Contents

Editor's Corner

Dear Readers,

The *International Monetary Fund* (IMF) had in 2008 approved a 23 month Stand-by Agreement (SBA) for Pakistan, of about $7.61 billion, which was augmented to $10.66 billion in August 2009, and extended through December 30, 2010. Four tranches have so far been disbursed. The fifth review which was to take place by end September 2010 has been delayed, as implementation of the value added tax has been deferred, and the end June 2010 performance criteria on general budget deficit and government borrowing from the central bank were missed. The government had to seek for a nine month extension.

Because the required reforms have not been carried out and the government needs more time, the disbursement of loans have declined, with serious implications for the economy. Lack of adequate finance is perhaps the major factor hindering progress. There is a wide gap between total investment needs and domestic resource mobilisation. In Pakistan's context, foreign aid has played an important role in meeting the financing gap, especially given the historically low savings ratio. But while foreign assistance provides the much needed resources, it comes with high economic and social costs. The need to seek alternative domestic sources of financing the development needs is much needed.

Pakistan's dependence on IMF assistance dates back to 1958. Increased dependency of the economy on IMF is a source of concern, as with the passage of time the conditionalities attached to the loan package have become harsh and have far reaching implications for the economy. Loans to developing countries have resulted in growing debt crisis, social unrest and increased poverty.

We need to generate revenues domestically to meet the economy's financing requirements. Taxation is an essential source of revenue for a country. As domestic resource mobilisation increases, it creates fiscal space and increases the ability of the government to perform its functions effectively. Revenue mobilisation ensures sustained economic growth, which in turn helps generate more revenue. This is made possible if conducive economic policies and better tax administration are in place. Setting up an efficient tax system that raises the much needed revenue, without discouraging economic activity is a challenge for policy makers.

Pakistan's tax effort remains poor as reflected in a tax to GDP ratio that is amongst the lowest in the region. This ratio has actually declined over the years. There can be no real progress in any sector of the economy, if the challenge of raising tax revenues, dealing with rising budget deficits and mounting debt are not addressed by the government.

Pakistan's tax base is very narrow. The government continues to tax only a limited number of businesses and people. Some sectors are much more heavily taxed compared to their contribution in terms of GDP than other sectors. The overall GDP ratio has shown a decline in recent years, and today it has a lower tax to GDP ratio then other Asian countries like Sri Lanka, Indonesia, India among others.

Given the emerging resource constraints it is important now to remove slack in the tax system, especially by taxing the incomes or consumption of sectors and households with greater ability to pay. Tax reliance can be achieved if the tax net is widened both in the urban and agricultural areas and all those earning above a certain threshold of income pay taxes. The government often takes the path of least resistance, developing tax systems that allow them to exploit whatever options are available, rather than establishing, rational and efficient tax systems.

Recently the government levied Rs53 billion of additional taxes on income, imports, domestic sales of export oriented items after having failed to introduce reformed general sales tax. The new tax measures undertaken to generate the much needed resources are directed mostly towards existing tax payers, and no new areas have been explored. Fairness dictates that, at the very least, low income individuals should not pay more of their income in tax than high income individuals. "While the tax system has been bad for the country, it has been good for those who were able to receive high incomes largely shielded from the tax man. These interest groups will not want wider tax nets and more effective enforcement because their narrower interest will supersede the broader ones of a stabilized economy", states the *World Bank Document 'Pakistan Tax Policy Report, Tapping the Bases for Development' - July 2009*.

The Report has shown that Pakistan has the potential to increase the tax-to-GDP ratio by around 3.5 percentage points over the next five years..... Pakistan needs to embrace substantial changes in its tax policy. These should be aimed at increasing the buoyancy of the tax system, broadening the tax base, reducing distortions and phasing out exemptions. The Report further shows that some Rs796 billion of taxes is evaded. The World Bank estimates that tax policy reforms outlined in the Report could raise tax revenues by around Rs400 billion. The revenue impact would come from GST reforms, provincial tax reforms, reforming the federal excise taxation and the individual income tax.

The potential to raise more revenues exists domestically, what are needed are reforms with a strong determination to implement them, so to strengthen the government's revenue position.

Pakistan needs a resource mobilisation strategy which mobilizes more revenues for the public exchequer, and the revenues are generated in a way where the burden of taxes is not on the lower income groups and it does not aid to inflationary pressures already burdening the economy. Political commitment to the importance of the task and the willingness to persist with tax reforms would go a long way to achieve sustainable development, without the long run economic and social costs that come with foreign assistance.

Aid helps, but it is not enough and not the answer to a home grown strategy for revenue generation, where those with a capacity to pay taxes are taxed and no individual/sector is allowed to escape the tax net.

Ayesha Mahmood

Energy Security in Pakistan

Concerns about energy security

In the world today there are increasing concerns about energy security. There are reasons why nations both developed and developing are concerned about the future of their energy supply. The concern is about growing demand from China (whose share in global oil consumption rose from 6 percent in 2000 to close to 11 percent in 2010), geopolitical situation in several energy producing countries, fossil fuel depletion, fears of terrorists attacks on supply infrastructure, natural disasters and the competition over energy sources.

High prices of oil and fears of supply disruption has brought this issue to the forefront. The importance of energy security derives from the critical role that energy plays in all aspects of everyday life. Secure and reliable energy supply and infrastructure impacts the feasibility and costs of doing business from the perspective of competitiveness and productivity. Energy security is of vital consideration, not only for day to day operations, but also for long term investment.

Energy security definition

Energy security — a term that means different things to different countries — depending on whether they produce oil or import it. Both set of countries have a common interest in ensuring that they produce and use energy at affordable costs and in a sustainable way, so ensuring quality of life for their citizens. A *World Bank* paper, *Energy Security Issues* states, 'for the World Bank Group, energy security means ensuring countries can sustainably produce and use energy at reasonable cost in order to:

- Facilitate economic growth and, through this, poverty reduction; and
- Directly improve the quality of peoples' lives by broadening access to modern energy services.

However, the precise meaning of energy security will vary by country. For energy producers, it is the ability to secure, long term and attractive markets for their natural resources that often underpin their economies.

For the major industrialized economies, it is the continuing supply of energy that drives their economies and supports a high and growing quality of life. For poor countries, it is a vital ingredient in their paths out of poverty. Energy increases poor people's productivity and incomes; lighting and power improve their health and education and help them connect to the global market.

A leading issue

Energy security is a leading issue today, as the increase in oil prices has contributed to high volatility and rising energy prices overall. This poses a risk to importing countries, while oil and gas exporters are able to generate good profits. Countries have to make new advancements in renewable resources, such as geothermal, solar power, wind power, and hydroelectric. Developing new resources has become all the more essential as the costs of importing oil increases.

The IMF in its recently released *World Economic Outlook* (WEO), expects oil prices to remain high for the foreseeable future and governments should be developing alternative sources of energy. Oil markets are in a period of increased scarcity, as oil demand in

Has Oil Become a Scarce Resource?

The implications of oil scarcity could be important and far-reaching. Oil is a key factor of production, including in the production of other commodities and in transportation, and is also a widely used consumption good. Oil is the most traded commodity, with world exports averaging US$1.8 trillion annually during 2007-09, which amounted to about 10 percent of total world exports in that period. This means that changes in oil market conditions have direct and indirect effects on the global economy, including on growth, inflation, external balances, and poverty. Since the late 1990s, oil prices have generally risen — notwithstanding cyclical fluctuations — and supply constraints are widely perceived to have contributed to this trend. This has raised concerns that the oil market is entering a period of increased scarcity.

Source: World Economic Outlook IMF, April 2011

Reviewing Country Perspectives on Energy Security

	Defining features	Priorities on energy security
Industrialized net energy importers	- GDP/capita income above $10,065 (1) - High per capita energy consumption - above 3,000 kgoe per year (2) - Decreasing trend in energy intensity; - Increasing gap between domestic energy supply and demand, with demand increasing slower than world's projected annual growth rate of 1.7 % till 2030 (3); - Well established energy infrastructure (E.g.: nearly universal access to electricity) (4); - Economy and house holds relatively resilient to energy price fluctuations (E.g.: $10 rise in oil prices causing less than 0.5 % drop in GDP) (5)	- Avoid disruption of energy supplies; - Diversification of energy supply sources; - Security concerns for energy infrastructure; - Technological solutions to reduce dependence on imported supplies
Major hydrocarbon exporting countries	- Varying GDP/capita from $260 (Chad) to $52,000 (Norway); - Large variations in annual energy per capita consumption - from 262 kgoe (Congo) to 26,888 (Qatar); - Mixed trends in energy intensity; - Sufficient supplies of energy resources (mainly hydrocarbon) in the foreseeable future; - Need for infrastructure development mainly for energy exports; - Economies vulnerable to boom and bust cycles dependent on world energy prices (E.g.: $10 rise in oil prices leading to 30 % growth in Angola's GDP).	- Long term markets at reasonable prices - Diversification of export markets for energy resources; - Securing capital and financing for investment in resource development and infrastructure - For less developed countries in this group: meeting people's basic energy needs and creating effective demand for energy services
Large emerging markets with rapidly growing energy demand	- Varying GDP/capita income from $620 (India) to $6,770 (Mexico), - Annual energy consumption per capita ranging from 514 kgoe (India) to 2,425 kgoe (S. Africa), - Mixed trends in energy intensity; - Demand to grow significantly above expected world's projected annual growth rate of 1.7 % till 2030 (E.g.: China's demand growing by 14 % in 2003); - Rapid growth in domestic energy infrastructure, though still insufficiently developed (E.g.: 57 % of the population lacking access to electricity in India and 34 % in S. Africa) - Economy and households relatively vulnerable to energy price fluctuations (E.g.: $10 rise in oil prices causing above 0.5 % drop in GDP, depending on the size of the economy and energy intensity).	- The ability to meet growing demand for energy from imported sources; - Diversification of energy supply sources; - Securing capital and financing for investment in resource development and infrastructure - Technological solutions to reduce dependence on imported supplies - Meeting people's basic energy needs and creating effective demand for energy services
Mid-income net energy importers	- GDP/capita income between $826-10,065; - For most countries, annual energy consumption per capita close to the world average of 1,631 kgoe, - Mixed trends in energy intensity; - Demand to grow above world's projected annual growth rate of 1.7 % till 2030; - Underdeveloped energy infrastructure; (E.g.: More than 10 % of population on average lacking access to electricity); - Economy and households relatively vulnerable to energy price fluctuations (E.g.: $10 rise in oil prices causing above 0.5 % drop in GDP, depending on the size of the economy and energy intensity).	- The ability to meet growing demand for energy from imported sources; - Securing capital and financing for investment in resource development and infrastructure; - Meeting people's basic energy needs and creating effective demand for energy services
Low income net energy importers	- GDP/capita income below $826; - Annual energy consumption per capita around or below 500 kgoe; - Mostly increasing trends in energy intensity; - Demand to grow above world's projected annual growth rate of 1.7 % till 2030; - Highly underdeveloped energy infrastructure; (E.g.: access to electricity for around 30 % of the population) - Economy and households highly vulnerable to energy price fluctuations (E.g.: $10 rise in oil prices causing above 0.75 % drop in GDP on average).	- The ability to meet growing demand for energy from imported sources; - Securing capital and financing for investment in resource development and infrastructure; - Meeting people's basic energy needs and creating effective demand for energy services

Source: World Bank
Notes: (1) In 2004, based on World Bank Atlas Method, (2) in 2001, according to World Resources Institute, (3) Energy Outlook 2004, IEA, (4) in 2000, according to World Resources Institute, (5) World Bank estimates

emerging economies is growing rapidly, and improvements in oil supply have been slow because of investment bottlenecks. In some major oil-exporting economies, oil fields have reached maturity.

Oil remains the primary source of energy in the world, accounting for about 33 percent of the total, while coal and natural gas, account for 28 and 23 percent. Renewable sources of energy account for only a fraction of primary energy supply.

Increased scarcity in energy markets

As oil and other energy markets have entered a period of increased scarcity — a period of higher than average prices, it has policy implications. The IMF WEO states, 'Fundamentally, there are two broad areas for action. First, given the potential for unexpected increase in the scarcity of oil and other resources, policymakers should review whether current policy frameworks facilitate adjustment to unexpected changes in oil scarcity. Second, consideration should be given to policies aimed at lowering the risk of oil scarcity, including through the development of sustainable alternative sources of energy.'

The *World Bank* paper has focused on specific areas which could enhance long run energy security. We give below excerpts from the paper: -

Overarching the longer term energy outlook are two major issues that should be the concern of the global community.

Areas which could enhance long-run energy security

i) The threat of climate change poses issues for the continued growth in use of fossil fuels (coal, oil and gas) – that for more than 200 years have been the most convenient and cost effective fuels for modern economic development – and are likely to continue to have cost advantages (excluding any consideration of possible externalities) in some important uses for a long period to come.

ii) Access to reasonable cost, reliable energy supplies will be an important factor in promoting growth and poverty reduction. As well, a significant number of the world's community, among them the poorest and most vulnerable, do not yet have access to affordable energy that can make their lives more healthy and more productive. Addressing these needs, too, should be a key task of the global energy security agenda.

Improving Energy Efficiency

Improving energy efficiency is a 'win-win' option for addressing concerns about energy security:

- Energy efficiency and demand side measures will often be the most cost effective, low risk and versatile approach to reducing the need for energy and associated infrastructure.
- Energy production efficiency improvements can increase effective energy supply (and exports) and reduce costs;
- Efficiency savings generally realize significant environmental benefits through reduced emissions of greenhouse gases and local air pollutants.

Developing and Diversifying Supplies

Improvements in energy efficiency will not remove the need for substantial energy investment, especially in developing countries where energy growth will, in many cases, be starting from very low levels per capita.

In the case of power sector investments need to:

- Promote policies that secure adequate cash flows in the public sector to help finance new investment and maintenance, rather than allow state utilities to be inefficient or not fully recover cost.
- Encourage new private investment through streamlining investment procedures, improving clarity and enforceability of contracts, and creating conditions that attract and facilitate competitive private investment within a framework of competition.

In the case of the oil sector, challenges include:

- Increasing the effectiveness of National Oil Companies, or state-dominated joint ventures.
- Reducing barriers to private investment.
- Improving transparency in the oil sector.
- Energy portfolio diversification can help in reducing energy security risks to individual countries and to global markets.

Diversification of energy supplies

Forces for the diversification of energy supplies are going to be:

- Continuing natural process of consuming and producing countries in prudently diversifying their energy mix by fuel and by supplier/ customer.
- Global reaction to the threat of climate change that should lead to a move away from carbon intensive emitting fuels.
- Some tendency to move away from oil where possible, given its potential high price level and volatility, and also given longer term concerns about resource availability.

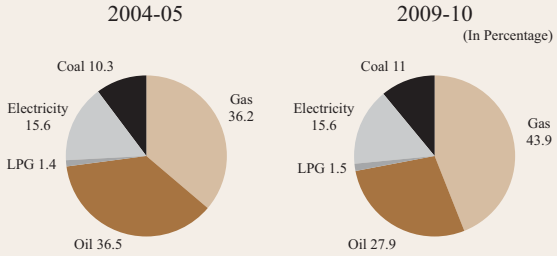
Pakistan's energy sector in crisis

Pakistan's energy sector is in crisis and its energy security is a grave challenge for policymakers. During the summer months, energy shortages peak at 5000-5500 megawatts; rural areas go without electricity for upto 20 hours, and urban areas are faced with prolonged power outages for upto 10-14 hours daily. Pakistan like other nations has to tackle its energy security needs. There is increased pressure on domestic capabilities but economic and political constraints have hindered development of the energy sector.

Gas shortages have also increased. Industrial activity has been badly affected and many factories have closed down rendering thousands jobless. Agriculture and services sectors have also suffered, consequently impacting economic growth. The cumulative effect of the energy crisis on the economy is estimated at upward of 2 percent of GDP during 200910 alone, states the *Pakistan Economic Survey* 2009-10.

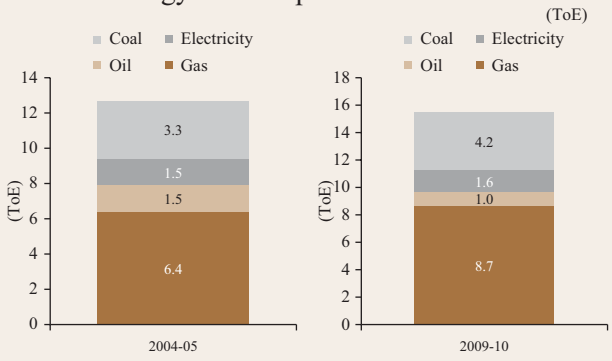
During 2009-10, of Pakistan's energy consumption of 38.8 million tons of oil equivalent, gas met 43.9 percent of the final energy consumed, oil 27.9 percent, and electricity 15.6 percent.

Energy Consumption by Source

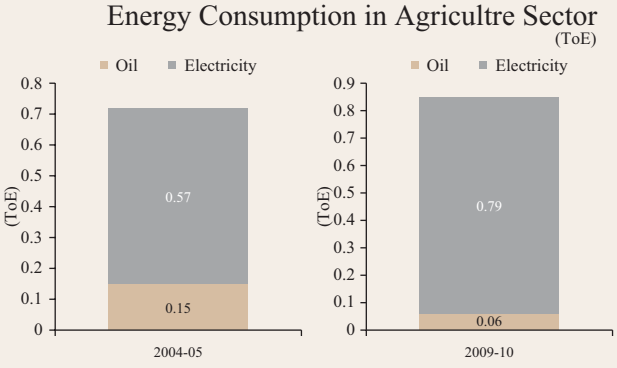


Over the years there has been a change in the energy consumption mix. Gas consumption has increased substantially, while oil consumption has declined. There has been a minor increase in the consumption of coal. This shift of energy consumption mix towards indigenous sources helps save considerable amount of foreign exchange and augurs well for the energy sector.

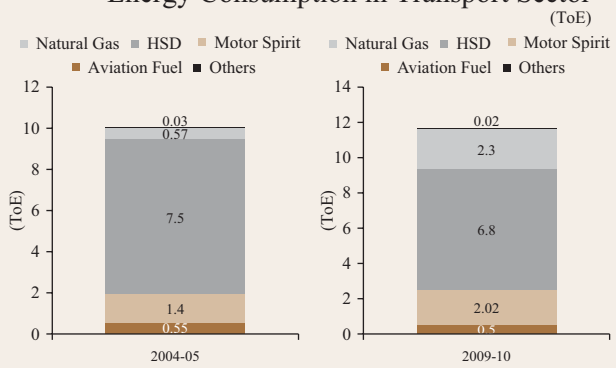
Energy Consumption in Industrial Sector



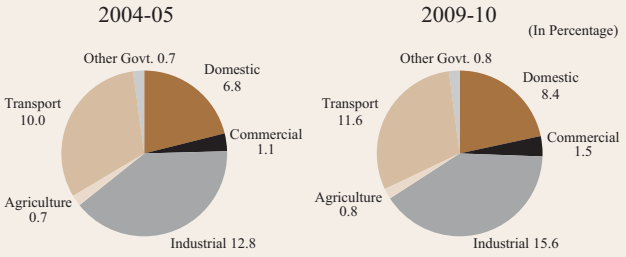
Energy Consumption in Agricultre Sector



Energy Consumption in Transport Sector



Industrial sector, followed by transport and domestic sectors are the major consumers of energy.



Any disruption in the supply chain of electricity and gas affects economic activity.

The *Third Annual Report 2010*, of the *Institute of Public Policy* shows that the costs to the economy of outages to the industrial sector in 2009 was Rs230 billion, or about 11 percent of industrial value added. It shows the high level of damage which power outages continue to cause to the economy.

Costs of Industrial Power Outages to the Economy, 2009

- Cost to the Industrial Sector Rs230bn
- Loss of Industrial Value Added 11%
- Total Cost of Industrial Load Shedding to the Economy Rs325bn
- Cost as % of GDP 2.5%
- Loss of Employment in the Economy 535,000
- Loss of Exports $1.3bn

Source: Annual Report 2010, Institute of Public Policy

Sluggish energy investment

Energy investments have not kept pace with economic needs and plans. Development of local resources such as hydrocarbons, hydropower, coal and renewable is below potential. The problem has been compounded by the circular debt plaguing the power sector. While the generation cost of electricity increased, with the increase in international price of oil, the government did not pass on the increase to the consumers in the form of increased tariffs but continued to subsidise customers.

Circular debt

As the subsidy grew, large amounts of circular debt were created whereby power producing companies were unable to receive payments from distribution companies, in turn the power producers could not make payments to the fuel suppliers. Power tariffs are now being revised in line with changes in international oil prices, so to recover the cost of power. Rising furnace oil prices have increased the electricity prices.

The energy crisis is not the only problem for Pakistan, but a severe gas crisis has also emerged. Demand for gas has increased more rapidly than supplies. There has been a substantial increase in the usage of CNG by the transport sector.

Gas Consumption by Sector

Sector	Share in Total 2009-10	Growth Rate % 2004-2010
Domestic	17.2	5.0
Commercial	3.0	6.3
Industries	25.1	8.6
Pakistan Steel Mills	1.0	(-)1.9
Cement	0.2	(-)32.0
Fertilizer (as feedstock)	13.7	3.2
Fertilizer (as fuel)	3.5	1.9
Power	28.7	(-)6.2
Transport CNG	7.6	32.3

Source: Pakistan Energy Yearbook, 2010

Pricing of gas has not been based on economic principles of scarcity and optimal allocation, which has resulted in its under pricing, misuse and misallocation. There has been a serious lack of realization that gas will be in short supply if domestic potential is not fully exploited.

According to the *Energy Information Administration*, in 2007, Pakistan's natural gas reserves were around 28,000 billion cubic feet, and it was estimated that these reserves would last for about 20 years. Given the large usage of gas for power generation, the reserves could be exhausted earlier. Exploration and drilling activities have moved at a slow pace.

Despite major finds of coal at Thar and Lakhra no major effort has been made to develop this potential substitute.

The *Third Annual Report 2010, 'State of the Economy: Pulling Back from the Abyss'* of the *Institute of Public Policy* states, "Pakistan needs to develop and implement a fuel sector strategy with the objectives to: *(a)* enhance the exploration and production activities of oil, gas and coal resources, *(b)* encourage the utilization of the country's indigenous resource base and reduce dependence on imported fuel, *(c)* create an environment conducive to the participation of the private sector and *(d)* develop the local energy scenario in the context of regional perspective."

Pakistan needs to strengthen its options for fuel/primary energy supply. The Planning Commission's *Medium Term Development Framework* (MTDF) projects the future energy mix picture upto 2030. Diversification in this energy mix between now and 2030 is central to the *Energy Security Plan*.

Energy Mix Plan Projections

	Current		Short Term		Medium Term				Long Term			
	2004		2010		2015		2020		2025		2030	
Total MTOE	50.8		79.39		120.18		177.35		255.37		361.31	
Oil	15.20	30%	20.69	26%	32.51	27%	45.47	25.7%	57.93	22.7%	66.84	18.5%
Natural Gas	25.45	50%	38.99	49%	52.98	44%	77.85	44%	114.84	45%	162.58	45%
Coal	3.30	6.5%	7.16	9%	14.45	12%	24.77	14.0%	38.28	15%	68.65	19%
Hydro	6.43	12.7%	11.03	13.9%	16.40	13.6%	21.44	12.1%	30.50	12%	38.93	10.8%
Renewable	0.00	0.0%	0.84	1.1%	1.60	1.3%	3.00	1.7%	5.58	2.2%	9.20	2.5%
Nuclear	0.42	0.8%	0.69	0.9%	2.23	1.9%	4.81	2.7%	8.24	3.2%	15.11	4.2%

Source: Medium Term Development Framework, 2005-10

The Energy Security Plan would gradually increase energy production capabilities by 2030. Nuclear capacity is projected to increase from 400 MW in 2004 to 8800 MW by 2030. Its share in the energy mix as projected by the MTDF is to rise from 0.8 percent to 4.2 percent in the corresponding period. Presently nuclear power is generated from the country's two nuclear power plants, the Karachi Nuclear Power Plant and Chashma Nuclear Power Plant. Pakistan Economic Survey 2010 shows that construction of a third plant, Chashma Nuclear Power Plant 2 is in progress.

According to the MTDF, for the power sector, an investment of Rs150 billion would be required. Billions of dollars of investment are needed for renewable energy development. Bringing about an improvement in the financial health of the sector would ensure Energy Security. Measures would have to be undertaken to bring about the desired results. The necessary steps would include among others; imposing tariffs which reflect the cost, going for targeted subsidies, enhancing public-private partnership and private sector to have an active role where it has a comparative advantage.

Box

Energy Crisis in Pakistan
Origins, Challenges and Sustainable Solutions
Muhammad Asif

The mentioned book analyzes the broader dimensions of Pakistan's energy scenario. As the gap between demand and supply of energy widens, Pakistan faces a severe energy crisis. This has intensified over the years, leading to prolonged power outages. We give below excerpts from the book.

- The present crisis is also a self-inflicted problem resulting from years of poor policies and reckless attitude on the part of concerned authorities.
- Pakistan has experienced a rapid growth in primary energy demand in recent decades.
- Over the years, while a major proportion of the population still remains deprived of the national grid, those who are connected to it have hardly enjoyed a secure supply of electricity.
- Over the last ten years the generation capacity has not been enhanced in response to swallowing electricity requirements.
- The electricity crisis is not the only headache for Pakistan but a severe gas crisis is also fast approaching.
- The local natural gas reserves were of strategic importance for the country but have been used relatively irresponsibly, particularly over the last decade or so.
- In the backdrop of the imminent gas crisis, Pakistan has been exploring options for gas import.
    - Natural gas pipeline from Turkmenistan to Pakistan through Afghanistan.
    - Natural gas pipeline from Qater to Pakistan through Oman.
    - Natural gas pipeline from Iran to Pakistan.
- When Pakistan needs to save every drop of the available water, it could only be said to be a national misfortune that every year over 30 million acre feet of water that could have been usefully capitalised flows into the sea.
- At a time when a large number of medium to large-scale dams are being constructed in India and China, Pakistan is showing little respect for this precious source of energy.
- If Pakistan does not change its attitude towards meaningful exploitation of its water resources for various applications in general and for electricity generation in particular, the days ahead are going to be extremely difficult so far as socio-economic conditions and national sovereignty are concerned.
- Another alarming dimension of the national energy scenario is import dependency as the energy demand far exceeds indigenous supplies.
- The indigenous gas and oil reserves are quite limited – at the end of 2008, they were respectively reported to be 29.8 trillion cubic feet (TCF) and 326.7 million barrels.
- The numerous challenges facing the global energy scene are pushing energy prices up across the world. The situation in Pakistan, however, is a lot more severe. Unfortunately, some decisions taken by the government have actually led to a promotion of these problems.
- An average Pakistani worker on daily wages makes around Rs300/day. His daily income can only get him 4.6 litres of petrol as per August 2009 prices. A UK worker even at the bottom of the daily wages scale would be able to purchase over 40 litres of petrol from a single day's income.
- Government estimates suggest that over 400,000 workers have lost their jobs due to load-shedding. The closure of industry is also inflicting huge economic losses to the country. Government statistics suggest that the loss the industrial sector alone is suffering amounts to over Rs240 billion per annum.
- The export sector is also paying a huge price. Exporters are missing their deadlines, several of them have been blacklisted for that very reason.
- One of the fundamental dimensions of national sovereignty – decision-making autonomy – is not guaranteed any more. A major blow has been dealt to national sovereignty as various international agencies such as the IMF dictate terms with regard to tariff structure and energy subsidies.
- Pakistan, having borrowed power sector development loans from international donors, has to accommodate their demands in some crucial policy issues including determination of tariff.
- Pakistan, with an already volatile internal situation on a number of fronts, cannot afford to add to its problems with energy-related unrest amongst the masses.
- One of the fundamental reasons for Pakistan still being a developing country that relies heavily on foreign aid and resources in early every sector after sixty-two years of independence is the weakness of its institutions. Institutions in Pakistan are far from being firmly established and have largely disappointed the nation in their performance.
- Concerned energy circles reveal a catalogue of compelling evidence that suggests that the root cause of the downfall of the energy sector is the wrong attitude – a combination of a lack of vision, bad governance and pursuance of vested interests on the part of a section of policy and decision-makers and departmental authorities has created this quagmire.
- One of the major weaknesses regimes have exhibited is lack of vision. They have either failed to foresee the gathering

storms or have deliberately given them a blind eye. The current energy could easily have been avoided had they exhibited due resolve during the preceding few years.

- Unfortunately, the masses do not comprehend that the responsibility for their suffering does not lie with the department but with those who held the policy and decision-making offices and who repeatedly neglected WAPDA's opportune warnings. The authority to make decisions and get them implemented is not in WAPDA's domain but of the regime's.
- The delay in implementing effective energy projects has been one of the most important driving factors behind the energy crises in the country. In trying to catch up, when things start getting out of control haphazard measures are sought.
- The over-reliance upon oil-based power generation – an evidence of bad policies and poor management – is hurting the country in numerous ways. A relatively new phenomenon in this respect has been the inability of oil-based power plants to operate at optimum performance due to the liquidity crunch which in turn is a consequence of the vicious circular debt.
- The endless sequence of the energy problems suggests that the policy and decision-makers in Pakistan have traditionally shown little concern for the welfare of the common man.
- Nepotism is another malpractice that has been patronised by regimes leaving an extremely adverse impact on the energy sector. Appointments of irrelevant and incompetent personnel in energy offices have been quite a common phenomenon. The problem not only exists at every level within the energy departments but also at the ministerial level. Energy is one of the most technical and vital ministerial portfolios yet ironically it is almost always handed over to people who are ill-qualified.
- Corruption is a real problem in Pakistan. The wider understanding amongst concerned circles is that though corruption exists at all levels, it mainly stems from and is patronized by the policy and decision-making circles.
- When it comes to financial corruption and financial kickbacks, the energy sector is the second to none.
- Serious corruption is also said to have played a role in the privatisation of KESC in 2005. The Corporation was reportedly privatised and sold for just Rs22 billion while its assets and receivables at the time were estimated to be worth around Rs200 billion.
- Successive regimes have fallen short of showing the due level of competence and commitment required to propel the energy sector forward in a healthy fashion. Not only have they failed to anticipate the dimensions and scale of the emerging challenges but also to react to them in a timely and pragmatic manner.
- After the 1970s, WAPDA could not maintain its cutting edge thanks to internal as well as external malpractices. Irregularities like financial corruption, operational inefficiencies and lack of sense of responsibility became widespread in the department as has been the case with most of the other public sector departments. Parallel to that, governmental support in the form of conducive policies and provisions of resources started to weaken.
- Considering both WAPDA and KESC the average countrywide losses turn out to be over 25 percent.
- Collectively these losses are termed as 'technical losses'. In an ideal scenario, these losses should not be more than 6-7 percent as is the case in most developed countries. However, with the poor state of infrastructure, these losses are phenomenally high in Pakistan.
- The energy crisis is the consequence of vested interest and professional and administrative negligence, at the hands of certain individuals.
- Another harmful practice is that of political appointments — over the years, thousands of jobs have been given by different regimes to the political workers of their parties in various energy departments. The criteria in doing so has not been qualifications or skills but political contacts and affiliations.
- Reliance on indigenous energy resources must be at the heart of the designed energy policy.
- To ensure a sustainable energy future, a strong human resource base is imperative.
- Reliance on imports of energy system is another costly affair that requires immediate attention.
- Amid fast changing and expanding international business environment, in order to achieve energy sustainability, it is crucial to become technologically self sufficient.
- A holistic overhauling of the energy department.
- The rental power programme is thus an extremely ill-advised and unviable option that the current regime is actively pursuing. Scrapping the rental programme would be indeed a service to the nation.
- A number of other options that are more pragmatic and sustainable and can help bridge the immediate gap between demand and supply at far more economical terms are available.
- *Firstly,* the installed power generation capacity is not being duly capitalized on. *Secondly,* the circular debt needs to be resolved. *Thirdly,* rather than going for rental power, a far economical option would be to revamp WAPDA's old thermal power stations. *Fourthly,* with a stringent check and balance programme system leaks can be controlled. *Fifth,* a considerable level of electricity can be saved by implementing a meaningful energy conservation and management programme.

Not only should the government focus on the supply side, but it needs to address the demand side also. Cost effective ways to be devised in the development strategy. Efficiency and conservation of energy be promoted which would reduce large financial outlays required for developing additional energy supplies, reduce subsidy requirements and defer expansion needs, so saving funds and increasing returns on energy infrastructure. Transmission and distribution losses need to be minimised, so as to enhance net availability. Improving thermal efficiency at the current plants could produce more power at lower cost.

Development of renewables

The development of domestic energy resources such as hydrocarbons, coal and renewables have not been developed to their maximum potential. The war on terror has delayed investment plans in the sector. Many projects being developed by private sector have been deferred due to security concerns. The security situation has also blocked oil and gas exploration and production activities in border provinces. "The enhanced perception of risk and uncertainty due to terrorism in Pakistan is responsible for a fall in private investment of 1.7 percent of GDP in 2009-10, equivalent to Rs244 billion," states the *SPDC Annual Review 2009-10.*

Given Pakistan's severe energy crisis, a joint report between *Asian Development Bank* and *Pakistan Energy Sector Task Force*, titled *Integrated Energy Sector Recovery Report & Plan* was prepared last year. The said Report sets out a detailed set of recommendations and an action plan to enable the country to achieve full energy security and sustainability.

The Report has identified fast track investment projects, in power, gas, oil and renewable sectors needed for energy security. These relate to immediate short and medium term projects. Without going into the details, we list on the following page some of the recommendations for each of these sectors.

The deficit between supply and demand of energy is growing wider and if no action is taken to enhance domestic supplies, it could have serious consequences for the economy. A significant part of Pakistan's population is not served by the energy sector and 30 percent of the population does not have access to electricity alone. The limited access has contributed to high poverty level in the country.

The country's oil sector is small and imports of crude oil and oil products account for 80 percent of oil supplies, local oil refineries cover only half of the demand for local products, the rest is covered by imports, gas supply is not sufficient to meet demand, particularly for electricity generation. Hydropower capacity is only 6500 MW compared to a potential of more than 54,000 MW, with the result that the country has to rely on fossil fuels to generate electricity resulting in reduced energy security.

Diversification of energy mix would help reduce dependence on imports, and subsequently the import bill, benefit economic growth and ensure better energy security. One option is coal which has substantial untapped potential for power generation. Efforts are needed to increase the share of coal in the primary energy mix. Huge renewable energy potential exists in the form of hydropower, wind energy and solar energy.

Besides developing renewable energy, more investments are also needed in domestic exploration and production of gas. Circular debt is a major impediment to new financing in the energy sector, and it is now affecting the power, gas and fuels sub-sector. This needs to be resolved to help improve liquidity and working efficiency in the sector. These measures alongwith the fast track investment projects as mentioned on page 13 are steps towards achieving energy security.

Fast Track Investment Projects for Energy Security

Power Sector

Thermal Projects

Immediate

- Diversify the fuel mix for power generation in favor of indigenous resources. The focus of government efforts should be on the reduction of fuel oil.
- Fast track the Kunar Pasakhi Combined Cycle Power Plant Complex (1000 MW).
- Fast track five prioritized thermal power projects (2700 MW).

Short Term

- IPPs and rental power plants should operate under existing signed contracts and pay penalties for delays.
- Pending projects that are ripe for development should be brought to financial and regulatory closure as soon as possible.
- The government should settle court cases related to two thermal IPPs.

Large Hydropower Projects (HPPs)

Short Term

- Diamer Basha project should begin construction in 2011.
- Work on other large dams should be expedited. Higher priority should be assigned to projects that have large reservoirs as well as generation capacities.

Medium Term

- Construction work on at least three large HPPs should be initiated to cope with severe water and power shortages.

Small HPPs on Canal System and Medium HPPs

Short and Medium Term

- Maximize the development of small HPPs on the canal system and of medium-sized HPPs.
- Commission 175 MW of small canal HPPs by 2012 and finalize plans to add an additional 155 MW by 2014-15.

Oil Sector

Imports and Quality

Short Term

- Replace fuel oil 180 Centistokes (Cst) with Fuel oil 380 Cst in power plants and industry as the preferred fuel in any new power plants because it is cheaper though this may require some plant modifications.
- Support PSO (main marketer and importer of refined products) in developing expertise in international oil trading and vessel chartering to avail market opportunities and minimize import costs of products.

Medium Term

- Replace expensive imported fuel oil for thermal power with indigenous sources (gas, hydel, coal).

Refinery Projects

Medium Term

- Expedite projects to meet Euro-II specifications.
- Implement the stalled hydrocracker project to upgrade 1.6 million tons/year net fuel oil from National Refinery Limited/ Pakistan Refinery Limited to white products.
- A grass-roots refinery of 200 KBBL/day should be commissioned by the end of 2015.

Oil Logistics

Short Term

- Conduct a national oil logistics and infrastructure study to pinpoint bottlenecks and to identify long term solutions vis-a-vis refining plans and demand growth.
- Implement a 52 km white oil pipeline linking Karachi Port Terminal and Port Qasim Authority as a priority project.

Energy Efficiency Investment

Immediate

- Rehabilitate transmission and distribution (T&D) systems on fast track basis to reduce losses.
- Fast track an energy efficient lighting program.

Short Term

- Foster loss reduction efforts in industry through energy management systems, audits and benchmarking in order to reduce specific energy consumption (in kWh/units of output) to 15%.
- Initiate a time of use concept alongwith the introduction of smart prepaid metering.
- Initiate an energy efficient water heating program.
- Initiate a tubewell replacement program.

Gas Sector

Short to Medium Term

- Increase indigenous gas production via infill drilling in existing big fields, given the growing gas shortages in the country.
- Exploration and production companies can utilize infill drilling technology which consists of drilling new wells inside the existing grid in order to produce gas located in small parts of the reservoir rock which is not drained by the existing wells.
- Tap "tight gas" (hard-to-reach) reserves to further increase indigenous gas production.
- A specific regulatory framework for producing additionalgas from these technologies needs to be put in place.

Gas & LNG Imports

Short Term

- Fast track implementation of stalled projects for importing 3.5 million tons/year (500 MMcfd) of LNG.
- Imports must be a combination of term and spot purchases to take advantage of seasonal low spot prices.
- Replace fuel oil imports with LNG imports for power generation.

Medium Term

- Land-based LNG import facilities should follow the above fast track solution in order to address the gas deficit in the medium term.
- Fast track cross border gas pipelines since Pakistan's geographical location makes it a potential market for some neighbouring countries rich in natural gas reserves.

Coal Sector

Short Term

- Pakistan should promote indigenous coal-based power generation in the private sector.
- The option of power generation by imported coal should also be considered within the integrated power sector plan subject to the economics and competition with alternative fuel sources.

Renewable Energy

Short Term

- Promote the fast track construction of 650 MW of wind farms to be implemented by the private sector.
- Fast track additional wind power projects.

Source: Integrated Energy Sector Reovery Report & Plan, October 2010

Energy Security Action Plan 2005-2030

Main Features:

Additional power generation of 143,310 MW by 2030
Investment requirement $150 billion (public 50 and private 100)
Ministries/agencies specific targets and action plan

Oil, Gas and Coal

- Maximum utilization of indigenous natural resources.
- Oil & Gas: Maximize exploration. Number of exploratory and development wells to be drilled be increased to at least 150/200 wells per year in the first instance.
- Expedite development of deeper reserves of Sui (1 TCF).
- Expedite development of Tal (Kohat) which has potential to meet the entire demand of north of Pakistan.
- Early finalization of formal negotiations to arrive at the best and most economical solution out of three alternatives (Iran, Qatar and Turkmenistan). Pipeline gas should be available by 2010.
- Strategic oil reserve be increased to 45 days from the present level of 20 days.
- Gas from dormant fields be utilized as CNG for supply to far flung areas.
- Establish economic size refineries (coastal at Khalifa point preferably as joint venture with China and at Kohat to refine crude from Tal field).
- Coal (Share to be increased to at least 19 percent (about 20,000 MW) by 2030 and 50 percent by 2050)

Action: Ministry of Petroleum and Natural Resources (MoP&NR)

Power

- Investigation on Skardu/Katzara to be initiated for its construction to start 2025.
- WAPDA to undertake a study for maximizing Hydel power generation from all rivers particularly mighty Indus.
- Decision to fast track small and medium dams like Thakot (about 500 MW) by encouraging joint ventures of WAPA, NWFP Government and private parties.
- Decision on mode of financing for execution of Neelum-Jhelum power project needs to be taken immediately.
- For double digit growth of LSM, WAPDA, KESC and PPIB must respond to this challenge and Fast Track the Private Sector Oil/Gas Power Projects to meet this additional demand.
- Encourage Public-Private partnership or BOT for Power generation on canals.
- Feasibility of bringing off-season sugar mills 2000 MW on national grid system may be explored.
- Demand management for optimal utilization of power.

Action: WAPDA and Provincial Governments

Nuclear

- Capacity to increase from 400 MW to 8800 MW.

Action: Pakistan Atomic Energy Commission

Alternative Energy

- Development of wind and solar energy be encouraged and at least 5 percent of total national power generation capacity be met through these resources by 2030 (i.e. 9700 MW).
- Encourage production and use of Ethanol from molasses for mixing with petrol.

Action: Ministry Alternate Energy Development Board

Energy Conservation

- Necessary laws be enacted and enforcement be ensured for energy efficient building designs.

Action: Ministry of Environment, National Energy Conservation Centre (ENERCON)

Implementation

- To ensure speedy decision making for implementation of the approved 'Energy Security Plan' Cabinet Committee on Energy should be reactivated and a Steering Committee of key stakeholders set up to assist CCE and to steer and coordinate all aspects of the Plan.

Action: Cabinet Secretariat

Source: Mid Term Review of Medium Term Development Framework 2005-10, Planning Commission, Government of Pakistan, May 2008

Agriculture — Major Crops Update

Wheat

Pakistan's wheat crop for the 2011 season is estimated at 23.5 million tonnes, while some estimates place it at 25 million . Farmers have sown wheat over an area of 8.8 million hectares; where 6.68 million hectares have been sown in Punjab, 1.08 million hectares in Sindh, 0.73 million hectares in Khyber-Pakhtunkhwa and in Balochistan 0.32 million hectares have been cultivated. In Punjab, area planted shows a slight reduction, whereas in Sindh wheat plantings have reportedly increased mainly due to cultivation along the Indus river banks covered with fertile silt deposits following the floods last December.

In Sindh, wheat production is projected at 3.8 million tons. Wheat procurement of 1.3 million tons has been set for the provincial food department.

The Ministry of Food and Agriculture have stated that the recent rains, together with normal temperature, better water supply and increase in sowing in rain fed areas would positively impact wheat production this year.

Monsoon rains caused damages to some 2.4 million hectares of standing crops. Despite the damages from the floods last year, wheat exports have resumed as the government has lifted the ban on export of wheat. Pakistan has sold 300,000 - 500,000 tonnes of wheat mainly to Bangladesh and Myanmar in recent weeks. The country has some 4 million tonnes of surplus stocks and is taking advantage of rising global prices. Tightening supplies of grains and recent price surge have stoked worries over food inflation, already in double digits in Asia's top consumers China and India.

The Food & Agriculture Ministry has sought the approval of the Economic Coordination Committee for procurement of 6.57 million tons of wheat during the next season. The Sindh Food Department has established 365 wheat procurement centres in 15 districts. A minimum support price of Rs950/- per 40 kgs has been ensured to the farmers, with the government expected to procure 28-30 percent of the total crop. Punjab will procure 3.5 million tons, Sindh 1.3 million tons, Passco 1.3 million tons, Khyber-Pakhtunkhwa 0.4 million tons, while Balochistan will procure 70,000 tons of wheat this year.

To store the procured wheat the government would buy 18 million jute bags for packing of 100 kgs of wheat and 72 million of polypropylene bags for 50 kgs packing. The wheat is stored for upto 6 to 7 months of a season and later given to the deficit provinces and to the local flour mills.

Leading international agricultural research institutions have jointly launched a project with Pakistan Agricultural Research Council to eradicate wheat stem rust disease and develop disease resistant wheat varieties in the country. The objective of the project is to increase wheat yield and enhance wheat production. Pests and diseases like wheat stem rust result in declining crop productivity.

The Sindh government has imposed a ban on inter-district movement of wheat and flour in the province. The *Sindh Food Department* says the restriction has been imposed to ensure that the growers get the official support price of Rs950 per 40kg and to stop the middlemen from influencing the prices by hoarding large stocks.

This decision has however, been opposed by the *Pakistan Flour Mills Association*, who want free movement of wheat, so that growers get a fair market price. Prices of wheat have increased in the local market following the ban.

The *Economic Coordination Committee* has allowed Passco to sell/export 0.2 million tons of 1.3 million stock of wheat, and keep the remaining quantity as strategic reserve.

Cotton

Cotton production target for 2010-11 is set at 14.01 million bales. According to available figures for the current season, the Pakistan Cotton Ginners Association has shown seed cotton (kapas/phuti) arrivals in the ginneries till March 1, 2011 at 11.5 million bales. The cotton crop harvested in Punjab is estimated at 7.6 million bales, against output of 8.4 million bales last year, and in Sindh 3.75 million bales over previous year's harvest of 4.2 million bales. Due to shortfall in crop production, spinners have so far purchased 10.5 million bales.

Recent floods had affected cotton crop in the districts of Muzaffargarh, Layyah, Rajanpur, Rahim Yar Khan, Multan and Dera Ghazi Khan. Textile sector has so far (by March 1, 2011) bought 10.5 million bales of cotton. Mill consumption could range between 13.5-15.0 million bales. Any shortfall would be met through imports.

Cotton rates have risen this year. The cottonseed prices remained on the higher side at around Rs5800-Rs6000 per maund.

Rice

The production target for rice has been set at 6.2 million metric tons for 2010-11. Basmati output is expected to be 2.5 million tons and others 3.65 million tons. The floods had a devastating effect on crops. About 2.1 million hectares of standing crops of kharif have been affected, mainly cotton, rice, sugarcane and vegetables. This had resulted in a loss of 2.5 million tons of rice.

Reportedly Sindh produced 1.23 million tons rice this year, against previous year's output of 2.42 million tons. Rice was sown on 361,000 hectares. Sowing of the new crop would start in June.

During FY11 (July-January), Pakistan sold 1.9 million tons of rice for $1.2 billion, against 2.2 million tons of rice worth $1.16 billion in the corresponding period a year earlier. During this period earnings from export of basmati rice increased to $517 million, or by 7.7 percent over $480 million, while earnings from other varieties declined by 1.6 percent to $669 million against $680 million.

Surgarcane

Sugarcane production target for 2010-11 was set at 53.7 million tonnes, to be harvested from an area of 1069 thousand hectares. Preliminary estimates available show that area sown declined by 2.1 percent, while production was 2.2 percent higher at 54.87 million tonnes. Of the total output, Punjab produced 35.85 million tonnes, Sindh harvested a lower crop of 14.47 million tonnes (target 15.17 million tonnes), Khyber-Pakhtunkhwa 4.5 million tonnes (target 4.6 million tonnes), while the output in Balochistan was higher by 6.9 percent at 35.6 thousand tonnes, against a target of 33.3 thousand tonnes. There was an overall improvement in the yield, which rose to 52.4 tons per hectare, against a target of 50.2 tons per hectare.

Sugar production in Sindh is likely to be around 1.25–1.3 million tons during 2010-11. Sugar stocks available with the mills are estimated at 0.72 million tons.

Administrative Expenses and Staff Cost of Scheduled Banks Operating in Pakistan

(Rs. Bn)

Banks	Admn Expenses			Staff Cost			No. of Employee		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
National Bank of Pakistan	14.2	18.2	22.6	12.3	15.6	15.5	14079	15441	16248
Habib Bank Limited	17.4	20.3	21.7	10.6	11.8	12.7	14461	14023	13122
United Bank Limited	13.4	15.5	16.6	6.5	7.0	7.7	9382	8851	8466
MCB Bank	5.4	7.5	10.1	6.1	6.7	6.7	9760	10207	9445
Allied Bank Limited	5.9	8.1	9.4	3.7	5.0	5.7	8236	8427	8855
Bank Al Falah	8.3	9.8	10.9	3.7	4.7	5.0	7371	7584	7462
Standards Chartered	12.1	12.4	12.2	3.8	4.1	4.0	3509	3282	2960
Askari Commercial Bank	4.8	5.9	7.0	2.4	3.2	3.8	5896	6496	6159
Soneri Bank	1.3	1.7	2.1	0.5	0.6	0.7	1477	1720	1958
Bank Al Habib	3.2	4.3	5.0	1.4	1.9	2.3	2704	3306	3634
Bank of Khyber	0.5	0.7	0.7	0.2	0.4	0.4	660	686	762
Bank of Punjab	2.3	2.8		1.5	1.7		3859	4156	-
KASB Bank	1.2	1.8	2.4	0.6	0.9	1.1	892	1134	1118
Habib Metropolitan Bank	2.3	3.1	3.5	1.0	1.5	1.8	1799	1937	2117
Faysal Bank	2.8	3.3	4.3	1.5	1.6	2.1	1759	1929	2042
mybank	0.7	0.9	1.1	0.3	0.4	0.4	824	930	930
Silk Bank	1.3	1.9	2.7	0.6	1.0	1.4	901	1182	1259
Meezan Bank	1.8	2.6	3.5	0.9	1.2	1.6	1959	2801	3204
NIB Bank	2.1	6.4	5.3	1.1	3.5	2.5	3693	5254	4955
Atlas Bank	0.7	1.9	1.9	0.3	1	0.9	781	862	714
Dubai Islamic Bank	1.5	1.8	1.7	0.7	0.9	0.7	553	588	549
Bank Islami Pakistan	0.5	1.0	1.8	0.2	0.4	0.6	563	1188	1471
Arif Habib Bank	0.4	0.8	1.1	0.2	0.3	0.5	319	541	615
JS Bank	0.7	0.9	1.7	0.3	0.5	0.7	280	610	828
Emirates Global Bank Limited	0.4	0.9	1.4	0.2	0.4	0.5	233	499	593
Dawood Islamic Bank Limited	0.2	0.4	0.7	0.06	0.2	0.2	89	225	449
Samba Bank Limited	0.9	1.5	1.4	0.5	0.7	0.6	536	571	421
First Women Bank	0.3	0.4	0.5	0.2	0.2	0.3	535	540	569
RBS	5.8	6.5	5.8	3.1	3.4	3.1	2319	1860	1643
Citibank	4.8	5.1	4.0	1.5	1.6	1.3	1200	1032	747
HSBC	1.0	1.9	2.2	0.5	0.7	0.6	517	663	576
Deutsche Bank	0.6	0.8	0.9	0.08	0.08	0.07	77	84	75
Oman International	0.04	0.06	0.06	0.03	0.03	0.03	28	35	32
Bank of Tokyo	0.07	0.09	0.1	0.03	0.03	0.04	31	35	32
Al Baraka Islamic Bank	0.3	0.6	0.7	0.2	0.2	0.2	364	455	528
Barclays		1.7	4.0		0.5	0.5	-	529	492
Total	119.21	153.55	171.06	66.80	83.94	86.24	101646	109663	105030

Source: Annual Reports of Banks

Ratios

Banks	Staff Cost to Admin			Staff Cost / Employee (Rs. Mn)*		
	2007	2008	2009	2007	2008	2009
National Bank of Pakistan	86.62	85.7	68.6	0.7	0.8	1.0
Habib Bank Limited	60.9	58.1	58.5	0.7	0.8	1.0
United Bank Limited	48.5	45.2	46.4	0.7	0.8	0.9
MCB Bank	113.0	89.3	66.3	0.6	0.7	0.7
Allied Bank Limited	62.7	61.7	60.6	0.5	0.6	0.6
Bank Al Falah	44.6	48.0	45.9	0.5	0.6	0.7
Standards Chartered	31.4	33.1	32.8	1.1	1.2	1.4
Askari Commercial Bank	50.0	54.2	54.3	0.4	0.5	0.6
Soneri Bank	38.5	35.3	33.3	0.3	0.4	0.4
Bank Al Habib	43.8	44.2	46.0	0.5	0.6	0.6
Bank of Khyber	40.0	57.1	57.1	0.3	0.5	0.5
Bank of Punjab	65.2	60.7	-	0.4	0.4	-
KASB Bank	50.0	50.0	45.8	0.6	0.8	1.0
Habib Metropolitan Bank	43.5	48.4	51.4	0.6	0.8	0.8
Faysal Bank	53.6	48.5	48.8	0.8	0.8	1.0
mybank	42.9	44.4	36.4	0.4	0.4	0.5
Silk Bank	46.2	52.6	51.9	0.7	0.9	1.1
Meezan Bank	50.0	46.2	45.7	0.4	0.4	0.5
NIB Bank	52.4	54.7	47.2	0.3	0.7	0.5
Atlas Bank	42.9	52.6	47.4	0.4	1.2	1.3
Dubai Islamic Bank	46.7	50.0	41.2	1.3	1.5	1.3
Bank Islami Pakistan	40.0	40.0	33.3	0.3	0.3	0.4
Arif Habib Bank	50.0	37.5	45.5	0.6	0.6	0.8
JS Bank	42.9	55.6	41.2	0.9	0.8	0.9
Emirates Global Bank Limited	50.0	44.4	35.7	0.7	0.7	0.9
Dawood Islamic Bank Limited	30.0	50.0	28.6	0.6	0.8	0.5
Samba Bank Limited	55.6	46.7	42.9	0.9	1.3	1.5
First Women Bank	66.7	50.0	60.0	0.4	0.4	0.5
RBS	53.4	52.3	53.4	1.3	1.8	1.9
Citibank	31.3	31.4	32.5	1.2	1.5	1.7
HSBC	50.0	36.8	27.3	1.0	1.3	1.5
Deutsche Bank	13.3	10.0	7.8	3.3	4.1	5.2
Oman International	75.0	50.0	50.0	0.7	0.6	0.7
Bank of Tokyo	42.9	33.3	40.0	1.0	1.1	1.4
Al Baraka Islamic Bank	66.7	33.3	28.6	0.5	0.5	0.5
Barclays	-	29.4	12.5	-	1.4	2.6
Total	56.0	54.7	50.4	0.6	0.7	0.8

** Ratios from absolute figures*

Source: Annual Reports of Banks

Market Analysis

Market Review – January to February 2011

The market during the period was mixed with major correction occurring in the month of February. Overall, the KSE-100 Index during January to February, 2011 shed 733 points or 6.1 percent to close at 11,289 on average daily turnover of 134.73m shares.

Bullish beginning

The first two weeks of the New Year saw the KSE-100 Index remain bullish despite some turmoil on the political front. The net foreign portfolio inflow continued to drive the market with buying activity concentrated in the oil and gas sectors as international crude oil prices were unrelenting marching past US$ 90 per barrel. In addition, there was buying interest in selective banking stocks due to payout speculation. At the beginning of the month, there were negative developments on the political front.

However, the market's negative reaction was short-lived. A major driver that boosted the Index during the second week was the news on January 13 that the Ministry of Law had approved the margin trading system and that it might be introduced next month. Other developments on the macroeconomic front were the 17 percent year-on-year increase in foreign remittances to US$ 5.3bn during 1HFY11, 18 percent year-on-year rise in the 1HFY11 trade deficit to US$ 8.2bn and headline inflation during December 2010 posting a 15.48 percent year-on-year rise. The KSE-100 Index jumped by 659 points or 5.3 percent from the start of the month to January 17 to close at 12,681.

Correction

From January 17 to February 25, the KSE entered into a correction in which the KSE-100 Index shed 1,458 points or 11.5 percent to close at 11,223.

The market underwent a slight correction from January 18 to 24, as there was profit taking activity initiated by mainly institutional investors. Fertilizer and banking stocks performed relatively better than other sectors during this period because of year-end result and payout expectations. The oil and gas sector had a rough week on the back of negative news flow such as the shutdown of Maramzai field due to security concerns, risks to PSO's furnace oil sales as the Ministry of Water and Power had proposed to allow power generation companies to directly import furnace oil on deferred payment basis and the government's decision to issue convertible bonds for OGDC and PPL during 2011. On the macroeconomic front, concerns had been expressed by both governmental and independent economic experts regarding the ballooning deficit and its impact on inflation and looming economic collapse if a unified economic agenda was not implemented soon.

Fertilizer and banking stocks perform well

The last few days of January, the KSE-100 Index was dull and lackluster as reflected in the thin turnover. The dullness in the market can be attributed to the anticipation of the Monetary Policy Statement by the SBP on January 29, as it appears that most investors chose to exercise caution in the run up to the policy statement. Due to the high inflation situation, many analysts expected that the SBP would raise the policy rate by another 50 to 100 bps and thus, most investors chose to move to book profits and/or move to the sidelines.

Anticipation of Monetary Policy

Most of the quarterly/annual result announcements of major companies were in-line with market expectations and so, they did not act as a trigger to spur fresh buying activity. On January 29, the SBP announced its Monetary Policy Statement by keeping the policy rate unchanged at 14 percent, as any further raise would be pointless until there was discipline applied to the fiscal stance. The following trading day on January 31, the market started on a bullish note on the back of the Monetary Policy but eventually profit taking occurred in the latter part of the session.

The first week of February was mainly mixed and range bound. The political situation outside

the country, i.e. Egypt crisis and reports of adverse changes in the oil pricing mechanism, namely the reduction in deemed duty for refiners led to some profit taking. In addition, the freezing of retail oil prices for another month despite oil prices hovering above the US$ 100 a barrel will likely add to the fiscal gap, making most investors quite nervous. The Index rallied near the end of the week on rumors about the Margin Trading System (MTS) beginning in the fourth week of February. The KSE-100 Index gained 68 points from the start of the month to February 7 to close at 12,427.

Subsequently, the market underwent a slump for the rest of the second week of the February. The key factors behind the slide were the reported tension in the Pak-US relations due to the Raymond Davis affair and statement that Moody's could downgrade Pakistan's sovereign rating if implementation of economic reforms were delayed. The KSE-100 Index slumped by 484 points or 3.9 percent from February 7 to 11 to 11,943. Some key economic data was released during the week such as:

- CPI inflation for January 2011 was reported at 14.19 percent YoY;
- The trade deficit during 7mFY11 was reported at US$ 9.32bn, up 9 percent YoY;
- Remittances during 7mFY11 posted 17.7 percent YoY rise to US$ 6.118bn and
- July to January 2010/11 tax collection improved by 10 percent YoY to PKR 764.822bn.

The third week of the month saw the KSE-100 Index trading in a narrow band around the 12,000 mark. The market was still being influenced b the developments if the Raymond Davis affair as Senator Kerry made an unscheduled visit to Pakistan on February 15 in attempt to cool down tensions.

The KSE-100 Index crossed the 12,000 level on February 15, as investors were sanguine on the announcement by MOL of another discovery in Tal Block (Tolanj). The remainder of the week was flat as the FBR notified the rules regarding the calculation of capital gains tax (CGT) coupled with developments on the MTS. The KSE-100 Index ended the third week up 97 points or 0.82 percent to close at 12,041 on February 18.

The market experienced major selling pressure during the last 5 sessions of the month. Most investors became nervous because of the political uncertainty in the country. In addition, investors were also wary about the methodology relating to calculation and filing of CGT, as it was reported in the local media that investors filing for the first time under CGT would be required to show their source of investment over the last 5 years. The KSE-100 Index plunged by 817 points from February 18 to 25 to close at 11,223.

Regional Valuation

The Pakistan market PE at 7.95x is trading at a 35.8 percent discount to the regional average of 12.38x. Based on dividend yield, Pakistan is the most attractive at 5.42 percent as compared to the regional average of 2.45 percent, followed by Thailand (3.60%) and Taiwan (3.26%).

The market direction in the near term will be influenced by the following factors:

Looking Ahead

- The upcoming federal budget for FY12 expected in May/June, it needs to be seen if the government will introduce measures to broaden the tax base;
- IMF negotiations expected in May will determine if the next tranche under SBA is disbursed;
- Political developments on both the domestic and geopolitical fronts;
- Direction of international commodity prices such as crude oil and
- Quarterly results season.

We expect the market to experience a bumpy ride during the final quarter of the fiscal year.

(Contributed by Taurus Securities Ltd, a subsidiary of National Bank of Pakistan)

Book/Report Reviews

Energy Crisis in Pakistan
Origins, Challenges and Sustainable Solutions
Muhammad Asif
Oxford University Press

Pakistan faces an ongoing energy crisis, with wide ramifications for the entire country, barring the influential elite class. The crisis is a result of years of poor policies, weakness of its institutions, poor management on the part of the authorities, lack of vision, bad governance, little concern for the welfare of the common man, nepotism and corruption. Patronization of corruption has seriously dented the progress of this sector as a whole. When it comes to financial corruption and financial kickbacks, the energy sector is second to none.

The first two chapters of the book discuss the contemporary status of energy by highlighting its various dimensions. Among other issues they discuss the energy resources presently being consumed in the world, the factors that have traditionally driven oil prices, the socio-economic implications of surging oil prices, global warming, energy security, oil driven foreign policy and geo-strategic conflicts, the role of petroleum in the geo-politics of the 21st century and the role that oil plays in the outcome of wars.

Chapter 3 presents an overview of the energy base of the country in terms of resources and institutional infrastructure. Chapter 4 investigates the origin of the present energy crisis, and its wide ranging implications for the country. For the overwhelming majority of the population in Pakistan, energy has to meet the basic necessities of life. It is only the ruling and economic elite, making up one or two percent of the population, that cherish a life of fuel prosperity. Unless radical changes are made in the generation, marketing and consumption of energy, the problem cannot be addressed, states the author.

Chapter 5 looks at the underlying issues that have contributed to the prevailing crisis. The performance of the crucial stakeholders who have gradually undermined the national energy scene has been discussed. The challenges faced by Pakistan on the road to a sustainable energy future is enormous and it will take time before things improve. Chapter 6 presents some solutions to achieve energy sustainability. Administrative irregularities, political interference has to be checked, alongwith enhanced coordination both at the policy, decision making and implementation levels. The last chapter in the book describes the indigenous resources that can be tapped to provide affordable and sufficient energy on a long term basis.

Social Development in Pakistan
Social Impact of the Security Crisis
Annual Review 2009-10
Social Policy and Development Centre

The Annual Review 2009-10 of the Social Policy and Development Centre, addresses the security issues of Pakistan and its impact on the economy, especially social development and the welfare of the people. Terrorism has taken a heavy toll on Pakistan's economy, which is faced with major challenges such as energy shortages, decline in investment, rising poverty, growing income disparities, high inflation and high levels of fiscal deficit. The war on terror has added to the challenges and is a major drag on public expenditure. The Report highlights the economic cost of terrorism and the resulting performance of the economy of Pakistan.

Post September 11, 2001, the geo-political and socio economic situation of the world has changed. The war on terror has caused great destruction and suffering to Pakistan and its people than any other country. There is an armed struggle going on in the province of Khyber Pakhtunkhwa (which has become the centre for the war on terror) and adjoining Federally Administered Tribal Areas. Its social sector has been badly affected, as large number of schools have been damaged or destroyed,

health facilities have been partially/completely damaged, housing settlements have been affected and has caused internal displacement of millions of people. The destruction of basic facilities like water supply and sanitation has an impact on the health of the people.

Lack of good governance is believed to be among the root causes of the growing crisis in Pakistan. The Report states, "a general perception is that political institutions have not been able to develop a system that promotes accountability and transparency, allows a voice to people and ensures social and economic justice."

According to estimates, the total costs of terrorism have increased tremendously from Rs380 billion in 2007-08 to Rs840 billion 2009-10. In terms of US dollars, these costs have increased from $6 billion to $10 billion.

The security crisis has affected expenditures. The combined federal and provincial expenditures on security reached Rs800 billion or 4.7 percent of GDP in 2010-11 compared to Rs177 billion or 4.2 percent of GDP in 2000-01. The shift in public expenditure priorities towards security expenditure has consequently impacted the distribution between, and the composition of current and development expenditure both at the federal and provincial levels.

Higher spending on security has caused a slowdown in the pace of social development. Pakistan consequently is unlikely to meet most of the targets of the MDGs by 2015, states the Report.

Human Development Report 2010
The Real Wealth of Nations: Pathways to Human Development
UNDP

This Report is the 20th in the series, and is about how the human development approach can adjust to meet the challenges of the new millennium. While the past 20 years have seen substantial progress in many aspects of human development, it has also seen increasing inequality, both within and across countries, as well as production and consumption patterns that have increasingly been revealed as unsustainable.

In the Report, three new measures have been introduced, *(i) the Inequality-adjusted Human Development Index, (ii) the Gender Inequality Index and (iii) the Multi-dimensional Poverty Index*. These indices incorporate recent advances in theory and measurement. These new measures yield many results, that can guide development policy debates and designs. They also open new possibilities for research.

Chapters 2 and 3 assess the health, education and income dimensions of development included in the Human Development Index. While substantial progress has been achieved, but considerable variability exists across countries. Despite advances, serious inequalities remain. The gulf separating developed and developing countries is still huge.

Chapter 3 seeks to provide answers as to why some countries succeed and others fail in grasping global opportunities. It analyzes the determinants of progress in the three basic dimensions in the ADI – income, health and education. Chapter 4 enlarges the scope, and discusses empowerment, equity and sustainability — the dimensions of human development, which are just as important as those covered by the HDI. The key findings: even when countries make progress in the HDI, they do not always do well in the broader dimensions. Countries may have a high HDI and be undemocratic, unequitable and unsustainable — just as they many have a low HDI and be relatively democratic, equitable and sustainable.

The final chapter proposed an agenda for expanding human development; it focused on policies and research. On the policy front it identified the need for a principle-based approach to policy guidance; and on the research front it highlighted the need for collecting better data on the dimensions of human development.

Pakistan Economy – Key Economic Indicators

	Unit	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10[P]
Output and Prices								
GNP Size (MP)	Rs.bn	5765	6634	7773	8831	10452	13084	15239
GDP Size (FC)	Rs.bn	5250	6123	7158	8235	9921	12082	13843
Income Per Capita	$	669	733	836	921	1038	1018	1095
Real Growth	(%)							
GNP		6.4	8.7	5.6	6.7	3.7	1.7	5.5
GDP		7.5	9.0	5.8	6.8	3.7	1.2	4.1
Agriculture		2.4	6.5	6.3	4.1	1.0	4.0	2.0
Manufacturing		14.0	15.5	8.7	8.3	4.8	-3.7	5.2
Services Sector		5.8	8.5	6.5	7.0	6.0	1.6	4.6
Prices	(%)							
Consumer Price Inflation		4.6	9.3	7.9	7.8	12.0	20.8	11.7
Wholesale Price Inflation		7.9	6.8	10.1	6.9	16.4	18.2	12.6
Food Inflation CPI		6.0	12.5	6.9	10.3	17.6	23.7	12.5
Non Food Inflation CPI		3.6	7.1	8.6	6.0	7.9	18.4	11.1
Core Inflation[†]		3.8	7.2	7.5	5.9	8.4	18.1	10.5
GDP Deflator		7.7	7.0	10.5	7.7	16.2	20.3	10.1
Gold Tezabi (Karachi)	Rs./10 grams	7328	8216	10317	12619	16695	22195	33544
Petrol Super	Rs/Ltr	33.69	40.74	55.21	56.00	57.83	67.68	67.56
Diesel	Rs/Ltr	-	-	36.45	38.40	40.97	60.42	69.57
Kerosene oil	Rs/Ltr	24.95	29.11	36.19	39.09	43.44	66.79	72.65
Wheat Flour	Rs/Kg	11.71	13.28	13.06	13.64	18.07	25.64	28.77
Savings and Investment	% GDP							
National Savings		17.9	17.5	17.7	17.4	13.4	13.2	13.8
Domestic Savings		15.7	15.4	15.7	15.6	11.4	10.5	9.9
Gross Fixed Investment		15.0	17.5	20.5	20.9	20.5	17.4	15.0
Public		4.0	4.3	4.8	5.5	5.4	4.6	4.3
Private		10.9	13.1	15.7	15.4	15.0	12.7	10.7
Public Finance								
Revenue Receipts (Fed Govt)	% GDP	13.5	13.5	13.5	14.0	13.7	13.2	14.0
Tax Revenue	% GDP	9.0	9.1	9.3	9.7	9.9	9.8	10.1
Total Expenditure	% GDP	15.9	15.4	15.8	15.7	18.8	16.5	17.6
Fiscal Deficit	% GDP	2.3	3.3	4.3	4.4	7.6	5.3	6.3
FBR Tax Collection (Fed Govt)	Rs.bn	510.0	590.0	704.0	839.6	1009.4	1251.5	1483.0
Direct Taxes	% share	31.7	31.0	32.0	38.2	38.4	39.6	36.4
Indirect Taxes	% share	68.3	69.0	68.0	61.8	61.6	60.4	63.6
Internal Debt Outstanding	Rs.bn	1979	2152	2337	2610	3275	3861	4653
Funded Debt	% Internal Debt	54.6	59.5	62.3	64.0	68.8	67.1	68.6
Un-Funded Debt	% Internal Debt	45.4	40.5	37.7	36.0	31.2	32.9	31.3
Monetary Sector								
Growth of Monetary Assets M2	%	19.6	19.1	15.1	19.3	15.3	9.6	12.5
Currency in Circulation	Rs.bn	578.1	665.9	740.4	840.2	982.3	1152.2	1295.4

P Provisional [†]*non-food non-energy*

	Unit	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10[P]
Credit to Private Sector	Rs.bn	1274	1712	2114	2480	2890	2907	3020
Credit to Public Sector	Rs.bn	657	747	834	927	1510	2034	2441
Borrowings for Budgetary Support	Rs.bn	575	641	708	810	1365	1681	2011
Resident Foreign Currency Deposits	Rs.bn	146	180	196	207	263	280	330
M2/GDP	%	-	-	0.45	0.47	0.46	0.40	0.39
Capital Market (KSE)								
Listed Capital	Rs.bn	377	439	496	631	706	782	910
Market Capitalisation	$ bn	1422	2068	2801	4019	3778	2121	2732
Listed Companies at KSE	Nos	666	659	658	658	652	651	651
Banking Sector								
Scheduled Banks Deposits	Rs.bn	-	2428	2817	3373	3812	4138	4353*
Scheduled Banks Advances	Rs.bn	-	1694	2071	2376	2816	3080	3192*
Non-Performing Loans All Banks	Rs.bn	200	177	173	214	314	432	460
Lending and Deposit Rates	weighted average							
Deposits	% pa	0.95	1.37	1.96	2.60	4.13	4.44	4.29*
Advances	% pa	7.28	8.81	10.61	11.55	12.49	14.25	13.18*
Open Market Operation	weighted average							
SBP 3-Day Repo	% pa	7.50	9.00	9.00	9.50	12.00	14.00	12.50
Treasury Bills Yield - 6 Months	% pa	2.08	7.96	8.49	8.90	11.47	12.00	12.33
KIBOR - 6 Months	% pa	2.69	8.46	9.36	9.75	13.95	12.65	12.25
Pakistan Investment Bonds - 5 yrs	% pa	5.27	7.50	9.65	9.53	-	12.40	12.60
Interbank Call Rates	%	2.70	6.10	8.80	8.90	9.90	13.20	12.20
SBP Export Finance Rate	%	1.50	6.50	7.50	6.50	6.50	6.50	8.00
External Sector								
Exports	$ bn	12.31	14.40	16.45	16.98	19.05	17.68	19.35
Imports	$ bn	15.59	20.60	28.58	30.54	39.96	34.82	34.71
Balance of Trade	$ bn	-3.28	-6.20	-12.13	-13.56	-20.90	-17.14	-12.24
Current Account Balance	$ bn	1.31	-1.75	-5.65	-7.40	-14.30	-9.40	-2.90
Workers' Remittances	$ mn	3872	4168	4600	5494	6451	7811	8906
Foreign Private Investment	$ mn	922	1677	3872	6960	5429	3209	2794
Direct	$ mn	950	1525	3521	5140	5410	3720	2206
Portfolio	$ mn	-28	153	351	1820	19	-511	588
Debts								
External Debt and Liabilities	$ bn	35.3	35.4	37.2	40.3	46.2	52.3	55.6
Domestic Debt Outstanding	Rs.bn	2027	2178	2337	2610	3275	3860	4653
Internal Debt as % of GDP	%	35.9	33.5	30.7	30.1	32.0	30.3	31.7
National Saving Schemes**	Rs.bn	984	940	936	1004	1094	1361	1586
Total Reserves	$ mn	13155	13338	14354	18890	13436	13971	17921
Gold	$ mn	831	917	1268	1344	1926	1935	2575
Liquid Fx Reserves	$ mn	12324	12421	13086	17546	11510	12036	15346
Exchange Rate (Average for year)	Rs/US$	57.5745	59.3576	59.8566	60.6342	62.5465	78.4983	83.8017

** December 2009 ** Outstanding* *Source: Annual Report 2009-10, State Bank of Pakistan*