is theirs in the Hereafter; (Al-Maidah, 05:33)

Fight with discipline and sincerity

And strive in His cause as ye ought to strive, (with sincerity and under discipline). (Al-Hajj, 22:78)

Fight those who hinder and obstruct in the way of expansion of Islam

Fight those who believe neither in God nor the Last Day, nor hold that forbidden which hath been forbidden by God and His Apostle, nor acknowledge the religion of Truth, (even if they are) of the People of the Book, until they pay the Jizya with willing submission, and feel themselves subdued. (At-Tawba, 09:29)

Fight against oppression and persecution until its end

And fight them on until there is no more Tumult or oppression, and there prevail justice and faith in God; but if they cease, Let there be no hostility except to those who practice oppression. (Al-Baqarah, 02:193)

Slay the Mushrikeene Makkah who have expelled you from your homes

And slay them wherever ye catch them, and turn them out from where they have turned you out; for tumult and oppression are worse than slaughter; but fight them not at the Sacred Mosque, unless they (first) fight you there; but if they fight you, slay them. Such is the reward of those who suppress faith. (Al Baqarah, 02:191)

Principles and conduct of war

Principle of similar and proportional response

If then any one transgresses the prohibition against you, Transgress ye likewise against him. But fear God, and know that God is with those who restrain themselves. (Al Baqarah, 02:194)

On deterrence & standing army

Against them make ready your strength to the utmost of your power, including steeds of war, to strike terror into (the hearts of) the enemies, of God and your enemies, and others besides, whom ye may not know, but whom God doth know. Whatever ye shall spend in the cause of God, shall be repaid unto you, and ye shall not be treated unjustly. (At-Anfal, 08:60)

No injustice towards the enemy

O ye who believe! stand out firmly for God, as witnesses to fair dealing, and let not the hatred of others to you make you swerve to wrong and depart from justice. Be just: that is next to piety: and fear God. For God is well-acquainted with all that ye do. (Al-Maidah, 05:08)

No compulsion in religion

Let there be no compulsion in religion: Truth stands out clear from Error. (Al Baqarah, 02:256)

For friendship with Non believers who have not caused harm

God forbids you not, with regard to those who fight you not for (your) Faith nor drive you out of your homes, from dealing kindly and justly with them: for God loveth those who are just. (Al Mumtahana, 60:08)

No friendship or relations with states who?

God only forbids you, with regard to those who fight you for (your) Faith, and drive you out of your homes, and support (others) in driving you out, from turning to them (for friendship and protection). It is such as turn to them (in these circumstances), that do wrong. (Al Mumtahana, 60:09)

Killing a person unjustly is like killing the whole humanity

On that account: We ordained for the Children of Israel that if any one slew a person - unless it be for murder or for spreading mischief in the land - it would be as if he slew the whole people: and if any one saved a life, it would be as if he saved the life of the whole people. (Al-Maidah, 05:32)

Against (weapons) of mass destruction (WMD)

When he turns his back, His aim everywhere is to spread mischief through the earth and destroy crops and cattle. But God loveth not mischief. (Al Baqarah, 02:205)

Against material objectives in military campaign

It is not fitting for an apostle that he should have prisoners of war until he hath thoroughly subdued the land. Ye look for the temporal goods of this world; but God looketh to the Hereafter. And God is Exalted in might, Wise. (Al Anfal, 08:67)

On compromise, truce, armistice

But if the enemy incline towards peace, do thou (also) incline towards peace, and trust in God: for He is One that heareth and knoweth (all things). (Al Anfal, 08:61)

Emphasis on peace treaty

Except those who join a group between whom and you there is a treaty (of peace), or those who approach you with hearts restraining them from fighting you as well as fighting their own people. If God had pleased, He could have given them power over you, and they would have fought you: Therefore if they withdraw from you but fight you not, and (instead) send you (Guarantees of) peace, then God Hath opened no way for you (to war against them). (An-Nisaa, 04:90)

Only selective cutting of trees permitted

Whether ye cut down (O ye Muslim!) The tender palm-trees or ye left them standing on their roots, it was by leave of God, and in order that He might cover with shame the rebellious transgresses. (Al-Hashr, 59:05)

On neutrality of judge and arbitrator

O ye who believe! Stand out firmly for justice, as witnesses to God, even as against yourselves, or your parents, or your kin, and whether it be (against) rich or poor: for God can best protect both. Follow not the lusts (of your hearts), lest ye swerve, and if ye distort (justice) or decline to do justice, verily God is well-acquainted with all that ye do. (An-Nisaa, 04:135)

Secrecy is permissible

In most of their secret talks there is no good: But if one exhorts to a deed of charity or justice or conciliation between men, (Secrecy is permissible): To him who does this, seeking the good pleasure of God, We shall soon give a reward of the highest (value). (An-Nisaa, 04:114)

Source: Holy Quran Translation by Yousuf Ali & Pickthall.

On non-combatants

Do not kill the old, the children and the women (Abu Daud)

Ten instructions on the conduct of battle (First Caliph)

- Do not kill women, or children or old.
- Do not cut fruit trees.
- Do not destroy populated areas.
- Do not kill beyond immediate eating needs.
- Do not kill beyond immediate eating needs.
- Do not destroy greenery or burn it.

Source: Fathul Buldan

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20 Conventional and Strategic Balance

In this chapter we would analyze the conventional and nuclear doctrines and strategies of the two countries, military structures including nuclear and conventional, and try to explore the links between conventional defence and its escalation to the nuclear theatre. As Pakistan's military is involved intermittently in politics and state administration, relevant issues would also be investigated and commented upon. And finally, some recommendations would be developed in allied areas.

It was expected and speculated that after becoming nuclear weapon states, the two countries would bring in the necessary changes in their societies and in the mutual relationship, and that dialogue and negotiations would replace confrontation. This has not happened. Pakistan has not improved its governance and has been mired into a cycle of rather unmanageable problems of extremism and internal terrorism; the latter often spills beyond borders. Proxy wars were encouraged, which have boomeranged. India instead of cooperating with Pakistan in dealing with this menace is reportedly fuelling the fire and accentuating the problems by various means. It appears that in both the countries, intelligence agencies and entrenched war-mongers are running the show in place of enlightened political leadership. Poverty and hunger in both the countries is not on decline, in the wake of continuing massive diversion of resources to military pursuits.

In a nutshell, nothing has been done on the two sides to make adjustments with nuclear realities. It is business as usual and conventional. In the meantime, at least twice, the two countries have reportedly been dissuaded from coming to the brink of war.

On both the sides, the two countries are ruled by rather insensitive elite hardened amidst abject poverty, who would not be averse to sacrifice of ten to twenty thousand lives on each side of the border. There is a significant chance that a conventional war may inevitably escalate to a nuclear catastrophe.

Recent statements of Indian military leadership indicate that they are planning for a nuclear entanglement of sorts, instead of contributing to a robust deterrence regime. Robust deterrence is perceived to work against India (reducing options) and in favor of smaller Pakistan (nullifying the power advantage of the adversary). Diluting deterrence by opening a nuclear window is one of the newest degeneration that has started to plague this unfortunate part of the world. Perhaps it is only from the debris of nuclear destruction, that the two countries would change their confrontational attitudes and policies. Soviet system melted away into a more stable order, peacefully and with discipline. Such opportunity may be available in South Asia. A nuclear conflict in the next two decades does not seem impossible.

Fortunately, more information on military infrastructure doctrine and strategy is available today than even before. Internet is being utilized by the national agencies in South Asia to informally disseminate information. Nuclear doctrines of the two countries and issues on conventional defence have been disclosed by the two countries. Although this kind of information is coming from the horse's mouth, there is still a reliability issue.

In the enthusiasm for promoting deterrence on the part of Pakistan, and for acquiring prestige and political benefits on the part of India, exaggerated claims of success and achievements may have been made. It is often speculated among informed circles that a lot of missile testing is more of a publicity than a technical requirement.

In order to be able to explore Pakistan's defence problems and speculate about their possible solutions, it would be of interest to have a perspective of adversaries, actual and potential, and their political and military aims and objectives. Following is a hypothetical list of such objectives, in the sense that there is no available public document to draw upon in this report. However, these are not baseless, but appear to have a rationale from adversary's perspective and to a large extent demonstrated by sixty years of history of relations between the two countries. Admittedly there may be some positive side also, but military discussions of this nature are not based on optimistic or/and rosy assumptions, and hence are ignored. Certainly the positive threads in policy options should be explored by the two countries, such as cooperation in the SAARC framework.

India's Political and Military objectives vis-à-vis Pakistan

India's political and military objectives and strategy vis-à-vis Pakistan maybe as follows:

1. To keep Pakistan under pressure, so that it does not pursue its claim on Kashmir, and adopts a submissive or "cooperative" approach in regional matters.
2. To force Pakistan on spending a disproportionate and back breaking amount of resources on military sector, so as to throttle its economic and social sectors and create Soviet Union kind of breakup scenario.
3. To keep Pakistan locked in South Asia, oppose entry of other powers in the affairs of the region and "Finlandise" Pakistan giving it a status of Nepal and Bangladesh.
4. To provide underhand support to Pakistani dissidents, nationalists and secessionists especially in Baluchistan.
5. To acquire a foothold in Afghanistan for a variety of current and long-term objectives.
6. To promote conflict between Afghanistan and Pakistan, so as to prop up another challenge to Pakistan's security and divide its resources and attention on two fronts.
7. To counter Chinese interests in Pakistan and the region.
8. To be available for providing logistics and other support in damaging or destroying Pakistan's nuclear establishments.
9. To manage Pakistan, avoid entanglement with it and keep marching towards achievement of global power status and prestige.
10. To dilute nuclear deterrence, so as to have flexibility and liberty of action to further its national interest and "deal" with Pakistan.
11. To convert Pakistan into a "pariah state" by pushing it into an undesirable collection of difficulties e.g. terrorism, safety (or lack of it) of nuclear weapons, unauthorized use and management, political instability, extremism and fundamentalism, religious violence, intolerance.
12. To enhance influence and relationship with rich Muslim Arab and non-Arab states, so as to neutralize their support to Pakistan.
13. To get overland access to Middle East, by creating soft conditions en-route or encourage or pressurize/force Pakistan to provide access as may be required by India.

14. To entangle Pakistan's military on a number of fronts, sapping its resources, energy and vitality, and similarly the entire state of Pakistan.
15. To cultivate, support and strengthen such political forces in Pakistan, so as to assume political control of Pakistan, in the wake of military debacle and internal turmoil ala Bangladesh.
16. To forestall and prevent complete chaos in Pakistan that may generate third party interest and invite world powers, as has happened in Afghanistan and Iraq.
17. To avoid discussions on Kashmir issue and brand local struggle of freedom fighters as terrorism initiated by Pakistan, which may not be true anymore. Pakistan has enough problems with terrorism as are widely known.

Evolving Nuclear Doctrines

The recent statement of the Indian army chief has caused much uproar in Pakistan. It has invited quite some uncharitable comments and even unnecessary frenzy and jingoism seems to have been unleashed disproportionate to the value and probability of the adoption and implementation of the statement and whether the same is a mere extension of what is generally recognized as a factual reality.

General Kapoor has made the following four points; a) a military campaign with Pakistan can be successfully completed in a few hours; b) India should plan for a limited nuclear war with Pakistan; c) India should plan for a simultaneous military campaign of Pakistan and China and d) Pakistan's stockpile of 70-80 nuclear weapons is more than the requirements of a "minimum" nuclear deterrence. Let us analyze the implication, feasibility and rationale of these assertions.

As to the assertion that India can walk over Pakistan in a matter of hours, Pakistan military Corps commanders have made an adequate reply rather bluntly and squarely. Military capabilities on both the sides have been enhanced very significantly since 1965 War, wherein the walk-over prognosis or targets have been made rather a matter of wishful thinking. The conventional strength ratio between the two countries has infact over the years narrowed down in Pakistan's favor from a classical 1:3 to 1:2.

National Command Authority; Pakistan's response

In response to the Indian Army chief's persistent threats to Pakistan in televised statements NCCA met under the prime minister and noted the following points:

- Such irresponsible statements reflected a hegemonic mindset, oblivious of the dangerous implications of adventurism in a nuclearised context.
- The NCCA also took note of the developments detrimental to the objectives of strategic stability in the region.
- It observed that instead of responding positively to Pakistan's proposal for strategic restraint regime in South Asia, India continued to pursue an ambitious militarization and offensive military doctrine.
- Massive induction of advanced weapon systems, including installation of ABMs, build up of nuclear arsenal and delivery systems through ongoing and new programs, assisted by some quarters, offensive doctrines like "Cold Start" and similar accumulations in the conventional realm, tend to destabilize the regional balance.
- Pakistan cannot be oblivious to such developments.
- Pakistan is satisfied with the safety and security of its strategic assets and effectiveness of its strategic deterrence.
- The meeting emphasized the importance of Pakistan's policy of credible minimal deterrence and maintaining strategic stability in South Asia.
- The authority reaffirmed Pakistan's policy of restraint and responsibility and its resolve to continue efforts to promote peace and stability in South Asia.
- It underscores the need for preventing conflict and avoiding nuclear and conventional arms race in the region.
- It noted that the India specific exemption made by Nuclear Suppliers Group and subsequent fuel supply agreements with several countries would enable New Delhi to produce substantial quantities of fissile material for nuclear weapons by freeing its domestic resources.
- It reiterated that while continuing to act with responsibility and avoiding an arms race, Pakistan would not compromise on its security interests and the imperative of maintaining a credible minimum deterrence.

- The meeting reviewed plans for generation of nuclear power under IAEA safeguards as part of National Energy Security Strategy to ensure sustained economic growth and welcomed the renewed interest in nuclear power generation to meet the challenge of climate change.
- It said that as a country with advance fuel cycle capability, Pakistan was in a position to provide nuclear fuel cycle services under IAEA safeguards and participate in any non-discriminatory nuclear fuel supply assurance mechanism.

India's nuclear doctrine

In India there is a habit of verbosity and issuing long repetitive texts and at times utilizing a jargon which is not even fully understood and appreciated by the drafters themselves. A seven page draft nuclear doctrine has been issued by the National Security Advisory Board of India, which is a civilian institution, but a third part of the three-tiered National Security Council (NSC). It consists of eminent citizens. Indian prime minister is at the head of this elaborate system, authorized to issue the fateful order of introducing and using the nuclear weapons in a conflict. Thus there is a significant civilian imprint as the language and ideology contained in the draft reflects most of K Subramanian's (former IDSA chairman) views. Key components of the Indian nuclear doctrine are as follows.

1. The very existence of offensive doctrine pertaining to the first use of nuclear weapons and the insistence of some nuclear weapon states on the legitimacy of their use even against non-nuclear weapons states constitute a threat to peace and stability.
2. In the absence of global nuclear disarmament, India's strategic interests require effective, credible nuclear deterrence and adequate retaliatory capability. Should deterrence fail, India shall pursue a doctrine of credible, "minimum nuclear deterrence". In this policy of "retaliation-only", the survivability of our nuclear arsenal is critical, which is a dynamic concept.
3. Any threat of use of nuclear weapons against India shall invoke measures to counter the threat.
4. Any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor.

5. India shall not be the first to initiate a nuclear strike, but will respond with punitive retaliation should deterrence fail.
6. India will not resort to the use of or threat of use of nuclear weapons against States that do not possess nuclear weapons or are not aligned with nuclear weapon powers.
7. Credibility, effectiveness and survivability are central to India's nuclear deterrent.
8. Nuclear weapons shall be tightly controlled and released for use at the highest political level. The authority to release nuclear weapons for use resides in the person of the prime-minister of India or the designated successor(s).
9. For effective employment, the unity of command and control of nuclear forces including dual capable delivery systems shall be ensured.

Comments on the nuclear doctrine of India

The document is highly verbose and quite irrelevant to India's immediate and near-future needs. It identifies the US as principal and potential enemy and by extension the peaceful Europeans, and also the Japanese who are the beneficiaries of the US nuclear umbrella. It demands force structure and assets to meet this eventual threat. The intention of no-first-use may be more an admission of reality vis-à-vis major nuclear powers than being a sincere creed. It may buy a partial insurance against China also. One is not sure if vis-à-vis Pakistan, the affirmation of no-first-use would be remembered and followed faithfully at the eleventh hour, should it be obvious or believed that Pakistan was about to use nuclear weapons. In actuality, Pakistan may be the first in issuing the threat, but India may be the one to use it, even if in pre-emption. So the draft doctrine may not be taken at its face value by Pakistan.

To be of any practical and immediate use, the draft doctrine should have addressed and responded to the possible and potential skepticism of its adversaries and to the other issues as are relevant to the South Asian theater, if it was destined to foster stability. Similarly issues relevant to China are not dealt with. The recent thoughts of the Indian Army Chief, at least partly cater to China, which the doctrine tends to have ignored. This rather bombastic, if not frivolous and irrelevant, doctrine only lays down the basis for India's future nuclear acquisitions. We should encourage and welcome more useful and down-to-earth communications as have been made by the Indian army chief recently, so as to be able to base our own thoughts on more robust assumptions.

Entertaining or planning and providing for a conventional conflict in the context of an evolving “nuclear peace and stability”, should not be a taboo. While India has larger ambitions, justifying the maintenance of a varied and diversified military force, Pakistan's maintenance of a conventional force and infrastructure indicates that it is also entertaining possibilities of conventional conflict with India. The planning for a conventional conflict by both sides should not be seen as an affront or threat to the nuclear deterrent and stability. Pakistan's nuclear doctrine (unannounced) also assures that it may allow some conventional losses or loss of non-critical territory, before launching a nuclear riposte.

Similarly simultaneous military conflict with Pakistan and China is not so preposterously impossible, as has been made out in Pakistan. Notion of application of Chinese pressure at Indian border, during a possible Indo- Pakistan conflict has never been ruled out but has been expected or relied upon in the past conflicts. Indeed after the militarization of South Asia, Chinese active or passive support in the military campaign may acquire an additional rationale of dissuading Pakistan from prematurely opening the nuclear front. And once such involvement has been considered feasible, it may also escalate into a unitary or joint nuclear campaign by China and Pakistan. Indians would not refrain from planning for such eventualities, irrespective of its possibility simply because Pakistan does not like it. As a hegemon, India would also like to dilute the nuclear deterrence created by Pakistan, in order to acquire political and military flexibility to further its interest here and there, by making its deterrence rather fuzzy and flexible. Hence they would always investigate the limits to which Pakistan maybe pushed without impelling it to bringing the nuclear dimension into the conflict.

Indians would also like to entertain and possibly invent the possibility of a limited nuclear conflict in order to maximize flexibility and space for themselves. However the idea of a limited nuclear conflict (nuclear war fighting) is a very dangerous one and very immoral too. Indian public opinion should always discourage such thoughts and intentions. On the other hand, by converting the Pakistani military leaders' rather obtuse and fuzzy ideas into a rough conversation in the media ought to be discouraged being discussed in India. It is rather unrealistic to publicly deride India's military capability, which has several times resource superiority over Pakistan. It can only add to war hysteria on both sides, rather than building public opinion against conflict.

India did its first nuclear explosion in 1971 in Pokharan near Pakistan's border in Sindh, and repeated the same with newer and may be more

sophisticated weapons in 1998, which was responded to by Pakistan, a few months later. India could not have given a better gift to its neighbor and arch-rival, as it gave Pakistan a legitimate excuse for testing its own weapons, which had been developed more than a decade earlier and remained untested and undemonstrated.

A state of a rather stable nuclear deterrence seems to have existed since then. It has created a stalemate like condition. It is obvious that the relevant circles in India have started feeling uneasy about this equalizer and a stalemate that has endured for more than two decades now. Pakistan mired in its own domestic problems of extremism and terrorism, India appears to be preparing for launching the next phase of its nuclear plan. The quest to acquire a permanent seat at the Security Council and the status of a nuclear weapon state appear to be the two near term political objectives.

India has consistently refused to sign the comprehensive test ban treaty (CTBT) prohibiting all kinds of nuclear testing in any physical environment, as it wants to keep its option open and rather wide open to undertake more tests to advance its nuclear force to higher level of sophistication and recognition. Pakistan may not be able to go very long in competition with India for a variety of economic, political and technological reasons. Its security interests would be better served, if India for one reason or the other does not push ahead with its nuclear ambitions. Pakistan would thus be more than happy to sign any bilateral or multilateral document pertaining to nuclear restraint be it NPT or CTBT or a new creative proposal, provided India does it too. Pakistan's refusal to sign such instruments is purely reactionary due to India's refusal.

To the chagrin of the idealists in India, a rudimentary nuclear deterrence regime seems to have stabilized in the sub-continent, which is considered by many as anathema due to its equalizing and stalemate character. Nevertheless nuclear doctrines have been announced by both the sides even if informally and nuclear command and control systems have been established. If Kapoor thinks, acquisition of 70-80 nuclear bombs is more than the requirements of a minimum nuclear deterrent; India should invite Pakistan for negotiations on the subject, for reaching an agreement on nuclear restraint in South Asia. Various estimates have been published in the US regarding the size of nuclear stock pile in the two countries. More reasonable estimates put up a figure half as much as Kapoor has indicated. But if Kapoor's figures are to be accepted as

correct, then there seems to be parity in this respect among the two countries. However the inventory of fissile material with India should be several times high in India, and also the production rate and potential. It is highly unlikely that India would enter into negotiations with Pakistan on a nuclear restraint regime even if and when the political climate prevailing between the two countries improve. India's objectives in acquiring and improving its status as a nuclear power are more political than strategic. It is more likely that instead India would spread the scare of Pakistan's nuclear capability and its improvement and exploit it to launch major expansion in this respect including the preparations of a third round of nuclear explosions.

This seems to have given the western powers some sense of ease and relief regarding the safety and security of nuclear weapons against the possibility of accidental or unintended use and safeguarding against unauthorized use or of falling in the wrong hands. Lately some doubts have been expressed in the US and elsewhere regarding Pakistan's capacity and capability to safeguard its nuclear weapons adequately, in the light of the rise of extremism and terrorism and the associated political instabilities and uncertainty. Pakistan has been assisted by the US in boosting the security of its nuclear weapons, both technically and financially. Reportedly access to nuclear infrastructure has been demanded or discussed by the US authorities, in case of a security melt down. A prospect that has been discounted by the Pakistan authorities. We will cross the bridge when it comes, seem to have been accepted by the US.

No First use Treaty

President Asif Ali Zardari has spoken to foreign media on no first use of nuclear weapons, immediately after being elected as the President. NFU has been on the table for several decades originally between Warsaw Pact and NATO countries. The erstwhile Soviet Union used to be the main proponent, while the US and NATO rejected the idea, due to proximity and conventional weapons dominance in Western Europe. The US did not want to close any option, especially dealing with the Soviets in the European theatre. In fact the US has never committed non- use of nuclear weapons even vis-à-vis non- nuclear weapons states.

Nuclear threats have been given by the US several times during the postwar decades including Korean War, Vietnam conflict and Cuban crises. Interestingly the Russians after the demise of the Soviet Union

also seem to have withdrawn their interest in the NFU. Being reduced to a smaller power status, they would like to resort to a more active use of a nuclear threat in the achievement of their foreign policy objectives and projection of power. Earlier Soviet interest in NFU was primarily to have a flexibility of having a conventional military campaign in Europe without incurring the nuclear risks, at much earlier stages in a possible confrontation.

While reading the US nuclear policy literature, it is clear that the US would not hesitate in using nuclear weapons anywhere, whenever it is in a difficult military situation including Pakistan, Afghanistan, Iraq, Middle East etc. for example if a thousand of their soldiers are trapped and their lives are in danger.

To date only India seems to be interested in NFU, partly for propaganda reasons and partly for clever strategic reasons, especially vis-à-vis Pakistan, the only country with which it has active conflict or confrontation. Any hesitation or delay on the part of Pakistan in starting to prepare for pushing the nuclear button would deprive it of the value of its deterrence. Plainly speaking, NFU would give India an opportunity to launch or win a conventional attack, without thinking of our nuclear weapons. India does not need nuclear weapons to face Pakistan in a conventional conflict, while the reverse may not be true.

Whether there may or may not be a formal nuclear doctrine in Pakistan in the context of first use in a military campaign or engagement, there seems to be a national consensus in the use of nuclear weapons, vis-à-vis India, should the need arise. There is no refrain, hesitation or compunction in general public over use or threat to use nuclear weapons. With this physical and psychological ability and preparedness to launch nuclear weapons in military conflict, the nuclear deterrence regime is established in the subcontinent. The confidence and resolve among the people and maybe the government to take on India seems to have come about due to this nuclear deterrence regime.

India has amassed forces on the border earlier and are, these days unduly pressurizing Pakistan in a wanton manner. Somehow there is no worry among general public despite poor economic conditions. The technical question, however remains which is the definition of a definite threshold for introducing nuclear weapons and the intensity of nuclear response. To explain this a bit, under what conditions would Pakistan resort to nuclear weapons? Will it gradually escalate to a nuclear war and

in this? It will use most or all of its 40-50 bombs at a time? Looking at the constancy and the background of the tone, India may respond after getting the answers to these technical questions.

It appears that India may launch some kind of attack to achieve these possible objectives as well. The pronouncements seem to be quite clear in this respect. Another motivation for the Indian stand could be to test and create space for power projection and achieving its policy objectives, despite a nuclear deterrence regime, namely to blunt, confuse, soften the regime.

Nuclear deterrence has also been linked to the Mutual Assured Destruction (MAD) doctrine. The regime assures that both sides would receive unacceptable damage and destruction during a conflict. In the context of MAD our image of being mad people among some, comes in quite handy. The cool, happy and rational attitude of typical westerner belies his ability for a resolve and readiness in using nuclear weapons. "Dama dam Mast Qalander" should be taken seriously by India.

It is therefore concluded that the pronouncements by President Zardari on NFU may be a mere palliative or plain simple gentlemanly wish usually untenable in realpolitik. It was quite understandable in the early days of his presidency. It has happened elsewhere also. President Ronald Reagan reportedly and quite innocently asked his advisors publicly as to why they were so particular and edgy about a few Pakistani nuclear bombs, when the US had thousands. Reagan was anxious in entailing Pakistan's support in Afghanistan against the "evil empire". Did Ronald Reagan prevail or the nuclear non-proliferation policies persisted! Perhaps both for Pakistan continued its nuclear program without a major threat from the US, but amidst loud American protestations and export bans. However President Zardari's statement may not be so untutored as it appears to be. After all talking about no first use indicates the inherent possibilities of being able to use first.

Pakistan's Nuclear Doctrine

There is no publicly available draft or formally announced nuclear doctrine in Pakistan. However, following indicators and assumptions can be ascribed to Pakistan's policy in this respect. This summarization is based on the frequent statements of the military officials, spokesmen and relevant civil bureaucrats and leaders, including the writings of accepted and recognized strategic thinkers in the country.

Conventional and Strategic Balance

1. Pakistan's nuclear programme is of purely defensive in nature and is India centric.
2. Pakistan will maintain a minimal nuclear deterrence vis-à-vis India, both for meeting conventional or nuclear threat from India.
3. Pakistan does not and will not subscribe to the so-called no-first-use syndrome. It would introduce nuclear weapons, should a threshold or a critical milestone is crossed in a conventional conflict. The threshold remains undefined but appears to be the possibility of run-over at major strategic boundaries.
4. Pakistan subscribes to a robust command and control system providing for safety and security of nuclear weapons and safeguards against the possibility of unauthorized use.
5. To promote stability and enhance internal control, nuclear weapons are to be stored in unassembled form, which could be put together in a few hours.
6. Ballistic missiles are being developed and refined to be able to attack most parts of India.

Conventional Combat Doctrine

(The Pakistan Army has developed a doctrine called the Riposte which is a limited "offensive-defence" doctrine. It has refined it consistently starting in 1989 during the "Exercise Zarb-e-Momin". This doctrine is fully focused towards Pakistan's arch enemy, India).

The Riposte doctrine is derived from several factors:

- *The vulnerability of Pakistan is not in its lack of strategic depth versus India, but in the fact that so many of its major population centers and politically and military sensitive targets lie very close to the border with India. As such Pakistan can ill-afford to lose large territories to an Indian attack.*
- *India has substantially enhanced its offensive capabilities, and a stand and fight approach doctrine used in the 1965 and 1971 wars would lead to serious Indian penetration of Pakistani territory with the Pakistani army being unable to maneuver to meet the threat. Counterattacking formations would then be destroyed piecemeal by numerically superior Indian forces.*
- *Holding formations in both India and Pakistan can man their forward defensive positions and fortifications in less than 24 hours. However, Corps level reserves with large stockpiles of munitions will take between 24 to 72 hours for mobilization after being given their orders. In this regard, both armies will be evenly matched in the first 24 hours*

Pakistan's development challenges

since the Pakistani units have to travel a shorter distance to their forward positions.

The Riposte doctrine entails that Pakistan in the event of hostilities with India will not wait for the enemy's offensive, but rather launches an offensive of its own. The offensive will be a limited advance along narrow fronts with the aim of occupying territory near the border to a depth of 40–50 km. Since Indian forces will not reach their maximum strength near the border for another 48–72 hours, Pakistan might have parity or numerical superiority against the Indians.

The Pakistani Army hopes to accomplish three things under this strategy.

- *The enemy is kept off-balance as it will be tied up containing the Pakistani offensive into its territory rather than launching an offensive into Pakistani territory.*
- *The Pakistani Army hopes to contain the fighting on the Indian side of the border so that any collateral or other damage will be suffered by India.*
- *Indian territory of strategic importance once seized, will give the Pakistani Army a bargaining chip to be used in the aftermath of a ceasefire brought about by international pressure after 3–4 weeks of fighting.*

Kashmir, LOC and the Northern Punjab areas are heavily fortified and ill-suited for large mechanized offensives. The most likely area where Pakistan might launch its offensive is the semi-desert and desert sectors in southern Punjab and Sindh provinces.

To supplement this doctrine, the Army in the 1990s created a strong centralized corps of reserves for its formations. The force is known as Army Reserve South and is a grouping of several powerful Corps from Pakistan's Order of Battle. These formations have been rapidly equipped with assets needed for mechanized capability. These reserve formations are dual-capable, meaning they can be used for offensive as well as defensive (holding) purposes. Pakistan has also increased its ammunition, fuel and other military stockpiles to last for 45 days in case of a conflict. During the 1965 war for instance, Pakistan only had 13 day reserves which hampered its military operations.

Courtesy: Wikipedia, Pakistan Army

Strategic depth: ridiculed or misunderstood

The term became popular during General Zia regime, that Afghanistan as a partner could provide “strategic depth” to Pakistan. Strategic depth

means distance between frontier and core assets, military or economic. A country having depth can afford to have a cascade type multi-layer defense. In such situations, withdrawal or loss suffered at the frontier may not result in total collapse or overrunning of core military and economic assets. A deep country can afford to encourage enemy advances into its territory, cut off its supply lines and thus simply “swallow” the enemy, as did Russia with German advancing troops, the latter could not sustain themselves after entering deep into Russian territory.

Pakistan is a narrow country, and thus does not have this kind of luxury. However for Afghanistan to serve as a buffer and provide depth to Pakistan is rather questionable and has been often decried and even ridiculed. Afghanistan worked very well for British India as a buffer and provided strategic depth to the later, against attack from the north. In its crude form, the strategic depth of Afghanistan would mean a freedom for Pakistan forces to abandon frontiers and take refuge in Afghan territory. Under this crude definition it is certainly rather preposterous and inconceivable. However Afghanistan, under certain circumstances, could serve as a back yard storage and other logistics support for Pakistan. However, it is highly unlikely that a friendly, reliable and compliant Afghanistan would at all be there politically to serve that kind of role.

Afghanis are too independent by their nature. Even the highly dependent “Taliban regime” did not quite cooperate with Pakistan. However, a totally unfriendly and hostile Afghanistan would mean Pakistan being sandwiched between North and South or East and West; and thus in that obverse sense, the notion of strategic depth may possibly be sustainable e.g. the requirement and utility of having a friendly or neutral government in Afghanistan which in case of regional hostilities maintains a quiet front or provide storage and logistics facilities.

Or one could deploy its strategic assets, not in Afghanistan itself, but on its border inside Pakistan territory, providing strategic depth, equal to the width of the whole country. If there is a hostile and unfriendly government installed in Afghanistan, the freedom and safety of installing strategic assets on our rear borders may not be there i.e. these would be vulnerable to attack and dilution or compromised. There are other rationales as well, with respect to nuclear development and defence. In case of a friendly Afghanistan and the consequent strategic depth, nuclear missiles can be deployed close to the rear border (Afghan-Pakistan), to avoid enemy air or missile attack by enlarging the range i.e.

enemy delivery vehicle may either be out of range or would be detected and possible counter measures adopted. This may thus further second strike capabilities. However, the location of Kahuta installations do not indicate that such considerations have always been at the forefront of our strategic planners and other overriding issues have often found supremacy.

The Number Game: Conventional Force

If the nation master/CIA figures are correct, parity has now been reached in the number of tanks. Military balance figures are shown in table 20.1. A ratio of 3:1 has also been achieved in number of soldiers, which both are significant improvement in our time. It is obvious that preparation for a full scale conventional defence has been made. The issue is where does one stop the race. An associated issue is the maintenance and updating requirement of a high number.

Serious thought has to go into putting some limit to conventional defence and make operational the “nuclear deterrent”. It is true that all conventional issues cannot be met through nuclear deterrence, but a threshold of a full- scale conventional conflict should be set at a lower limit. We have discussed this issue elsewhere, in the context of the need of reducing military expenditure.

Nuclear Warheads

In Tables 20.4 & 20.5, we produce data on delivery vehicle. Various estimates have been published in the US, on number of nuclear warheads in Pakistan's arsenal. For obvious reasons, Pakistan has no reason, to discount those. The figures vary from 30 to 60 or 70 warheads, which falls in the range of “proportional deterrence’ in 1987, I wrote “Nuclear Stalemate or Conflagration”, which I am reproducing a table from, on nuclear warhead requirements. The reader may consult its explanatory notes in that book on page 109, Table - 8.1.

Conventional and Strategic Balance

Table 20.1: Militaries Compared - Pakistan, India, China, Turkey (2005-06)

	Units	Pakistan	India	China	Turkey
Air force personnel		45,000	110,000	2,810,000	63,000
Armed forces growth		27	3	-28	-3
Armed forces personnel		612,000	1,303,000	2,255,000	610,000
Army personnel		520,000	980,000		525,000
Conventional arms exports	Mn USD	\$10.00	\$22.00	\$125.00	\$18.00
Conventional arms imports	Mn USD	\$344.00	\$2,375.00	\$2,238.00	\$418.00
expenditure > % of GDP		3.36%	2.87%	1.98%	3.23%
Expenditures > Dollar figure	Mn USD	\$3,848.00	\$14,018.00	\$67,490.00	\$12,155.00
Gulf War Coalition Forces		4,900			
Military Capabilities > Defense Budget	Mn USD	\$4,253.00	\$19,040.00	\$81,480.00	\$12,155.00
Military Capabilities > Tanks		2,461	3,978	7,580	6,522
Navy personnel		22,000	55,000		51,000
personnel		921,000	3,047,000	3,755,000	617,000
Tanks	Tanks	1,050	950	11,000	
US military exports	Thousand	\$507.00	\$452.00		
Weapon holdings		5,407,000	10,538,000	34,281,000	10,049,000
Manpower > Availability > Males age 15-49		-	288,252,000	375,520,000	19,534,500

Source: Nation Master, CIA World Facts

**Table 20.2: Warhead Requirements for India and Pakistan
(year 2000)**

	Parity (1)	Proportional Deterrence (2)	Minimal Deterrence (3)	Nuisance Deterrence (4)
India vs (PRC)	500	200-250	30-50	5-10
Pakistan vs India		50-125	15-30	3-5

Source: Compiled by the Author, Reproduced from his 1987
Book (South Asia Nuclear Stalemate or Conflagration)

The Indian army chief has recently expressed concern over Pakistan's acquisition of 60-70 nuclear warheads, which according to him exceeds the minimum deterrence requirement. It is "useful" to know that he is deterred at much lower level. There is really no fixed arithmetic to it. It also depends upon affordability and availability of fissile material. If more material is available, the tendency is to utilize it. However, manufacturing cost is only a fraction of the total deployment costs, which should be kept in mind, while deciding on these numbers.

As for India, its material availability should be much higher, and the affordability of the total cost much more at their end. On the world scene, there is talk of 500- 1000 nuclear warheads to be sufficient in the US-Russian theatre, down from an inventory of 50,000 warheads. Thousands of warheads have been dismantled under Treaty. This trend should also be affecting military thinking on both sides, as to the upper limit. From Pakistan's perspective, especially in the context of terrorism, Taliban and Baloch insurgencies there would be biting constraints on dispersal and lack of space issues and dangers of loosening effective control beyond a certain number that would be setting the upper limit.

Pakistan's Nuclear Force

The estimate presented here that Pakistan possesses approximately 60 nuclear weapons is conservative. On the basis of recent estimates of the size of Pakistan's military inventory of HEU and separated plutonium, the country could theoretically produce up to 100 nuclear weapons. However, Pakistan is believed to have used only part of this inventory to manufacture warheads, and thus the actual number of warheads is likely to be lower than this maximum. Pakistani officials claim that the country has already produced more warheads than needed to satisfy its 'minimum deterrence requirement' but note that this requirement is subject to review 'according to situation'.

Conventional and Strategic Balance

Pakistan's current nuclear arsenal is based primarily on HEU, which is produced by a gas centrifuge uranium enrichment facility at the Kahuta Research Laboratories (also called the A. Q. Khan Research Laboratories), Punjab. There is evidence that Pakistan is moving towards a plutonium based arsenal. The 50-megawatt thermal (MW (t)) Khushab I reactor, completed in 1998, is capable of producing about 10–12 kg of weapon-grade plutonium annually. Pakistan is building two additional plutonium production reactors at the nuclear complex at Khushab, Punjab; commercial satellite images taken during 2008 indicated that the second reactor was nearing completion. According to one estimate, the power of the new reactors will be approximately 100 MW(t). This will increase Pakistan's plutonium production capability several-fold, provided that the country has sufficient spent fuel-reprocessing capacity. Plutonium separation takes place at the pilot-scale New Labs reprocessing plant at Rawalpindi, Punjab. A new chemical separation facility appears to be nearing completion at Chashma, Punjab

Strike aircraft

The aircraft of the Pakistani Air Force that is most likely to be used in the nuclear weapon delivery role is the US-produced F-16 (see table 8.8). Other aircraft, such as the French-produced Mirage V or the Chinese-produced A-5, could also be used.

Pakistan currently maintains 32 F-16A/B aircraft in service, deployed in three squadrons. As part of a \$5.1 billion deal agreed in 2006, the USA delivered the final 4 of 14 refurbished F-16 aircraft to the Pakistani Air Force on 28 July 2008. The deal also includes the purchase of 18 Block 52 F-16C/D aircraft, with an option for 18 more and the midlife update of the F-16s already in Pakistani service.

Land-based missiles

Pakistan has begun deployment of two types of short-range ballistic missiles (SRBMs) which are believed to have nuclear delivery roles. The Ghaznavi (Hatf-3) is a single-stage, solid-propellant, road-mobile SRBM which was formally inducted into service in 2004. The Pakistani Army test-launched a Ghaznavi missile on 13 February 2008. The other SRBM, the Shaheen I (Hatf-4), entered into service with the Pakistani Army in 2003. It was most recently test-launched on 25 January 2008 during a troop training exercise conducted by the Army Strategic Force Command (ASFC).

Pakistan's only MRBM currently in service is the Ghauri I (Hatf-5), which is a road-mobile, liquid-propellant, single-warhead missile. Pakistani military officials said that it has a nuclear delivery role. In addition, Pakistan continues to develop the two-stage, road-mobile, solid-propellant Shaheen II (Hatf-6) MRBM. On 19 April 2008 the Pakistani military announced that a Shaheen II

Pakistan's development challenges

missile had been successfully test-launched to a range of 2000 km. Another Shaheen II was test-launched on 21 April 2008 at the end of the first 'operational readiness' field training exercise with the missile. The Shaheen II's range of 2000–2500 km means that it can reach targets across India. Pakistani officials have denied that the country was seeking to develop longer-range ballistic missiles that could strike targets outside the region.

Pakistan is continuing to develop its arsenal of cruise missiles. In December 2007 Pakistan conducted the fourth test flight since 2005 of a nuclear capable cruise missile, designated the Babur (Hatf-7). Efforts are under way to increase the range of the subsonic cruise missile from 700 km to 1000 km. Pakistan is developing an air-launched version of the Babur, which will reportedly be carried by F-16 and JF-17 aircraft. It is also developing a sea-launched version, rumoured to be for deployment on the Agosta submarine.

Pakistan is developing a nuclear-capable air-launched cruise missile, known as the Ra'ad (Hatf-8), which will have a range of 350 km. On 8 May 2008 Pakistan conducted the second test launch of the Ra'ad as part of a 'continuing process of validating the design parameters'. The missile, which was previously test-fired in August 2007 from a Mirage fighter, was described by Pakistan's military press service as having 'special stealth capabilities'.

Courtesy: SIPRI

Table 20.3: World nuclear forces by number of deployed warheads, January 2009

Country	Strategic warheads	Non-strategic warheads	Total warheads
USA	2 202	500	2 702 <i>b</i>
Russia	2 787	2 047	4 834 <i>c</i>
UK	160 <i>d</i>	-	(160)
France	300	-	(300)
China	(186)	... <i>e</i>	(186)
India	-	-	(60-70) <i>f</i>
Pakistan	-	-	(60) <i>f</i>
Israel	-	-	(80) <i>f</i>
N. Korea			<i>a</i>
Total	-	-	(8 392)

Source: Shannon N. Kile, Vasily Fedchenko and Hans M. Kristensen, 'World Nuclear Forces', SIPRI Yearbook 2009 (Oxford University Press: Oxford, 2009), pp. 345-379.

Conventional and Strategic Balance

Note: As defined by the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT), only states that have manufactured and exploded a nuclear device prior to 1 Jan. 1967 are recognized as nuclear weapon states. By this definition, China, France, Russia, the UK and the USA are the legally recognized nuclear weapon states. India, Pakistan, and Israel are not parties to the NPT.

- a. North Korea conducted nuclear test explosions in Oct 2006 and May 2009 but there is no public information to verify that it has operational nuclear weapons.
- b. The total US inventory is c. 9400 warheads, of which c. 5200 are in the Department of Defence stockpile (c. 2700 operational and c. 2500 in reserve) and 4200 warheads are scheduled to be dismantled by 2022.
- c. The total Russian inventory contains c. 13 000 warheads, of which c. 8166 are in reserve or awaiting dismantlement.
- d. Some warheads on British strategic submarines have sub-strategic missions previously covered by tactical nuclear weapons.
- e. The existence of operational Chinese non-strategic warheads is uncertain.
- f. The stockpiles of India, Pakistan and Israel are thought to be only partly deployed.

Table 20.4: Pakistani nuclear forces, January 2009

Type	Range (km) ^a	Payload (kg)	Status
Aircraft			
F-16A/B	1 600	4500	32 aircraft, deployed in 3 squadrons; most likely aircraft to have a nuclear delivery role
Ballistic missiles			
Ghaznavi (Hatf-3)	~400	500	Entered service with Pakistani Army in 2004; fewer than 50 launchers deployed; last test-launched 13 Feb. 2008; believed to be a copy of M-11 missile acquired from China in 1990s
Shaheen I (Hatf-4)	>450 ^b	750-1000	Entered service with Pakistani Army in 2003; fewer than 50 launchers deployed; last test-launched 25 Jan. 2008
Shaheen II	2000	-1000?	First Army operational readiness launch on 19 Apr. 2008; second on 21 Apr. 2008 ^c
Ghauri I (Hatf-5)	>1 200	700-1000	Entered service with Pakistani Army in 2003; fewer than 50 launchers deployed; test-launched in 1 Feb. 2008

Pakistan's development challenges

Cruise missiles		
Babur (Hatf-7)	700d	Under development. Ground-launched version tested three times in 2007 (Mar., Jun. and Dec). Sea- and air-launched versions under development too
Ra'ad (Hatf-8)	350	Under development; air-launched; first test-launch Aug. 2007; second 8 May 2008

Notes:

a Missile payloads may have to be reduced in order to achieve maximum range. Aircraft range is for illustrative purposes only; actual mission range will vary according to flight profile and weapon loading.

b Some unofficial sources claim a range of 600–1500 km.

c The twin operational readiness tests suggest that the Shaheen II may be operational.

d Since 2006 the range of flight tests has increased from 500 to 700 km, and the goal is now 1000 km.

Source: SIPRI Year Book 2009

India's Nuclear Force

The conservative estimate presented here is that India has an arsenal of about 60–70 operational nuclear weapons. The figure is based on calculations of India's inventory of weapon-grade plutonium as well as the number of operational nuclear-capable weapon systems. Most published estimates of the number of Indian nuclear weapons are based on calculations of the total amount of weapon-grade plutonium that India has produced. Numerous media and government reports suggest that India has not manufactured as many nuclear weapons as it otherwise could owing to material constraints. It is not publicly known whether India has produced highly enriched uranium (HEU) for weapon purposes, in particular for thermonuclear devices.

India's nuclear doctrine, which was published as a draft document in 1999, is 'based on the principle of a minimum credible deterrent and no first-use'. However, India published additional guidelines in January 2003 stating that it would use nuclear weapons to deter or retaliate against the use of chemical or biological weapons. There has been no official statement specifying the size of the arsenal required for 'minimum credible deterrence' but, according to the Indian MOD, it involves 'a mix of land based, maritime and air capabilities'.

Strike aircraft

At present, aircraft constitute the most mature component of India's nuclear strike capabilities (see table 8.7). The Indian Air Force (IAF) has reportedly

Conventional and Strategic Balance

certified the Mirage 2000H Vajra ('Divine Thunder') multi-role aircraft for delivery of nuclear gravity bombs. The IAF deploys two squadrons of Mirage 2000H aircraft at the Gwalior Air Force Station in north central India. In addition to the Mirage 2000H, some of the IAF's four squadrons of Jaguar IS Shamsher ('Sword') fighter-bombers may have a nuclear delivery role. Other aircraft in the Indian Air Force's inventory which are potentially suitable for nuclear roles are the MiG-27 (Bahadur) and the Su-30MKI. The Su-30MKI has an in-flight refueling capability with the IL-78 aerial tanker.

Land-based missiles

The Prithvi ('Earth') was India's sole operational ballistic missile for many years. A number of Prithvi I missiles are widely believed to have been modified to deliver nuclear warheads, although this has not been officially confirmed. The Prithvi I (SS-150) is a single-stage, road-mobile, liquid-fuel ballistic missile capable of delivering a 1000-kg warhead to a maximum range of 150 km. The missile was first flight-tested in 1988 and inducted into service by the Indian Army in 1994. It is currently deployed with the Army's 333, 444 and 555 missile groups. There are two newer versions of the Prithvi missile. The Prithvi II (SS-250) entered into service with the IAF in 2004 and with the Army in 2006. On 23 May 2008 the Army test fired for the first time a 350-km extended range Prithvi II in a 'post-induction training launch' from the Integrated Test Range (ITR) at Chandipur-on-Sea, Orissa. The Prithvi III (SS-350) is a solid-fuel missile which has improved range, accuracy and handling characteristics. Neither the Prithvi II nor the Prithvi III are believed to be assigned a nuclear weapon delivery role.

The short-range Agni I is a single-stage, solid-fuel missile that can deliver a 1000-kg warhead to a maximum range of 700–800 km. The two stage Agni II can deliver a similar payload to a range of up to 2000–2500 km. The missiles are road and rail mobile and both can carry nuclear as well as conventional warheads. On 4 February 2008, three days after Pakistan test-launched an IRBM, the Indian Government reportedly announced that the Agni I and the Agni II were operationally deployed with the Strategic Forces Command's 334 and 335 missile groups, respectively. On 23 March 2008 army personnel from the Strategic Forces Command carried out the fifth successful test flight of an Agni I missile and the second from a mobile road launcher. The Agni II was most recently test-launched in October 2004, before its formal induction by the Army, and there are doubts about whether it is fully operational.

On 7 May 2008 the Indian Defense Research and Development Organization (DRDO) conducted the third test flight of the intermediate-range Agni III. The missile, which was equipped with a new ring laser gyroscope inertial navigation system, was launched from a fixed platform at the ITR on Wheeler Island in the Bay of Bengal. It delivered a dummy warhead to the target area approximately 3000 km from the launch site. Although DRDO officials subsequently declared the Agni III to be ready for induction, this is not expected to occur until 2010–

Pakistan's development challenges

11.103 The test marked the second successful test flight of the Agni III after the first launch failed in 2006. The two-stage, solid-fuel missile is expected to be able to deliver a 1500-kg payload to a range in excess of 3000 km.

In 2008 design work was under way for a three-stage Agni V IRBM that will have a range of 5000 km. The new missile is based on the Agni III design and will use approximately 60 per cent of the latter's subsystems. The first test flight of the new missile, which will use a canister-launch system, is scheduled for 2010. There have been unconfirmed media reports that the Indian Government decided not to proceed with the development of a full-fledged ICBM because of concern about negative international reactions.

On 12 November 2008 the DRDO conducted the first test flight of a missile known as the Shourya ('Silent'), with a range of 600–700 km. The missile, which will be silo-based, was cold-launched using a gas booster from an underground canister launcher at the ITR at Balasore, Orissa. Indian press reports indicate that the missile is a land-based version of the K-15 missile (see below), although this has not been officially confirmed. According to the MOD, it is designed for 'simplicity of operation and maintenance' and 'can be easily handled, transported and stored within the canister for longer shelf life'. It is not publicly known whether the Shourya is nuclear-capable. The DRDO's Advanced Systems Laboratory at Hyderabad, Andhra Pradesh, has begun development of a subsonic cruise missile with a range of 1000 km, known as the Nirbhay ('Fearless'). Indian defense officials have not indicated whether the missile, which is reportedly similar to the US Tomahawk and the Pakistani Babur cruise missiles, will be nuclear capable.

Courtesy: SIPRI

National Power Index Rankings

It may be of interest here to bring in the concept of National Power Index and try to see and project the balance of power in the region and beyond. Several attempts have been made in the west to develop such an Index and the latest is RAND Corporation. However Chinese have been, uncharacteristically, taking interest in developing and maintaining a National Power Index, which attempts to measure national power in terms of population, strategic materials production (steel), energy consumption and military infrastructure and effort (military expenditure and military personnel strength). We produce in Table 21.5 the ranking of 25 nations as per NPI formula.

The startling output of the NPI is that it awards a ranking of four to Russia, with China as second and India as third, while the US being

Rank one would not be contested. Russians' power today comes out of its nuclear status and technology and its ability to initiate a process which may lead to the end of human civilization. The index does not include any variable that may measure this aspect, hence a lower ranking.

Table 20.5: Indian nuclear forces, January 2009

Type	Range (km) ^a	Payload (kg)	Status
<i>Land-based ballistic missiles</i>			
Prithvi I (P-I)	150	800	Entered service in 1994; widely believed to have a nuclear delivery role; fewer than 50 launchers deployed; most recent test flight on 9 May 2007
Agni Ic	>700	100	First and second Army operational test in Oct. 2007 and Mar. 2008, respectively; deployed with the Army's 334 Missile Group
Agni II	>2000	1000	Last test-launched 29 Oct. 2004; inducted into Army but operational status uncertain
Agni III	>3000	1500	Under development; test-launched 3 times, most recently 7 May 2008; induction expected in 2010–11
<i>Sea-based ballistic missiles</i>			
Dhanush	350	1000	Last test-launched on 30 Mar. 2007; induction underway
K-15d	700	500-600	Test-launched from submerged pontoon on 26 Feb. 2008
<i>Aircraft</i>			
Mirage 2000H Vajra	1850	6300	Has reportedly been certified for delivery of nuclear gravity bombs
Jaguar IS Shamsher	1400	4760	Some of 4 squadrons may have nuclear delivery role

Notes:

^a Missile payloads may have to be reduced in order to achieve maximum range. Aircraft range is for illustrative purposes only; actual mission range will vary according to flight profile and weapon loading.

^b India has also begun developing a subsonic cruise missile with a range of 1000 km, known as the Nirbhay ('Fearless'), which may have a nuclear capability.

c The original Agni I, now known as the Agni, was a technology demonstrator programme that ended in 1996.

d According to unconfirmed Indian media reports, a land-based version of the K-15, known as the Shourya, was test-launched for the first time on 12 Nov. 2008.

Source: SIPRI Year Book 2009

Table 20.6: Countries ranking as per NPI index

NPI Rank	Country	CINC	NPI Rank	Country	CINC
1	United States	0.149702	11	Italy	0.017823
2	China	0.133636	12	Indonesia	0.016727
3	India	0.068158	13	Ukraine	0.016245
4	Russia	0.05455	14	Mexico	0.014764
5	Japan	0.050712	15	Turkey	0.014605
6	Germany	0.027985	16	Pakistan	0.014329
7	Brazil	0.025451	17	Iran	0.013321
			18	North Korea	0.01204
8	South Korea	0.024189	19	Canada	0.011913
9	United Kingdom	0.023008	20	Taiwan	0.010663
10	France	0.01996	21	Spain	0.010568
			22	Saudi Arabia	0.010449
			23	Thailand	0.010433
			24	Egypt	0.009905
			25	Poland	0.008194

Source: Wapedia –Wiki: Comprehensive National Power

Notes: Each component is a dimensionless percentage of the world's total.

RATIO= Country/World

CINC = TPR+UPR+ISPR+ECR+MER+MPR / 6

Where

TPR = total population of country ratio

UPR = urban population of country ratio

ISPR = iron and steel production of country ratio

ECR = primary energy consumption ratio

MER = military expenditure ratio

MPR = military personnel ratio

India's 3rd rank in NPI confirms and qualifies what was being projected already in qualitative terms. It is already number three as opposed to

projections of 2030 and 2050. India's influence in world politics is going to multiply due to its faster economic growth, the impact of compound growth rate(which shows up later, than earlier in terms of absolute increases), the volume of foreign trade, military expenditure (India is already among top 20 military spender) etc. Pakistan's long term strategy should keep these numbers in view. Already India dismisses any military comparison or negotiations with Pakistan, which is dismissed as too small and local, while India poses as regional or world power already.

The tenth rank among top ten of NPI is of France, while UK gets the ninth rank. Surprisingly Japan comes on rank five, immediately after Russia, despite its low military expenditure and personnel. Perhaps its population and energy consumption and steel production earned it that status. Surprisingly South Korea and Brazil respectively get a ranking of 8th and 7th.

Finally and more importantly, among the second tier powers 11-25th, Pakistan gets a ranking of sixteen, as opposed to 25th of Poland. Amazingly, six countries in this 2nd tier are Muslim countries; Indonesia (12), Turkey (15), Pakistan (16), Iran (17), Saudi Arabia (22) and Egypt (24). Indonesia's large population has largely contributed to its ranking, while Iran and Saudi Arabia get their rank due to their high military spending. Most countries in the list have high energy consumption and steel production. Pakistan's steel production is low, but other factors such as population and military personnel contribute mainly towards its ranking.

More surprising is the unfortunate fact that except Turkey and Saudi Arabia, all other countries appear to be more inclined towards India, while Saudi Arabia seems to be slipping away gradually, as Indian power projects itself. Alternatively, there is a case of some kind of cooperation frame-work among these six or seven Muslim countries, to include Malaysia.

Iran's industrial infrastructure and potential has often been underestimated. It has only been recognized by its nuclear fuel enrichment success. While alleged Pakistan involvement may have speeded up the process, Iran's own human and physical potential is significant. By 1978, Iran's car production exceeded 125000 with local content of 40-50%, while Pakistan's current car market and production does not exceed 25000. Similarly truck production by 1978, stood at 25000 per year, while Pakistan production has never crossed 8000.

Similarly in steel and cement, and other engineering goods Iran exceeds production.

NPI has not been widely accepted as a true measure of power, yet it indicates some aspect of hard or crude power. An attempt to acquire higher ranking on this may be counter productive. NPI awards higher ranks for wrong reasons; higher population is rewarded, although all countries are trying to control population of which China is an extreme example. Urbanization is decried, while military expenditure diverts away vital social investments. Another ironic aspect of NPI is that it equals Afghanistan with Denmark and rates Myanmar, Bangladesh and Ethiopia to be ahead of Sweden.

How robust is nuclear deterrence?

What are the possible conditions, in which (nuclear) deterrence may fail or get diluted, enhancing the risk of conventional or nuclear attack? Hostility and belligerence among the two countries has been on the rise in the post 1998 period, as contrary to what was being projected in the pre-1998 period. Nuclear threats have been issued by a variety of leaders, both government and others, on both sides. Kargil and many other hostilities of lower rank have taken place. Will deterrence fail? Under what circumstances, is it an issue of grave strategic interest and significance? Both the sides should understand and undertake a risk analysis of nuclear deterrence, to be better aware of potentialities and develop a list of do's and don'ts and their implications.

From the perspective of Pakistan, the following situations may emerge having influence on the performance of the nuclear deterrence:

1. Fundamentalists and extremists political parties come into power. Out of sheer ideology and hatred, their leaders can decide to wipe out the other. We are well aware of such forces in Pakistan, which are quite capable of doing this. But with equal intensity the same threat may come from India. Let me quote here one of the statements of an Indian political leader.
2. Technological developments and deployment resulting in "push-button wars", may make nuclear war more likely and feasible. Currently in both countries, the "bomb" and the delivery system are stored in un-matched and un-installed form. This may however, change in future. Currently missile firing is oriented

towards exhibition and demonstration of higher payloads and ranges, serving a psychological purpose. Indian political objectives of acquiring prestige and status make these demos more meaningful for them. On both sides, reliance would still be laid more on aircraft delivery than on missiles, with its pros and cons.

3. Deteriorating political conditions and chaos in Pakistan may invite a conventional conflict, which may then escalate into a nuclear one. Both countries may have the reason to cross the threshold and go nuclear. Pakistan out of anxiety and despondency and India out of ambition and “finally solving the problem syndrome”. Instability in Pakistan and actions of non-state actors may further legitimize the “crossing of threshold”, both in conventional or nuclear terms.
4. Nihilism in Pakistan’s military and political leaders, “one has to die anyway syndrome” (General Aslam Baig), may impel it to take uncalled for risks. Muslims are blamed and are famous for their rather rash attitudes and thinking. Such a “balance of terror”, may however, have a deterrent value, to dissuade the other from being “funny”, and take things lightly or underestimate the resolve.
5. Large disparity in economic, political and technological conditions between the two countries may provide incentives to larger power to remove irritant or not to tolerate certain actions by the small powers. For example, the US is more likely to use nuclear weapons, even under current circumstances, against smaller powers like North Korea or Iran, if unacceptable actions are committed by these countries or some other smaller challenger. If and when India has such supremacy (2030-2050), there might be similar incentives and political space available to it. In the aftermath of the “Mumbai episode”, some threats of the kind have already been issued. In a future scenario, where there is much more disparity, a 9/11 kind of action by the non-state actors, and/or Kargil like misadventurism may develop such a scenario. It is all relative. As we have mentioned elsewhere nuclear weapons only afford a mid- term solution. These do not offer eternal peace and security. Political and economic development should not, therefore, be postponed and sacrificed too long. We have discussed these aspects elsewhere under

“Military Expenditure” and the need to invest in education and social sector.

6. Evolutions of defensive technologies dilute nuclear deterrence. In a small nuclear environment, second strike capability is always there, as opposed to sophisticated nations like US, Russia, where second strike option may not be decisively and securely available. Defence against nuclear missiles was supposed to be impossible, and it is difficult, yet is getting increasingly feasible. Patriot missile defense has been successfully demonstrated.

In all probabilities, a mix of the afore-mentioned conditions may prevail during various coming period, creating a dynamic performance or robustness of nuclear deterrence. Under-estimations and misjudgments in Pakistan's military history are not unknown. Sending “saboteurs” in Kashmir in 1965, assumed that it would not spill over into larger fronts and full-fledged war. Filling winter vacuum in Kargil and forgetting about summer has been a unique strategic or tactical gift of general Musharraf. Neither are the stories of immature heroism and indiscipline on the part of some Pakistan military officers totally unknown. As revealed by general Musharraf in his book, “In The Line of Fire “ in a number of attacks and conspiracies to kill him, persons of armed forces have been involved. Thus attempts of unauthorized users, indiscipline or misdemeanors in this respect may not be ruled out, especially if such news of “Taliban” being 80 kilometers from Islamabad, behind only Margalla, becomes credible. In such situations frenzy of India may not be out of place and should be expected. These are actually risk analysis issues and need separate treatment altogether.

The US government has reportedly funded a multi-million dollars technical assistance to secure Pakistan's nuclear arsenal. It is said that National Command Authority has been established at least partly under US pressure and American style management system has been put in place. It is also reported that Pakistan's arsenal has not been kept in trigger-ready form, but it has been kept in a “disassembled” state, but can be put together in a short time. Latest revelations made by general Musharraf to Seymour Hershe, indicate that weapons are kept in fool proof security under formidable concrete structures that cannot be destroyed by any weapons whatsoever.

Nuclear Dimension of Kargil Episode

Based on information from intelligence sources Clinton informed Nawaz Sharif that the Pakistani Army had mobilized its nuclear tipped missiles. Unnerved by this disclosure (Sharif reportedly seemed 'taken aback' when confronted with this fact) and the resulting potential for disaster, Nawaz Sharif agreed to immediate withdrawal, shedding all earlier pretensions that Pakistan has no control over the attacks.

There are also reports suggesting that nuclear weapons were kept ready on the Indian side. The most credible of these reports claimed that India 'activated all its three types of nuclear delivery vehicles and kept them at what is known as "Readiness State 3" meaning that some nuclear bombs would be ready to be mated with their delivery vehicles at short notice.

Source: Quoted in M.V.Ramana and Zia Mian, P-197

Security and Safety of Pakistan's Nuclear Weapons

International community has expressed a number of doubts and misgivings in this respect, some are quite recent (last five years) and some are general in nature and have been discussed in the non-proliferation literature. In the wake of the falling law and order situation and terrorist activities of Taliban (TTP) and its other allies, the risk perceptions have naturally multiplied. The risks may be as follows:

1. Nuclear weapons may be hijacked by terrorists, and used against Pakistan, India, Israel and other US interests.
2. There might be a military coup and a division in the army, with a variety of possibilities, including the possibility of anti-US and anti-West conflict involving nuclear weapons.
3. Fundamentalists in Pakistan's scientific establishment may help Taliban/Al Qaeda to build nuclear weapons with Pakistani and foreign proliferated inputs.
4. Due to chaos, nuclear facilities may be taken over and their security compromised. Or the nuclear weapons may become loosely available to any potential takers.
5. Pakistan's disgruntled or ambitious nuclear scientists may engage in general business, involving sales of nuclear technology to nth countries and actors.

There are unverified rumors that the US is increasing its clandestine physical presence in Pakistan with or without permission of the GOP.

The sole purpose of this activity is reported to be able to snatch away the nuclear weapons, should there be some melt down in Pakistan's security; some similar proposals have been elaborated upon in open literature, (David Albright: ISIS online) and Seymour Hershe recent article in "New Yorker" has made similar discussions. It is highly improbable that such a force has already been installed or is in the process of being installed on Pakistan territory. However, there may be contingency plans, involving stand-by units probably already stationed in the region.

Pakistanis should not be nervous about all this talk. Americans are in the habit of doing all kinds of planning and contingency development. The US is full of "whiz kids", who work in all kinds of schemes and technical systems. So long as Pakistan is in the US list of friends we should not worry. It is altogether a different story, if hypothetically speaking, "there is an anti-American radical regime' in Pakistan.

In 1970s, Shah of Iran was sold 20,000 MW of nuclear power, many of which were in advanced stage of planning and some were already under implementation. All the suppliers went away including Japanese, France, Germany, and the US. Today a small enrichment facility operated by Iran is a major cause of concern and conflict. One does not have to like the person to do business with. There is more than one reason to develop a working relationship with India, as the environmental and resource degradation sets in; the issues of water, trade, terrorism etc Resolution of Kashmir issue cannot be put on a fast track; any attempt to do this would be defeated with a vengeance. There is no military solution, at least from outside. Pseudo military options have not worked and even fond counter-productive. Only a Hong Kong model or an approximation to it may be the approach heading to its solution. Hong Kong issue did not deter China to deal with the US.

Military Expenditure in South Asia

Table 21.1 provides data on the subject. Since 1976, both India and Pakistan have been increasing their military expenditures. In current US dollar terms, Pakistan's MILEX increased to 5.13 times its level in 1976, while Indian MILEX rose to 9.32 times, implying a long term growth rate in MILEX; twice as much as of Pakistan. Indian MILEX used to be 3.69 times that of Pakistan in 1976; now it is 6.71 times, again indicating double growth.

In terms of per cent of GDP, Pakistan's MILEX, came to half the 1976 level i.e. MILEX as % of GDP came down to 3.10% vis-à-vis 6.50% in 1976. In the same period, India's MILEX to GDP ratio came down from 3.2% to 2.5%. With the recent fast growth in India's economy, even after significant increase in MILEX, India's MILEX to GDP may continue to come down and may stabilize around 2%; A standard level that is a recommended benchmark standard by many economists.

With Pakistan's slow economic growth trends extending into the future, MILEX to GDP ratio may not fall beyond current 3.1%, even if MILEX is kept constant without increase. Pakistan MILEX used to be 37% of its annual budget in 1980, which came down to 14.90% in 2008-09. It has been reported that this used to be even 67% in 1960s. This is thus a happy trend for those who propose higher spending in social sector. In the same period, India's corresponding figure came down from 15.21 to 8.51%.

It is obvious that due to the large size of the Indian economy and its comparatively better economic performance, past and projected, a MILEX of 30 billion US\$ is coming out to be a relatively smaller % of budget and GDP. Pakistan has to dissociate and de-link its military preparations and budgeting from India, which it seems to have done partly already. Achievement of minimum deterrence and its stable maintenance, less in conventional and more in nuclear terms, may be advisable. There is a strong case for freeze in MILEX in US dollar terms, if not for a 25% decrease in a phased manner, as has been discussed elsewhere.

MILEX as a % of GDP in the period 1950-70, was normally fluctuating around 3%. However, it is surprising that MILEX constituted 58-75% of the budget. The budget itself remained a very small percentage of the GDP at 4.4-6.6%, as opposed to 15-20% later. Similarly debt servicing in the same period (1950-70) remained under 20% of the budget, as opposed to 50% in later years. There was hardly any public sector development expenditure worth the name in 1950-70 period, if the figures are correct. Similarly budgetary deficits were hardly known in pre-1970 period, in so far as the available public record suggests, which increased to 9% of GDP in the period 1970-90, and then started tapering down. There is a legislation now, limiting budgetary deficit to 4% of GDP. How was Ayub Khan's "Decade of Development" funded; only through private sector effort, while bulk of the budget (50%) went to defence sector.

There is some discrepancy in the Pakistan MILEX figures among SIPRI and GOP figures, although broadly these match with each other. The sources of discrepancy are probably the military pensions and some expenditure in nuclear sector are included in SIPRI, but excluded in GOP figures.

Z.A.Bhutto, in the wake of debacle of 1971, initiated the nuclear weapons programme, and vowed to make Pakistan's defence forces as best "fighting machine" on earth, as I recall my youth period. That perhaps resulted in steep increase in military expenditure, in a period of weak economic growth and high debt liabilities due to cataclysmic drop in exchange rate. It is claimed by many western sources that "Islamic Bomb" was financed by Libya and other friendly Muslim countries. With the recent revelations, in the wake of Dr A.Q. Khan network, and Libya - and Iran's admissions of getting nuclear equipment and technology from Pakistan, indicate that these news stories were correct.

If the figures released by economic survey 2008-09, are correct, then MILEX at 2.4% of GOP appears to be quite reasonable. In that case, Pakistan MILEX matches with India. India's corresponding ratio is 2.5% of GDP. However, it has been reported that due to military campaign in northern areas, additional expenditure had to be committed. But then where is the saving going to? The allocations to social sector have not increased. The general desire of many people in Pakistan to reduce Military expenditure stems from a desire for higher allocations to education, health and other social sectors. It would be unfortunate that such savings from MILEX are diverted into other non productive expenditures e.g. administration and parliamentary.

Conventional and Strategic Balance

Table 20.7: Military expenditure trend and as a % of Budget and GDP for India and Pakistan

Pakistan									
	Units	1976	1980	1985	1995	2000	2005	2008-09	Times base year value
Military expenditure (MILEX) current prices	Bn Rs. PK	8.112	13.903	31.354	112.09	153.8	263	336	41.42
Military expenditure (MILEX) current prices	Mn. USD	819.39	1404.34	1962.08	3623.83	2864.50	4457.63	4200.00	5.13
Military expenditure (MILEX) constant prices	Mn. USD				3435.00	3320.00	4412.00	4217.00	1.23
MILEX as a % of GNP	2005								
MILEX as a % of GNP	%	6.50	6.00	6.50	5.30	4.40	3.60	3.10	0.48
MILEX as a % of Annual budget	%	-	37	38			18.10	14.90	
Exchange Rate (USD)		9.90	9.90	15.98	30.93	53.69	59.00	80.00	
India									
Military expenditure (MILEX) current prices	Bn Rs. I	25.4	37.39	75.583	316	642	1010	1306	51.42
Military expenditure (MILEX) current prices	Mn. USD	3020.57	4740.71	6110.68	9744.97	14266.67	21956.52	28164.76	9.32
Military expenditure (MILEX) constant prices	Mn. USD				12550.00	17697.00			
MILEX as a % of GNP	2005								
MILEX as a % of GNP	%	3.2	3	-	2.2	2.3	2.9	2.5	0.78
MILEX as a % of Annual budget	%	18	15.2	-				8.51	0.47
Exchange Rate (USD)		8.409	7.887	12.369	32.427	45	46	46.37	
MILEX Ratio (as times of Pakistan)	Times	3.69	3.38	3.11	2.69	4.98	4.93	6.71	

Notes: Exclude military pensions, estimated to be adding 10-15% to MILEX, in India & Pakistan; also considerable expenditure on nuclear side may be pushed to civilian energy side in both the countries.

Source: SIPRI, ACDA, Nation Master, GOP and GoI Budget Documents

Pakistan's development challenges

Table 20.8: Pakistan Military Expenditure and other Budgetary and Economic parameters (1981-2009)

Year	Trends in Components of Expenditure (As %of GDP)				MILEX as % of Budget	Trends in Components of Expenditure (Rs Billion)		Real GDP Growth Rate %
	Total Expenditure	MILEX	Fiscal Deficit (- %)	Development Expenditure		Development Expenditure	MILEX	
1980-81	22.9	5.5	6	9.3	24.06	25.8	15.3	
1984-85	24.7	6.7	8.3	7	27.23	33.1	31.8	
1988-89	26.1	6.6	8.1	6.3	25.37	48.1	51	
1989-90	25.9	6.9	7.3	6.5	26.49	56.1	58.7	
1990-91	25.6	6.3	9.5	6.4	24.76	65.3	64.6	5.4
1991-92	26.5	6.3	8.7	7.5	23.55	91.3	75.7	7.6
1998-99	20.9	4.9	5	3.3	22.15	98.3	143.5	3.5
1999-2000	18.5	3.9	5.4	2.5	21.21	95.6	150.4	3.9
2000-01	17	3.1	4.3	2.1	18.27	89.8	131.2	1.8
2001-02	18.5	3.3	4.3	2.8	18.08	126.2	149.3	3.1
2002-03	18.4	3.3	3.7	2.6	17.78	129.2	159.7	4.7
2003-04	16.9	3.3	2.3	2.8	19.34	161	184.9	7.5
2004-05	17.2	3.2	3.3	3.5	18.95	228	211.7	9
2005-06	18.4	3.2	4.3	4.8	17.20	365	241.1	5.8
2006-07	20.6	2.9	4.3	5	13.88	433	249.9	6.8
2007-08	22.1	2.7	7.4	4.4	12.15	452	277	5.8
2008-09 P	18.6	2.4	4.3	2.8	12.88	365	313	2

Source: Economic survey of Pakistan 2008-09

Conventional and Strategic Balance

Table 20.9: Pakistan Military Expenditure and other Budgetary and Economic parameters (1950-1980)

Year	Percent of GDP)			Percent of Budget	
	Total Budgetary Expenditure	MILEX	Debt Servicing	MILEX	Debt Servicing
1949-50	4.4	3.2	0.2	73.1	3.6
1954-55	5.4	3	0.4	55.5	8.2
1959-60	5.8	3.3	0.7	57	11.3
1964-65	5.2	2.7	0.9	52.6	18
1969-70	6.6	3.8	1.3	58.1	19.6
1974-75	11.8	6.7	2.2	56.5	18.4
1979-80	14	6	5	42.9	35.5

Source: Hafiz A. Pasha and Mahnaz Fatima, "Fifty year of public finance in Pakistan: A trend analysis in Fifty years of Pakistan economy, (ED) Shahrkh Rafi Khan, OUP, Karachi, 1999.

Pakistan's development challenges

Table 20.10: Public expenditure priorities: Military vs others sectors in selected countries

	HDI	Public expenditure on health (% of GDP)	Public expenditure on education (% of GDP)		Public expenditure on education (% of Total Budget)		Military expenditure (% of GDP)		Total debt service (% of GDP)	
		2004	1991	2002-05	1991	2002-05	1990	2005	1990	2005
United States	12	6.9	5.1	5.9	12.3	15.3	5.3	4.1		
United Kingdom	16	7	4.8	5.4	N.A.	12.1	3.9	2.7		
Singapore	25	1.3	3.1	3.7	18.2	N.A.	4.9	4.7		
Saudi Arabia	61	2.5	5.8	6.8	17.8	27.6	14	8.2		
Thailand	78	2.3	3.1	4.2	20	25	2.6	1.1	6.2	11
China	81	1.8	2.2	1.9	12.7	13	2.7	2	2	1.2
Turkey	84	5.6	2.4	3.7	N.A.	N.A.	3.5	2.8	4.9	11.6
Philippines	90	1.4	3	2.7	10.5	16.4	1.4	0.9	8.1	10
Iran	94	3.2	4.1	4.7	22.4	22.8	2.9	5.8	0.6	1.3
Sri Lanka	99	2	3.2	N.A.	8.4	N.A.	2.1	2.6	4.8	1.9
Indonesia	107	1	1	0.9	N.A.	9	1.8	1.2	8.7	6.3
Egypt	112	2.2	3.9	N.A.	N.A.	N.A.	N.A.	0.5	N.A.	5.6
India	128	0.9	3.7	3.8	12.2	10.7	3.2	2.8	2.6	3
Pakistan	136	0.4	2.6	2.3	7.4	10.9	5.8	3.5	4.8	2.2

Source: Human Development Report 2007/2008

MILEX vs Education and Health expenditures

Table 21.2 provides data on public expenditure priorities as reflected by public expenditure on Education, Health, Military and debt servicing. Comparison is also provided between year 1991 and 2002-05 expenditures. Following trends can be readily discerned.

Military expenditure, as a percentage of GDP, has undergone significant reduction in most countries, except Iran, Singapore and Sri Lanka. Iran has doubled its MILEX, and Sri Lanka increased it by 25% perhaps due to insurgency, and Singapore kept it constant. India reduced its MILEX by 12%, while Pakistan reduced it by 39%, although in absolute terms both countries increased MILEX several times more. Saudi Arabia stood as the highest military spender, although reducing its MILEX from a whopping 14% to 8.2% in 2005.

Industrialized countries spend very high percentages on education and health; combined Health & Education expenditure as a % GDP exceeds 12%, while developing countries like India, Pakistan spend less than one-third in % GDP terms of the countries. Even Thailand spends 2.3% of GDP on health; while oil rich Iran and Saudi Arabia respectively spend 3.2% and 2.5%.

Most Importantly, India has been spending since 1991, the level of expenditure in education and health as recommended by UNESO i.e. 0.9% of GDP in health and 3.8% of GDP on education. In Pakistan education expenditure was 2.6 % in 1991, which got reduced to 2.3% in 2002-05. On health Pakistan spends 0.4%, less than half the percentage of India. In Pakistan, MILEX as a % of GDP is 3.5% against the combined H&E expenditure of 2.7% that is, 29% higher. In India, MILEX at 2.8% of GDP is 67% lower than expenditure on education and health. To emphasize, Pakistan MILEX is 29% higher than E&H expenditure, while India MILEX is 67% lower than E&H expenditure. Concluding, in education and health, Pakistan's priority and commitment has been one-half that of India in the long run (1991-2002ts).

General Talat Masood recounted a very eye-opening narration, in a TV interview recently, of the history of Wah Ordnance Factory, of which he has remained chairman for a long time. When he assumed charge of Wah Ordnance Factory (WOF), there was a workers union protest going on, demanding better and equitable education facilities for workers' children.

General Talat Masood accepted the demand, and in due course, qualitatively and quantitatively improved and enhanced the required education facilities. He narrated that the total environment of WOF changed with a positivism and enthusiasm, when workers felt contented about the future of their wards improvement of education facilities. Similar proactive improvement across by all can bring a similar turn-around, at Pakistan's level, eliminating polarization, alienation, despondency and discontentment, and a growth cycle could be initiated which may strengthen Pakistan much more than parity in tanks can do.

Cooperation with India

India rejects any kind of bilateralism, based on reciprocity and equality, with Pakistan e.g. mutual restraints in the nuclear field, reducing military expenditures. India's arguments in this respect are that India is too big and its problems, concessions and interests and ambitions are beyond region and are global in nature. In both the areas, nuclear infrastructure and military expenditure, their enhancements are so huge in absolute terms, that any move on discussion on reduction and comparison becomes meaningless. In that case one has to look for common problems and perceptions, which appear to be a) Kashmir b) trade and economic cooperation c) environmental issues d) terrorism.

Pakistan's position is that Kashmir resolution first, and trade cooperation later. And Indians argue otherwise. Thus environmental and terrorism issues should get an agenda without any reservations or procrastinations. Both countries officially and un-officially, can aid and abet terrorism in each others premises, which it must be understood is not in the interest of any of the two. Terrorists have their own mindset and agenda. They may obtain state support initially and later, and once they get the opportunity, they start implementing their will and agenda, often outside and beyond their masters and supporters.

Terrorism has a great potential into converting itself into a un-intended nuclear conflict and catastrophe. However, the problem for diplomacy is that India links freedom fighters of Kashmir with Pakistan, but almost refuses to talk on Kashmir. And to compound issues, there is no magic solution to the problem of Kashmir that may be acceptable to both the sides, irrespective of debate scoring points. The residual non-controversial issue remains of environment. Starting next decade global and trans-boundary environmental issues would start surfacing with increasing intensity. Preventing side is being spearheaded by the

Introduction

industrialized countries, while we in the developing countries especially in South Asia would be more vulnerable to the vagaries of climate. And countries like Pakistan were already on receiving end of the weather vagaries like drought etc. Climate change is more dangerous and ultimate in consequences. Regional approaches and cooperation should be explored in dealing with problems arising out of climate change. This aspect alone is a reason important enough to remain in touch and persist in dialogue and cooperation.

Mutual trade between India and Pakistan has become a contentious issue; infact it has always been. Antagonists argue that without a reasonable settlement of the Kashmir issue, it may send soft and wrong signals to India. Protagonists of trade argue that trade would build up a vested interest and stake in peace and peaceful settlement of Kashmir issue. It is patently obvious that Pakistan cannot impose or extract a military solution. The Jihadi brigade has boomeranged. Infact, the terrorism of Talibans and other fundamentalists who also engage in cross border attacks, have created an enormous rationale for opening peace talks, as Mr. Shah Mahmood Qureshi, Pakistan's foreign minister, has recently said, welcoming opening up of talks between the two countries.

Before this menace expands and takes root in India, which would greatly complicate the relation and peaceful existence between the two countries, talks and cooperation, especially with respect to trade terrorism should be undertaken and reasonable modus operandi developed. However, I would argue in favor of trade, for altogether different reasons. In India many items and industrial inputs are much cheaper than elsewhere. We are passing through energy crises, and do not have much resources. India's power plants, steel and other inputs could make a very positive impact on Pakistan's economy. Pakistan needs trade with India, more than India. This in selected area, where Pakistan's production potential is limited and there is less comparative advantage, trade with India may solve many problems.

Improvement of Image

It is important for the army to improve its image. It is fast emerging as one of the vested interests. Military interventions have done a lot of damage to tarnish its image. There is even a much graver long term aspect to its image. In earlier times, people with a sense of service and sacrifice used to compete to enter into military, now with this image, the afore-mentioned class of entrants may be replaced by those who are

more interested in power and pelf and less interested in fighting for the national cause. Eventually one may find an army full of officers who are not willing to fight, too soft and sophisticated to lay down their lives, or risk it. Although officers do not fight in a traditional way, and the risk is being reduced over time, after all it is a fighting organization.

Secondly it is important to provide decent living to all officers and the soldiers, during service and after retirement. Presently all focus appears to be on officers' improvement, and not much appears to be done for the soldiers. With three plots in a lifetime of service, and rising prices of land, an officer is converted into a capitalist. Excess of everything even a good thing, is also bad. This focus should partly shift to the soldiers' welfare.

Trends of fundamentalism have already been shown by several episodes of attempts on life of general Musharraf. Afghan Jihad syndrome already should have left a lot of fundamentalist baggage, of which ISI is often blamed to have a high proportion of. Poverty and deprivation among soldiers would be a recipe for disaster. It finds dangerous conditions. Employing lesser number, more efficient and better paid may be the answer.

Involvement of Civilians

It may be beneficent for the armed forces to involve more civilians as employees, consultants and advisors. It is cost-effective, marshals resources, promotes engagement and interaction of civilian- military, diversity of perspectives, the latter being so important for modern forces. Security clearance system on the lines of the US, which deals with various levels and classes, may be introduced to take care of the security issues. In the immediate circumstances, it may be risky, but once this emergency is over, considerations may be given to these aspects. This inter-action is enriching for both, civilians and armed forces. Military in the US has created demand for technologies which have often affected and improved civilian life. Science and technology often is not grown and developed behind barbed wires. Soviet model has failed. Involvement with civilians brings along many vices as well. It is also important to improve oversight on military procurement activities. Transparency International and PIPA's framework maybe introduced with some adjustments.

Introduction

On the issues of war and peace, more civilian diversity is required, especially on major strategic issues. Most strategic input in the US has come from civilian side. Even Indians have accommodated and inducted civilians, as has been mentioned earlier under Indian Strategic Doctrine. In Pakistan, the reverse seems to be the case. It is reported that military's input to foreign policy is considered final. It is not a question of knowledge, capability or superiority. It is an issue of perspective and has far reaching consequences on society and its long term development as a modern compatible component of the world system.

All conventional campaigns and conflicts may not be converted and escalated to nuclear solutions. The advocacy can engage in partial campaigns, try to achieve its limited objectives of harassment or otherwise, and avoid reaching a nuclear threshold, thus in a way dilute nuclear deterrence. They are even talking of a 'limited nuclear war', in the same attempt to dilute deterrence. The larger power may want to keep its options open, and the freedom to act, which Pakistani nuclear deterrence would attempt to foreclose. The nuclear deterrence may not thus be so water tight and working all the time, in all situations, hence the rationale for reasonable conventional defense. But it need not be over- ambitious and counter-productive, straining the economy and sapping the social fabric.

Indigenization

Among things that we do not like in the military is frequent coups, pomp, exhibitionism, wasteful protocol, profligacy and a Roman army like lifestyle. A positive development has taken place, and that is liking and preference for self reliance and indigenization of military equipment. In my youth when I entered the job market, many seniors who were senior retired EME officers lamented of military's preference for the imported, for stated and unstated reasons. May be the local skills in 1970s were not up to the mark. There is a change now since 1970s, a positive preference for the local. Self reliance and indigenization itself is a meritorious task, additionally, it saves money in the form of lower production costs, saves foreign exchange, boosts local vendor industry and has a multiplier effect for the local economy. It boosts military preparedness and reduces reliance on foreign suppliers who may at times be black mailing.

We must thank our Chinese friends for their support and cooperation in this respect. Partly credit also goes to Dr. A.Q. Khan who proved in the 1970s that even nuclear weapons could be made locally, albeit with some

imported componentary, which is normal even in the developed countries. Trend of third party electronics has also played a role. But most importantly it is the change in mind, where the toughest battle has to be fought.

Milbus; an uncalled for pejorative

Some people have decried military's involvement in business activities, which is, in my view, is totally un-warranted. Infact it is a better way for promoting and organizing welfare of the military personnel, without straining the budgetary resources. Even if some advantageous treatment is given to military foundations, it is well deserved. Such in-kind concessions do not involve cash costs on the part of government. It is not a foreign multinational that some benefit is being passed on to. It is one own people who commit and give their lives to the cause of national defence.

Military can cut through red tape, over come many difficulties and barriers and work or colonize difficult areas and regions, is its competitive edge, which if converted to profit which goes to the welfare activities, should not be so hard on some people? NLC, FWO have remarkable achievement to their credit. In Pakistan, private businesses are small and fragmented, and cannot put together large organizations together. And if they somehow manage to do, it would have involved excessive costs. Perhaps the criticism and fear emanates out of frequent military interventions. It is alleged that military rules promote MILBUS, which in turn creates pressure for military intervention, which is rather exaggerated. It is hard to imagine that a civilian government would have opposed the concessions that may have been granted to military foundations, here and there. Yet the skepticism and fears do indicate a general sense of undue domination of national life, and sometimes a brazen show of force (Okara land dispute), which is unhealthy and would in the long run affect military effectiveness and performance.

All military interventions were based on personal ambitions, from general Ayub Khan to general Musharraf. In the last case, there was an organizational resentment against what was perceived as arbitrary action, which could have been sorted out, had personal ambition not exceeded its bounds. On the other hand, if through indoctrination and training, the fruits and pursuit of democracy are inculcated in rank and file, a general sense and culture opposing military intervention from within would develop. Even if military intervention happens, it could be short lived.

Because there is general resentment against political parties amidst professionals, civilians or military, the interventions are supported heartily and find a comfortable existence and extension.

Promoting Democracy Within

Military and civilian professionals should, however, understand and come to terms with the “noise” of democracy. Like all dynamic and enduring institutions and discipline, democracy thrives on discussing error and mistakes, ideas and approaches, rejection and acceptance, dismissal and renewal. Democracy is in dynamic equilibrium, as opposed to the certitude of military or dictatorial rule. This logic would be understood by those who have some grounding in physics. A bicycle remains in equilibrium and does not fall, so long it is moving. It will fall if it stops. Same is true of democracy and the democratic process. Had democratic rule been allowed to work with continuity and without intervention, political institutions would have by now matured and strengthened. Next door India is an example, which had a larger set of problems, diversity and differences and has managed to get ahead and surmount problems.

It must be mentioned, however, that at least once, an army chief let the opportunity go and supported civilian rule. It was General Baig in 1988, after “The Bahawalpur crash”, in which Ziaulhaque died a tragic death. One would argue that people were already fed up with general Zia’s long rule, and the late dictator was already on a dead end when he died, and that belonging to a minority community prevented General Baig to act. General Yahya was not prevented from taking over, due to Ziaulhaque like political conditions after general Ayub’s military rule. And belonging to minority community (Mohajir) did not prevent General Musharraf from taking over and punishing a Prime-Minister (Nawaz Sharif) who was so thoroughly entrenched in Punjab. So it is all personal preferences and ambitions and not institutional ones.

Both civilians and military should look the past interventions with disdain and contempt, which may find display on military messes and conference rooms. After all, throwing away the constitution of a country should merit same condemnation, even if it is post- fact.

National Security Council (NSC)

NSC has been discussed in two different context and meanings. General Jahangir Karamat lost his job, perhaps without much justification, at his out of time and tune, expounding of a NSC concept, which went largely understood. General Karamat proposed a NSC, to be comprised of civilian and military leaders, to discuss the issues of war and peace, and military preparedness was, where civilian-military interaction at policy level would have been beneficial. This concept has been adopted in a number of countries including India. NSC, in this harmless concept, was unfortunately misunderstood.

But I support NSC, even in its more “pernicious form”, comprising of civilian and military leaders, to discuss and deliberate emergencies. It is true that NSC is an infringement of a “puritan democracy”. We have fundamentalists in all spheres of life, not just in religion; an unwillingness to compromise on fundamentals or postpone its implementation or keep in abeyance for some time during emergencies. (In that respect, despite all my liberalism and realism, I may also be blamed of democratic fundamentalism, when I argue against military interventions unconditionally, even if according to some, exigencies may demand otherwise).

The situation on ground is that the military always remains in the wings, military rule or civilian rule. These are “dos and don'ts” of military which are generally accommodated by civilian leadership. There is practical, even if call it unconstitutional role and interference, in a routine manner. Can't we put some structure around it and make it more disciplined and subject to discussion even if not reprimand, in a forum of responsible people. With the advent of democracy, our political leaders think that military days are over this time, the latter comes back with a vengeance next time. Only very recently, the need of a NSC was well demonstrated, in the final days of reinstatement of Chief Justice Iftikhar Chaudry. Reportedly, President Zardari gave in after General Karamat visited him and apprised him of the situation on ground. It was widely commented that, “the president was humbled”. The same could have been discussed in a NSC. Musharraf's pique and Kargil episode were the right issues for NSC, which could have been sorted out, without military invention, personal ambition notwithstanding.

It should not be considered a foregone conclusion that an automatic unanimity among all service chiefs would always prevail. It is quite

Introduction

possible that other service chiefs may, out of principles or sheer jealousy or both, may voice their opposition to personal ambitions of an army chief in NSC making the implementation of a coup on the part of an army chief more difficult. Till democracy matures, NSC could have proved as a useful institution. NSC could have been sustained under a time-bound twenty years framework, after which such a constitutional provision could have died automatically.

We have to creatively and courageously look at the problems and find solutions. Even judiciary may be made a part of the NSC. There are issues and problems, where rules and laws, do not provide enough guidance, and are subject to individual interpretations by top military, executive or judiciary leadership. Due to lack of institution and provision for discussion, a chief justice is called at GHQ, manhandled and dismissed, which was followed by mass protestations. Earlier, Justice Sajjad Ali Shah, some argue, acted in collusion with President Leghari, resulting in frenzy among PM's supporters and resulted in attack on the Supreme Court; again due to lack of an institution with some teeth to discuss and sort out the issues.

A strong un-adultred, if not puritan, democratic civilian rule can only come about when the system matures, and strong organized political parties emerge and are established. As we have discussed and argued elsewhere, a million soldier army "organized and armed" can be balanced only by several million political party work, not in confrontation on streets, but as system-wide structural organized resistance to personal piques and ambitions of some military general.

Presently parties are led and controlled by popular leaders, in a personal and dictatorial style, in the habit of nominating party officials and themselves without ever holding meaningful elections, and even discourage expanding general membership. Such leadership can organize revolt at times of a mass discontentment, but cannot lead a constant political force institutionally opposing the arbitrary rules. Membership involving only tens of thousand of political workers in a population of 160 million is too little. And that is why now and then, a piqued military leader takes over with ease. Even a disgraceful treatment of Nawaz Sharif on return from Saudi Arabia could not manage to arouse discontent. Life of a military dictator can be made difficult, even after he takes over under some circumstances by organized political parties, having roots in all echelons of society, and the interregnum of military rule shortened instead of convenient extension, as has been the case.

Hereditary politics in South Asia has been buttressed and reinforced by political or judicial murders of political leaders. A whole Bhutto family has been martyred and cruelly wiped out. Even in the US this would have promoted hereditary politics and leadership. The Charisma of Kennedy's in the US at least partly stems out of the assassination of President John F Kennedy and his brother Robert Kennedy, if not for their sexual appeal and interests. PPP may have vanished or its popular base much diluted gradually in the context of its poor management of economy in the seventies, had PM Bhutto not been judicially murdered. Similarly Nawaz Sharif's charisma and appeal stems from sympathy vis-à-vis his premature and unlawful removal from power, while "he was on the way to cause economic revolution". Less personalized and structured leadership could have emerged in Muslim League, but for this "martyrdom syndrome". If parties are allowed to rule a full length of five years, they would have won or lost on the basis of their performance, than the martyrdom. My old-time friend Jawed Hashmi, often makes this point, and that is probably the reason the top PML leadership keeps him at back-burner, despite his sacrifices and persecution he faced at the hands of Musharraf regime.

Finally

Finally, I would like to close the chapter with a few rather ironical statements. First, Pakistan and its armed forces can succeed and survive only on the basis of ideology and values of sacrifice, austerity and selflessness, in face of an adversary which is many times larger, stronger and resourceful. We would continue to need many more Nishane Haider to survive and re-emerge, for which capitalistic values are a poison and antithetical. Muslim austere armies have won on bare horse backs fighting against heavily loaded Roman and Persian soldiers.

Ethos of a professional army should be shun in favor of a national ideological force that is mindful of the right and wrong and does not follow into the blind alleys of piqued and ambitious coup masters. National interest lies in freedom, democracy and justice and not in the interregnum or suspension of it.

Replicating West Point may not be a good idea, in toto. While it is useful for military officers to have an insight into the larger problems of the country, military training should not be a preparation for taking over and run civilian institutions during military take-over. In fact, there should be some indoctrination in the opposite direction. Military training of civilian

Introduction

issues should not breed ambitions for control of civilian institutions. There is a fine line, which the leadership of military training institutions should recognize and care must be taken so as not to cross that line.

Nuclear weapons offer only a mid-term solution. In the long run, it is the strength and dynamism of people and societies that guarantees continuity, survival, growth, development and honor. Only education is a long term solution. You cannot afford to postpone it until a good time. You cannot fast-track education. It grows like a tree, even much slower and excessive fertilizer can burn it. Soviets went down despite nuclear weapons. Russian people were convinced that the US like system offered a good future. We are in a similar competition. Let us not loose out on this.

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Appendix - I:

Excerpts from selected federal constitutions of countries (Subject Lists)

Pakistan, India, Australia, Germany, Canada, Spain

Pakistan FOURTH SCHEDULE Federal Legislative List PART I

1. The defense of the Federation or any part thereof in peace or war; the military, naval and air forces of the Federation and any other armed forces raised or maintained by the Federation; any armed forces which are not forces of the Federation but are attached to or operating with any of the Armed Forces of the Federation including civil armed forces; Federal Intelligence Bureau; preventive detention for reasons of State connected with defense, external affairs, or the security of Pakistan or any part thereof; person subjected to such detention; industries declared by Federal law to be necessary for the purpose of defense or for the prosecution of war.
2. Military, naval and air force works; local self- government in cantonment areas, the constitution and powers within such areas of cantonment authorities, the regulation of house accommodation in such areas, and the delimitation of such areas.
3. External affairs; the implementing of treaties and agreements, including educational and cultural pacts and agreements, with other countries; extradition, including the surrender of criminals and accused persons to Governments outside Pakistan.
4. Nationality, citizenship and naturalization.
5. Migration from or into, or settlement in, a Province or the Federal Capital.
6. Admission into, and emigration and expulsion from, Pakistan including in relation thereto the regulation of the movements in Pakistan of persons not

domiciled in Pakistan; pilgrimages to places beyond Pakistan.

7. Posts and telegraphs, including telephones, wireless, broadcasting and other like forms of communications; Post Office Saving Bank.

8. Currency, coinage and legal tender.

9. Foreign exchange; cheques, bills of exchange, promissory notes and other like instruments.

10. Public debt of the Federation, including the borrowing of money on the security of the Federal Consolidated Fund; foreign loans and foreign aid.

11. Federal Public Services and Federal Public Service Commission

12. Federal Pensions, that is to say, pensions payable by the Federation or out of the Federal Consolidated Fund.

13. Federal Ombudsmen.

14. Administrative Courts and Tribunals for Federal subjects.

15. Libraries, museums, and similar institutions controlled or financed by the Federation.

16. Federal agencies and institutes for the following purposes, that is to say, for research, for professional or technical training, or for the promotion of special studies.

17. Education as respects Pakistani students in foreign countries and foreign students in Pakistan.

18. Nuclear energy, including:-

- (a) mineral resources necessary for the generation of nuclear energy;
- (b) the production of nuclear fuels and the generation and use of nuclear energy, and
- (c) ionizing radiations.

19. Port quarantine, seamen's and marine hospitals and hospitals connected with port quarantine.

20. Maritime shipping and navigation, including shipping and navigation on tidal waters; Admiralty jurisdiction.

21. Major ports, that is to say, the declaration and delimitation of such ports, and the constitution and powers of port authorities therein.

22. Aircraft and air navigation; the provision of aerodromes; regulation and organization of air traffic and of aerodromes.

23. Lighthouses, including lightships, beacons and other provisions for the safety of shipping and aircraft.

24. Carriage of passengers and goods by sea or by air.

Introduction

25. Copyright, inventions, designs, trademarks and merchandise marks.
26. Opium so far as regards sale for export.
27. Import and export across customs frontiers as deemed by the Federal Government, inter-provincial trade and commerce, trade and commerce with foreign countries; standard of quality of goods to be exported out of Pakistan.
28. State Bank of Pakistan; banking, that is to say, the conduct of banking business by corporations other than corporations owned or controlled by a Province and carrying on business only within that Province.
29. The law of insurance, except as respects insurance undertaken by a Province, and the regulation of the conduct of insurance business, except as respects business undertaken by a Province, Government insurance, except so far as undertaken by a Province by virtue of any matter within the legislative competence of the Provincial Assembly.
30. Stock exchanges and future markets with objects and business not confined to one Province.
31. Corporations, that is to say, the incorporation, regulation and winding-up of trading corporations, including banking, insurance and financial corporations, but not including corporations owned or controlled by a Province and carrying on business only within that Province, or cooperative societies, and of corporations, whether trading or not, with objects not confined to a Province, but not including universities.
32. National planning and national economic coordination including planning and coordination of scientific and technological research.
33. State lotteries.
34. National highways and strategic roads.
35. Federal surveys including geological surveys and Federal meteorological organizations.
36. Fishing and fisheries beyond territorial waters.
37. Works, lands and buildings vested in, or in the possession of Government for the purposes of the Federation (not being military, naval or air force works), but, as regards property situate in a Province, subject always to Provincial legislation, save in so far as Federal law otherwise provides.
38. Census.
39. Establishment of standards of weights and measures.
40. Extension of the powers and jurisdiction of members of a police force belonging to any Province to any area in another Province, but not so as to enable the police of one Province to exercise powers and jurisdiction in another Province without the consent of the Government of that Province; extension of the powers and jurisdiction of members of a police force belonging to any Province to railway areas outside that Province.
41. Elections to the office of President, to the National Assembly, the Senate and the Provincial Assemblies, Chief Election Commissioner and Election Commissions.
42. The salaries, allowances and privileges of the President, Speaker and Deputy Speaker of the National Assembly, Chairman and Deputy Chairman of the Senate, Prime Minister, Federal Minister, Ministers of State, the salaries, allowances and privileges of the members of the Senate and the National Assembly, and the punishment of persons who refuse to give evidence or produce documents before committees thereof.
43. Duties of customs, including export duties.
44. Duties of exercise, including duties on salt, but not including duties on alcoholic liquors, opium and other narcotics.
45. Duties in respect of succession to property.
46. Estate duty in respect of property.
47. Taxes on income other than agricultural income;
48. Taxes on corporations.
49. Taxes on the sales and purchases of goods imported, exported, produced, manufactured or consumed.
50. Taxes on the capital value of the assets, not including taxes on capital gains on immovable property.
51. Taxes on mineral oil, natural gas and minerals for use in generation of nuclear energy.
52. Taxes and duties on the production capacity of any plant, machinery, undertaking, establishment or installation in lieu of any one or more of them.
53. Terminal taxes on goods or passengers carried by railway, sea or air; taxes on their fares and freights.
54. Fees in respect of any of the matters in this Part, but not including fees taken in any court.

55. Jurisdiction and powers of all courts, except the Supreme Court, with respect to any of the matters in this list and, to such extent as is expressly authorized by or under the Constitution, the enlargement of the jurisdiction of the Supreme Court, and the conferring thereon of supplemental powers.
56. Offences against laws with respect to any of the matters in this Part.
57. Inquiries and statistics for the purposes of any of the matters in this Part.
58. Matters which under the Constitution are within the legislative competence of Majlis-e-Shoora (Parliament) or relate to the Federation.
59. Matters incidental or ancillary to any matter enumerated in this Part.

PART II

1. Railways.
2. Mineral oil and natural gas; liquids and substances declared by Federal law to be dangerously inflammable.
3. Development of industries, where development under Federal control is declared by Federal law to be expedient in the public interest; institutions, establishments, bodies and corporations administered or managed by the Federal Government immediately before the commencing day, including the Pakistan Water and Power Development Authority and the Pakistan Industrial Development Corporation; all undertakings, projects and schemes of such institutions, establishments, bodies and corporations, industries, projects and undertakings owned wholly or partially by the Federation or by a corporation set up by the Federation.
4. Council of Common Interests.
5. Fees in respect of any of the matters in this Part but not including fees taken in any court.
6. Offences against laws with respect to any of the matters in this Part.
7. Inquiries and statistics for the purposes of any of the matters in this Part.
8. Matters incidental or ancillary to any matter enumerated in this Part.

Concurrent Legislative List (Deleted under 18th Amendment)

1. Criminal law, including all matters included in the Pakistan Penal Code on the commencing day, but excluding offences against laws with respect to any of the matters specified in the Federal Legislative

List and excluding the use of naval, military and air forces in aid of civil power.

2. Criminal procedure, including all matters included in the Code of Criminal Procedure, on the commencing day.

3. Civil procedure, including the law of limitation and all matters included in the Code of Civil Procedure on the commencing day, the recovery in a Province or the Federal Capital of claims in respect of taxes and other public demands, including arrears of land revenue and sums recoverable as such, arising outside that Province.

4. Evidence and oath; recognition of laws, public acts and records of judicial proceedings.

5. Marriage and divorce; infants and minors; adoption.

6. Wills, intestacy and succession, save as regards agricultural land.

7. Bankruptcy and insolvency, administrators-general and official trustees.

8. Arbitration.

9. Contracts, including partnership, agency, contracts of carriage, and other special forms of contracts, but not including contracts relating to agricultural land.

10. Trusts and trustees.

11. Transfer of property other than agriculture land, registration of deeds and documents.

12. Actionable wrongs, save in so far as included in laws with respect to any of the matters specified in the Federal Legislative List.

13. Removal of prisoners and accused persons from one Province to another Province.

14. Preventive detention for reasons connected with the maintenance of public order, or the maintenance of supplies and services essential to the community; persons subjected to such detention.

15. Persons subjected to preventive detention under Federal authority.

16. Measures to combat certain offences committed in connection with matters concerning the Federal and Provincial Governments and the establishment of a police force for that purpose.

17. Arms, firearms and ammunition.

18. Explosives.

19. Opium, so far as regards cultivation and manufacture.

20. Drugs and medicines.

21. Poisons and dangerous drugs.

Introduction

22. Prevention of the extension from one Province to another of infectious or contagious diseases or pests affecting men, animals or plants.

23. Mental illness and mental retardation, including places for the reception or treatment of the mentally ill and mentally retarded.

24. Environmental pollution and ecology.

25. Population planning and social welfare.

26. Welfare of labor; conditions of labor, provident funds; employer's liability and workmen's compensation, health insurance including invalidity pensions, old age pensions.

27. Trade unions; industrial and labor disputes.

28. The setting up and carrying on of labor exchanges, employment information bureaus and training establishments.

29. Boilers.

30. Regulation of labor and safety in mines, factories and oil- fields.

31. Unemployment insurance.

32. Shipping and navigation on inland waterways as regards mechanically propelled vessels, and the rule of the road on such waterways; carriage of passengers and goods on inland waterways.

33. Mechanically propelled vehicles.

34. Electricity.

35. Newspapers, books and printing presses.

36. Evacuee property.

37. Ancient and historical monuments, archaeological sites and remains.

38. Curriculum, syllabus, planning, policy, centres of excellence and standards of education.

39. Islamic education.

40. Zakat.

41. Production, censorship and exhibition of cinematograph films.

42. Tourism.

43. Legal medical and other professions.

43A. Auqaf.

44. Fees in respect of any of the matters in this List, but not including fees taken in any court.

45. Inquiries and statistics for the purpose of any of the matters in this List.

46. Offences against laws with respect to any of the matters in this List; jurisdiction and powers of all courts except the Supreme Court, with respect to any of the matters in this List.

47. Matters incidental or ancillary to any matter enumerated in this List.

18th Amendments changes in the subject list

101. Amendment of Fourth Schedule to the Constitution.- In the Constitution, in the Fourth Schedule, in the Federal Legislative List,- (1) in Part I,- (i) in entry 18, in sub-entry (c) for the full stop at the end the semicolon and a word ";and" shall be added and after sub-entry(c) amended as aforesaid the following new sub-entry shall be added, namely:-"(d) boilers."

(ii) for entry 32 the following shall be substituted, namely:- "32. International treaties, conventions and agreements and International arbitration.", (iii) entries 21,33,38 and 40 shall be omitted; (iv) entry 45 and entry 46 shall be omitted; (v) in entry 49, after the word "consumed" the comma and words", except sales tax on services" shall be added. (vi) in entry 50, after the word "taxes" the words "on capital gains" shall be omitted.

(2) in Part II,- (i) entries 4, 5, 6, 7, and 8 shall be renumbered as entries 13, 14, 15, 16 and 17, respectively, and (ii) after entry 3, the following new entries shall be inserted, namely:- "4. Electricity.

5. Major ports, that is to say, the declaration and delimitation of such ports, and the constitution and powers of port authorities therein.

6. All regulatory authorities established under a Federal law.

7. National planning and national economic coordination including planning and coordination of scientific and technological research.

8. Super and management of public debt.

9. Census.

10. Extension of the powers and jurisdiction of members of a police force belonging to any Province to any area in another Province, but not so as to enable the police of one Province to exercise powers and jurisdiction in another Province without the consent of the Government of that Province; extension of the powers and jurisdiction of members of a police force belonging to any Province to railway areas outside that Province.

11. Legal, medical and other professions.

12. Standards in institutions for higher education and research, scientific and technical institutions.

13. Inter-provincial matters and co-ordination,"

(3) The Concurrent Legislative List and the entries thereto from 1 to 47 (both inclusive) shall be omitted.

102. Omission of the Sixth and the Seventh Schedule in the Constitution.- In the Constitution, the Sixth Schedule and the Seventh Schedule shall be omitted.

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Monday, May 10, 2010, Jamadi-ul-Awwal 25, 1431 A.H

India

1. Defense of India and every part thereof including preparation for defense and all such acts as may be conducive in times of war to its prosecution and after its termination to effective demobilization.

2. Naval, military and air forces; any other armed forces of the Union. 12A. Deployment of any armed force of the Union or any other force subject to the control of the Union or any contingent or unit thereof in any State in aid of the civil power; powers, jurisdiction, privileges and liabilities of the members of such forces while on such deployment.

3. Delimitation of cantonment areas, local self-government in such areas, the constitution and powers within such areas of cantonment authorities and the regulation of house accommodation (including the control of rents) in such areas.

4. Naval, military and air force works.

5. Arms, firearms, ammunition and explosives.

6. Atomic energy and mineral resources necessary for its production.

7. Industries declared by Parliament by law to be necessary for the purpose of defense or for the prosecution of war.

8. Central Bureau of Intelligence and Investigation.

9. Preventive detention for reasons connected with Defense, Foreign Affairs, or the security of India; persons subjected to such detention.

10. Foreign affairs; all matters which bring the Union into relation with any foreign country.

11. Diplomatic, consular and trade representation.

12. United Nations Organization.

13. Participation in international conferences, associations and other bodies and implementing of decisions made thereat.

14. Entering into treaties and agreements with foreign countries and implementing of treaties, agreements and conventions with foreign countries. 11ns. by the Constitution (Forty-second Amendment) Act, 1976, s. 57 (w.e.f. 3-1-1977).

15. War and peace.

16. Foreign jurisdiction.

17. Citizenship, naturalization and aliens.

18. Extradition.

19. Admission into, and emigration and expulsion from, India; passports and visas.

20. Pilgrimages to places outside India.

21. Piracies and crimes committed on the high seas or in the air; offences against the law of nations committed on land or the high seas or in the air.

22. Railways.

23. Highways declared by or under law made by Parliament to be national highways.

24. Shipping and navigation on inland waterways, declared by Parliament by law to be national waterways, as regards mechanically propelled vessels; the rule of the road on such waterways.

25. Maritime shipping and navigation, including shipping and navigation on tidal waters; provision of education and training for the mercantile marine and regulation of such education and training provided by States and other agencies.

26. Lighthouses, including lightships, beacons and other provision for the safety of shipping and aircraft.

27. Ports declared by or under law made by Parliament or existing law to be major ports, including their delimitation, and the constitution and powers of port authorities therein.

28. Port quarantine, including hospitals connected therewith; seamen's and marine hospitals.

29. Airways; aircraft and air navigation; provision of aerodromes; regulation and organization of air traffic and of aerodromes; provision for aeronautical education and training and regulation of such education and training provided by States and other agencies.

30. Carriage of passengers and goods by railway, sea or air, or by national waterways in mechanically propelled vessels.

Introduction

31. Posts and telegraphs; telephones, wireless, broadcasting and other like forms of communication.

(Seventh Schedule) 316

32. Property of the Union and the revenue there from, but as regards property situated in a State 1*** subject to legislation by the State, save in so far as Parliament by law otherwise provides.

2* * * * *

34. Courts of wards for the estates of Rulers of Indian States.

35. Public debt of the Union.

36. Currency, coinage and legal tender; foreign exchange.

37. Foreign loans.

38. Reserve Bank of India.

39. Post Office Savings Bank.

40. Lotteries organized by the Government of India or the Government of a State.

41. Trade and commerce with foreign countries; import and export across customs frontiers; definition of customs frontiers.

42. Inter-State trade and commerce.

43. Incorporation, regulation and winding up of trading corporations, including banking, insurance and financial corporations, but not including co-operative societies.

44. Incorporation, regulation and winding up of corporations, whether trading or not, with objects not confined to one State, but not including universities.

45. Banking.

46. Bills of exchange, cheques, promissory notes and other like instruments.

47. Insurance.

48. Stock exchanges and futures markets.

49. Patents, inventions and designs; copyright, trade-marks and merchandise marks.

50. Establishment of standards of weight and measure. 1The words and letters "specified in Part A or Part B of the First Schedule but" omitted by the Constitution (Seventh Amendment) Act, 1956, s. 29 and Sch. 2Entry 33 omitted by s. 26, *ibid*.

(Seventh Schedule) 317

51. Establishment of standards of quality for goods to be exported out of India or transported from one State to another.

52. Industries, the control of which by the Union is declared by Parliament by law to be expedient in the public interest.

53. Regulation and development of oilfields and mineral oil resources; petroleum and petroleum products; other liquids and

substances declared by Parliament by law to be dangerously inflammable.

54. Regulation of mines and mineral development to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.

55. Regulation of labour and safety in mines and oilfields.

56. Regulation and development of inter-State rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.

57. Fishing and fisheries beyond territorial waters.

58. Manufacture, supply and distribution of salt by Union agencies; regulation and control of manufacture, supply and distribution of salt by other agencies.

59. Cultivation, manufacture, and sale for export, of opium.

60. Sanctioning of cinematograph films for exhibition.

61. Industrial disputes concerning Union employees.

62. The institutions known at the commencement of this Constitution as the National Library, the Indian Museum, the Imperial War Museum, the Victoria Memorial and the Indian War Memorial, and any other like institution financed by the Government of India wholly or in part and declared by Parliament by law to be an institution of national importance.

63. The institutions known at the commencement of this Constitution as the Benares Hindu University, the Aligarh Muslim University and the 1 Delhi University; the University established in pursuance of article 371E;] any other institution declared by Parliament by law to be an institution of national importance.

1Subs. by the Constitution (Thirty-second Amendment) Act, 1973, s. 4, for "Delhi University and" (w.e.f. 1-7-1974).

(Seventh Schedule) 318

64. Institutions for scientific or technical education financed by the Government of India wholly or in part and declared by Parliament by law to be institutions of national importance.

65. Union agencies and institutions for—

Pakistan's development challenges

(a) professional, vocational or technical training, including the training of police officers; or

(b) the promotion of special studies or research; or

(c) scientific or technical assistance in the investigation or detection of crime.

66. Co-ordination and determination of standards in institutions for higher education or research and scientific and technical institutions.

67. Ancient and historical monuments and records, and archaeological sites and remains, [declared by or under law made by Parliament] to be of national importance.

68. The Survey of India, the Geological, Botanical, Zoological and Anthropological Surveys of India; Meteorological organizations.

69. Census.

70. Union Public Service; All-India Services; Union Public Service Commission.

71. Union pensions, that is to say, pensions payable by the Government of India or out of the Consolidated Fund of India.

72. Elections to Parliament, to the Legislatures of States and to the offices of President and Vice-President; the Election Commission.

73. Salaries and allowances of members of Parliament, the Chairman and Deputy Chairman of the Council of States and the Speaker and Deputy Speaker of the House of the People.

74. Powers, privileges and immunities of each House of Parliament and of the members and the Committees of each House; enforcement of attendance of persons for giving evidence or producing documents before committees of Parliament or commissions appointed by Parliament.

75. Emoluments, allowances, privileges, and rights in respect of leave of absence, of the President and Governors; salaries and allowances of the 1Subs. by the Constitution (Seventh Amendment) Act, 1956, s. 27, for "declared by Parliament by law".

(Seventh Schedule) 319

Ministers for the Union; the salaries, allowances, and rights in respect of leave of absence and other conditions of service of the Comptroller and Auditor- General.

76. Audit of the accounts of the Union and of the States.

77. Constitution, organisation, jurisdiction and powers of the Supreme Court (including

contempt of such Court), and the fees taken therein; persons entitled to practise before the Supreme Court.

78. Constitution and organisation 1[(including vacations)] of the High Courts except provisions as to officers and servants of High Courts; persons entitled to practise before the High Courts.

79. Extension of the jurisdiction of a High Court to, and exclusion of the jurisdiction of a High Court from, any Union territory.

80. Extension of the powers and jurisdiction of members of a police force belonging to any State to any area outside that State, but not so as to enable the police of one State to exercise powers and jurisdiction in any area outside that State without the consent of the Government of the State in which such area is situated; extension of the powers and jurisdiction of members of a police force belonging to any State to railway areas outside that State.

81. Inter-State migration; inter-State quarantine.

82. Taxes on income other than agricultural income.

83. Duties of customs including export duties.

84. Duties of excise on tobacco and other goods manufactured or produced in India except—

(a) alcoholic liquors for human consumption;

(b) opium, Indian hemp and other narcotic drugs and narcotics, but including medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (b) of this entry.

85. Corporation tax.

86. Taxes on the capital value of the assets, exclusive of agricultural land, of individuals and companies; taxes on the capital of companies. 1Ins. by the Constitution (Fifteenth Amendment) Act, 1963, s. 12 (with retrospective effect). 2Subs. by the Constitution (Seventh Amendment) Act, 1956, s. 29 and Sch., for entry 79.

(Seventh Schedule) 320

87. Estate duty in respect of property other than agricultural land.

88. Duties in respect of succession to property other than agricultural land.

89. Terminal taxes on goods or passengers, carried by railway, sea or air; taxes on railway fares and freights.

Introduction

90. Taxes other than stamp duties on transactions in stock exchanges and futures markets.

91. Rates of stamp duty in respect of bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies and receipts.

92. Taxes on the sale or purchase of newspapers and on advertisements published therein.

92A. Taxes on the sale or purchase of goods other than newspapers, where such sale or purchase takes place in the course of inter-State trade or commerce.

92B. Taxes on the consignments of goods (whether the consignment is to the person making it or to any other person), where such consignment takes place in the course of inter-State trade or commerce.

92C. Taxes on services.

93. Offences against laws with respect to any of the matters in this List.

94. Inquiries, surveys and statistics for the purpose of any of the matters in this List.

95. Jurisdiction and powers of all courts, except the Supreme Court, with respect to any of the matters in this List; admiralty jurisdiction.

96. Fees in respect of any of the matters in this List, but not including fees taken in any court.

97. Any other matter not enumerated in List II or List III including any tax not mentioned in either of those Lists.

List II—State List

1. Public order (but not including 3) the use of any naval, military or air force or any other armed force of the Union or of any other force subject to

1Ins. by the Constitution (Sixth Amendment) Act, 1956, s. 2.

2Ins. by the Constitution (Forty-sixth Amendment) Act, 1982, s. 5.

*Ins. by the Constitution (Eighty-eighth Amendment) Act, 2003, s. 4 (which is yet not in force, date to be notified later on).

3Subs. by the Constitution (Forty-second Amendment) Act, 1976, s. 57, for certain words (w.e.f. 3-1-1977).

(Seventh Schedule) 321

the control of the Union or of any contingent or unit thereof] in aid of the civil power).

1. Police (including railway and village police) subject to the provisions of entry 2A of List I.]

3. 2***Officers and servants of the High Court; procedure in rent and revenue courts; fees taken in all courts except the Supreme Court.

4. Prisons, reformatories, Borstal institutions and other institutions of a like nature, and persons detained therein; arrangements with other States for the use of prisons and other institutions.

5. Local government, that is to say, the constitution and powers of municipal corporations, improvement trusts, districts boards, mining settlement authorities and other local authorities for the purpose of local self government or village administration.

6. Public health and sanitation; hospitals and dispensaries.

7. Pilgrimages, other than pilgrimages to places outside India.

8. Intoxicating liquors, that is to say, the production, manufacture, possession, transport, purchase and sale of intoxicating liquors.

9. Relief of the disabled and unemployable.

10. Burials and burial grounds; cremations and cremation grounds.

3* * * * *

12. Libraries, museums and other similar institutions controlled or financed by the State; ancient and historical monuments and records other than those 4[declared by or under law made by Parliament] to be of national importance.

13. Communications, that is to say, roads, bridges, ferries, and other means of communication not specified in List I; municipal tramways; ropeways; inland waterways and traffic thereon subject to the provisions of List I and List III with regard to such waterways; vehicles other than mechanically

propelled vehicles. 1Subs. by the Constitution (Forty-second Amendment) Act, 1976, s. 57, for entry 2 (w.e.f. 3-1-1977). 2Certain words omitted by s. 57, *ibid.* (w.e.f. 3-1-1977). 3Entry 11 omitted by s. 57, *ibid.* (w.e.f. 3-1-1977). 4Subs. by the Constitution (Seventh Amendment) Act, 1956, s. 27, for “declared by Parliament by law”.

(Seventh Schedule) 322

14. Agriculture, including agricultural education and research, protection against pests and prevention of plant diseases.

Pakistan's development challenges

15. Preservation, protection and improvement of stock and prevention of animal diseases; veterinary training and practice.

16. Pounds and the prevention of cattle trespass.

17. Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provisions of entry 56 of List I.

18. Land, that is to say, rights in or over land, land tenures including the relation of landlord and tenant, and the collection of rents; transfer and alienation of agricultural land; land improvement and agricultural loans; colonization.

1*****

21. Fisheries.

22. Courts of wards subject to the provisions of entry 34 of List I; encumbered and attached estates.

23. Regulation of mines and mineral development subject to the provisions of List I with respect to regulation and development under the control of the Union.

24. Industries subject to the provisions of 2[entries 7 and 52] of List I.

25. Gas and gas-works.

26. Trade and commerce within the State subject to the provisions of entry 33 of List III.

27. Production, supply and distribution of goods subject to the provisions of entry 33 of List III.

28. Markets and fairs.

1*****

30. Money-lending and money-lenders; relief of agricultural indebtedness.

31. Inns and inn-keepers.

1Entries 19, 20 and 29 omitted by the Constitution (Forty-second Amendment) Act,

1976, s. 57 (w.e.f. 3-1-1977).

2Subs. by the Constitution (Seventh Amendment) Act, 1956, s. 28, for "entry 52".

(Seventh Schedule) 323

32. Incorporation, regulation and winding up of corporations, other than those specified in List I, and universities; unincorporated trading, literary, scientific, religious and other societies and associations; co-operative societies.

33. Theatres and dramatic performances; cinemas subject to the provisions of entry 60

of List I; sports, entertainments and amusements.

34. Betting and gambling.

35. Works, lands and buildings vested in or in the possession of the State.

1*****

37. Elections to the Legislature of the State subject to the provisions of any law made by Parliament.

38. Salaries and allowances of members of the Legislature of the State, of the Speaker and Deputy Speaker of the Legislative Assembly and, if there is a Legislative Council, of the Chairman and Deputy Chairman thereof.

39. Powers, privileges and immunities of the Legislative Assembly and of the members and the committees thereof, and, if there is a Legislative Council, of that Council and of the members and the committees thereof; enforcement of attendance of persons for giving evidence or producing documents before committees of the Legislature of the State.

40. Salaries and allowances of Ministers for the State.

41. State public services; State Public Service Commission.

42. State pensions, that is to say, pensions payable by the State or out of the Consolidated Fund of the State.

43. Public debt of the State.

44. Treasure trove.

45. Land revenue, including the assessment and collection of revenue, the maintenance of land records, survey for revenue purposes and records of rights, and alienation of revenues.

46. Taxes on agricultural income.

47. Duties in respect of succession to agricultural land.

48. Estate duty in respect of agricultural land.

1Entry 36 omitted by the Constitution (Seventh Amendment) Act, 1956, s. 26.

(Seventh Schedule) 324

49. Taxes on lands and buildings.

50. Taxes on mineral rights subject to any limitations imposed by Parliament by law relating to mineral development.

51. Duties of excise on the following goods manufactured or produced in the State and countervailing duties at the same or lower rates on similar goods manufactured or produced elsewhere in India:— (a) alcoholic liquors for human consumption; (b) opium, Indian hemp and other narcotic drugs and

Introduction

narcotics; but not including medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (b) of this entry.

52. Taxes on the entry of goods into a local area for consumption, use or sale therein.

53. Taxes on the consumption or sale of electricity.

54. Taxes on the sale or purchase of goods other than newspapers, subject to the provisions of entry 92A of List I.

55. Taxes on advertisements other than advertisements published in the newspapers 2[and advertisements broadcast by radio or television.

56. Taxes on goods and passengers carried by road or on inland waterways.

57. Taxes on vehicles, whether mechanically propelled or not, suitable for use on roads, including tramcars subject to the provisions of entry 35 of List III.

58. Taxes on animals and boats.

59. Tolls.

60. Taxes on professions, trades, callings and employments.

61. Capitation taxes.

62. Taxes on luxuries, including taxes on entertainments, amusements, betting and gambling.

63. Rates of stamp duty in respect of documents other than those specified in the provisions of List I with regard to rates of stamp duty. 1 Subs. by the Constitution (Sixth Amendment) Act, 1956, s. 2, for entry 54. 2 Ins. by the Constitution (Forty-second Amendment) Act, 1976, s. 57 (w.e.f. 3-1-1977).

(Seventh Schedule) 325

64. Offences against laws with respect to any of the matters in this List.

65. Jurisdiction and powers of all courts, except the Supreme Court, with respect to any of the matters in this List.

66. Fees in respect of any of the matters in this List, but not including fees taken in any court.

List III—Concurrent List

1. Criminal law, including all matters included in the Indian Penal Code at the commencement of this Constitution but excluding offences against laws with respect to any of the matters specified in List I or List II and excluding the use of naval, military or air forces or any other armed forces of the Union in aid of the civil power.

2. Criminal procedure, including all matters included in the Code of Criminal Procedure at the commencement of this Constitution.

3. Preventive detention for reasons connected with the security of a State, the maintenance of public order, or the maintenance of supplies and services essential to the community; persons subjected to such detention.

4. Removal from one State to another State of prisoners, accused persons and persons subjected to preventive detention for reasons specified in entry 3 of this List.

5. Marriage and divorce; infants and minors; adoption; wills, intestacy and succession; joint family and partition; all matters in respect of which parties in judicial proceedings were immediately before the commencement of this Constitution subject to their personal law.

6. Transfer of property other than agricultural land; registration of deeds and documents.

7. Contracts, including partnership, agency, contracts of carriage, and other special forms of contracts, but not including contracts relating to agricultural land.

8. Actionable wrongs.

9. Bankruptcy and insolvency.

10. Trust and Trustees.

11. Administrators-general and official trustees.

11A. Administration of Justice; constitution and organisation of all courts, except the Supreme Court and the High Courts.]

12. Evidence and oaths; recognition of laws, public acts and records, and judicial proceedings.

13. Civil procedure, including all matters included in the Code of Civil Procedure at the commencement of this Constitution, limitation and arbitration.

14. Contempt of court, but not including contempt of the Supreme Court.

15. Vagrancy; nomadic and migratory tribes.

16. Lunacy and mental deficiency, including places for the reception or treatment of lunatics and mental deficient.

17. Prevention of cruelty to animals.

17A. Forests.

17B. Protection of wild animals and birds.

18. Adulteration of foodstuffs and other goods.

19. Drugs and poisons, subject to the provisions of entry 59 of List I with respect to opium.

20. Economic and social planning.

Pakistan's development challenges

20A. Population control and family planning.

21. Commercial and industrial monopolies, combines and trusts.

22. Trade unions; industrial and labour disputes.

23. Social security and social insurance; employment and unemployment.

24. Welfare of labour including conditions of work, provident funds, employers' liability, workmen's compensation, invalidity and old age pensions and maternity benefits.

25. Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour.

26. Legal, medical and other professions. 1Ins. by the Constitution (Forty-second Amendment) Act, 1976, s. 57 (w.e.f. 3-1-1977). 2 Subs. by s. 57, *ibid.*, for entry 25 (w.e.f. 3-1-1977).

(Seventh Schedule) 327

27. Relief and rehabilitation of persons displaced from their original place of residence by reason of the setting up of the Dominions of India and Pakistan.

28. Charities and charitable institutions, charitable and religious endowments and religious institutions.

29. Prevention of the extension from one State to another of infectious or contagious diseases or pests affecting men, animals or plants.

30. Vital statistics including registration of births and deaths.

31. Ports other than those declared by or under law made by Parliament or existing law to be major ports.

32. Shipping and navigation on inland waterways as regards mechanically propelled vessels, and the rule of the road on such waterways, and the carriage of passengers and goods on inland waterways subject to the provisions of List I with respect to national waterways.

33. Trade and commerce in, and the production, supply and distribution of,— (a) the products of any industry where the control of such industry by the Union is declared by Parliament by law to be expedient in the public interest, and imported goods of the same kind as such products; (b) foodstuffs, including edible oilseeds and oils; (c) cattle fodder, including oilcakes and other concentrates; (d) raw

cotton, whether ginned or unginned, and cotton seed; and (e) raw jute.

33A. Weights and measures except establishment of standards.

34. Price control.

35. Mechanically propelled vehicles including the principles on which taxes on such vehicles are to be levied.

36. Factories.

37. Boilers.

38. Electricity. 1Subs. by the Constitution (Third Amendment) Act, 1954, s. 2, for entry 33. 2Ins. by the Constitution (Forty-second Amendment) Act, 1976, s. 57 (w.e.f. 3-1-1977). THE

(Seventh Schedule)-328

39. Newspapers, books and printing presses.

40. Archaeological sites and remains other than those declared by or under law made by Parliament to be of national importance.

41. Custody, management and disposal of property (including agricultural land) declared by law to be evacuee property.

42. Acquisition and requisitioning of property.

43. Recovery in a State of claims in respect of taxes and other public demands, including arrears of land-revenue and sums recoverable as such arrears, arising outside that State.

44. Stamp duties other than duties or fees collected by means of judicial stamps, but not including rates of stamp duty.

45. Inquiries and statistics for the purposes of any of the matters specified in List II or List III.

46. Jurisdiction and powers of all courts, except the Supreme Court, with respect to any of the matters in this List.

47. Fees in respect of any of the matters in this List, but not including fees taken in any court.

Germany

Article 70 (Legislation of the Federation and the Laender)

(1) The Laender have the power to legislate insofar as this. Basic Law does not confer legislative powers on the Federation.

(2) The division of competence between the Federation and the Laender is determined by the provisions of this Basic Law concerning exclusive and concurrent legislative powers.

Introduction

Article 71 (Exclusive legislative power of the Federation, concept)

On matters within the exclusive legislative powers of the Federation the Laender have authority to legislate only if, and to the extent that, a Federal law explicitly so authorizes them.

Article 72 (Concurrent legislative power of the Federation, concept)

(1) On matters within the concurrent legislative powers the Laender have authority to legislate as long as, and to the extent that the Federation does not use its legislative power.

(2) The Federation has the right to legislate on these matters to the extent that a need for a Federal rule exists because

1. a matter cannot be effectively dealt with by the legislation of individual Laender, or
2. dealing with a matter by Land law might prejudice the interests of other Laender or of the entire community, or
3. the maintenance of legal or economic unity, especially the maintenance of uniformity of living conditions beyond the territory of a Land necessitates it.

Article 73 (Exclusive legislative power, catalogue) As amended 24 June 1968.

The Federation has the exclusive power to legislate on:

1. foreign affairs and defense, including the protection of the civilian population;
2. citizenship in the Federation;
3. freedom of movement, passports, immigration and emigration, and extradition;
4. currency, money and coinage, weights and measures, as well as computation of time;
5. the unity of the customs and commercial territory, commercial and navigation agreements, the freedom of movement of goods, and the exchange of goods and payment with foreign countries, including customs and frontier protection;
6. Federal railroads and air traffic;
7. postal and telecommunication services;
8. the legal status of persons employed by the Federation and by Federal bodies-corporate under public law;
9. industrial property rights, copyrights and publication rights;
10. cooperation of the Federation and the Laender in matters of (a) criminal police, (b) protection of the free democratic basic order, of the existence and the security of the Federation or a Land (protection of the

constitution) and (c) protection against activities in the federal territory which, through the use of force or actions in preparation for the use of force, endanger the foreign interests of the Federal Republic of Germany, as well as the establishment of a Federal Criminal Police Office and the international control of crime;

11. statistics for Federal purposes.

Article

74 (Concurrent legislation, catalogue)

Concurrent legislative powers extend to the following matters:

1. civil law, criminal law and execution of sentences, the system of judicature, the procedure of the courts, the legal profession, notaries and legal advice;
2. registration of births, deaths, and marriages;
3. the law of association and assembly;
4. the law relating to residence and establishment of aliens;
- 4a. the law relating to weapons and explosives; (inserted 28 July 1972 and amended 23 August 1972).
5. the protection of German cultural treasures against removal abroad;
6. the affairs of refugees and expellees;
7. public welfare;
8. citizenship in the Laender;
9. war damage and reparations;
10. benefits to war-disabled persons and to dependents of those killed in the war, assistance to former prisoners of war, and care of war graves;
- 10a. war graves of soldiers, graves of other victims of war and of the victims of despotism; (inserted 16 June 1965)
11. the law relating to economic matters (mining, industry, supply of power, crafts, trades, commerce, banking and stock exchanges, private insurance);
- 11a. the production and utilization of nuclear energy for peaceful purposes, the construction and operation of installations serving these purposes, protection against dangers arising from the release of nuclear energy or from ionizing rays, and removal of radioactive material;
12. Labor law, including the legal organization of enterprises; protection of workers, employment exchanges and agencies, as well as social insurance, including unemployment insurance;
13. the regulation of educational and training grants and the promotion of

scientific research; (as amended 12 May 1969)

14. the law regarding expropriation, to the extent that matters enumerated in Articles 73 and 74 are concerned;

15. transfer of land, natural resources and means of production into public ownership or other forms of publicly controlled economy;

16. prevention of the abuse of economic power;

17. promotion of agricultural and forest production, safeguarding of the supply of food, the import and export of agricultural and forest products, deep sea and coastal fishing, and preservation of the coasts;

18. dealings in real estate, land law and matters concerning agricultural leases, housing, settlements and homesteads;

19. measures against epidemic and infectious diseases of humans and animals, admission to medical and other professions and practices in the field of healing, traffic in drugs, medicines, narcotics, and poisons;

19a. the economic viability of hospitals and the regulation of hospitalization fees; (inserted 12 May 1969)

20. protection with regard to traffic in food and stimulants as well as in necessities of life, in fodder, in agricultural and forest seeds and seedlings, and protection of trees and plants against diseases and pests;

21. ocean and coastal shipping as well as aids to navigation, inland shipping, meteorological services, sea waterways and inland waterways used for general traffic;

22. road traffic, motor transport, construction and maintenance of long distance highways, as well as the collection of charges for the use of public highways by vehicles and the allocation of revenue there from; (amended 12 May 1969)

23. railroads other than Federal railroads, except mountain railroads.

24. waste disposal, air pollution control and noise abatement. (amended 12 May 1969)

Article 74a+ (Concurrent legislative power of the Federation, remuneration and pensions of members of the public service)

(1) Concurrent legislative power shall further extend to the remuneration and pensions of members of the public service whose service and loyalty are governed by public law, insofar as the Federation does not have exclusive power to legislate pursuant to item 8 of Article 73.

(2) Federal statutes enacted pursuant to paragraph (1) of this Article shall require the consent of the Bundesrat. (3) Federal statutes enacted pursuant to item 8 of Article 73 shall likewise

Notes for above:

* Inserted by federal statute of 12 May 1969 (Federal Law Gazette I p. 363).

** As amended by federal statute of 18 March 1971 (Federal Law Gazette I p. 207).

*** As amended by federal statute of 12 May 1969 (Federal Law Gazette I p. 363).

**** As amended by federal statute of 12 April 1972 (Federal Law Gazette I p. S93).

+ Inserted by federal statute of 18 March 1971 (Federal Law Gazette I p. 206).

require the consent of the Bundesrat, insofar as for the structure and assessment of remuneration and pensions, including the rating of posts, provision is made for criteria or minimum or maximum rates other than those provided for in federal statutes enacted pursuant to paragraph (1) of this Article.

(4) Paragraphs (1) and (2) of this Article shall apply mutatis mutandis to the remuneration and pensions of judges in the Laender. Paragraph (3) of this Article shall apply mutatis mutandis to statutes enacted pursuant to paragraph (1) of Article 98.

Article 75 (Power of the Federation to pass framework legislation catalogue) amended 18 March 1969 Subject to the conditions of Article 72 the Federation has the right to enact general rules concerning:

1. the legal status of persons in the public service of the Laender, communities other corporate bodies of public law, insofar as Article 74a does not provide otherwise; 1a. the general principles governing higher education. (inserted 12 May 1969)

2. the general rules of law concerning the status of the press and motion pictures;

3. hunting, protection of nature and care of the countryside;

4. land distribution, regional planning and water conservation;

5. matters relating to registration and identity cards.

Article 76 (Bills) amended 15 November 1968 and 12 May 1969)

(1) Bills are introduced in the Bundestag by the Federal Government, by members of the

Introduction

Bundestag or by the Bundesrat. (2) Bills of the Federal Government shall be submitted first to the Bundesrat. The Bundesrat is entitled to state its position on these bills within six weeks. (3) Bills of the Bundesrat shall be submitted to the Bundestag by the Federal Government within 3 months. In doing so the Federal Government shall state its own views.

Article 77 (Legislative procedure) (amended 15 Nov 1968)

(1) Federal laws are adopted by the Bundestag. Upon their adoption, they shall, without delay, be transmitted to the Bundesrat by the President of the Bundestag.

(2) The Bundesrat may, within three weeks of the receipt of the adopted bill, demand that a committee for joint consideration of bills, composed of members of the Bundestag and the Bundesrat, be convened. The composition and the procedure of this committee are regulated by rules of procedure adopted by the Bundestag and requiring the consent of the Bundesrat. The members of the Bundesrat on this committee are not bound by instructions. Where the consent of the Bundesrat is required for a law, the demand for convening this committee may also be made by the Bundestag or the Federal Government. Should the committee propose any amendment to the adopted bill, the Bundestag must again vote on the bill.

(3) Insofar as the consent of the Bundesrat is not required for a law, the Bundesrat may, if the proceedings under paragraph 2 are completed, enter a protest within two weeks against a law adopted by the Bundestag. This period begins, in the case of paragraph 2, last sentence, on the receipt of the bill as re-adopted by the Bundestag, in all other cases on the receipt of a communication from the chairman of the committee provided for in paragraph (2) of this Article to the effect that the committee's proceedings have been concluded.

(4) If the protest is adopted by a majority of the votes of the Bundesrat, it can be rejected by a decision of the majority of the members of the Bundestag. If the Bundesrat adopted the protest by a majority of at least two-thirds of its votes, the rejection by the Bundestag requires a majority of two-thirds, including at least the majority of the members of the Bundestag.

Article 78 (Passage of federal statutes)

A bill adopted by the Bundestag is deemed to have been passed if the Bundesrat consents to it, does not make a demand pursuant to Article 77, paragraph 2, does not enter a protest within the time limited by Article 77 paragraph 3, or withdraws such protest, or if the protest is overridden by the Bundestag.

Article 79 (Amendment of the Basic Law)

As amended March 27, 1954.

(1) The Basic law can be amended only by a law which expressly amends or supplements the text thereof. With respect to international treaties the subject of which is a peace settlement, the preparation of a peace settlement or the abolition of an occupation regime, or which are designed to serve the defense of the Federal Republic, it shall be sufficient, for the purpose of a clarifying interpretation to the effect that the provisions of the Basic Law are not contrary to the conclusion and entry into force of such treaties, to effect a supplementation of the Basic Law confined to this clarifying interpretation.

(2) Such a law requires the affirmative vote of two-thirds of the members of the Bundestag and two-thirds of the votes of the Bundesrat.

(3) An amendment of this Basic Law affecting the division of the Federation into Laender, the participation in principle of the Laender in legislation, or the basic principles laid down in Articles 1 and 20, is inadmissible.

Article 80 (Issue of ordinances)

(1) The Federal Government, a Federal Minister or the Land Governments may be authorized by a law to issue ordinances having the force of law. The content, purpose and scope of the powers conferred must be set forth in the law. The legal basis must be stated in the ordinance. If a law provides that a power may be further delegated, an ordinance having the force of law is necessary in order to delegate the power.

(2) The consent of the Bundesrat is required unless otherwise provided by Federal legislation, for ordinances having the force of law issued by the Federal Government or a Federal Minister concerning basic rules for the use of facilities of the Federal railroads and of postal and telecommunication Services, or charges therefore, or concerning the construction and operation of railroads,

as well as for ordinances having the force of law issued on the basis of Federal laws that require the consent of the Bundesrat or that are executed by the Laender as agents of the Federation

or as masters of their own concern.

Article 80a* (Application of legal provisions in a state of tension)

(1) Where this Basic Law or a federal statute on Defense, including the protection of the civilian population, stipulates that legal provisions may only be applied in accordance with this Article, their application shall, except in a state of Defense, be admissible only after the Bundestag has determined that a state of tension (Spannungsfall) exists or where it has specifically approved such application. In respect of the cases mentioned in the first sentence of paragraph (5) and the second sentence of paragraph (6) of Article 12a, such determination of a state of tension and such specific approval shall require a two-thirds majority of the votes cast.

(2) Any measures taken by virtue of legal provisions enacted under paragraph

(1) of this Article shall be revoked whenever the Bundestag so demands.

(3) In derogation of paragraph (1) of this Article, the application of such legal provisions shall also be admissible by virtue of and in accordance with a decision taken with the consent of the Federal Government by an international body within the framework of a treaty of alliance. Any measures taken pursuant to this paragraph shall be revoked whenever the Bundestag so demands with the majority of its members.

Inserted by federal statute of 24 June 1968 (Federal Law Gazette I p. 711)

Article 81 (State of legislative emergency)

(1) Should in the circumstances of Article 68 the Bundestag not be dissolved, the Federal President may, at the request of the Federal Government and with the consent of the Bundesrat, declare a state of legislative emergency with respect to a bill, if the Bundestag rejects the bill although the Federal Government has declared it to be urgent. The same applies if a bill has been rejected although the Federal Chancellor had combined with it the motion under Article 68.

(2) If, after a state of legislative emergency has been declared, the Bundestag again rejects the bill or adopts it in a version declared to be unacceptable to the Federal Government the bill is deemed to have been passed insofar as the Bundesrat consents to it. The same applies if the bill is not adopted by the Bundestag within four weeks of its reintroduction.

(3) During the term of office of a Federal Chancellor, any other bill rejected by the Bundestag may be passed in accordance with paragraphs 1 and 2 within a period of six months after the first declaration of a state of legislative emergency. After expiration of this period, a further declaration of a state of legislative emergency is inadmissible during the term of office of the same Federal Chancellor.

(4) The Basic Law may not be amended nor be repealed nor suspended in whole or in part by a law passed pursuant to paragraph 2.

Article 82 (Promulgation and effective date of legal provisions)

(1) Laws passed in accordance with the provisions of this Basic Law will, after countersignature, be signed by the Federal President and promulgated in the Federal Gazette. Ordinances having the force of law will be signed by the agency which issues them, and unless otherwise provided by law, will be promulgated in the Federal Gazette.

(2) Every law and every ordinance having the force of law should specify its effective date. In the absence of such a provision, it becomes effective on the fourteenth day after the end of the day on which the Federal Gazette was published.

VIII. THE EXECUTION OF FEDERAL LAWS AND THE FEDERAL ADMINISTRATION

Article 83 (Distribution of competence between the Federation and the Laender)

The Laender execute Federal laws as matters of their own concern insofar as this Basic Law does not otherwise provide or permit.

Article 84 (Land execution and Federal Government supervision)

(1) If the Laender execute Federal laws as matters of their own concern, they provide for the establishment of authorities and the regulation of administrative procedures insofar as Federal laws consented to by the Bundesrat do not otherwise provide.

Introduction

(2) The Federal Government may, with the consent of the Bundesrat, issue general administrative rules.

(3) The Federal Government exercises supervision to ensure that the Laender execute Federal laws in accordance with applicable law. For this purpose the Federal Government may send commissioners to the highest Land authorities and, with their consent or, if this consent is refused, with the consent of the Bundesrat, also to subordinate authorities.

(4) Should any shortcomings which the Federal Government has found to exist in the execution of Federal laws in the Laender not be corrected, the Bundesrat decides, on the application of the Federal Government or the Land whether the Land has acted unlawfully. The decision of the Bundesrat may be challenged in the Federal Constitutional Court.

(5) For the execution of Federal laws, the Federal Government may, by Federal law requiring the consent of the Bundesrat, be authorized to issue individual instructions for particular cases. They must be addressed to the highest Land authorities unless the Federal Government considers the matter urgent.

Article 85 (Execution by the Laender as agents of the Federation)

(1) Where the Laender execute Federal laws as agents of the Federation, the establishment of the authorities remains the concern of the Laender insofar as Federal laws consented to by the Bundesrat do not otherwise provide.

(2) The Federal Government may with the consent of the Bundesrat, issue general administrative rules. It may regulate the uniform training of civil servants and salaried government employees. The heads of authorities at intermediate level shall be appointed with its agreement.

(3) The Land authorities are subject to the instructions of the appropriate highest Federal authorities. The instructions shall be addressed to the highest Land authorities unless the Federal Government considers the matter urgent. Execution of the instructions shall be ensured by the highest Land authorities.

(4) Federal supervision extends to the conformity with law and appropriateness of the execution. The Federal Government

may, for this purpose, require the submission of reports and documents and send commissioners to all authorities.

Article 86 (Direct federal administration)

Where the Federation executes laws by Federal administrative agencies or by Federal bodies-corporate or institutions under public law, the Federal Government issues, insofar as the law contains no special provision, the general administrative rules. It provides for the establishment of authorities insofar as the law does not otherwise provide.

Article 87 (Matters for direct federal administration)

(1) The foreign service the Federal finance administration, the Federal railroads, the Federal postal service and, in accordance with the provisions of Article 89, the administration of the Federal waterways and of shipping are conducted as matters of Federal administration with their own subordinate administrative structure. Federal frontier protection authorities and central offices for police information and communications, for the compilation of data for the purpose of protecting the Constitution and for the criminal police may be established by Federal legislation.

(2) Social insurance institutions whose sphere of competence extends beyond the territory of one Land are conducted as Federal bodies-corporate under public law.

(3) In addition, independent Federal higher authorities and Federal bodies-corporate and institutions under public law may be established by Federal law for matters on which the Federation has the power to legislate. If new functions arise for the Federation in matters on which it has the power to legislate, Federal authorities at intermediate and lower level may be established in case of urgent need, with the consent of the Bundesrat and of the majority of the members of the Bundestag.

Article 87a.

Added March 19, 1956.

Article 87a (Establishment and powers of the Armed Forces)**

(1) The Federation shall establish Armed Forces for Defense purposes. Their numerical strength and general organizational structure shall be shown in the budget.

(2) Apart from Defense, the Armed Forces may only be used insofar as explicitly permitted by this Basic Law.

(3) While a state of Defense or a state of tension exists, the Armed Forces shall have the power to protect civilian property and discharge functions of traffic control insofar as this is necessary for the performance of their Defense mission. Moreover, the Armed Forces may, when a state of Defense or a state of tension exists, be entrusted with the protection of civilian property also in support of police measures; in this event the Armed Forces shall cooperate with the competent authorities.

(4) In order to avert any imminent danger to the existence or to the free

* As amended by federal statute of 28 July 1972 (Federal Law Gazette I p. 1305).

** Inserted by federal statute of 19 March 1956 (Federal Law Gazette I p. 111).

democratic basic order of the Federation or a Land, the Federal Government may, should conditions as envisaged in paragraph (2) of Article 91 obtain and the police forces and the Federal Border Guard be inadequate, use the Armed Forces to support the police and the Federal Border Guard in the protection of civilian property and in combating organized and militantly armed insurgents. Any such use of the Armed Forces shall be discontinued whenever the Bundestag or the Bundesrat so demands.

Article 87b (Administration of the Federal Armed Forces)

Added March 19, 1956.

(1) The administration of the Federal defense Forces shall be conducted as a Federal administration with its own administrative substructure. Its function shall be to administer matters pertaining to personnel and to the immediate supply of the material requirements of the Armed Forces. Tasks connected with benefits to invalids or construction work shall not be assigned to the administration of the Federal Defense Forces except by Federal legislation which shall require the consent of the Bundesrat. Such consent shall also be required for any legislative provisions empowering the administration of the Federal Defense Forces to interfere with rights of third parties: this shall, however, not apply in the case of laws concerning personnel.

(2) Moreover, Federal laws concerning defense including recruitment for military service and protection of the civilian

population may, with the consent of the Bundesrat, stipulate that they shall be carried out, wholly or in part, either under Federal administration with its own administrative substructure or by the Laender acting as agents of the Federation. If such laws are executed by the Laender acting as agents of the Federation, they may, with the consent of the Bundesrat, stipulate that the powers vested by virtue of Article 85 in the Federal Government and appropriate highest Federal authorities shall be transferred wholly or partly to higher Federal authorities in such an event it may be enacted that these authorities shall not require the consent of the Bundesrat in issuing general administrative rules as referred to in Article 85 paragraph (2) first sentence.

Article 87c inserted 23 December 1959

Laws enacted under item 11a of Article 74 may, with the consent of the Bundesrat stipulate that they shall be executed by the Laender acting as agents of the Federation.

Article 87d

Added 6 Feb 1961

(1) The Aviation Administration shall be administered by the Federation.

(2) By Federal law requiring the consent of the Bundesrat, the functions of the Aviation Administration may be assigned to the Laender as agents of the Federation.

Article 88.

The Federation establishes a note-issuing and currency bank as the Federal bank.

Article 89 (Federal waterways)

(1) The Federation is the owner of the former Reich waterways.

(2) The Federation administers the Federal waterways through its own authorities. It exercises the public functions relating to inland shipping which extend beyond the territory of one Land and those relating to maritime shipping which are conferred on it by law. Upon request, the Federation may transfer the administration of Federal waterways insofar as they lie within the territory of one Land, to this Land as an agent. If a waterway touches the territories of several Laender the Federation may designate as its agent one Land if so requested by the Laender concerned.

(3) In the administration, development and new construction of waterways the needs of soil cultivation and of regulating water

Introduction

supply shall be safeguarded in agreement with the Laender.

Article 90 (Federal highways)

(1) The Federation is the owner of the former Reich motor roads and Reich highways.

(2) The Laender, or such self-governing bodies-corporate as are competent under Land law, administer as agents of the Federation the Federal motor roads and other Federal highways used for long-distance traffic.

(3) At the request of a Land, the Federation may take under direct Federal administration Federal motor roads and other Federal highways used for long-distance traffic, insofar as they lie within the territory of the Land.

Article 91 (Internal emergency) amended 24 June 1968

(1) In order to avert any imminent danger to the existence or to the free democratic basic order of the Federation or of a Land, a Land may request the services of the police forces of other Laender or of the forces and facilities of other administrative authorities and the Federal Border Guard.

(2) If the Land in which the danger is imminent is not itself willing or able to fight the danger, the Federal Government may place the police in that Land and the police forces of other Laender under its own instructions and use units of the Federal Border Guard. The order for this shall be rescinded after the danger is past, or else at any time on the demand of the Bundesrat. Where the danger extends to a region larger than a Land, the Federal Government may, insofar as is necessary for effectively combating such danger, issue instructions to the Land governments; the first and second sentences of this paragraph shall not be affected by this provision.

VIIIa. JOINT TASKS*

Article 91a* (Participation of the Federation by virtue of federal legislation)

(1) The Federation shall participate in the following sectors, in the discharge of responsibilities of the Laender, provided that such responsibilities are important to society as a whole and that federal participation is necessary for the improvement of living conditions (joint tasks):

1.** extension and construction of institutions of higher education, including university clinics;

2. improvement of regional economic structures;

3. improvement of the agrarian structure and of coast preservation.

(2) Joint tasks shall be defined in detail by a federal statute requiring the consent of the Bundesrat. Such legislation should include general principles governing the discharge of joint tasks.

(3) Such legislation shall provide for the procedure and the institutions required for joint overall planning. The inclusion of a project in the overall planning shall require the consent of the Land in which it is to be carried out.

(4) In cases to which items 1 and 2 of paragraph (1) of this Article apply, the Federation shall meet one half of the expenditure in each Land. In cases to which item 3 of paragraph (1) of this Article applies, the Federation shall meet at least one half of the expenditure, and such proportion shall be the same for all the Laender. Details shall be regulated by statute. Provision of funds shall be subject to appropriation in the budgets of the Federation and the Laender.

(5) The Federal Government and the Bundesrat shall be informed about the execution of joint tasks, should they so demand.

Germany

Article 29 (New delimitation of Laender boundaries) (Amended 19 August 1969 and 23 August 1976)

(1) A new delimitation of federal territory may be made to ensure that the Laender by the size and capacity are able effectively to fulfill the functions incumbent upon them. Due regard shall be given to regional, historical and cultural ties, economic expediency, and the requirements of regional policy and planning.

(2) Measures for a new delimitation of federal territory shall be effected by federal statutes which shall require confirmation by referendum. The Laender thus affected shall be consulted.

(3) A referendum shall be held in the laender from whose territories or partial territories a new Land or a Land which redefined boundaries is to be formed (affected

Laender). The referendum shall be held on the question whether the affected Laender are to remain within their existing boundaries or whether the new Land or Land with redefined boundaries should be formed. The referendum shall be deemed to be in favor of the formation of a new Land or of a Land with redefined boundaries where approval is given to the change by a majority in all the territories or partial territories of an affected Land whose assignment to a Land is to be changed in the same sense. The referendum shall be deemed not to be in favor where change; such rejection shall, however, be of no consequence where in one part of the territory whose assignment of the affected Land is to be changed a majority of two-thirds approve of the change, unless in the entire territory of the affected Land a majority of two-thirds reject the change.

(4) Where in a clearly definable area of interconnected population and economic settlement, the parts of which lie in several Laender and which has a population of at least one million, one tenth of those of its population entitled to vote in Bundestag elections petition by popular initiative for the assignment of that area to one Land, provision shall be made within two years in a federal statute determining whether the delimitation of the affected Laender shall be changed pursuant to paragraph 2 of this Article or determining that a plebiscite shall be held in the affected Laender. (5) The plebiscite shall establish whether approval is given to a change of Laender delimitation to be proposed in the statute. The statute may put forward different proposals, not exceeding two in number, for the plebiscite. Where approval is given by a majority to a proposed change of Laender delimitation, provision shall be made within two years in a federal statute determining whether the delimitation of the Laender concerned shall

be changed pursuant to paragraph 2 of this Article. Where approval is given, in accordance with the third and fourth sentences of paragraph 3 of this Article, to a proposal put forward for the plebiscite, a federal statute providing for the formation of the proposed Land shall be enacted within two years of the plebiscite and shall no longer require confirmation by referendum. (6) A majority in a referendum or in a plebiscite shall consist of a majority of the votes cast, provided that they amount to at least one quarter of the population entitled to vote in Bundestag elections. Other detailed provisions concerning referendums, popular petitions and plebiscites (Volksentscheide, Volksbefragungen) shall be made in a federal statute; such statute may also provide that popular petitions may not be repeated within a period of five years.

(7) Other changes concerning the territory of the Laender may be effected by state agreements between the Laender concerned or by a federal statute with the approval of the Bundesrat where the territory which is to be the subject of a new delimitation does not have more than 10,000 inhabitants. Detailed provision shall be made in a federal statute requiring the approval of the Bundesrat and the majority of the members of the Bundestag. It shall make provision for the affected communes and districts to be heard.

Appendix II

Center - Province relationship in Oil and Gas sector in federal countries

In this appendix, we provide an overview of the centre-province relationship in the oil and gas sector in several federal countries such as USA, Canada, Argentina, Brazil, Australia, India and Pakistan. Also useful data is provided in this respect in the form of tables and figures.

In the **United States** oil and gas and mineral resources belong to the owner of the land, even if he, she is a private individual. In the US, 30% of public land belongs to the federal government, hence 30% ownership. However, 90% of the rent, royalty and revenues go to the states. Federal government has more say in offshore production than on-shore one.

In the US, except for a 3 mile shore adjacent area, off shore land is in the ownership of federal government and as such all revenue/rents /royalty on offshore oil and gas is federal. Some 40% share of offshore oil/gas income goes to the states adjacent to the offshore area.

In the **Brazilian** constitution, oil reserves found off shore and on-shore belong to the Union (federal government). However oil income legislation has been made to grant 60% of royalties to producing states and municipalities. Currently debate is going on the division of income from off shore production, equally among all states / provinces, as oil belongs to all Brazilian people.

Argentina: Since the constitutional reforms of the 1994, oil, gas and other subsoil natural resources lie in the provincial domain; ownership, control and income. Provinces collect royalties on oil and gas and have the legal power to collect other taxes on economic activities and assets, like the gross sales tax, property tax, vehicles stamp duty on contract. Provinces also get a share in federal taxes or proceeds except on exports/imports. Federal government collects fuel taxes and shares the proceeds with provinces. Provincial government is empowered to grant oil/ gas/ mineral concessions, permits and licenses related with E&P.

India: Articles 294- 297 of the Indian Constitution provide that the ownership and natural resources located within the territory of a state rest with that state. However this ownership is not absolute and has been

qualified by several parallel regulations. Management of the Oil and Gas sector is under control of the federal government. Royalties are decided by federal government and provinces cannot levy any tax on oil/ gas. Petroleum law “the petroleum and natural gas rules” has been federally promulgated, and has to be followed by the states / provinces. Although states may grant concessions and licenses and lease, these have to be cleared/ approved by respective federal ministry.

All offshore resources are owned by the Union (federal government). Except for royalty and a few traditional provincial taxes such as on property, vehicles etc all other taxes go to federal government/Union. There is no sharing of corporate income tax etc. Union's share in total oil/gas revenues has stood to be 84% and only 16% has gone to the states by the year 1996-2000. Thereafter the Union to states ratio of income became more balanced at the 67.33, two third (67%) going to federation and 33% to the province. The dominance role and clout of public sector oil companies have further diluted states authority and leverage.

Canada: For on-shore oil and gas, provincial ownership and domain exists. Offshore oil and gas falls under federal jurisdiction. Income is however remitted to adjacent province. Both federation and provinces levy income tax not on just oil and gas but in general. Thus in this way, provinces also share in the corporate tax.

Australia: In Australia, oil and gas production are not significant as compared to other sources, and not much attention has been paid on the subject. Under British Common Law oil/gas and minerals belonged to the owner of the land, be it private individual or province or federal government. Later government ownership was introduced. Provinces own and control on-shore oil and gas and receive royalty, lease/rentals etc, while in off-shore production, federation gets 4% royalty and states 8%.

Pakistan: Constitution of Pakistan (1973 and as updated 2010 through 18th amendment) puts oil and natural gas in federal legislative list Part 11. However, most revenues related to oil and gas including royalty, excise, gas development surcharge go straight to the provinces. Corporate Income Tax and GST however goes to the federal government. However there is no mention in the constitution regarding ownership of natural resources. Complete resource management cycle is managed by the federal ministry of fuel and natural resources and no provincial control or permission is involved.

Table AII-1: Centre State revenue Share across exploration and production regimes.

Charges		Nominate d	Pre NELP	NELP
Fees	Onshore	States	States	States
	Offshore	Centre	Centre	Centre
Dead rent	Onshore	States	States	States
	Offshore	Centre	Centre	Centre
Royalty	Onshore	States	States	States
	Offshore	Centre	Centre	Centre
Oil Industry Development Cess	Onshore	Centre	Centre	Centre
	Offshore	Centre	Centre (NOCs only)	-
Fines / Penalties	Onshore	-	States	States
	Offshore	-	Centre	Centre
Profit Petroleum	Onshore	-	Centre	Centre
	Offshore	-	Centre	Centre
Income Tax	Onshore	Centre	Centre	Centre After 7 yrs
	Offshore	Centre	Centre	Centre After 7 yrs
Minimum alternate tax	Onshore	Centre	Centre	Centre
	Offshore	Centre	Centre	Centre
Custom duty	Onshore	Centre	Centre	-
	Offshore	Centre	Centre	-

Source: Ligia Noronha and Nidhi Srivastava, Oil and Gas Management and Revenues in India, World Bank Conference, Oil and Gas in Federal Systems, Washington, D.C., 2010

Table AH-2: Oil & Gas Revenues (2009/2010) Billion Rupees

	Balochistan	NWFP	Punjab	Sindh	Pakistan
Royalty on crude oil	0	2469	1429	3915	7813
Royalty on natural gas	4443	2729	1214	18129	26515
GDS	5632	2159	1631	19915	29338
Excise duty on gas	1371	191	191	4545	6458
Total	11446	7548	4465	46504	70124
% of total revenues	17.0	6.6	1.0	14.2	3.0

Source: Gulfaraz Ahmedi, Management of Oil and Gas Revenues in Pakistan, World Bank Conference, Oil and Gas in Federal Systems, Washington, D.C., 2010

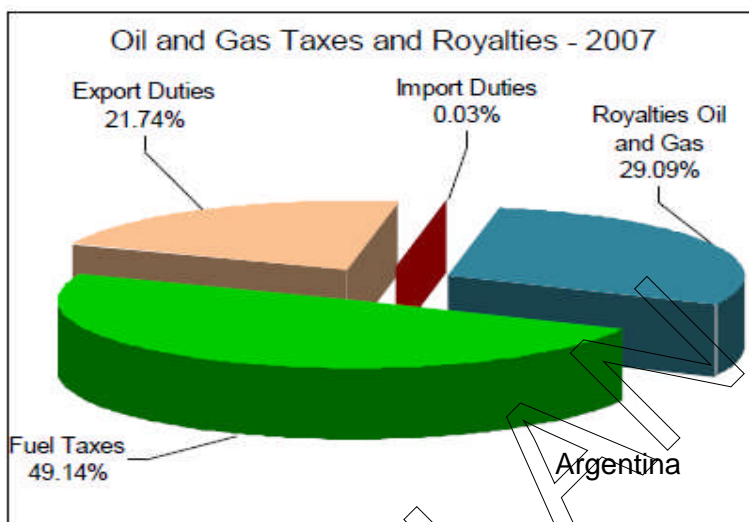
Table AII-3: Natural Resource Revenues for Six States of the United States

	Alaska	Wyoming	New Mexico	Texas	Louisiana	Oklahoma
Taxes	7965	620	1242	5966	1138	1266
Royalties	2200	152	50	978	962	104
Share in Federal Royalties	38	1271	615	21	49	7
Total Revenue	10203	2042	1907	6965	2149	1177
Per Capita Revenue	\$14,873	\$3831	\$961	\$284	\$487	\$323
Population 2008 (Thousands)	686	533	1984	2432	4411	3642

Sources:

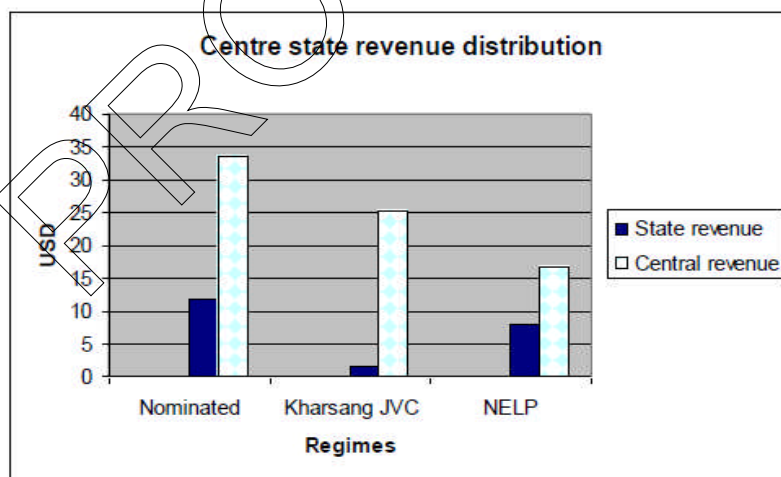
1. State of Alaska, Department of Revenue, Annual Report 2008.
2. Taxes come from Wyoming Department of Revenue, Annual Report, 2008 and royalties come from Office of State Land and Investment, Annual Report, 2008.
3. Jim Nunns, Tax Policy Director, "Overview of Major New Mexico Taxes Memorandum" dated February 17, 2009 and "Revenue from Oil and Natural Gas Memorandum" December 15, 2008.
4. Taxes and royalties are from Texas Annual Cash Report, FY 2008, Comptroller of Public Accounts. Property taxes collected on minerals were supplied by Bill Lindsey of the Texas Comptroller of Public Accounts.
5. Department of Natural Resources, Technology Assessment Division, Louisiana Energy Facts.
6. Taxes come from Oklahoma Tax Commission, Annual Report, 2008 and royalties come from Commissioners of Land Office, Annual Report, 2008.
7. US Department of the Interior news release "Interior's Mineral Management Service Disburses Record \$23.4 billion in FY 2008", November 20, 2008.

Graph 2 - Oil and gas taxes and royalties (2007)



Source: Juan Antonio Zapatai, Oil and Gas in Argentina, World Bank Conference, Oil and Gas in Federal Systems, Washington, D.C., 2010

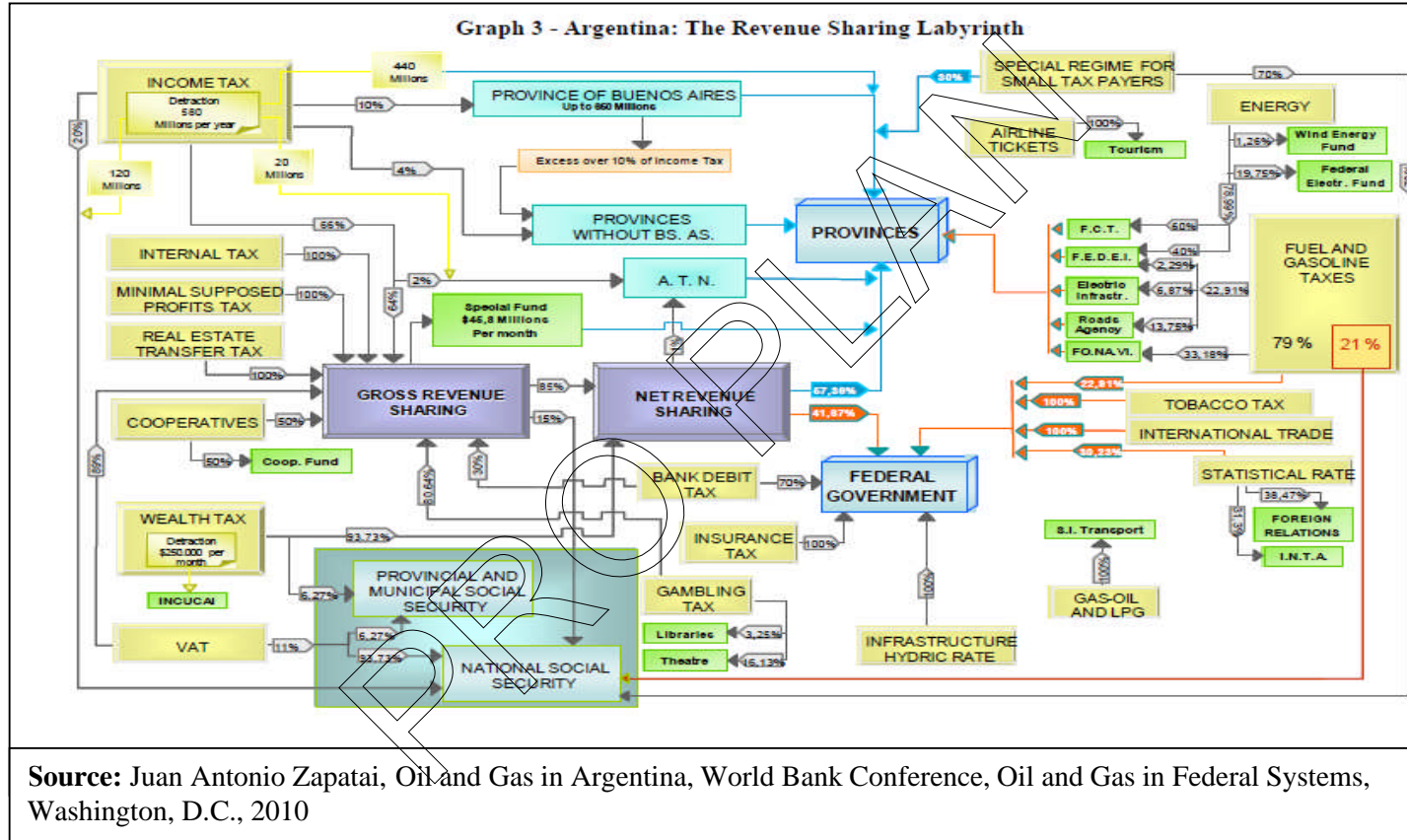
Figure 4: Centre State revenue shares from a barrel of oil



Source: TERI 2008; Data source: Oil India Ltd.

Source: Ligia Noronha and Nidhi Srivastava, Oil and Gas Management and Revenues in India, World Bank Conference, Oil and Gas in Federal Systems, Washington, D.C., 2010

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Index

- agriculture, 6, 83, 85, 86, 87, 100, 133, 134, 136, 138, 142, 165, 166, 226, 368, 366, 389
- Allah, 370, 372, 378, 379
- Al-Qaeda, 60, 335, 385
- armed forces, 311, 315, 316, 317, 433, 448, 454
- armistice**, 394
- arms race, 402, 403
- army, 32, 84, 115, 317, 333, 311, 365, 371, 379, 384, 393, 401, 405, 412, 418, 424, 434, 447, 449, 451, 453, 455
- Asghar Khan, 378
- Asif Ali Zardari, 16, 408
- associations, 12, 133, 281, 334
- attack, 5, 22, 30, 53, 313, 352, 379, 380, 381, 383, 388, 404, 409, 410, 411, 412, 413, 414, 453
- automotive, 100, 102, 103, 117, 118, 119, 293
- Balochistan, 17, 19, 55, 60, 82, 224, 227, 228, 229, 234, 236, 237, 240, 241, 242, 244, 245, 246, 247, 249, 250, 251, 252, 253, 254, 255, 256, 257, 260, 261, 262, 263, 269, 270, 271, 272, 275, 276, 277, 282, 285, 286, 287, 289, 292, 293, 296, 304, 328
- Balochistan package, 237, 249
- battle, 32, 355, 386, 395, 449
- Benazir, 18, 26, 90, 121, 274, 368, 366
- Bhutto, 18, 23, 25, 26, 52, 53, 61, 82, 274, 351, 329, 331, 336, 338, 437, 454
- blood, 94
- Brazil, 41, 56, 64, 70, 71, 74, 134, 147, 164, 229, 291, 307, 332, 354, 355, 308, 309, 339, 428, 429
- Budget deficit, 83
- bureaucracy, 20, 61, 115, 227, 236, 237, 270, 274, 276, 279, 295, 311, 315, 316, 317
- caliph, 378
- Caliphate, 365
- capital goods, 112, 113
- CBM, 219, 220
- Census, 76, 262, 326
- China, 42, 43, 47, 50, 51, 58, 59, 60, 62, 64, 65, 71, 72, 74, 75, 76, 77, 94, 100, 102, 107, 112, 118, 119, 129, 134, 143, 151, 164, 165, 166, 167, 174, 177, 179, 182, 189, 205, 208, 210, 220, 226, 268, 288, 291, 332, 335, 340, 346, 348, 354, 355, 308, 309, 311, 322, 401, 404, 405, 416, 421, 422, 426, 427, 430, 435, 442
- Christians, 29, 373, 386, 387
- civil liberties, 23, 311, 314, 326, 331, 334, 343, 353, 354, 304, 305, 306, 333, 335, 336, 351
- coal mining, 202
- coal pricing, 11, 185, 202, 204
- combatants, 385, 388, 389, 391, 395
- competition, 5, 11, 35, 85, 119, 141, 142, 144, 152, 153, 157, 184, 238, 318, 364, 407, 455
- Competitiveness**, 6, 7, 8, 96, 131, 141, 145, 148, 149, 152, 153, 159, 366
- comprehensive test ban treaty, 407
- concurrent list, 12, 13, 14, 224, 225, 226, 227, 228, 236, 238, 265, 280
- Constituency**, 323, 324, 326
- constituency delimitation, 323, 324, 325
- constitutional, 223, 226, 250, 280, 301, 302, 303, 305, 356, 305, 326, 329, 348, 453
- construction, 47, 136, 191, 217, 290, 304, 368, 366
- contract, 193, 209, 213, 271, 272, 273, 280, 281, 283, 284, 286, 317, 324, 368
- control, 5, 6, 7, 13, 18, 19, 45, 59, 85, 89, 97, 115, 121, 134, 138, 143, 150, 153, 167, 211, 226, 227, 233, 234, 235, 237, 238, 250, 253, 266, 274, 275, 280, 317, 319, 335, 304,

Index

- 314, 315, 318, 336, 338, 349, 400,
404, 407, 411, 418, 430, 433, 455
conventional war, 34
- Cooperatives**, 6, 133, 135, 138, 139
copper, 54, 83, 283, 286, 292, 293, 294
corruption, 7, 26, 29, 51, 88, 89, 90,
142, 143, 150, 175, 194, 236, 311,
313, 317, 318, 319, 320, 324, 309,
310, 311, 312, 316, 349, 365, 368,
366, 385
- Corruption Index**, 308
cotton, 104, 134, 142, 364
coup, 26, 55, 434, 453, 455
courts, 194, 225, 324, 376
criminal law, 28
Crop yields, 8, 162
crops, 86, 87, 173, 174, 394
CTBT, 407
Defense Budget, 416
delivery vehicle, 414, 415
demand, 1, 15, 17, 47, 52, 56, 57, 82,
85, 92, 103, 106, 107, 119, 142,
145, 152, 170, 183, 186, 189, 190,
194, 195, 205, 216, 218, 223, 224,
234, 255, 262, 276, 283, 284, 286,
292, 335, 324, 330, 375, 377, 379,
445, 448, 452
deterrent, 58, 404, 405, 407, 415, 423,
431
diesel, 186, 195, 212
distribution, 4, 11, 17, 56, 135, 140,
150, 158, 181, 185, 187, 188, 204,
214, 218, 221, 223, 229, 239, 241,
252, 254, 266, 273, 290, 291
domestic consumer, 197
Dr. A.Q. Khan, 32, 449
drinking water, 5, 52, 88, 354, 359
drip irrigation, 87, 169, 170, 175
drought, 446
economic development, 1, 20, 142,
144, 291, 310, 312, 332, 342, 304,
311, 365, 369, 370, 432
- Economic Growth**, 3, 81
education, 2, 27, 28, 33, 36, 52, 57, 58,
61, 84, 88, 89, 92, 146, 147, 149,
150, 151, 153, 157, 226, 315, 344,
352, 353, 354, 358, 360, 365, 366,
368, 369, 370, 371, 377, 388, 432,
437, 442, 444, 445, 455, 456
Egypt, 8, 51, 56, 150, 162, 163, 164,
165, 166, 167, 178, 180, 182, 341,
346, 348, 354, 355, 359, 308, 360,
362, 364, 366, 367, 370, 382, 384,
428, 429, 443
EIA, 201, 294
EITI, 273, 277, 278, 285
EIU, 332, 333, 334, 347
elections, 23, 24, 26, 81, 223, 264, 330,
352, 353, 356, 304, 310, 321, 322,
323, 325, 326, 330, 332, 333, 334,
335, 340, 341, 342, 345, 348, 349,
350, 453
Electoral Issues, 22, 320
electoral reforms, 324
electricity tariff, 19, 189, 196, 239, 275,
303
Engineering Development Board, 93,
113
environment, 4, 8, 11, 12, 50, 61, 83,
84, 115, 139, 148, 149, 162, 184,
185, 202, 211, 218, 276, 277, 278,
302, 326, 331, 334, 380, 407, 432,
445, 446
expenditure, 2, 3, 14, 27, 31, 45, 58, 83,
84, 147, 150, 157, 229, 233, 240,
278, 340, 354, 365, 367, 370, 371,
415, 416, 426, 428, 429, 430, 436,
437, 438, 439, 441, 442, 444, 445
explosion, 406
exports, 5, 9, 45, 47, 55, 90, 92, 95, 97,
99, 100, 101, 102, 103, 104, 105,
106, 107, 110, 112, 113, 115, 116,
117, 118, 120, 128, 129, 130, 134,
137, 145, 163, 268, 279, 283, 294,
416
family, 25, 26, 90, 148, 336, 379, 454
FAO, 183
FDI, 47, 157, 158, 189, 238
federal domain, 225, 240, 265
federal list, 225, 235, 236
federation, 13, 17, 18, 25, 51, 222, 224,
225, 226, 227, 238, 240, 241, 243,
263, 274, 277
fertilizer, 11, 135, 185, 205, 209, 210,
211, 366, 367, 455
fertilizers, 98, 104, 121, 135, 217
fight, 5, 11, 29, 61, 184, 268, 280, 317,
321, 378, 380, 386, 387, 389, 391,
392, 393, 394, 412, 447
flood, 87, 167

- FnWG, 325, 326, 327, 328, 330, 333, 334, 336, 337, 338, 339, 340, 341, 342, 343
- Food**, 8, 52, 105, 108, 109, 110, 116, 120, 122, 123, 124, 161, 162, 163, 173, 183, 312
- foreign exchange, 32, 53, 59, 104, 118, 120, 174, 189, 196, 203, 214, 293, 304, 449
- free countries, 354, 356
- Free Countries**, 355
- freedom, 7, 14, 17, 20, 23, 24, 61, 226, 245, 273, 310, 324, 351, 352, 353, 354, 355, 357, 304, 305, 306, 309, 310, 311, 316, 329, 332, 333, 334, 350, 380, 401, 413, 414, 446, 449, 455
- Freedom House, 7, 24, 310, 325, 352, 353, 354, 356, 357, 360, 304, 305, 307, 312, 332
- Freedom House Index, 332
- Freedom of Expression**, 359, 305
- freedom of information, 273
- fuel, 100, 120, 121, 186, 191, 192, 195, 217, 219, 304, 359, 402, 403, 413, 419, 424, 425, 429
- Fund for Peace, 310, 322, 323, 330, 343
- fundamentalist, 28, 30, 370, 373, 384, 385, 387, 448
- funding political parties, 25
- garments, 104, 133, 136, 137
- gas pipeline, 206, 209
- gas pricing, 242
- gas tariff, 197, 198
- gas theft, 143
- gasoline, 195, 196, 210
- GCI**, 147, 151, 153, 154, 157, 159
- GDP, 5, 14, 20, 35, 36, 41, 43, 45, 47, 49, 58, 62, 63, 64, 65, 69, 71, 72, 73, 75, 76, 77, 79, 95, 96, 98, 128, 148, 150, 152, 153, 154, 195, 240, 244, 270, 271, 310, 328, 354, 355, 359, 366, 367, 369, 370, 371, 416, 436, 437, 438, 439, 440, 442, 444
- General Assembly, 8, 27, 162
- General Kapoor, 401
- Global Competitive Index, 151
- governance, 1, 19, 20, 24, 28, 34, 63, 83, 222, 310, 311, 312, 313, 315, 320, 323, 324, 325, 328, 329, 330, 331, 333, 337, 342, 343, 344, 345, 317, 330, 332, 336, 362, 369, 371, 372, 373, 397
- Governance Indicators**, 323, 324, 325, 338, 339, 342, 344, 349, 362
- GPI, 349, 358
- gross enrolment, 369, 370
- Hamas, 373, 385, 387
- HDI, 7, 36, 270, 310, 311, 356, 357, 362, 363, 364, 365, 366, 369, 370, 442
- health, 27, 28, 33, 36, 52, 57, 58, 84, 88, 133, 134, 136, 139, 149, 151, 226, 311, 315, 318, 345, 352, 354, 359, 360, 368, 370, 371, 366, 388, 437, 442, 444
- Hong Kong, 100, 345, 310, 435
- human, 3, 7, 8, 10, 14, 27, 31, 36, 45, 51, 53, 88, 142, 145, 148, 162, 326, 331, 332, 353, 352, 306, 307, 323, 332, 351, 352, 355, 366, 369, 390, 426, 429
- Human development Index**, 356
- hunger, 5, 27, 34, 52, 311, 352, 353, 358, 367, 374, 387, 398
- Hydro Profits**, 19
- IAEA, 403
- illiteracy, 27, 387
- Imam, 373, 379, 381, 382, 388, 396
- imports, 4, 5, 45, 46, 47, 97, 99, 102, 103, 104, 106, 107, 120, 129, 130, 139, 284, 416
- income, 3, 13, 14, 24, 36, 45, 47, 50, 51, 58, 59, 63, 94, 140, 147, 154, 169, 176, 224, 233, 239, 240, 241, 242, 243, 246, 249, 250, 251, 252, 253, 256, 257, 269, 276, 279, 293, 294, 304, 341, 353, 358, 367
- Indonesia, 29, 42, 43, 45, 59, 64, 65, 70, 74, 75, 82, 100, 101, 102, 104, 108, 109, 110, 147, 150, 164, 165, 167, 177, 179, 182, 220, 285, 291, 292, 322, 340, 341, 346, 348, 354, 355, 360, 307, 308, 309, 322, 332, 335, 340, 362, 365, 366, 367, 370, 427, 429, 442
- industrialization, 365
- inflation, 81, 83, 98, 196, 204, 268
- innovation, 7, 84, 142, 146, 151, 152, 154, 158, 319, 320
- Insuring the Poor**, 368

Index

- interpretation, 29, 370, 374
- investment, 1, 10, 19, 28, 36, 59, 83, 88, 98, 133, 146, 188, 193, 203, 213, 216, 219, 237, 238, 244, 273, 275, 278, 284, 285, 293, 296, 304, 365
- Iran, 51, 54, 55, 56, 57, 74, 82, 100, 112, 118, 121, 150, 164, 165, 166, 178, 180, 182, 195, 196, 198, 206, 208, 209, 210, 268, 314, 331, 333, 335, 337, 339, 341, 347, 348, 349, 354, 355, 311, 373, 378, 380, 382, 385, 387, 388, 428, 429, 432, 435, 437, 442, 444
- Irani, 378
- Iraq, 22, 51, 55, 56, 57, 82, 208, 268, 330, 331, 333, 335, 337, 340, 342, 344, 347, 348, 354, 355, 307, 308, 309, 332, 340, 373, 375, 380, 381, 382, 383, 385, 387, 400, 409
- irrigation, 9, 87, 167, 169, 170, 174, 175, 312, 364
- Islam, 28, 29, 30, 31, 224, 370, 371, 372, 373, 374, 379, 380, 381, 382, 383, 384, 386, 388, 390, 392, 396
- Islami**, 28, 29, 336, 342, 369, 371, 373, 375, 382, 385, 387
- Islami Nizam, 28, 369
- Islamic system, 30, 305, 369, 372, 376
- Israel, 51, 56, 164, 230, 355, 308, 339, 383, 384, 385, 387, 394, 421, 422, 434
- Japan, 41, 43, 47, 50, 56, 57, 58, 59, 60, 62, 63, 64, 65, 70, 71, 73, 75, 76, 77, 100, 102, 134, 135, 164, 165, 166, 167, 177, 179, 183, 200, 230, 338, 339, 346, 354, 355, 308, 310, 322, 332, 338, 427, 429
- Jawed Hashmi, 16, 17, 454
- Jihad**, 28, 29, 30, 82, 369, 371, 377, 378, 379, 380, 381, 383, 387, 388, 389, 391, 396, 447
- judges, 329
- judiciary, 20, 23, 45, 61, 310, 311, 313, 315, 318, 353, 316, 331, 334, 350, 374, 453
- justice, 3, 6, 23, 25, 26, 29, 61, 138, 245, 353, 370, 374, 390, 391, 392, 393, 395, 453, 455
- Kalabagh, 10, 89, 90, 175, 188, 296
- Kargil, 5, 58, 430, 432, 433, 452
- Kashmir, 5, 9, 23, 27, 53, 82, 84, 378, 387, 399, 401, 412, 432, 435, 445, 446
- Kennedy, 454
- Kharijis- Takfiris, 25, 390
- Khilafate Ilaahiya, 30
- killing, 380, 394
- King dom*, 33, 76, 77, 231, 338, 346, 428, 442
- Kurd, 22, 365
- land, 4, 6, 8, 24, 29, 54, 56, 57, 82, 83, 87, 90, 112, 138, 161, 162, 165, 166, 169, 170, 174, 175, 218, 226, 245, 269, 276, 283, 284, 339, 341, 359, 367, 392, 394, 423, 425, 427, 447, 450
- land reforms, 367
- Lashkare Tayyaba, 17, 25, 382, 383, 390
- law, 14, 27, 29, 36, 65, 82, 83, 189, 216, 235, 236, 280, 284, 302, 311, 313, 317, 321, 323, 325, 329, 331, 332, 337, 358, 304, 314, 332, 334, 344, 345, 350, 354, 355, 370, 371, 375, 376, 434
- lawyers, 343, 344, 376
- leadership, 12, 26, 34, 94, 113, 115, 116, 117, 186, 192, 266, 269, 280, 316, 336, 337, 338, 339, 350, 373, 381, 398, 452, 453, 454, 455
- legislation, 192, 218, 224, 330, 437
- legislature, 84, 234, 235, 280, 318, 357, 341, 348
- literacy, 20, 51, 61, 150, 310, 349, 358, 362, 365, 369, 370
- LNG, 11, 185, 198, 205, 206, 209, 210, 211, 218, 221
- load-shedding, 215
- local government, 20, 21, 343, 314, 317, 318, 319, 334
- Machinery, 100, 101, 105, 106, 108, 109, 110, 117, 119, 122, 123, 126, 127
- Malaysia, 42, 56, 57, 73, 100, 101, 102, 104, 105, 108, 109, 110, 120, 134, 151, 164, 165, 166, 167, 177, 179, 182, 200, 230, 268, 322, 335, 340, 341, 342, 344, 347, 348, 354, 355, 359, 308, 309, 311, 322, 332, 335, 339, 360, 362, 364, 365, 366, 367, 370, 429

- malnutrition, 95, 311
- market, 7, 32, 51, 61, 85, 86, 93, 94,
100, 101, 102, 103, 104, 105, 106,
107, 114, 116, 117, 118, 119, 121,
134, 135, 136, 137, 139, 142, 145,
146, 147, 149, 151, 152, 153, 157,
158, 169, 175, 186, 191, 197, 203,
212, 217, 219, 238, 253, 269, 282,
283, 303, 305, 311, 430, 449
- Masjid, 375
- Maudoodi, 373, 378, 382
- Maulana, 373, 378, 382, 396
- MDG, 26, 27, 28, 45, 317, 353, 354,
355, 356, 360, 367
- Medina, 388, 389
- Milbus**, 449
- MILEX, 435, 436, 437, 438, 439, 440,
444
- military, 1, 2, 3, 14, 22, 23, 24, 27, 29,
31, 32, 33, 34, 36, 45, 50, 53, 55,
58, 60, 61, 81, 84, 85, 92, 236, 252,
312, 313, 316, 321, 333, 343, 352,
353, 310, 314, 327, 329, 330, 331,
334, 336, 338, 343, 345, 348, 350,
354, 355, 365, 376, 378, 380, 389,
394, 397, 398, 399, 400, 401, 402,
405, 406, 408, 409, 411, 412, 413,
415, 416, 418, 419, 420, 426, 428,
429, 430, 431, 432, 434, 435, 436,
437, 439, 444, 445, 446, 447, 448,
449, 450, 451, 452, 453, 454, 455
- Military rule, 2, 317, 336, 338
- Millennium Development Goals**, 26,
45, 88, 352, 358, 368, 369
- mineral resources, 3, 55, 227, 234, 237,
244, 250, 267, 269, 282, 283, 287,
290, 291
- minerals, 4, 13, 18, 54, 82, 83, 100,
103, 137, 193, 213, 219, 235, 236,
244, 245, 253, 270, 274, 283, 286,
290, 296
- mining investments, 202
- Ministry of Petroleum, 193, 211, 213,
236, 250, 272
- missiles, 411, 414, 419, 420, 422, 424,
425, 426, 427, 431, 432, 433
- monopoly, 25, 61, 142, 144, 152, 153,
157, 189, 339
- Motor cycle, 117
- MPNR, 193, 211, 213, 236
- Muhammad (PBUH), 22
- Musharraf, 7, 24, 45, 46, 60, 82, 88, 89,
94, 193, 213, 245, 274, 277, 280,
353, 357, 310, 314, 329, 331, 335,
383, 432, 433, 447, 450, 451, 452,
454
- Muslim, 28, 29, 50, 321, 341, 343, 347,
311, 314, 338, 342, 343, 362, 364,
370, 369, 378, 379, 380, 381, 382,
384, 386, 387, 388, 389, 395, 400,
429, 437, 454, 455
- national assembly, 24, 337
- National Command Authority**, 401,
433, 456
- National Defence**, 31
- national interest, 45, 66, 400
- National Power Index**, 425
- National Security Council, 403, 452
- nationalization, 82, 331
- NATO, 333, 365, 366, 408
- natural resources, 3, 13, 18, 19, 47, 54,
55, 148, 193, 213, 224, 234, 235,
237, 238, 239, 243, 245, 250, 265,
274, 275, 277, 331
- Nawaz Sharif, 18, 92, 274, 331, 338,
433, 451, 454
- NCCA, 402
- NEPRA, 11, 12, 184, 185, 192, 193,
201, 202, 203, 204, 205, 211, 212,
213, 302, 303, 306
- New York, 279, 285, 368, 369
- New Yorker, 434
- NFC, 17, 18, 241, 245, 256, 257, 273,
274, 303
- NFU, 408, 409, 410
- NGOs, 20, 91, 133, 137, 310, 312, 314,
342, 357, 366
- no-first-use, 404, 411
- non-proliferation, 191, 410, 434
- Not Free, 352, 354, 355, 356, 357, 360,
305, 306, 307
- NPT, 407, 421
- nuclear, 18, 23, 31, 32, 33, 34, 48, 50,
53, 58, 61, 84, 191, 195, 208, 236,
274, 333, 335, 331, 355, 397, 398,
400, 401, 402, 403, 404, 405, 406,
407, 408, 409, 410, 411, 414, 415,
418, 419, 420, 421, 422, 423, 424,
425, 426, 427, 429, 430, 431, 432,
433, 434, 435, 436, 437, 439, 445,
446, 448, 449, 455, 456
- nuclear attack, 430

Index

- nuclear force, 407
Nuclear Power, 191
nuclear weapons, 31, 53, 84, 191, 333,
401, 403, 404, 405, 408, 409, 410,
419, 421, 423, 432, 434
Obama, 331, 384
OGRA, 11, 184, 193, 201, 211, 213,
237, 249
oil, 4, 11, 13, 18, 19, 46, 47, 48, 50, 51,
54, 57, 60, 81, 82, 86, 103, 104,
120, 122, 185, 186, 187, 188, 189,
190, 192, 195, 196, 197, 198, 205,
209, 212, 213, 214, 219, 220, 224,
234, 235, 236, 237, 241, 242, 243,
245, 246, 248, 249, 250, 252, 253,
266, 268, 273, 274, 275, 279, 283,
286, 288, 290, 331, 311, 354, 365,
444
Pakistan Army, 375
Paradise, 372
party membership, 330, 342, 345, 346,
347
Payload, 422, 426
peace, 2, 20, 31, 36, 66, 276, 310, 352,
344, 376, 380, 383, 386, 389, 390,
394, 402, 403, 405, 432, 446, 448,
452
per capita GDP, 41, 63, 270, 366
Percival Spear, 33
Persian, 455
personal, 7, 28, 33, 236, 305, 353, 304,
317, 342, 350, 373, 376, 450, 451,
453
petrol, 186, 194, 195
petroleum products, 186
PIDC, 6, 93, 94, 138
Planning Commission, 91, 188, 368
PML(N), 317, 342
police, 84, 85, 119, 157, 311, 315, 316,
324, 315, 316, 376
Political Economy, 19, 267, 368
political parties, 3, 21, 25, 26, 45, 90,
149, 313, 316, 343, 353, 304, 306,
316, 330, 334, 335, 336, 339, 340,
341, 342, 343, 344, 345, 348, 349,
352, 430, 450, 453, 454
political power, 32, 316, 349
political rights, 23, 353, 354, 356, 304,
305, 306
pollution, 8, 10, 162, 169, 171, 196,
294
populations, 45, 64, 82, 182, 254, 306,
324, 325
poverty, 5, 17, 24, 27, 28, 34, 51, 83,
84, 142, 167, 174, 245, 269, 273,
277, 317, 328, 352, 355, 356, 358,
367, 369, 371, 368, 369, 374, 387,
398
power plant, 191, 193, 210, 221
power theft, 197
president, 26, 452
Primary Education, 144, 157, 353, 358
prime minister, 25, 402, 403
Principle of proportionality, 389
privatization, 6, 47, 138, 367
productivity, 7, 8, 9, 36, 45, 64, 84, 86,
142, 148, 158, 162, 163, 164, 165,
166, 169, 174, 175, 183
professors, 22, 344, 345
profit, 19, 133, 152, 203, 243, 244, 246,
275, 276, 293, 294, 301, 306, 367,
374, 450
Property, 157, 327
prophet, 22, 370, 372, 378, 379, 381,
386, 388
provincial assembly, 16
Provincial autonomy, 2, 262
provincial domain, 14, 227, 235, 239,
245, 265
provincial government, 318
provincial lists, 14
punishment, 25, 371, 380, 390, 392
Quaid-e-Azam, 369, 370
Quran, 30, 370, 371, 372, 378, 385,
386, 387, 391, 395, 396
Rainfall, 4, 54
Rate of Return, 11, 185
reform, 2, 32, 86, 90, 93, 115, 143, 236,
313, 315, 320, 321, 326
Rekodeq, 245, 270, 271, 272, 280, 282,
283, 284, 286, 290, 292, 293, 294,
295
religion, 17, 314, 370, 379, 381, 382,
385, 387, 392, 393, 452
religious, 7, 20, 50, 54, 310, 311, 314,
352, 304, 349, 350, 355, 356, 370,
375, 381, 383, 386, 400
Resource Curse, 267, 282
response, 1, 16, 31, 139, 389, 393, 401,
402, 410
retaliation, 404

- revenue, 82, 83, 240, 241, 243, 244,
249, 268, 278, 279, 302, 307, 367
- rice, 9, 135, 163, 165, 167, 174, 218
- riposte, 405
- ROR, 202, 203, 215
- royalties, 13, 14, 18, 19, 197, 236, 237,
244, 245, 246, 250, 251, 252, 274,
275, 277, 279, 282, 302, 303, 304,
305, 306, 307
- Saddam Hussain, 22, 51
- safe water, 27, 367
- Saindak, 54, 83, 237, 243, 245, 269,
282, 286, 290, 292, 294
- Salafist, 373, 381
- Salat, 372, 373
- Samuel P. Huntington, 384
- scholar, 30
- schools, 57, 89, 136, 150, 157, 311,
314, 370, 374
- second strike, 414, 432
- security, 1, 8, 15, 27, 30, 52, 58, 83, 87,
93, 113, 145, 162, 279, 283, 319,
324, 326, 327, 348, 350, 356, 377,
400, 402, 403, 407, 408, 411, 432,
433, 434, 448
- Seraiki Province**, 15, 262
- settlement, 19, 23, 264, 275, 305, 354,
359, 375, 446
- Shah Mahmood Qureshi, 16, 17, 446
- Shaheed, 90
- Shale gas**, 218, 219, 220
- Shia, 22, 29, 373, 378, 382
- Sikh*, 33
- SMEDA, 6, 92, 94, 137, 138
- SMEs, 90, 92, 113, 137, 143, 218
- social sector, 1, 2, 27, 32, 36, 59, 82,
84, 88, 91, 317, 318, 354, 355, 356,
365, 432, 436, 437
- soldiers, 380, 409, 414, 447, 448, 455
- sprinkler, 167
- strategic depth, 121, 411, 413, 414
- strategy, 32, 47, 398, 399, 412, 429
- structure, 14, 117, 139, 204, 224, 228,
272, 276, 313, 316, 317, 344, 372,
404, 452
- subsidies, 121, 195, 210, 214, 239, 240,
242
- sugar cane, 165, 167
- Sunni, 22, 373, 382
- surgical instruments, 107
- Swat, 17, 325, 363, 376
- SWOT Analysis**, 316, 317, 319, 320,
321
- tactical, 422, 432
- Taliban, 25, 28, 31, 58, 313, 374, 375,
379, 381, 382, 384, 387, 390, 414,
418, 433, 434
- tanks, 31, 355, 414, 445
- Tarbela, 19, 174, 197, 266, 275, 301,
302, 304, 305, 306, 307
- tariff, 19, 85, 157, 183, 190, 193, 196,
197, 198, 209, 211, 213, 214, 275,
303
- TDAP, 107
- teachers, 22, 57, 89, 150, 311, 317,
344, 345, 377
- terrorism, 17, 29, 30, 33, 34, 84, 93,
157, 312, 317, 319, 324, 330, 331,
335, 343, 344, 353, 358, 335, 354,
356, 375, 380, 382, 384, 385, 387,
397, 400, 401, 406, 408, 418, 435,
445, 446, 447
- terrorist, 4, 28, 30, 313, 335, 385, 387,
388, 434
- test ban, 407
- textiles, 100, 104, 113, 133
- Thailand, 42, 73, 87, 100, 101, 102,
103, 104, 106, 108, 109, 110, 131,
164, 165, 167, 178, 179, 182, 340,
348, 355, 308, 309, 322, 335, 339,
367, 428, 442, 444
- Thar Coal, 11, 12, 19, 46, 47, 54, 60,
89, 90, 163, 185, 189, 190, 199,
202, 203, 204, 205, 211, 216, 217,
218, 221, 227, 237, 274
- theft, 143, 192, 368
- trade, 5, 7, 9, 45, 46, 47, 59, 82, 97, 98,
100, 101, 112, 114, 118, 128, 135,
146, 151, 157, 163, 167, 187, 224,
225, 243, 311, 306, 340, 350, 368,
366, 371, 373, 376, 428, 435, 445,
446, 447
- Trade Gap**, 5, 97
- trade unions*, 306, 350
- trades, 374
- transmission, 188, 221, 239
- transparency, 20, 24, 121, 148, 211,
270, 272, 273, 278, 280, 281, 287,
310, 307, 309, 326, 334
- Transparency international, 24
- Treaty, 9, 408, 418, 421
- truck, 102, 103, 430

Index

- TTP, 17, 25, 28, 375, 379, 381, 382, 384, 388, 390, 434
- Turkey, 41, 44, 50, 51, 56, 65, 70, 73, 75, 79, 100, 102, 103, 104, 108, 109, 110, 121, 164, 166, 167, 178, 180, 182, 217, 307, 322, 341, 342, 344, 347, 354, 355, 360, 307, 308, 311, 322, 332, 335, 340, 345, 362, 365, 366, 367, 370, 416, 427, 429, 442
- UN, 8, 20, 27, 112, 114, 134, 162, 310, 312, 353
- UNDP, 183, 325, 324, 360, 370, 371
- unemployment, 93, 167, 311
- UNESCAP, 323, 325
- university, 22, 345
- uranium, 191, 291, 419, 423
- US, 13, 22, 24, 28, 32, 41, 45, 53, 55, 56, 59, 62, 63, 64, 65, 66, 71, 73, 76, 85, 86, 95, 97, 99, 100, 101, 102, 103, 104, 105, 106, 107, 114, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 128, 129, 130, 131, 134, 135, 138, 151, 154, 165, 166, 174, 188, 190, 191, 193, 195, 196, 197, 198, 200, 202, 203, 206, 208, 209, 210, 212, 213, 219, 220, 222, 224, 225, 227, 229, 235, 240, 246, 251, 252, 270, 283, 284, 287, 289, 292, 293, 303, 331, 333, 334, 308, 316, 322, 325, 344, 355, 356, 365, 366, 367, 369, 371, 375, 380, 382, 383, 384, 385, 387, 404, 407, 408, 409, 410, 415, 416, 418, 419, 421, 425, 426, 431, 432, 433, 434, 435, 436, 448, 454, 455, 456
- USA, 5, 8, 13, 41, 43, 50, 53, 56, 64, 69, 73, 75, 82, 96, 115, 134, 164, 165, 167, 174, 178, 180, 182, 198, 200, 217, 220, 229, 242, 268, 279, 292, 293, 296, 322, 331, 332, 333, 355, 357, 360, 310, 419, 421
- Voter turn-out**, 321
- voting, 260, 261, 322, 323, 324, 326
- war, 29, 30, 34, 55, 63, 371, 375, 377, 378, 386, 389, 390, 391, 392, 393, 394, 395, 397, 398, 401, 406, 410, 413, 431, 432, 448, 449, 452
- waste water, 87
- water, 4, 8, 9, 10, 54, 56, 57, 82, 86, 87, 88, 95, 161, 162, 164, 165, 166, 167, 168, 169, 170, 171, 174, 175, 179, 180, 181, 182, 183, 192, 212, 218, 220, 225, 239, 294, 303, 312, 315, 359, 367, 369, 371, 368, 435, 449
- Water shortage**, 87
- weather, 3, 86, 164, 165, 311, 446
- wheat, 86, 120, 121, 134, 163, 174, 311
- yield, 8, 162, 163, 164, 166, 167, 169, 174, 229
- Ziaulhaque, 22, 451
- zinc, 54, 286

About the Books **(authored by Akhtar Ali)**

Pakistan: Issues in Energy Policy (2010)

This book is a follow up on the earlier book by the author on the same subject and focuses on Energy Policy issues, which although covered in earlier book also, but had been rather eclipsed there. The purpose here is to discuss Energy Policy, although in Pakistan there is no Energy Policy issued as a single document, but is spread subject wise into separate sub-policies. Although the book focuses on policy issues, we have provided brief initial chapters as background data, so that the policy ideas are checked against the reality of data.

In the aftermath of floods (2010)

This is a collection of blogs the author wrote during and after the recent floods. One section of the book is directly related to the floods, while other sections deal with the issues related with short, medium and long term issues related with development, reconstruction and governance *in the aftermath of floods*. There is no claim or intention to propose a complete treatment of reform and reconstruction issues.

Pakistan's Development Challenges: Federation, Security and Governance (2010)

This is a multidisciplinary book examining public policy, issues in the areas of development, federalism, national security, and governance. It has chapters in Provincial Autonomy, Royalty and Natural Resources, Democracy and Political Parties, Governance, Freedom and Transparency, Food, Water and Energy. Recommendations are made to break new ice and solve related issues and problems. The book is to be published shortly.

Pakistan's Energy Development: the Road Ahead (2010)

This is the most extensive and voluminous account of Pakistan's Energy problems, options and resources, ever published before. The author lays down options and choices involving most available technologies and resources especially Thar Coal, Hydel, Oil and Gas, Solar and Wind. Also examined are costs and tariff and availability issues. It is aimed at both academicians and practitioners, including energy industry professionals, policy makers, regulatory bodies, end user industries and business and general public. The book is under printing and shall reach retail outlets in April.

Nuclear Politics and Challenges of Governance (1998)

This book was written in the wake of nuclear explosions of Pakistan and India in 1998. The book emphasizes the need to improve governance to bring it in compatibility with the requirement of a nuclear weapon power. Recommendations are made towards constitutional reforms, technologies, governance and development issues.

Political Economy of Pakistan; An agenda for reforms (1994)

The book published in 1994, proposes extensive reforms in Land ownership and distribution, and political and constitutional areas for bringing about a fair and just society and furthering better governance and economic development.

South Asia: Nuclear Stalemate or Conflagration (1987)

This book was written in the wake of acknowledgment and declaration by Pakistan of its nuclear capability. The book examines a mix of development of options in the area of offensive and defensive technologies, and proposes a development framework in that respect.

**Pakistan's Nuclear Dilemma; Energy and Security Dimensions
(1984)**

It was the first ever written pioneering book ever written by a Pakistani author on the subject. It exposed the dilemma faced by Pakistan due to the situation created by Indian nuclear explosion of 1971 that aimed to further Indian hegemony in the wake of dismemberment of Pakistan. Role and economics of nuclear energy and other options are explored along with potential nuclear doctrines and consequences.

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