

NATIONAL REPORT OF PAKISTAN FOR HABITAT III



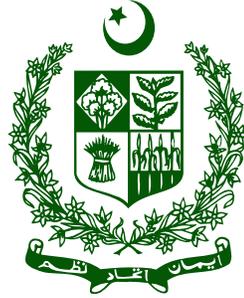
Government of Pakistan
Ministry of Climate Change, Islamabad, Pakistan

June 2015



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Acronyms

ADB	Asian Development Bank	EPA	Environmental Protection Agency
ADPs	Annual Development Programs	ERC	Emergency Relief Cell
AIDP	Auto Industry Development Program	FATA	Federally Administered Tribal Areas
AJK	Azad Jammu and Kashmir	FDI	Foreign Direct Investment
AKPBS	Aga Khan Planning and Building Services	FERTS	Fuel Efficiency in Road Transport Sector
ARI	Acute Respiratory Infections	GBIEC	Great Britain Information, Education and Communication
BACIP	Building and Construction Improvement Program	GDP	Gross Domestic Product
BAU	Business as Usual	GFF	Global Finance Facility
BCC	Behaviour Change Communication	GIS	Geographical Information System
BISP	Benazir Income Support Program	GOKP	Government of Khyber Pakhtunkhwa
BOD	Biological Oxygen Demand	GOP	Government of Pakistan
CAGR	Compound Annual Growth Rate	GB	Gilgit Baltistan
CBO	Community Based Organization	GCRI	Global Climate Risk Index
CCB	Community Citizens Board	GHG	Greenhouse Gas
CDA	Capital Development Authority	HBFC	House Building Finance Corporation
CDM	Clean Development Mechanism	HELP	Health Expenditure and Livelihood Protection for the Poor
CFD	Cubic Feet per Day	H.H.	His Highness
CLEAN	Central Laboratory for Environmental Analysis and Networking	IEE	Initial Environmental Examination
CLTS	Community Led Total Sanitation	ICT	Islamabad Capital Territory
CNG	Compressed Natural Gas	IFPRI	International Food Policy Research Institute
CPEC	China-Pak Economic Corridor	ILO	International Labour Organization
DCO	District Coordination Officer	IMF	International Monetary Fund
DFI	Development Finance Institution	IUCN	International Union for Conservation of Nature and Natural Resources
DFID	Department for International Development, UK	IURD	Institute of Urban and Regional Development, University of California Berkeley
DHA	Defence Housing Authority	LDA	Lahore Development Authority
DIABP	Dubai International Award for Best Practices	KDA	Karachi Development Authority
D.I. Khan	Dera Ismail Khan		
DRR	Disaster Risk Reduction		
EIA	Environmental Impact Assessment		

KLM	Karachi-Lahore Motorway	PEPC	Pakistan Environmental Protection Council
KM	Kilo-Meter	PFCA	Provincial Finance Commission Award
KKB	Khuda ki Basti	PHATA	Punjab Housing and Town Planning Agency
KP	Khyber Pakhtunkhwa	PHED	Public Health Engineering Department
KW&SB	Karachi Water and Sewerage Board	PIDE	Pakistan Institute of Development Economics
LG	Local Governments	PRSP	Poverty Reduction Strategy Paper
LHW	Lady Health Workers	PSLM	Pakistan Social and Living Standards Measurement Survey
LNG	Liquefied Natural Gas	PM	Particulate Matter
LPG	Liquefied Petroleum Gas	PPP	Purchasing Power Parity
LPP	Lodhran Pilot Project	PSDP	Public Sector Development Program
MDG	Millennium Development Goal	PWP	Pakistan Weather Portal
MVE & ETC	Motor Vehicle Examination and Emission Testing Centers	R&D	Research and Development
NDMA	National Disaster Management Authority	Rs.	Rupees
NDP	National Drainage Program	RWASA	Rawalpindi Water and Sanitation Agency
NEQS	National Environmental Quality Standards	SACOSAN	South Asian Conference on Sanitation
NESPAK	National Engineering Services Pakistan (Pvt.) Limited	SDP	Sustainable Development Plan
NGO	Non-Governmental Organization	SERRA	State Earthquake Rehabilitation and Reconstruction Authority
NOC	No Objection Certificate	SOPs	Standard Operating Procedures
NTCIP	National Trade Corridor Improvement Program	SPM	Suspended Particulate Matter
ODF	Open Defecation Free	SWM	Solid Waste Management
OPP	Orangi Pilot Project	TARUCCI	Tribal Areas Rural to Urban Centres Conversion Initiative
Pak EPA	Pakistan Environmental Protection Agency	TAVTA	Technical and Vocational Training Authorities
PAKOSAN	Pakistan Conference on Sanitation	TDP	Temporarily Dislocated Persons (TDP's)
PAKTRAN	Pakistan Transport Project	TFP	
PATS	Pakistan Approach to Total Sanitation	TMA	Total Factor Productivity
PCAP	Pakistan Clean Air Program		
PEPA	Pakistan Environmental Protection Act		
PEPAC	Pakistan Environmental Planning and Architectural Consultants		

TPES	Tehsil Municipal Administration	US	United Nations Children's Fund
UC	Total Primary Energy Supply	USAID	United States
UK	Union Council		United States Agency for
UNDP	United Kingdom	WASA	International Development
	United Nations Development	WASEP	Water and Sanitation Authority
UN-Habitat	Program		Water and Sanitation Extension
	United Nations Human Settlements	WB	Program
UNFCCC	Program	WHO	World Bank
	United Nations Framework	WSP	World Health Organization World
UNFPA	Convention on Climate Change		Bank's Water and Sanitation
	United Nations Family Planning		Program
UNICEF	Association		

Preface

The National Report of Pakistan for Habitat III has been prepared on behalf of the Government of Pakistan in compliance with the UN General Assembly Resolution No. 66/207 and 67/216, wherein the decision to hold the Habitat III conference in 2016 was taken and preparatory activities and format of the conference were decided.

Habitat III conference will be one of the first global conferences after the 2nd Rio Summit and Post 2015 Development Agenda. This Conference will chart new pathways in response to the challenges of urbanization and the opportunities it offers for the implementation of the Sustainable Development Goals.

The National Report of Pakistan for Habitat III presents the status of implementation, progress and shortcomings in respect of the key areas and indicators identified in the format of the UN-Habitat guidelines for preparation of the National report by the member countries.

(Arif Ahmed Khan)

Secretary

Ministry of Climate Change

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Islamabad

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Introduction and Overview

The first Habitat Conference held in Vancouver in 1976, adopted Vancouver Declaration on Human Settlements. Outcome of the conference was the establishment of UN-Habitat, the UN organization for human settlements in 1978. The second United Nations Conference on Human Settlements (Habitat II) was held in Istanbul, Turkey in June 1996. The purpose of the Habitat II conference was to address two themes: "Adequate shelter for all" and "Sustainable Human Settlements Development in an urbanizing world".

At present, about 54% of the world's population is living in cities and by 2050 it is estimated to increase to two-thirds. In 2010, the United Nations Human Settlements Programme (UN-Habitat) reported that more than 827 million people were living in slum-like conditions, in the larger and mega-cities of developing countries. As the world continues to urbanize, sustainable development will pose daunting challenge in cities.

Habitat III is the Third United Nations Conference on Housing and Sustainable Urban Development, scheduled in October 2016. The conference is expected to bring together all relevant stakeholders to review urban and housing policies affecting the future of cities within international governance architecture. This will generate a 'New Urban Agenda' for the 21st century to recognize the ever-changing dynamics of human civilization. Governments are expected to benefit from Habitat-III by adoption of a new model of urban development that is able to integrate all factors for sustainable development. The Habitat-III offers Member States an opportunity to discuss the New Urban Agenda that will focus on policies and strategies that can result in effectively harnessing the power and forces behind urbanization.

Pakistan is one of the founder member States of UN-Habitat and the Ministry of Climate Change which represents the erstwhile Ministry of Environment, the National Focal Point is required to submit a National Report before the Preparatory Committee for Habitat-III. The National reports will review implementation of the Habitat-II agenda and other relevant internationally agreed goals and targets. The report will also review new challenges, emerging trends and a prospective vision for sustainable human settlements and urban development, as a basis for the formulation of a "New Urban Agenda".

The present National report of Pakistan follows the UN-Habitat Guidelines for uniform reporting at the international forum. The report is divided into eight chapters. Chapter 1 deals with urban demographic issues and challenges for a new urban agenda. It describes the urban growth and population dynamics, demographic composition, urbanization challenges. Chapter 2 presents land and urban planning issues and describes the achievements made by various tiers of governments in ensuring sustainable urban planning and design. Chapter 3 describes environment and urbanization issues in respect of climate change; disaster risk reduction; traffic congestion and air pollution. Chapter 4 explains the urban governance and legislation highlighting urban legislation; need for decentralization and strengthening of local authorities. Chapter 5 illustrates Urban Economy and focuses on improving municipal and local finance supporting local economic development; integration of the urban economy into national development policy. Chapter 6 deals with Housing and Basic Services and focuses on improving access to adequate housing; basic sanitation and drainage; improving access to clean domestic energy; and improving access to sustainable means of transport. Chapter 7 highlights the level of progress against the indicators provided in the guidelines. Chapter 8 presents the case studies of successful initiatives and policy measures that have made significant impacts in dealing with urbanization challenges in Pakistan.

Executive Summary

Pakistan has made commendable efforts towards implementation of Habitat - II Agenda, since the second United Nations Conference on Human Settlements (Habitat - II) held in Istanbul in 1996. The Agenda defines a set of goals and principles, spelled out unified commitments adopted as Global Plan of Action that called for taking initiatives towards creation of healthy, safe, equitable and sustainable human settlements through better management of its cities and towns in a broader macro-economic and social context so that the impacts of the initiatives taken by the government are reported at the Habitat-III conference.

Pakistan is the most urbanized nation in South Asia and its urban population has increased from 43.0 million to 72.5 million between 1998 to 2014 and is expected to become pre-dominantly urbanized by the year 2025. At present about 47 percent of urban population lives in nine cities, having population exceeding one million each. The primary factor in this conglomeration is increase in rural-urban migration. As such there is a need to address the existing challenges of large urban centers while planning ahead for the continued migration towards cities.

68.4 percent of Pakistan's population is below the age of 30 years. Therefore, there is an opportunity to reap the benefits of “Demographic Dividend” till 2045, but urbanization has to cater to the needs of a huge youth group. While females constitute a little less than half of the urban population, gender disparity in education has nearly disappeared in urban areas and in some universities women actually outnumber their male counterparts¹. Improved equity is also visible in terms of employed women in professions.

Challenges of accelerated urbanization include aggravating urban deficit; eroding live ability, productivity and efficiency of urban areas and degrading urban ecology. Eradication of urban poverty is another challenge. The government has adopted policy initiatives and developed Pakistan Vision 2025, followed by national and provincial policies and strategies. The government is taking measures to economically strengthen the regions neglected in the past such as Balochistan, Azad Jammu and Kashmir (AJK) and Gilgit-Baltistan. Major initiatives are the Pak-China Economic Corridor; Development of Karakorum Highway and Economic Development Program for 'Temporarily Dislocated Persons' (TDP's) in Federally Administered Tribal Areas (FATA) affected due to terrorism. It has initiated development of intermediate cities and towns in all provinces and has prepared Master Plans to improve urban infrastructure network, services and utilities to address the impact of rapid urbanization. As a result, the urban population in quantitative terms has grown from 42.968 million to 69.870 million; though the rate of urbanization has declined from 3.5 percent in 1998 to 3.3 percent in 2013.

The major issues related to land and urban planning like poor maintenance of land records and, regulatory framework have impeded the economic growth of cities and towns. Conversion of agricultural and forest lands into other uses etc. has triggered food security issues. These have retarded effective utilization of both human and natural resources. The major initiatives taken in this regard are establishment of dedicated urban planning units at provincial level; digitization of land records; promoting vertical growth of buildings; rationalization of plot sizes, integrated planning at the district level; revision of Building Bye Laws and Town Planning Regulations as well as incorporation of DRR checklist in PC-I and PC-II for development projects related to infrastructure, production and social sectors.

The most devastating effects of climate change are heavy flooding and drainage problems on the one hand and drought and urban heat island phenomenon on the other. It also effects human health due to wide spread vector, water and air borne diseases.

The main natural disasters that have caused huge losses of life and property in Pakistan have been earthquake and urban flooding. It also has serious consequences on the economy of Pakistan. According to an official damage report on the earthquake of 2005, 73,338 people died; 128,304 severely injured; and 3.5 Million rendered homeless as over 600,000 houses were destroyed. It is estimated that in the coming few years, the per capita availability of water would be less than

1. Government of Pakistan (2007); Pakistan in the 21st Century, Vision 2030; Planning Commission, Islamabad, Page 28.

1000 m³ which is the threshold for declaring a country water-scarce. Water pollution is resulting in increase in diseases like diarrhea and typhoid. Total health cost of water pollution is estimated to be 1.8 percent of GDP. Quality of drinking water is below the WHO approved standards. In this respect the Government approved the National Drinking Water Policy in 2009 and National Standards for Drinking Water Quality as well as launched a Nation-wide Clean Drinking Water for All program. Water filtration plants are being installed at neighbourhood level in cities and at union council level in rural areas. Pakistan has already met the MDG target in drinking water. Land degradation is increasing. Tarbela Dam capacity has decreased by 29.32 percent due to siltation of its reservoir. The main cause of which is upstream deforestation.

One of the main problems of urban governance is the centralization of financial and administrative powers by the provincial governments despite introduction of the 18th Constitutional Amendment. As a result the third tier of government is not yet functional on-the-ground in any province. There is another issue of protection of interests of diverse society with various ethnic and religious minorities because of lack of effective governance system in some cities. Another big challenge is to create laws that not only better clarify the division and balance of power and functions between the Provincial and Local Governments (LGs) but also give strength to the efficacy of local governance. Further, there are serious gaps in implementation of government policies and regulations.

The new Urban Agenda in this regard focuses on institution of third tier of government empowered with adequate administrative and financial authorities; streamlining coordination between different land controlling agencies for integrated planning and development of cities. In terms of urban safety and security there is a need to make governance system more participative, responsive, efficient and accountable to control terrorism, crime, land tenure insecurity, protection, gender based violence and disasters. The Government is encouraging programs like Benazir Income Support Program and technical education to create job market for urban poor. The government is also working on laws and policy formulation for informal labour –i.e. Home-based workers.

In order to boost urban economy the Vision 2025 has committed to enhance Total Factor Productivity (TFP) exponentially by raising investment rate from 14 percent of GDP (public and private sector) to at least 25 percent - with special attention on human and social development. The Agenda also includes increasing local government revenue through reforms; accessing domestic capital market; financing facility and public private community participation.

Housing backlog has increased to about 9 million from 4.3 million in 1998 due to housing supply and demand gap. The current low income housing deficit within Pakistan is 4.5 million units with an addition of 150,000 units per annum. More than 50 percent population of major cities lives in slums and squatter settlements. To overcome housing backlog the government has taken initiatives like construction of low cost housing under a dedicated Prime Minister's Program; Apna Ghar Scheme in Punjab; Behan Benazir Basti (Benazir Housing Program) and Shaheed Benazir Bhutto Housing Scheme in Sindh; and similar programs in other parts of the country. The government has approved National Policy on Slums and squatter settlements, Urban Renewal and Slum Up-gradation. The provincial governments are regularizing the slums and squatter settlements and providing with basic urban services.

Inadequate sanitation system in peri-urban and rural areas is costing 3.9 percent of GDP and is unsatisfactory. The government approved the National Sanitation Policy 2006 and prepared sanitation and hygiene standards for schools. The provincial governments have adopted Pakistan Approach to Total Sanitation (PATS) program and developed policies and strategies for its implementation. However, the MDG targets for sanitation have not been achieved as yet. Polio is also a big problem which is also not getting in control due to inadequate and inappropriate sanitation, and a reluctance by many parents to allow the use of polio immunisation vaccines

Electricity shortage in Pakistan continues to grow due to increased demand. If proper actions are not taken, Pakistan's estimates indicate supply-demand mismatch and for the electricity demand to double in the next ten years. The government has introduced the Integrated Energy Plan 2009-2022 to meet its energy requirements and launched a massive

program which comprises of projects of accumulative capacity of 16,564 MW by 2018, based on coal, hydel, natural gas and solar energy which would bridge power shortfall. By the year 2030, approximately 10,000 MW of electricity would be generated through renewable energy sources. Currently, out of 25 million households in Pakistan, 4.3 million are connected to natural gas network. The rest are dependent on biomass, kerosene oil and Liquefied Petroleum Gas (LPG). The Government of Pakistan has launched integrated Mass transit System: Metro Bus and Metro-rail in major cities; so far the Mass transit Metro Bus system is successfully working in Lahore. The government has planned to develop a 2,395 kms. China-Pak Economic Corridor (CPEC) connecting Gwadar to Kashghar and has also planned the Karachi-Lahore Motorway (KLM), a 6-lane controlled-access motorway to ensure smooth and efficient movement of goods and passengers in a healthy environment.

Out of twelve urban indicators identified for reporting by UN-Habitat, data on eight indicators are available. The level of achievements of available indicators from 1996-2013 are presented in the report. A number of successful case studies like country-wide adoption of Pakistan's Approach to Total Sanitation (PATS); Promotion of Energy Efficient Housing and Heating technologies in Sindh, Khyber Pakhtunkhwa and Gilgit-Baltistan and Water and Sanitation Extension Program in Gilgit-Baltistan have been included in the report which present the details of successful interventions achieved from 1996 to 2014.

In a nutshell Pakistan, despite challenges of economic depression, natural disasters, terrorism, climate change vulnerabilities and high rate of migration to cities and absence of third tier of government; has largely managed the urbanization challenges and is moving forward to reap the benefits of demographic dividend from the window of opportunity that remains open till 2045. Policies and strategies are being developed and different programs are being implemented by the federal and provincial governments for overcoming the urbanization challenges and increase the growth of GDP from 3.5 percent to 7 percent as committed in 'Pakistan Vision 2025'. There is a need to initiate more projects and programs in the gaps identified in this report to overcome these challenges.

Chapter 1: Urban Demographic Issues and Challenges for a New Urban Agenda

1.1 Managing Rapid Urbanization

An important phenomenon in the demographic dynamics of Pakistan is the increasing urbanization. Today Pakistan is the most urbanized nation in South Asia and its urban population has risen from 32.5% in 1998 to 40% in 2014. If current trends of rural to urban migration continue, this share will exceed 50% in 2025.

Table 1.1 Pakistan: Population Growth and Urbanization 1981- 2014

Year	Total Population (000)	Urban Population (000)	Urban (%)	Annual Growth Rates
1981	84,253	23,583	28.3	4.4
1998	132,352	42,968	32.5	3.5
2013	184,350	69,870	37.9	3.3
2014*	188,646	72,500	38.6	-

Source: GOP 2012, Population Census Organization & (*) GOP 2013-14, Pakistan Economic Survey

1.1.1 Growth and Status of Cities

Urban population increased more than three times during the last three decades (Table 1.1). Currently there are 75 cities having population between 0.1 million and one million². There are around 448 small towns with a population of less than 100,000³. Within the population scenario, the large cities dominate urban scene. Karachi, the largest city of Pakistan and seventh largest city of the world has about 20 percent of the total urban population, followed by Lahore and Faisalabad with another 15 percent. Rawalpindi, Multan, Hyderabad, Gujranwala and Peshawar together hold another 12 percent, while about half of the remaining 46 percent of the urban population lives in relatively small towns and cities. The population in most large cities grew at a rate of over 3 percent per year, during the last few years and it is projected that this growth rate will continue for the current decade (Table 1.2).

While the population of large cities is on the rise, there was also a large increase in the population of the cities between 200,000 and 499,999 from 4.5 percent in 1981 to 9.1 percent in 1998. Most of these smaller cities and large towns are located in the neighbourhood of the one million plus metropolis and along the National Highway. This means that the government will now have to plan beyond the city boundaries for urban regions, agglomerations and clusters rather than individual towns and cities.

Table 1.2 Population of Major Cities of Pakistan 1981-2010

CITY	1998 Census	1981 Census	CAGR (%)	2010
KARACHI	9,339,023	5,208,132	3.49	13,386,730
LAHORE	5,143,495	2,952,689	3.35	7,214,954
FAISLABAD	2,008,861	1,104,209	3.58	2,912,269
RAWALPINDI	1,409,768	794,834	3.43	2,013,876
MULTAN	1,197,384	732,070	2.93	1,610,180
HYDERABAD	1,166,894	751,529	2.62	1,521,231
GUJRANWALA	1,132,509	600,993	3.79	1,676,357
PESHAWAR	982,816	566,248	3.29	1,386,529
QUETTA	565,137	285,719	4.09	871,643
ISLAMABAD	529,180	204,364	5.7	972,669

Source: Population Census Organization, Ea Wing

2. GOP 2013, Pakistan Vision 2025, Planning Commission

3. GOP 2007, Vision 2030, Planning Commission

1.2 Managing Rural Urban Linkages

The primary factor in the conglomeration of metropolitan population is the increasing rural-urban migration. According to the 1998 Census, 10.8 million Pakistanis, or 8 percent of the total population, were migrants. Among these some 63.7 percent had migrated to urban areas; while as much as 25 percent of the total had migrated to large cities like Karachi, Lahore and Rawalpindi. Karachi alone received thirteen percent of the total migrant population of Pakistan and is growing at about 3.5% per year (compared to 3% growth in urban population) mainly as a result of rural – urban internal migration. It has been estimated that 45000 workers are coming to the city every month from different parts of Pakistan.

There are many economic, social and physical reasons for people to migrate from rural to urban areas. The Push factors are associated with low productivity of agricultural land, land fragmentation, landlessness, surplus farm labor, poor economic, health and educational opportunities, these relate to the characteristics pushing people to migrate from their area of origin. While pull factors in the area of destination include economic environment i.e. better wage rate, better standard of living, bright future for children, availability of basic needs of health, education and urban infrastructure. Since the government policies and programs are more focussed on development of urban areas, hence better governed, therefore more people are being attracted towards the cities.

Beyond the simple physical relocation of people from rural to urban areas, there is also universal penetration of the phenomena of mixed rural urban livelihoods across the rural urban divide in Pakistan. Rural parts of many districts in Punjab, KP and Sindh have reached the density threshold for urban settlement. They have a population density of 400 persons per km. or more—the benchmark widely applied for defining urban areas. These bands of sprawled-out settlements are called as “Desakota”. In these areas, open country-side and wilderness have almost disappeared, and have turned into markets, factories, roads, main streets, with open sewers, garbage heaps, stores, and homes. Municipal services and other utility service delivery organizations have become a necessity for these areas as for cities.

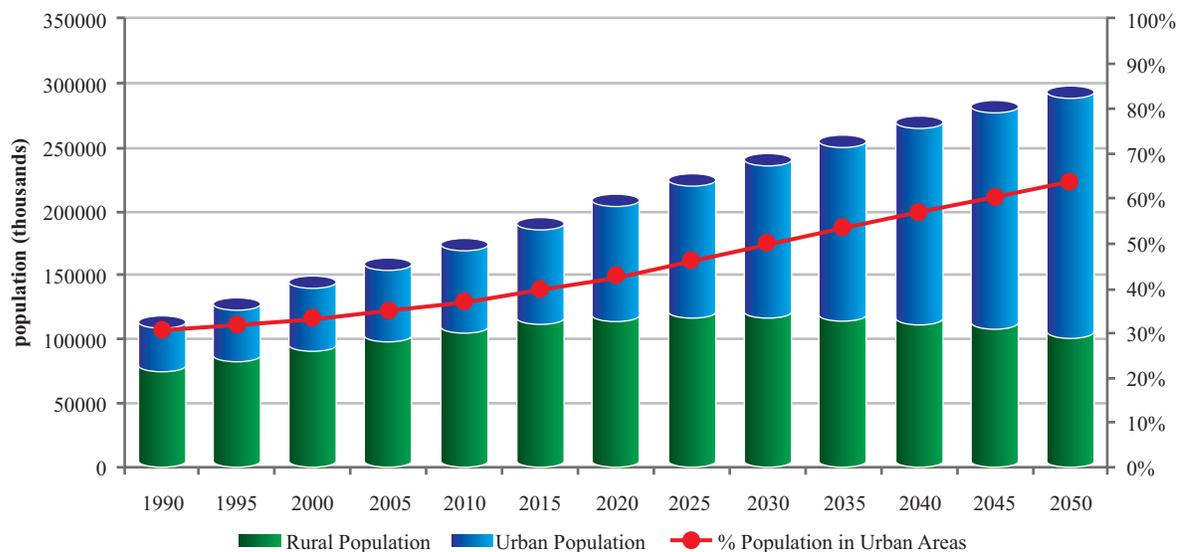
The high rate of migration results in problems due to inability of the cities to absorb, accommodate and meaningfully employ migrants. Further, it leads to additional complexity in exacerbating social and ethnic tensions between natives and migrant populations. There is a need to address the issue through rural linkages and complementarities whereby while planning ahead for the continued migration towards cities the rural urban linkages should be explored to harness the full potential of rural and urban areas in harmony with one another through enhancing connectivity and developing modern infrastructure.

1.2.1 Prospects for Future Urbanization

Most projections indicate that the urbanization in Pakistan will continue to increase. This is due to the built-in momentum of high growth rates in the past. According to some base case projections, the year 2025 will be a major landmark in Pakistan's demographics, as for the first time in its history, the urban population of Pakistan will constitute 50 percent of the total, after which it will become predominantly urban (fig. 1.1).

1.3 Addressing Urban Youth Needs

Fig. 1.1 Pakistan: Urbanization Trends 1990- 2050



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat

The present pattern of increase in urbanization will also be accompanied by further growth in the large cities as can be seen in the following table

Table 1.3 Cities of the Future

City More Than 1m	Population 2030 ('000)
Karachi	27993
Lahore	14626
Faisalabad	6192
Rawalpindi	4149
Multan	3025
Hyderabad	3005
Gujranwala	3143
Peshawar	2778
Islamabad	3175
Quetta	2038
Sargodha	1074
Bahawalpur	1903
Sialkot	1087
Larkana	1174
Sheikhupura	1019

(Source: GOP 2011a)

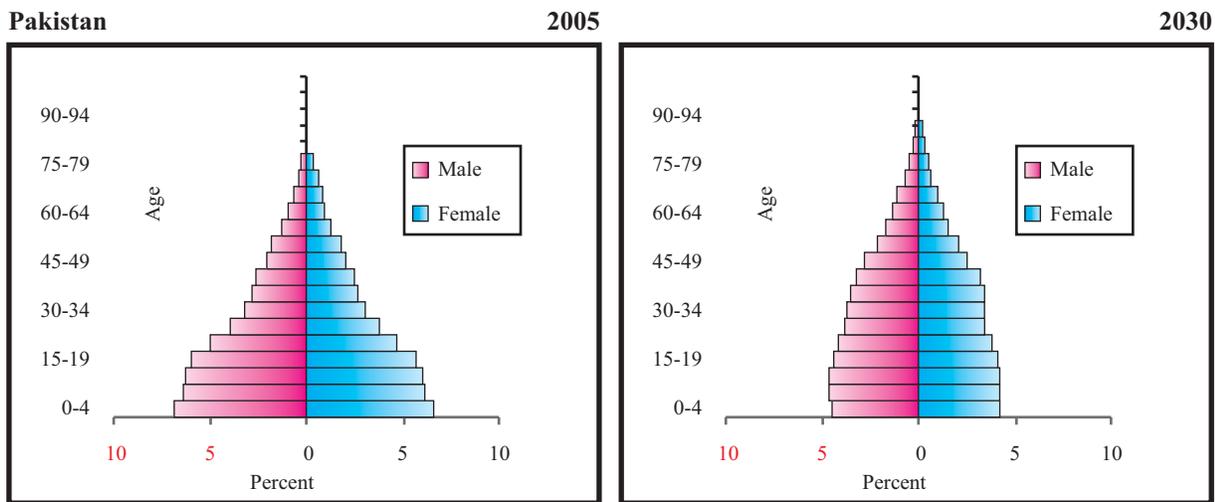
This 'population explosion' focused on a few metropolitan centres with the concomitant emerging problems of congestion related cost is being questioned in terms of economically providing more employment and infrastructure in these urban complexes and calls for cost-benefit analysis of its future feasibility particularly from quality of life standpoint. Moreover, cluster like the Gujranwala - Sialkot – Gujarat will continue to form. Some already in the process of development include Lahore–Gujranwala– Faisalabad triangle and Mansehra–Hasanabdal Corridor and Peshawar–Nowshera Corridor.

1.3.1 Characteristics of Urban Demography

There are some very important features in terms of Pakistan's urban demography that needs serious attention in terms of planning. The first one of these relates to the decline in fertility and mortality, which is totally transforming the population composition particularly age structure. Pakistan has been experiencing a fertility decline since the late 1980s and this along with mortality decline has triggered a process that is affecting the age composition as well as the dependency ratio. It is lowering of dependency ratio with positive effects on economic growth, as it means more working people looking after lesser number of young or old people. The higher number of youth also provides opportunity for improving the chances of better productivity as well as probability of increased savings.

A lower total fertility and lower mortality rates also means that Pakistan is experiencing the last stage of demographic transition which poses a challenge whereby there is an opportunity for Pakistan in the near future to reap the benefits of "Demographic Dividend" as a result of an increase in working age population. With half the share of total population (52 percent) in Pakistan born in the late 80s to early 90s, the proportion of working age population (15–64 years) in Pakistan has already reached almost 60 percent. The share of working age population will increase with time (See the increasing bulge between 2005 and 2030 in the working age youth population in Fig. 1.3).

Fig. 1.2 Pakistan's Population Profile 2005 & 2030

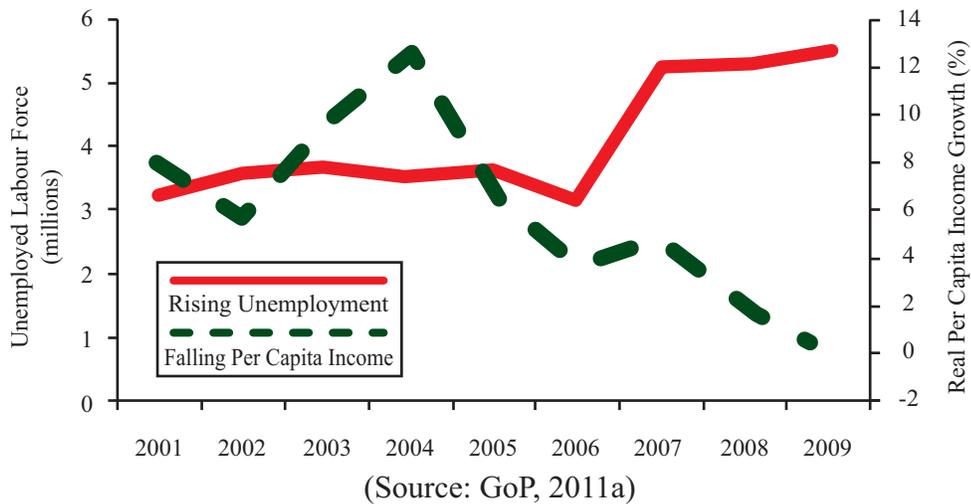


(Source GOP 2007)

1.3.2 Urban Youth Needs

A little more than two-thirds of the population (68.4 percent) of Pakistan is below the age of 30, numbering about 126 million. One third of these or 42 million live in urban areas constituting over 60 percent of urban population. As such, urbanization has to cater to the needs of the people falling within this age group in particular. The social indicators of the age group 15–30 years in urban areas have changed considerably over time. Literacy in this age group, of both males and females, has increased between the inter-census years. Major changes have also taken place in marriage patterns for this age group. In 1981 Census, 16.07 percent men and 41.54 percent women were married as opposed to 11.15 percent men and 29.86 percent women (28 percent for Karachi) in 1998. Urban policies related to education and employment is needed to cater to this changing population needs. Sadly the recent growth history is not encouraging for the youth entering the labor force as shown in figure 1.3 indicating the falling growth in per capita income and rising unemployment levels.

Fig. 1.3 Pakistan: Falling Income and Rising Unemployment 2001-2009



A bulge in the working age groups in coming 40 years will increase the economy-wide potential productive capacity. However, if economic growth is not leveraged on a higher trajectory then the coming demographic changes will imply rising unemployment, shortage of assets, difficulties in competing with neighboring South Asian countries—which will also be benefitting from younger populations during the same period. Pakistan's demography, instead of providing a dividend may well prove to be a nightmare.

1.4 Responding to the Needs of the Aged

Ageing urban population in Pakistan is the outcome of not only improved healthcare, but also due to better nutrition, improved sanitation, education and incomes. There are currently 11.6 million senior citizens in Pakistan (About 60 percent of this population, around 7 million, lives in towns and cities making up some ten percent of urban population). This has been estimated by the United Nations Population Fund⁴ to rise to 43.3 million people by 2050 (four times from now), which would account for roughly 15.8% of the estimated population. This growth in elderly population also poses a range of socio-economic challenges for individuals, families, and societies at large. Having spent years toiling in building the future of their country and their children, senior citizens find themselves on the margins of society. There is a need to develop special policies and programs for providing adequate support, particularly health care, for the elderly people. Special needs of the elderly people such as special entrance and exit for boarding on the public transport, railway, hospitals and shopping malls as well as pathways for their free movement may also be considered.

1.5 Integrating Gender in Urban Development

Females constitute a little less than half the population of urban areas in Pakistan and they need to be allowed a greater role in the development of towns and cities. For urbanization to be sustainable, governments, policy makers and the development community need to understand the gender impacts of rural-urban migration, international migration, slum growth and rapid urbanization. When urban design and services— including water, sanitation, transport and markets—address gender discrimination and promote equal opportunities, greater social and economic benefits can be achieved. Gender equality and sustainable urbanization are crucial not only for the survival of cities, but for the realization of global commitments and targets, including the Millennium Development Goals.

It is encouraging to note that gender disparity in education has nearly disappeared in urban areas and in some universities women are actually outnumbering their male counterparts. New avenues of employment are emerging based upon increasing education and skills among women. Improving equity is visible in terms of employed women in professions such as doctors, lawyers, accountants, engineers as well as blue-collar jobs such as the paramedics, teachers,

4. UNFPA and Help Age International 2012

police, sales, as well as in manufacturing (electronics, textiles), banking and financial services. Opportunities for employment are also increasing. Women are becoming more assertive and confident, and employer bias against hiring women in different occupations is also reducing considerably.

There have been also some impressive gains in the empowerment of women in recent years, with reserved representations in federal, provincial and local elected bodies. The Muslim Families Law Ordinance (1961) provides contractual protection to women in marriage. The Women's Protection Bill 2006 and Protection against Harassment of Women at Workplace Act 2010 is another important step in providing them some relief against institutional injustices. One dimension of political empowerment, representation of women in National and Provincial Assemblies, has been achieved well ahead of the 2015. This is a significant milestone in reaching a key Millennium Development Goal (MDG). Many other MDGs are embedded in gender equity, where extreme poverty is cut in half, child and maternal mortality is greatly reduced, and gender disparities in primary and secondary education are eliminated.

1.6 Challenges Experienced and Lessons Learnt

A major challenge in managing urbanization and urban demography facing Pakistan is the fast population growth of towns and cities. It has been estimated that by the year 2025, 50 million more people will be added to urban areas in Pakistan. While, the growing urbanization has given to cities an extremely important role to play in the economic and social development, it has also brought a great challenge for their development and management in an efficient manner based on the principles of promoting harmony, productivity, efficiency, creativity and equity.

The city size growth poses another big challenge to the planners as, while dealing increasingly with fast growing mega and metropolitan cities as well as urban clusters, they will also be faced with utilizing the full potential of those small and medium sized towns for national development, which are losing their vitality due to the out-migration of their elite and educated citizens as well as a lack of investment and infrastructure. The state of urbanization in Pakistan would thus need critical assessment both in terms of its costs and benefit.

In urban demography, current fertility and mortality decline is encouraging. It means reaching a natural population increase at replacement level by 2030, provided the rapid fertility decline achieved during the past few years is retained. The planners would then be able to concentrate more on the migration issue as far as urban growth is concerned. Further, falling fertility and mortality would also affect family composition and population structure, with changes in numbers of three and two generations living together.

No doubt the changing age structure of population with increasing working age population has offered a great opportunity but it is also a mammoth challenge. In order to earn the demographic dividend from it, ways and means have to be designed and applied for the imaginative utilization of this additional workforce. If not, an increasingly disillusioned younger unemployed cadre can be a time bomb, waiting to explode. The 'window' is projected to close after 2050. The fast increase in elderly population is another challenge, which needs tackling on priority. If not tackled, it will place an overwhelming burden on families already struggling to cope with the burden of attending to their aging relatives, while trying to simultaneously meet their children's needs.

1.7 Future Challenges and Issues for a New Urban Agenda

The Government of Pakistan has launched Vision 2025, a perspective plan, which has implications for managing urbanization as well as changing urban demography. The vision envisages a people-centered and inclusive approach to development whereby, the main driver of growth will be:

- Anchored in better functioning urban clusters
- Focus on creation of jobs/employment

- Bolstered by better skilled and more employable youth
- Led by the private sector
- Based on productivity improvement and export enhancement

The first driver will go a long way in managing urbanization and promoting sustainability of urban growth. The second driver on creation of job/ employment has recognized the changing urban demography and been devised to address youth employment and reap the benefit of demographic transition. The working age population would reach a peak in 2045 of 68 percent but getting the optimum advantage from this population is a challenge for the nation in providing to them the right types of skill and opportunities so that this human resource could contribute to the economic progress otherwise instead of providing a dividend may well prove to be a nightmare. Hence, the third driver - increasing the skill of youth is also the need of the time, in view of promoting their employment and to utilize human resources optimally. The current weak performance of public sector enterprises has led the Government to let the private sector take the lead in promoting growth. The fourth and fifth drivers are most likely to improve productivity and Open Avenue for future jobs.

Vision 2025 also commits to focus on massive investments in infrastructure, and social services particularly in least developed and backward areas, which most likely promote conducive environment for redistribution of growth along new urban clusters. Pakistan and China have already signed an agreement to develop Pak-China Economic Corridor. The proposed Corridor from Gwadar in Pakistan to Kashgar in China is passing through Gilgit-Baltistan (GB). The major development projects in transport and infrastructure sectors in the proposed Pak-China Economic Corridor and energy sector will be financed through substantial inflow of foreign investment and disbursements. These projects will generate both economic opportunities and avenues for employment.

The Provincial Governments in follow up to the Vision 2025 have also started work on their respective Growth Strategies. The Government of the Punjab has launched “Punjab Growth Strategy”, which aims to double the GDP growth by 2018, taking it from 3.5 percent to 6.5 – 7 percent per annum and to provide jobs to nearly 1 million.

The Government of Sindh has also developed Sindh Sustainable Development Strategy, which aims to harness the full potential of planned urbanization by adding connectivity and modern infrastructure to develop creative, smart and green cities. The Government of KP has launched its “Economic Growth Strategy”, which envisions stimulating growth in potential sectors of the economy through enhanced public investments and complementary sectoral policies that is most likely to enhance employment. The Government of Balochistan launched “Balochistan Development Vision and Strategy” to create an egalitarian, enlightened, educated and healthy society that ensures full employment for every able bodied adult citizen of Balochistan through sustainable exploitation and development of the natural resources of the province. The development strategy of AJK has been designed to focus on almost 2-folds increase in allocation for Productive Sectors to achieve self-reliance and to enhance capacity building and skill enhancement of service providers and communities for gainful employment.

1.7.1 Managing Rapid Urbanization

The visions developed by the Federal and Provincial Governments constitute a major first step towards outlining the strategy for managing rapid urbanization. However within the broad framework of these there is an urgent need to devise a strategic vision for a new urban agenda to guide this growth of cities on a sustainable path by taking measures such as development of medium and secondary towns to serve as filters to reduce migration to large cities. Several countries including Republic of Korea (Twenty years) and Japan (Ten years) have in place long-term national vision for urban growth and development, which are also reflected in their national spatial planning policy framework. The

visualization and implementation of such a strategic vision in Pakistan is essential to promote sustainable urban growth on the one hand and to fully utilize economic and social potential of town and cities by coordinating urbanization policy with overall economic and sectoral policies on the other. Since towns and cities are made up of interconnected systems through flow of goods and people, therefore the strategic vision and policies and plans based on it would need to treat cities individually as well as collectively as a system of cities, aiming at inclusive and holistic urban development. This is also essential to develop sound urban policies to address the variant nature of issues confronting large as well as small towns and cities and back them with legislation to ensure their implementation.

The draft of the National Human Settlement Policy study had concentrated on three sets of variables for determining the growth potential of individual settlements namely: (i) economic productivity as measured by the value added per capita locally; (ii) urban infrastructure cost per capita and (iii) average capital cost of creating a job. It also attempted to uncover relative costs and benefits of increase in the populations of various settlements and had identified places where it would be economical to absorb additional population. The Per Capita costs had also been estimated.

While developing visions for the system of cities, individual vision will also be needed particularly for mega and large cities. Government of Sindh has already prepared Development plans of Karachi and Hyderabad and urban development strategies of Sukkur and Larkana. Furthermore, it has plans to prepare urban development strategies of 19 district headquarters of Sindh by 2016. Karachi already has its Strategic Development Plan 2020, which would need to be revised soon. Similar strategic plans and visions will also be needed for at least the major cities of over a million population to provide them with strategic framework, and overall development direction within the scope of Pakistan's Urban Vision.

The vision also needs to address linkages between urban centers and rural areas to ensure that the two remain mutually reinforcing. If properly strengthened, the rural-urban dynamics under the new agenda can help ensure that investments in services, facilities, infrastructure and productive activities are located strategically to serve a wider area and larger population.

1.7.2 Managing Rural-Urban Linkages

Strengthening linkages between urban centers and rural areas is necessary to ensure that the two remain mutually reinforcing. Towns and cities provide markets for rural products and jobs to absorb surplus rural labor. If marketing systems are improved for agricultural products and inputs then production, employment and the scope for private enterprise in both rural areas and cities can be increased. Further, if properly strengthened, the rural-urban dynamics under the new agenda can help ensure that investments in services, facilities, infrastructure and productive activities are located strategically to serve a wider area and larger population. However, the rural urban migration also leads to shifting of rural skills to urban areas where those are not required. So people coming with wrong skills to urban areas, leave a gap of those skills in rural areas that affects both rural and urban development. It is, therefore, important to stress here that a holistic approach will need the involvement of all tiers of government to meet the implementation at the local levels of the policy interventions and oversight framed by the provincial and federal governments under the broad spectrum of spatial Planning. Creation of city districts was a good initiative in that direction under the local Government Ordinance of 2000 but these had to be disbanded with the dissolution of local government.

1.7.3 Addressing Urban Demographic Issues

According to the Constitution of Pakistan, the holding of a census is required after every 10 years. As the last census was held in 1998, so the government of Pakistan should expedite holding of population census so that updated data on demographic issues may become available to facilitate formulation of comprehensive actions for New Urban Agenda.

In order to cope with the changing age and sex composition of urban population, there is also a need to plan appropriately for growing youth and elderly cohort as well as gender. The statistics indicate the age-specific unemployment rate for the youth cohort (15 to 24 years) at 9.5 percent compared to overall unemployment rate of 5.5 percent in 2008-09. This is primarily because there is a mismatch between the skills with which the youth graduates and those demanded by the market. It is also apparent from the fact that Pakistan is ranked 92 out of 133 countries in university-industry linkages index, much lower than the ranks of China and India, which are 23 and 46, respectively. Due to the weak university-industry-professional nexus in Pakistan, the urban youth is not able to acquire the skills sought by employers. This skill mismatch is essential to remove so that the national enterprises and universities could compete effectively in the global markets.

In order to promote relevant skills in youth and promote their self-employment the federal government has launched initiatives like Prime minister's Qarz-e-Hasna scheme; Small business loans scheme; Youth training scheme; Provision of laptops for youth scheme; Reimbursement of fee of students scheme; and Youth skill development scheme. The Youth Challenge Fund has been established in KP with about Rs. 1.3 billion for providing credit to skilled youth for business development. Government of Sindh has introduced Benazir Bhutto Shaheed Youth Development Program which aims at facilitating people for employment to curtail poverty. Moreover, Technical and Vocational Training Authorities (TAVTA) have been established in all the provinces including Azad Jammu and Kashmir (AJK) and GB.

For increasing social security of the elderly population, the government has introduced a number of programs such as old age benefit program for people working in the service and industrial sectors under the labor laws. In addition an insurance scheme (HELP) has been introduced within Benazir Income Support Program, which provides an amount up to Rs 25,000 to cover health and for protecting livelihood of the poor families. However, there is a further need of investments in pension systems for elderly as important mechanisms to ensure economic independence and reduce poverty in increasing old age cohort. Currently, besides government retirees and well-to-do private firms, employees can hardly expect such support once they physically stop working. The Government needs to extend such system for all workers of large and small firms. The social benefits of schemes for aged persons are not enough and getting access to those has numerous difficulties. Further, medical costs are also on the increase; hence social benefits like medical coverage by employers for parents could help support the aged persons. Moreover, greater efforts are simultaneously needed to address the pending health and economic empowerment of the aging population. Making public healthcare facilities more proactive and elderly-friendly is one such mechanism; trying to devise health insurance schemes to cater to the elderly in particular is another one that requires closer Government attention.

The promotion of gender justice assumes equity of opportunity for all citizens – both women and men. For both, it also necessitates freedom - freedom from hunger, poverty, illiteracy, ill health, strife and lawlessness, religious and ethnic intolerance, feudalism, tribalism, racism, militarism, class and linguistic boundaries, deprivation and marginalization. A major initiative in this direction was the National Policy for Development and Empowerment of Women (NPDEW) enunciated in March 2002. However, besides its implementation in order to sustain the continuity of the process, an environment of persistent government interventions and social activism is required with proactive legislation, and practical operational programs for women to play an active role in the development of towns and cities for greater social and economic benefits.

Chapter 2: Land and Urban Planning: Issues and Challenges for a New Urban Agenda

2.1 Introduction

Land is the most crucial resource in development of a city and the way it is used directly affects its value. Property rights reflect the value that the market places on land by virtue of its productive potential. The value of land however, may be established through a formal process of urban and land use planning. Urban planning plays a vital role in pursuing socio-economic development through land use scheduling and provision of infrastructure, business and industry; providing adequate housing, utilities and service facilities as needed; and enhancing participation of urban dwellers in developing their city, protecting its environment and promoting its social milieu.

2.2 Ensuring Sustainable Urban Planning and Design

Pakistan developed a number of policies and plans as well as established institutional mechanisms for urban planning in the light of Agenda of Habitat II held at Istanbul.

2.2.1 Urban Policies and Plans:

The federal and provincial governments have formulated urban and related policies in Pakistan, whereas plans have been formulated by Federal, Provincial as well as local Governments. In terms of policies a major stride was initiated with the work on human settlement policy in late 1980s. However, progress has been faster in the aftermath of Habitat II when a number of other policies, and programmes related to urbanization were formulated. These policies, which targeted at development of human settlements; land and housing development; provision of infrastructure and utilities and protection and enhancement of urban environment are listed at Annex-I. These policies provide overarching guidelines for preparation of province/ region specific policies and plans. Salient features of many of these policies have been incorporated into provincial conservation strategies and plans.

Current trends in urban development remain uncontrolled, unguided & unsustainable. Fragmentation and overlapping of responsibilities at all levels makes the urban challenges more complex. In terms of master plans, the Federal Capital Islamabad has its master plan since 1960. City Profiles/ Master plans of 14 districts of Punjab i.e. Lahore, Okara, Chinyot, Qasur, Sheikhupura, Faisalabad, Sialkot, Jhang, Gujarat, Sargodha, Sahiwal, Multan, Bahawalpur, and Rahim Yar Khan have been prepared. In Sindh Master/ Development plans of four districts including Karachi, Hyderabad, Sukkur and Larkana have been prepared and plans of the remaining districts would be prepared in next two years. Land Use Plan of seven big cities of KP including Peshawar, Swat, Abbottabad, Kohat, Bannu, D.I. Khan and Chitral are in progress as part of district land use plans. Balochistan government has prepared master plans of all six divisional headquarters i.e. Quetta, Khuzdar, Dera Allah Yar, Sibi, Loralai and Turbat. Master plans of some other cities like Gwadar are also being finalized. Master Plans of Gilgit, Chilas and Gahkuch in Gilgit-Baltistan province have been prepared, while work on plan of Skardu is ongoing. In predominantly rural Federally Administered Tribal Area (FATA), the government has planned to establish some urban centers through promoting economic opportunities and development of basic urban services and transport facilities including roads, bridges etc. A major initiative along this line is "Tribal Areas Rural to Urban Centers Conversion Initiative" (TARUCCI) is being implemented for the purpose.

Overall these policies and planning have contributed to (i) improving housing and Slums and squatter settlements (ii) provision of community utilities such as water supply, sewerage and sanitation, public transport etc. (iii) institution building for design and planning of cities and (iv) implementation of special projects, particularly for tribal areas, Azad Kashmir (rebuilding of earthquake affected cities). Besides government, some NGOs have also made laudable efforts for urban improvements. Most significant among these was Orangi Pilot Project for provision of sanitation through Self-help

has been included in the list of UN-Habitat's best practices. Known as one of the most successful NGO sanitation provision projects, this community-owned, community-managed infrastructure upgrading program has helped over one million people to improve sanitation since its inception in 1980 when the primary means of sewage disposal were bucket-latrines or soak-pits, and open sewers. Its strategy is to minimize external support and help households achieve their own local development needs.

Considering the present and future challenges as well as on-going initiatives, urban planning & design must be participatory, based on holistic approach, efficient use of resources in line with environmental concerns and future needs of the cities

2.3 Improving Urban Land Management and Addressing Urban Sprawl

Urban land management in terms of maintenance of records of land rights in the entire country is responsibility of Board of Revenue. Other agencies responsible for additional aspects of land records include:

- Property Tax Record - Department of Excise and Taxation
- Plot ownership and development record within their own jurisdiction – City Development Authorities
- Records of issuance of certificates to beneficiaries of regularized Slums and squatter settlements - Directorate General of Katchi Abadis

In terms of legislation, Transfer of Property Act (1882) governs most transfers of land and properties in urban areas. Land transfers between private individuals are complex due to poor and disputed titles, inheritance or benami (unnamed) holdings and out of date record of rights. Stamp duties, high land transfer fee, registration fee and collateral wealth tax liabilities are major factors in discouraging the proper recording of land transactions and understatement of actual sale price of the land. Efficiency of urban land markets needs to be improved through appropriate and affordable land use, building regulations, improving procedures for land transfer, measures to stop speculation and improving information to public on land market procedures and indicators.

Moreover land use regulations and building codes are also out of date. Realizing the problem, government is digitizing land records; revising land use and building codes and taking other necessary measures to improve urban land management. In order to digitize land records, the Government with assistance of World Bank has launched a major initiative under Land Administration and Revenue Management Information System (LARMIS) to streamline and modernize land record system in Punjab, Sindh and KP, which is serving as a milestone in informed decision-making, land management and land use planning.

Process of plot development for housing in Pakistan was initially undertaken primarily through city development authorities, which controlled public land in urban areas and developed these into plots for selling to public. Since this mechanism fell short of meeting the needs of growing urban population, therefore the authorities started allowing private entrepreneurs to develop land, a mechanism that contributed to urban sprawl and meeting the needs of upper class only. Further, the process set into motion speculation – making land a commodity providing security against inflation and future uncertainties. It favored the rich with no incentive to build homes on vacant plots and encouraged them to hold land for speculative purposes. Inflated price of land created many other problems such as increased cost of public projects out of proportion and further reduced access of appropriate residential land impossible to low-income population. As a result low-income people resorted to developing informal housing or Squatter Settlements.

2.3.1 Urban Sprawl

Cities, particularly the large ones, have seen enormous expansion in the form of slums and informal settlements causing urban sprawl. It has occurred due to change of land use in the periphery of the cities' hinterland, surrounding villages and settlements. With the passage of time it becomes part of the city. Most large and intermediate cities in Pakistan (with the exception of Karachi) seem to be undergoing horizontal growth, encroaching into rural areas or pockets of fertile agricultural land that lies within the urban fringe. Its major impact, however, has been adverse footprint on fertile agricultural land. Residential area has increased by more than two and a half times during the last two decades primarily at the expense of class one farm land. Another similar study in Lahore determined that during last 40 years 114,630 ha. of arable land was converted to urban use and 18 percent of this converted land fell to 252 sprawling housing schemes.

Gravity and impact of urban sprawl on agricultural land is evident from the fact that in some cases agricultural lands, even with crops still cultivated on them, have been purchased at low rates by speculators from farmers who have their lands encircling core city and could not make ends meet because of low crop yield and meager financial returns. Estimates show that expansion of human settlements, primarily urban sprawl, encroached upon 77,000 hectares of land, most of which was prime agricultural land. This is quite serious in view of the fact that even in 2008, 51% of Pakistan's population (72 million people) was food insecure. An important consequence of sprawling of built environment over arable land is diminishing urban and peri-urban agriculture, which was the main source of fresh supplies of vegetables and dairy products to the city dwellers.

2.4 Enhancing Urban and Peri-Urban Food Production

Pakistan is already food deficient and it cannot afford to lose more fertile agricultural land particularly on the urban fringe, which could provide high value added products through truck and dairy farming. Currently, agriculture is an unorganized activity in urban areas of Pakistan or their hinterland. There is a need to develop it along commercial lines and increase the yield through organized truck, dairy or livestock farming. The current low productivity and yield, even compared with progressive farms in Pakistan is a major hindrance in making urban or peri-urban agriculture compete with real estate development. The Economic Growth Framework for Pakistan estimates that overall unachieved agricultural potential in Pakistan is from 67 to 84 percent. In urban areas it is about 60 percent. The Framework attributes "factors such as traditional farming practices, inefficient irrigation methods, high input costs, lack of bio-safety regulations and insufficient institutional credit to poor farmers" for low yields. It argues, "Given the substantial yield gaps, there are immediate opportunities to increase production through improved soil and water management, use of quality certified seeds, balanced use of fertilizers and proper plant protection measures". For urban areas an important component of the strategy to enhance productivity in agriculture will be to change the pattern of production to higher value-added activities such as vegetable and fruit farming, animal husbandry and dairy farming.

2.5 Addressing Urban Mobility Challenges

Most of the cities in Pakistan were designed for a limited population. Due to rapid increase in their population, it was not possible for the city managers to provide infrastructure and services including transport facilities commensurate with this growth creating the problems of urban mobility. The sustained increase in urbanization and rapid motorization has created traffic gridlock across almost all cities of Pakistan. The increase in travel by private automobiles and by motorized two-wheelers is contributing the most to traffic congestion. New infrastructure has been provided to address this challenge, largely in the form of road widening, grade separation of opposing traffic, and building bypasses. Nonetheless, the rise in demand for motorized commuting has outpaced the supply of transport infrastructure. Meanwhile, the increase in demand for efficient, reliable, and safe public transit largely remained unmet. Until recently neither the private nor the public sector has responded adequately to meet the growing demand for mobility via public transit. As a result, the lack of adequate transit supply further accelerated the rate of motorization that contributed to

even more traffic congestion. The government has however, started to launch mass transit system such as Metro-bus service, development of ring roads to avoid heavy vehicles entering the downtown, Circular Railway in Karachi is also being revitalized and integrated rapid transport system are also being designed.

2.6 Improving Technical Capacity to Plan and Manage Cities

In order to improve technical capacity for planning and managing cities, Pakistan has developed sizable institutional structure (both public and private). At the Federal level, Physical Planning and Housing Section looks after the urban planning matters in the Planning Commission, while the Ministry of Environment and Urban Affairs served as the federal focal point for urban planning and management at the time of Habitat II, which has now been renamed as the Ministry of Climate Change. The Physical Planning and Housing Departments are the provincial counterparts for urban and physical planning. Until 2010, the federal institutions were providing funding for many provincial projects in addition to the funding of other provincial projects through their own Annual Development Programs (ADPs). There were also some mega projects in various provinces, these were funded through federal Public Sector Development Program (PSDP).

In addition to strengthen technical capacity of the provincial governments to better plan and manage the city, Urban Units have been established in all the four provinces under Provincial Planning and Development Departments. These Units have been manned with technical experts in urban planning and related disciplines. In Punjab, the Urban Unit has been converted into a government owned company to reduce financial burden on the government and allowing them to generate their own financial assets. At the city or local level, a number of institutions such as municipalities/municipal corporations, town management authorities, Cantonment Boards are functioning. In addition Development Authorities have been instituted in several metropolitan cities to undertake major public works, water sewerage and transport and to develop land for urban expansion. In addition in some cases sectoral agencies are also looking after such matters as water and sanitation, land management etc. Management by different agencies sometimes has also resulted in duplication and overlapping of functions. In Karachi, for instance, more than 17 different agencies are involved in land titling and registration (24 sub-registrars) with several possibly applicable legal regimes. At the scale of township private developers like Bahria Town and Defence Housing Authority are also engaged in urban planning. Illustration about historical places and cities in respect of their planning significance is provided at Annex-II.

2.7 Challenges Experienced and Lessons Learnt in Land and Urban Planning

Past experience of land management and urban planning offer a number of challenges and lessons. Some of these include:

- Non-implementation of policies, master plans and legal frameworks
- Lack of technical and financial capacity of local planning institutions
- Unfriendly formal residential land and plot development for poor encouraging them to go for informal housing and squatter settlements
- Growing urban sprawl
- Weak urban land management in terms of disorganized land records and inefficient transactions
- Poorly functioning land market
- Lack of popularity of indigenous and environmentally friendly urban design
- Outdated legislation for land and urban planning
- Low performance of urban management and service delivery institutions
- Overlapping institutional mandates. Lack of awareness, understanding and capacity regarding DRR in the organizations working on urbanization
- Non resilient Structural standards to absorb the impacts of hazards and risks.

In most cases Master Plans and Development Plans were prepared but not followed due to lack of legal cover and adequate legal framework for planning. As a result, relentless expansion of cities continued along a combination of planned and unplanned paths, creating traffic congestion, incompatible uses, environmental problems, illegal encroachments and conversion of land use.

The biggest challenge in urban planning and management in Pakistan is implementation. There has been no dearth of policies and programs and plans, yet limited results have been achieved either because of non-implementation or partial implementation. Projects have been implemented, but not replicated. Programs have been successful, even as objectives have failed to materialize. There have been disconnects between plans and their implementation, follow up, and feedback for lessons learned. There is no urban planning, only 'project-based' development". Integrated Master Plan for Lahore 2021 has acknowledged that there is still no control on peripheral growth and land subdivisions that consume prime agricultural land.

Lack of capacity in terms of both fiscal resources and technical expertise is another major challenge, which has also hampered implementation of plans. Cash-strapped city governments have been looking at provincial and federal funding for implementation funds and have neither attempted to mobilize their own resources nor attract private sector investment. Hence, urban development was restrained to projects that received funding (See also Chapter 5). Hence, a 'project-based', ad-hoc development has become a general norm instead of comprehensive urban planning. Further, urban planning institutions lack planners and manager who are familiar with modern tools and technologies that can be applied to city management and planning (See also Chapter 4). As with many other post-colonial countries, the tools of Pakistan's planning are rooted in mental models of the mid-20th century enacted in and for a very different situation with little regard for local cultures and traditions. There is also dearth of data and mapping and urban planning procedures and practices are outdated and cumbersome.

The challenge in planning for housing or plot development lies in reducing the cost. Whether developed through city authorities or private developers, the inflating residential land value has outstripped the increase in household incomes and prevailing situation is the same in both old residential areas and in new housing developments. For example in Lahore, Multan, Faisalabad and Rawalpindi, 3 and 5 marla (about 20 square meters) land plots (targeted toward low and moderate income households) in new development areas cost between Rs. 0.3 to Rs 0.72 million (2.3-5 times income) and Rs. 0.5 to Rs. 1.2 million (3.8-9 times income) respectively.

Inefficient land management and supply of affordable housing to low income people as well as informal actors like land mafia, support of local political persons, and need for service population results in development of informal housing or Squatter Settlements. Unless plots are developed and provided formally at affordable rates on a large scale, the informal development of squatter settlements will continue unabated.

The huge challenge of urban sprawl is as serious as the development of Slums and squatter settlements. It is resulting from both inability and lack of will to regulate horizontal growth at the fringe of urban centers mostly by subdivision of agricultural land. There is no 'condominium law' that sets out the rights and obligations of tenants or residents of apartment buildings, town houses or high-rises. Often, because of negligence on the part of building owners or landlords, apartment buildings appear unattractive for the purposes of family living and, as a result, a bungalow in sprawling private housing schemes are preferred even for commercial activity. City managers often have become comfortable with the sight of businesses opening in residential areas, which usually results in additional problems such as traffic congestion.

Urban land management constitutes a mammoth challenge in Pakistan. Data and information on land records is not managed along scientific lines, creating severe problems. Further, there are flaws and weaknesses in existing land management, land use regulations, and planning standards. Major challenges in land administration and management are fake land titles; inefficient land transactions and poorly functioning land market. Poorly functioning land market is promoting illegal land transfer, land speculation, creation of slums and squatter settlements, inefficient service provision and inefficient urban development pattern including urban sprawl that increases the cost of doing business in the city.

The existing, out-dated planning legislation, bye-laws, zoning regulations constitute no mean challenge. In their present form, they impede an efficient and economical use of land. These laws and regulations are mostly anti-street, anti-pedestrian, anti-mixed land use, anti-high densities and anti-public space. Their rigidity “has seriously affected the quality of architecture and urban design and has suppressed initiatives for design creativity and excellence.” Additionally, the inflexibility of regulations makes the process of securing building permissions/no objection certificate tedious, expensive and time consuming. Non-implementation of many city plans was also due to lack of legal cover.

Overlapping institutional mandates is another serious challenge emanating from generally unclear division of responsibilities in terms of plan-making, and roles and responsibilities for preparing and approving planning schemes are vaguely defined. For example although Punjab Housing and Town Planning Agency (PHATA) is tasked to establish a comprehensive system of urban planning at provincial and local government levels, in any particular city of the Punjab, different laws apply within the jurisdiction of different agencies like Cantonment Boards, Development Authorities, Defence Authority, Pakistan Railway, that plan independently of the City Government, and follow their own laws, rules and bylaws.

Urban planning institutions are unable to cope with the growing urbanization challenges. An example of this is ineffective planning for urban infrastructure services. This results in poor delivery of basic urban services and utilities. There is a challenge to increase the planning and designing capacity of urban institutions.

2.8 Future Challenges and Issues Under a New Urban Agenda

Under the new development agenda, Vision 2025, the Government of Pakistan has resolve to address the existing challenges of the urban centers, particularly large ones, while planning for a future. National Urban Policy and Spatial plan needs to be formulated to provide basic guidelines to streamline process of urbanization to make urban centers engines of economic growth. The Government has also committed to harness the full potential of planned urbanization by adding connectivity and modern infrastructure to develop creative, smart and green cities. While guidance will continue from the federal and provincial governments, the eighteenth amendment in the constitution has given local/city governments' primary responsibility to undertake urban development. Therefore, greater administrative and financial autonomy will need to be given to the local/city governments in the on-going restructuring process. This would also bring in new challenges to the urban scene in the future. It would mean integrated planning and improving coordination between city based agencies, strengthening both financial and technical capacity of local/city governments, simplifying city planning procedures promoting participatory planning, improving city information management system, and introducing innovation and creativity for land management as well as checking growth of squatter settlements.

The new urban agenda also calls for facilitating development through simplified planning institutions and procedures. It is important to streamline the planning application process to reinforce transparency and reduce regulatory burden on development of industry and other economic activities. The need of the day is to promote a culture of planning that has a positive assumption about facilitating development. The recovery and rehabilitation efforts should be guided by the Build Back Better principle with a focus on sustainable efforts to reduce vulnerabilities and increase capacity against future disasters.

Data and information are crucial for urban planning, implementation and monitoring. Digitization of land records is a good step in this direction and there is a need to carry this program further for digitization of spatial plans and superimposing the same on the digitized revenue maps. Land inventory is also indispensable (taking stock of what is vacant or developed—if vacant, is the land developable or constrained, if constrained, is it relatively or absolutely, if developed, is it totally unavailable, partially unavailable or re-developable) for improving land management.

Further, urban land has two dimensions—horizontal and vertical—and the planning framework must therefore address both these dimensions as well as enforcement action for effective development and management particularly to check rapidly growing urban sprawl. It is possible to contain urban sprawl through developing and implementing appropriate policies. These policies would need to be based on the rationale of cause – effect relationships. Since the cause of conversion of farmland is market-driven therefore, the solution to prevent the process has to be market-driven with a scientific foundation. It means that agriculture has to be made economically profitable to compete in the urban land market and counter the forces that switch good farmland to other uses.

Commercial activity of all types are increasing in the cities and new lobbies representing transporters, market operators and the real estate have emerged as powerful players in determining the form the cities are taking in Pakistan particularly in terms of urban sprawl. These lobbies and other stakeholders need to be involved in decision-making for owning development plans and the programs and projects they undertake need to be guided by professional advice.

There is a need not only to upgrade urban planning expertise in towns as well as cities, but also to promote balanced and linked development between urban areas and their rural hinterland to serve as nucleuses of growth to reduce exodus to large urban centers. Smart City Strategic plan for capital territory and provincial capitals may be prepared on the pattern of other smart cities of the world and state of the art technology solutions proposed for sustainability. There is a need for training and capacity building of urban planners, engineers, architects, land managers and other professionals engaged in the development planning.

Some innovative and creative experiment also needs replication particularly those, which provide houses for low income. For example, Hyderabad Development Authority implemented a low-income housing project entitled 'Khuda ki Basti' (KKB) as the part of large Gulshan e Shahbaz Scheme. The main scheme was conventional with inappropriately serviced plots provided with large public outlays without accountability. Some of these plots are still lying vacant while in the KKB area low income people progressively constructed their houses on self-help basis and provided basic utilities through community participation on incremental basis.

Chapter 3: Environment and Urbanization: Issues and Challenges for a New Urban Agenda

3.1 Introduction

Pakistan faces serious environmental problems in the urban areas. Environmental degradation is further accelerated with the climate change impacts which are leading to increase frequency and occurrence of natural disasters. These environmental problems create an immediate threat to health as well as human welfare and lead to poverty. These could easily jeopardize continuous economic growth and sustainable development in Pakistan.

In order to improve economic performance and promote sustainable development the cities in Pakistan, apart from increasing economic growth, would also need to enhance the quality of life in cities and improve the urban environment. Cognizant of these challenges the Government of Pakistan has taken policy and institutional initiatives towards trying to effectively manage these issues. Major initiatives include development of comprehensive legislation on environment, environmental quality standards, regulations, guidelines, established water and air quality monitoring stations and environmental laboratories throughout Pakistan, on-line pollution measurement and reporting tool, and took on-the-ground initiatives such as mass transit system; adaptation and mitigation of climate change and disaster risk reduction.

3.2 Addressing Climate Change

Climate change is an issue that falls under common but differentiated responsibilities because its victims are not necessarily the ones who are responsible for triggering the problem by excessive greenhouse emissions since industrial revolution. The irony is that Pakistan is hard hit by climate change, even though it contributes very little to the global greenhouse gas (GHG) emission - ranking 135th among countries of the world in terms of per capita GHG emissions. Global Climate Risk Index (GCRI) of German watch 2012 ranked Pakistan - eighth among over 180 nations of the world. Earlier, in 2010, GCRI had ranked it first.

Government of Pakistan being a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, constituted a task force on Climate change to formulate policy measures. National Climate Change Policy; Framework for implementation of climate change policy as well as CDM National Operational Strategy have been prepared to address climate change vulnerabilities. Pakistan granted Host Country Approval to 71 CDM projects, out of which 38 projects have been registered with CDM Executive Board. National Environmental Action Plan and "One UN Joint Programme on Environment" were implemented and Nationally Appropriate Mitigation Action (NAMA) for waste to energy project has been prepared. Pakistan's Vision 2025 includes addressing climate change as one of the priority areas. Khyber Pakhtunkhwa is in the process of formulation of Provincial Policy on Climate Change. The AJK has established Climate Change Section under Planning and Development Department.

Pakistan is presently a small GHG emitter (0.8 percent of global GHG) but is ready to contribute to the global GHG mitigation efforts without compromising on its basic minimum energy and food needs consistent with its socio-economic developmental requirements. It is estimated that additional investment costs of mitigation range between \$8 and \$17 billion by 2050 will be required to reduce emissions by 40 percent from the business as usual (BAU) scenario by employing cleaner technologies. While adaptation costs will be too high, ranging from US\$7 to US\$14 billion per year⁵. Developing countries like Pakistan do not have the resources to meet such huge adaptation costs and need the help of developed countries, to adapt to climate change.

5. GOP; 2012; National Economic, Environment and Development Study (NEEDS) Study

3.3 Disaster Risk Reduction

Natural disasters like earthquake, urban flooding, urban heat island phenomenon, smog, droughts, hail and dust storms, landslides & cyclones are the main disasters that had serious consequences for the economy of Pakistan. Due to increased incidence of disaster, the government created National Disaster Management Authority (NDMA) in 2006. It manages and coordinates the implementation of the National Disaster Management Ordinance 2006, replaced by NDM Act 2010. The NDMA formulated National Disaster Risk Reduction Policy in 2013 and National Disaster Management Plan up to 2022.

The earthquake of 2005 mostly affected and caused maximum damage in urban areas of AJK and KP province. About 73,338 people died, 128,304 severely injured, 3.5 Million rendered homeless, over 600,152 houses destroyed⁶. Total estimated losses in the form of housing, transport, communication, forests and other economic assets in the private and public sectors were US\$1.25 billion. Earthquake Rehabilitation and Reconstruction Authority at the national level was established to respond to earthquake situation in Pakistan and coordinate the national, provincial and local level efforts. In AJK State Earthquake Rehabilitation and Reconstruction Authority (SERRA) coordinated efforts of government and other donor agencies in damage assessment and provision of financial and technical assistance in reconstructing. The NDMA has prepared Contingency plans to address disasters for (i) smog, snowfall and avalanches in winter; (ii) cyclones (in the coastal belt of Sindh); (iii) industrial and chemical accidents and (iv) monsoon. The Contingency plan for monsoon as reviewed and updated annually. The provincial/State/GB/FATA Disaster Management Authorities are also developing some contingency plans and conducting vulnerability assessment studies against various disasters For ensuring effective disaster risk reduction, capacity of the concerned organizations and affected communities including vulnerable groups like women, children, persons with disabilities and elderly; should be made part of all policies and plans,

3.4 Reducing Traffic Congestion

Transport is the major activity contributing to atmospheric pollution. There are about 10.6 million registered vehicles in Pakistan⁷. The government of Pakistan has taken a number of steps to reduce traffic congestion in urban areas and control emissions. These included promotion of mass transit system, voluntary inspection and tune-up of vehicles; phasing out of two stroke engines, and use of cleaner fuel. The Government of Punjab has introduced Metro-Bus service in Lahore. Such projects are also under construction in Rawalpindi and Islamabad districts. Metro-train project in Lahore will also be launched in near future to reinforce -mass-transit system.

Master Plans for Mass Transit system in other provincial capitals are also under progress. In addition projects such as; Fuel Efficiency in Road Transport Sector project has significantly contributed in reducing gases like carbon monoxide. Thousands of vehicles were tuned up at several stations. Hundreds of computerized stations are working in Pakistan because of the efforts of the projects. This handles emissions and safety issues as well, and is in operation for all commercial and other types of vehicles.

The Environmental Protection Agencies (EPAs) and the provincial traffic police are implementing a provincial motor vehicle ordinance that allows them to apprehend private and public transport vehicles emitting visible smoke, vapor, grit, sparks, ashes, cinders, or oily substances and fine them for such violation. Further, to consolidate on-going and proposed initiatives for the management of urban air quality, Ministry of Climate Change has developed the Pakistan Clean Air Program (PCAP). The salient features of the Programme are at Annex-III. Pakistan has also developed National Environmental Quality Standards (NEQS) for Motor Vehicle Exhaust and has enforced engine specifications, Euro II and Euro III for petrol and diesel driven vehicles.

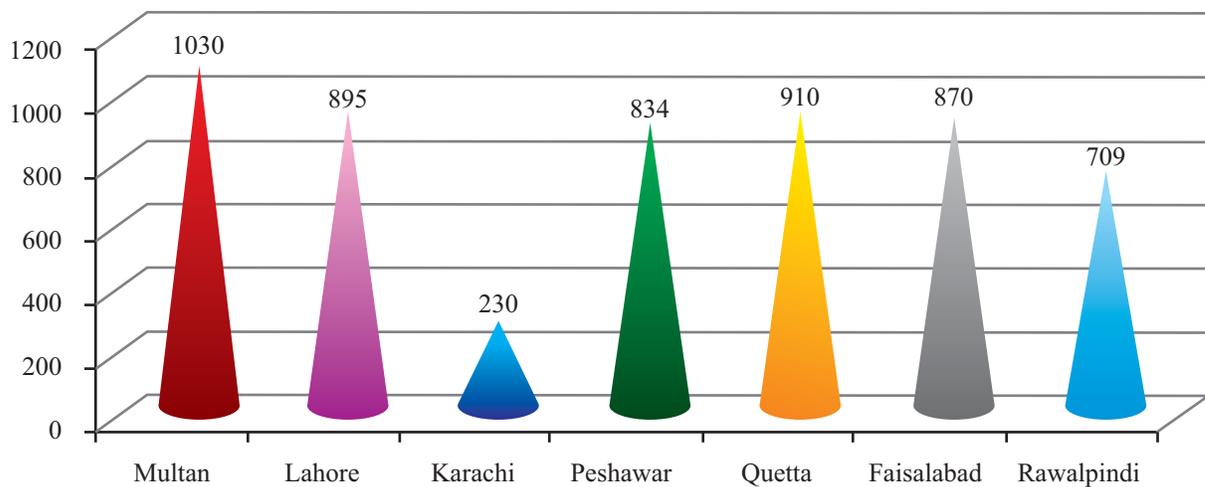
6. www. http://ndma.gov.pk/Documents/flood_2010/flood_comparison.pdf

7. World Bank; 2014, Cleaning Pakistan's Air; Policy Options to Address the Cost of Outdoor Air Pollution. (Compiled by Ernesto Sánchez-Triana, Santiago Enriquez, Javaid Afzal, Akiko Nakagawa, and Asif Shuja Khan) <https://openknowledge.worldbank.org/bitstream/handle/10986/18887/890650PUB0Clea00Box385269B00PUBLIC0.pdf?sequence=1>

3.5 Air Pollution

Sources of Air Pollution in Pakistan include Vehicles, Natural Dust, Trans-boundary Pollution, Garbage, Burning, Domestic Burning, etc.

Fig 3.1: Coarse Suspended Particulate Matters in Air PM10 (Particulates Size greater than 10 micron), Safe Level: 120 microgram per cubic meter WHO Standards⁸



“Pakistan's urban air pollution is among the most severe in the world and it engenders significant damage to human health and the economy”. However, PM-10 level in Karachi is significantly low as compared to other major cities because of the land and sea breeze effect which flushes out the air pollution concentration. More than 22,600 adult deaths in 2005 were caused in some way by urban air pollution. Outdoor air pollution alone causes more than 80,000 hospital admissions per year; nearly 8,000 cases of chronic bronchitis, and almost 5 million cases of lower respiratory cases in children under the age of five.

In urban Pakistan, as elsewhere, the major sources of fine particulate pollution are vehicles, combustion of fossil fuels in factories, and power plants. The problem is aggravated by an aging fleet of vehicles in poor mechanical condition and low levels of fuel efficiency. Over the past decade the number of diesel trucks in major cities has increased dramatically, creating an additional source of pollution.

Airborne lead is one of the most harmful particulate pollutants. Young children are especially vulnerable since lead poisoning causes learning disabilities, hearing loss and behavioral abnormalities. In adults lead absorption is responsible for hypertension, blood pressure problems and heart disease. To address the air pollution problem, National Clean Fuel Programme is being implemented at federal level. By 2001-2002 all major refineries moved to production of lead free gasoline. However the health impacts will persist for several decades as lead deposits accumulated in soils and water tend to dissipate slowly over time. Ministry of Climate Change along with provincial EPAs will ensure compliance of Pak-II Emission Standards for new vehicles. Regular vehicle inspection/emission testing is done through Motor Vehicle Examination and Emission Testing Centers (MVE & ETC) established throughout Pakistan, in collaboration with Motor Vehicle Examiner, Motor Vehicle Registration and Environmental Protection Agencies. Pakistan has also developed NEQS for Ambient Air. Other environmental concerns and achievements are at Annex-IV.

8. Qadir, Dr. Noman Fazal; Air Quality in Urban areas in Pakistan Vs Transport Planning: Issues and Management tools; Document 16B, page 1 http://cleanairinitiative.org/portal/system/files/37336_tp_16B_qadir.pdf

9. World Bank; 2014, Cleaning Pakistan's Air; Policy Options to Address the Cost of Outdoor Air Pollution. (Compiled by Ernesto Sánchez-Triana, Santiago Enriquez, Javaid Afzal, Akiko Nakagawa, and Asif Shuja Khan) <https://openknowledge.worldbank.org/bitstream/handle/10986/18887/890650PUB0Clea00Box385269B00PUBLIC0.pdf?sequence=1>

3.6 Challenges Experienced and Lessons Learnt in These Areas

Data analysis since 1961 showed that frequency of highest daily temperature & heaviest rainfall events have increased in the passing decades. As a result, extreme weather events are hitting Pakistan more frequently and causing huge damage to life, property and ecosystem, particularly water, food and energy security of Pakistan. The extreme weather events due to climate change are triggering migration of surplus farm labour from rural to urban areas. These people live in the slums that have no access to basic amenities.

Inadequate public transport system and introduction of car loan system by the commercial banks is leading to rise in number of private vehicles in major cities. This phenomenon is creating serious traffic congestion and deterioration of environment due to air pollution in the cities.

Urban air pollution is also a mammoth challenge in the major cities of Pakistan including Islamabad, Lahore, Karachi, Peshawar and Quetta. It shows high concentration of suspended particulate matter (SPM 2.5 microns), which have reached levels that are 2 - 3.5 times higher than the NEQS.

The environmental cost of indoor air pollution is estimated to be Rs. 67 billion and urban air pollution (particulate matter) adds another Rs. 65 billion. The estimated cost of lead exposure is about Rs. 45 billion. The magnitude of these costs indicates that environmental decay has become a serious development concern. Polluted air is estimated to cause about 22,000 pre-mature deaths every year and ever-increasing incidents of respiratory diseases. Smog, haze, brown clouds and dense fog, adversely impact the economy and individual health.

Human health and safety has been threatened by both ambient and indoor air pollution. Health effects of indoor pollutants include asthma, respiratory diseases, common cold, influenza, or even upset of stomachs. Inappropriate land use policies, mixed local and through traffic, road encroachments and use of poor quality fuel have aggravated congestion, delays and air pollution. Air pollution is endemic because of a surge in automobiles, insufficient emission standards, and absence of effective enforcement.

3.7 Future Challenges and Issues in Environment and Urbanization that could be Addressed by a New Urban Agenda

The new urban agenda identified by the federal and provincial governments and other stakeholders are as follows:

- **Introduction of Environment Friendly Technologies** like Inverted wells for groundwater recharge, recycling of waste water for water conservation, Refuse derived Fuel, waste to energy, energy audits and efficiency improvement, promotion of renewable energy, water efficiency improvement techniques like drip and sprinklers, rainwater harvesting at household and multistory building level, urban forestry (Avenue plantation in parks and open spaces) in urban areas, bio-degradable plastic bags and other measures related to adaptation and mitigation of climate change to reduce carbon footprint, make the cities climate resilient and withstand disasters.
- **Traffic Management Measures** like Mass transit system, ring roads, signal free roads, bikeways, and pedestrian walk ways etc.
- **Promotion of Air, Water and Land Pollution Abatement Techniques:** end of the pipe and pre-treatment at the factory level, phasing out of 2-stroke engines and introduction of Euro-II and Euro-III petrol and diesel engine specifications, enforcement of approved Environmental Quality Standards (NEQS), rules, guidelines, IEE and EIA regulations; Development of new NEQS for pollution abatement, enforcement of rules of Motor vehicle examination for road worthiness certification. All new cars of Suzuki, Toyota and Honda have Euro-II or Euro-III petrol and diesel compliant engines.
- **Containing Mushroom Growth of Peri-Urban and Informal Urban Settlements taking Place at Banks and Beds**

Rivers and Natural Nallahs, such as Nallah Lai in Rawalpindi, River Lyari in Karachi, River Gilgit and Hunza in GB and Katcha areas of Indus river; and steep mountainous slopes by enforcement of town planning regulations and building bye laws

- **Improving Urban Environmental Governance** by strengthening current institutional mechanisms and mainstreaming environmental concerns in urban policies and planning at all levels. It also calls for providing support to the judiciary, Environmental Protection Tribunals as well as civil society organizations in enforcing environmental legislation. Following the Supreme Court's initiative to hear environment related cases, all high courts and the Supreme Court of Azad Jammu and Kashmir have constituted 'green' benches. The enactment of “Green benches” would be strengthened for streamlining implementation of existing environmental rules and regulations.
- **Strengthening Capacity of Urban Policy, Planning and Service Delivery Institutions** through knowledge management, technology transfer, education, training, and raising awareness. While mentioning the key institutional constraints, even the World Bank (2006) has recognized that opportunities exist for the purpose. These opportunities need to be utilized effectively.
- Adopt **Sustainable Development Plans and Regulations** that make environmental conservation and rehabilitation integral to all development initiatives.
- **Conservation of Natural Resources & DRR:** Manage the use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage. The DRR Program up to 2030 would be prepared focusing on strengthening disaster risk governance to manage disaster risk; investing in disaster risk reduction for resilience; enhancing disaster preparedness for effective response and to “Build Back Better in recovery, rehabilitation and reconstruction.
- **Reduce, Reuse, and Recycle the Materials used in Production and Consumption Systems**, and ensure that residual waste can be assimilated by ecological systems.
- **Strengthen Local Communities** and enabling them to care for their environments.

The implementation of new urban agenda will enable Pakistan to effectively address emerging urban environmental challenges; climate change and disaster risk reduction by improving resilience as well as reducing the cost of environmental degradation.

Chapter 4: Urban Governance and Legislation: Issues and Challenges for a New Urban Agenda

4.1 Introduction

Urban governance plays an important role in reaping the benefits from opportunities offered by urban growth and development. It is for the same reason that after the Habitat II Pakistan started a comprehensive decentralization program to improve urban governance under a “Devolution of Power” Plan and implemented it with a series of Local Government (LG) elections that ended by August 2001. The process of devolution gained additional momentum with the incorporation of the 18th Constitutional Amendment in 2010 which gave total responsibilities to the provinces of even those subjects, which were previously managed jointly, through federal and provincial concurrent responsibilities. The 18th amendment has made it mandatory that each province shall by law establish a LG system and devolved political, administrative, and financial responsibility and authority to the elected representatives of the local Governments.

The respective provincial governments have enacted LGs Act 2013. Government of Balochistan has completed the process of election of LG in January 2015. The other provinces are planning to hold these elections in 2015. Federal and provincial government have enacted, promulgated and up-dated several laws, rules and regulations pertaining to LG, city and town planning, land Acquisition and use, zoning, building, urban service delivery, environmental protection etc. since Habitat II in 1996.

4.2 Improving Urban Legislation

Rapid economic, social and political changes taking place in urban milieu demand audit, review and retooling of governance and planning instruments, including legislation and regulations to ensure effective functioning of towns and cities. The main federal legislation introduced included Environmental Protection Act 1997; Land Disposal Act 1998, Pakistan Local Government Ordinance 2001 and Illegal Dispossession Act, 2005. The main federal and provincial legislation since Habitat II is at Annex-V.

4.3 Decentralization and Strengthening of Local Authorities

Enactment of Local Government (LG) Ordinance 2001 was a major attempt at decentralization/devolution by the federal government in Pakistan. Besides setting up a hierarchy of municipal set up (Annex-VI shows the three tiered structure); it made an endeavor to make local government more representative with stakeholders' participation. The devolution process also brought a number of changes in the local governance. Large funds were transferred to the District and Union Councils that led to far more work on physical infrastructure projects at the local level than in the past. In addition to devolving administrative and expenditure responsibilities to LGs, decentralization involved, to differing degrees, changes in administrative level of decision making, accountability of decision making authority (political or bureaucratic) and nature and amount of fiscal resources available. New local institutions with structures for LGs, arrangements for sharing of intergovernmental resources, electoral arrangements, rules for government formation and dismissal and opportunities for citizens to participate in the affairs of the government have all been created. Installing this array of structures and accountability arrangement is an achievement that can hardly be overstated.”

Table 4.1: LG Structure and Function 2001

Local Government Tier	Planning Related Functions
City District Government	<ul style="list-style-type: none"> • Approval of master plans, zoning, land use plans, including classification and reclassification of land, environment control, urban design, when renewal and ecological balances • Review implementation of rules and by-laws governing land use, housing, markets, zoning, environment, roads, traffic, tax, infrastructure and public utilities • Approval of development schemes for beautification of area along rivers
Town Municipal Administration	<ul style="list-style-type: none"> • Preparation of spatial plan for the town in collaboration with Zilla and Union Councils including plans for land use, zoning and functions for which the TMA is responsible within the framework of the spatial/master plan for the city district • Exercise control over land use, land subdivision, land development and zoning by public and private sector for any purpose including agriculture, industry, commerce, markets, shopping and other employment centres, residential recreation parks, passenger and transport freight and transit stations within the framework of the spatial and master plan of the city districts. • Compilation of information provided by union and village councils of prioritized projects • Coordination of development plans and projects with Union Administration
Union Councils	<ul style="list-style-type: none"> • Collection and maintenance of statistical information for socio-economic surveys • Consolidation of ward and neighborhood development needs and to prioritise these into union-wide development proposals • Identification of deficiencies in the delivery of services and making recommendation for improvement thereof to the concerned TMA

However, The Devolution Plan of 2001 had many shortcomings such as no specific efforts were made for revenue mobilization at local level. The plan did not give any control over salaries, wages and benefits of employees working for district governments, who in fact were provincial government employees, seconded to local governments. As a result, their provincial government exercised control over a significant part of recurring expenses of the local government.

Urban governance in Pakistan underwent a major change under the devolution plan of 2001. This was far more comprehensive than any other previous decentralization attempts. This process has been further carried forward with the enactment of Provincial LG Acts of four provinces and GB. However, government of AJK has not revised the LG Act of 1997. Election Commission shall conduct the LG elections and, for the purpose, shall, by notification in the official Gazette, declare the election schedule for election under this Act.

After the 18th Constitutional Amendment, Punjab, Sindh and KP enacted LG Acts in 2013 while Balochistan and GB in 2014. Salient features of Acts of four provinces are at Annex-VI.

It is important to recognize that autonomous LGs are essential for improved governance. Under the LG Acts, Local councils will receive allocations through respective Provincial Finance Commission, and would have limited powers to impose taxes or exercise regulatory functions. The LG Acts for each province, provide limited autonomy to local councils in terms of fiscal management and control over service delivery, revenue, tax and police departments.

Punjab, Sindh and Balochistan will have Union Councils and District Councils in the rural areas and Union Councils/Committees, Municipal Committees and Metropolitan Corporations in urban areas. The KP LG Act also provides for Tehsil Councils and Village Councils in the rural areas and City Districts Councils; Districts Councils and Neighbourhood Councils in the urban areas. The major difference between the 2001 Ordinance and the KP's LGA 2013 Act is establishment of village and neighbourhood councils through non-party based polls thereby abolishing the tier of union council. The advantages of the new structure will provide administrative and financial autonomy at the grass root level; would empower people in real terms as the local communities will be more involved in decision making, hence giving them more effective and efficient representation. It will also restore authority to the people, and makes them responsible. Furthermore, it will curb the imbalance of power, and make politicians responsible to the people.

The LG Acts of Punjab, Sindh and KP allow for discretion by the provincial government to change, exclude, include and redesign a constituency. The KP Act provides greater fiscal autonomy to the LG, as it empowers Village and Neighborhood Councils to supervise all LG functionaries including revenue officials in their jurisdiction. All four LG Acts allow the Chief Ministers to dismiss a LG or head of council and appoint officeholders after the dismissal of council heads. The Punjab and Balochistan LG Acts state that the District Councils will function under the directives of the provincial government. The KP and Sindh Acts give greater autonomy to the provincial governments to supervise and inspect Local Governments.

While all the LG Acts devolve the key service delivery functions to LGs, provinces have made exceptions to retain large entities such as the Karachi Water and Sewerage Board, Sindh Building Control Authority, Lahore Development Authority (LDA), and Solid Waste Management (SWM), etc. The LG Act of Punjab provides for the creation of education and health authorities. The government promulgated the FATA Local Government regulations 2012 to regulate and establish municipal bodies in the Federally Administered Tribal Areas. Current Administrative Set up at the District level is described at Annex VII.

4.4 Improving Participation and Human Rights in Urban Development

The participation through Community Citizen Boards (CCBs) defined in the Local Government Act 2001 was quite effective in the implementation of schemes financed by the development budget on an 80-20 principle where the community endured 20% of the proposed budget. The general public showed great support for the new system particularly union councils particularly largely due to the fact that direct elections were held at this level for councilors and mayors, through which people felt involved and empowered. This was especially true for women who for the first time in Pakistan's history became councilors and got involved in decision making in large numbers for which there was no previous precedence. However, the local bodies created under devolution plan could not continue as representative bodies after 2008, with the resumption of parliamentary democracy. Nevertheless, during the tenure of local bodies, large funds were transferred to the district and union councils that led to far more work on physical infrastructure projects at the local level than in the past. The salient features of Provincial Local Government Acts related to reserved seats and direct participation of local communities in the elections are at Annex-VIII.

In the current provincial LG Acts, there is an encouragement for working with the existing Community/ Village organizations instead of Community Citizen Boards established under the Local Government Act 2001. In the rural areas the Community/ Village organizations exist but there is no such structure in urban areas so the participation of local community in the urban areas is minimal in the newly approved Provincial LG Acts.

Furthermore, the political federal and provincial governments give grants to members of parliament for implementation of various schemes in their constituencies. Implementation of these schemes mostly does not involve stakeholder participation. Constitution of Pakistan provides for protection of fundamental human rights, which include freedom of speech, thought, information, religion, association, press, assembly, movement within the country and abroad and the (conditional) right to bear arms. Recognizing the basic human rights, the federal and provincial governments while formulating the national and provincial policies and strategies establish multi-stakeholder consultative committees. Civil society organizations and media dealing with human rights are made members of such committees. Further illustration of human rights is described at Annex IX.

4.5 Urban Safety and Security

Rapid urbanization has also led to a host of problems from poverty, unemployment, infrastructure deficits and traffic congestion to security issues related to terrorism, crime, natural and man-made disasters and diseases. The Citizens-Police Liaison Committee (CPLC) is a non-political statutory institution, operationally independent and managed by dedicated and concerned citizens offering their honorary services. Such committees have been established in major cities like Karachi and Lahore. Major concerns relating to terrorism, crime, violence and disasters in urban areas, particularly the large cities are described at Annex-X.

4.6 Improving Social Inclusion and Equity

Urban poverty in Pakistan is also partly an indication of governance failure. According to the human development report of 2013, Pakistan is ranked 146th out of 187 countries and territories on incidence of poverty. The spatial pattern of poverty in Pakistan is gradually shifting from rural to urban areas as Pakistan rapidly urbanizes and undergoes unplanned urban growth primarily through migration. In both Karachi and Lahore, almost 89 percent of Katchi abadi residents live below the poverty line.

Four common characteristics of the urban poor in Pakistan include: i) limited employment opportunities particularly for disadvantaged groups like women, and the elderly, ii) poor living conditions, iii) minimal access to services, and iv) environmental and health risks. Although urbanization has led to creation of new job opportunities, the growth of such jobs has not kept pace with the increasing migrant population of Pakistan. Further, these migrant urban poor face difficulty in finding jobs in the formal sector due to their low education levels and lack of requisite skills. Hence, the only option available to them to make ends meet is to work in the informal sector, which constitutes a big check of Urban Economy. Disable persons among urban poor are more vulnerable (Annex XI).

Squatter settlements are characterized by overcrowding. A case study on Slums and squatter settlements in Karachi revealed that almost 34 percent of residents in squatters had 8 or more people per room in a house. Apart from congestion, there is usually just one shared bathroom and a kitchen available to the occupants. Some of the inner city slums also have similar conditions. These are mostly located next to wholesale markets, warehouses and storage facilities, accommodating workers of these activities. For example, in Lahore, slums are located inside Shah Alam market that is a hub of textile wholesale trade, with small one or two room apartments constructed above shops.

The slums and squatter settlements also have severe infrastructure and service problems particularly water supply and sanitation and other infrastructure deficits. In addition most urban slums and squatter settlements across Pakistan also face serious environmental, safety and health risks. Builders in such areas do not pay much attention to safety regulations, which make them extremely vulnerable to environmental risks. The houses in these slums and squatter settlements, in many cases, are built of unreliable and non-durable construction material, which makes them extremely dangerous in case a natural or man-made hazard strikes. Most of these settlements are really constrained for space, as

they are literally built next to each other are highly congested and difficult to access in emergencies. In February 2011, a fire broke out in Shah Alam the busiest wholesale market in Lahore. It engulfed at least eight buildings including residential apartments causing four deaths and over 35 injuries. Rescue authorities were unable to contain the fire for a couple of days simply because the area was too congested and roads were too narrow for the fire brigade.

4.6.1 Women Rights

Pakistan has a Gender Inequality Index value of 0.567, ranking it 123 out of 148 countries. Female participation in the labor market is 22.7 percent compared to 83.3 for men. The female literacy rate remained extremely low, 45 percent as compared to 69 percent for men in 2009. There is also a persistent urban-rural divide: in urban areas the literacy rate is 74 percent, compared to 48 percent in rural areas. Dropout rate for girls is higher than that of boys due to social and cultural constraints. Further, nearly 62 percent of the out-of-school girls are unlikely to enroll in schools as compared to 27 percent of the boys in Pakistan. The main factors inhibiting female education are poverty, lack of empowerment and the generally lower social status of women, particularly in the rural areas.

Seventy-four percent workers are employed in the informal sector in Pakistan and of these 65 percent are home-base workers. Eighty five percent of these are female home-based workers and the majority of these are located in the urban areas. The home-based workers are active in the manufacturing sector, food processing, garments and leather industry. Home-based workers have become an organized movement linked with regional associations, however, no success have come of their efforts to get legislation passed for their recognition and protection. The draft policy proposed by the home-based workers association suggests a micro-credit facility, marketing and advisory services for home-based workers at district level, access to local and international market, new legislation for home-based workers and amendment to existing labor laws, space for home-based workers in future planning and legislation in urban housing schemes, infrastructure, women friendly laws such as Protection against Harassment of Women , health and occupational safety at workplace and right of complaint for non-payment of wages, violence and sexual harassment. Socio-cultural and entertainment activities in the cities tend to play a leading role in economic diversification, enhancing social integration and engaging the younger generation in healthier activities.

4.6.2 Minorities

Pakistan is a diverse society with various ethnic and religious minorities. According to 1998 census, Hindus make up 1.20% and Christians 1.9% of the total population of Pakistan. According to Pakistan's Constitution (1973) 'all citizens are equal before law and are entitled to equal protection of law'. There 'shall be no discrimination against any citizen on the ground only of race, religion, caste, sex, residence etc. in respect of their access to places of public entertainment or resort'. The Constitution gives 'protection against discrimination on basis of religion etc. on appointment in service of Pakistan if he/she is qualified otherwise'. It provides for the protection of minorities and states that the 'State shall safeguard the legitimate rights and interest of minorities, including their due representation in the Federal and Provincial services'. The minorities are protected through a special allocation of seats in professional educational institutions and civil service of Pakistan. They can also join armed forces or judiciary. The federal government has a dedicated Ministry on Ministry of Religious Affairs and Inter-faith Harmony. The work on constitution of a national council of minorities' rights is under progress to monitor the practical realization of the rights and safeguards provided to the minorities under the constitution and law. The council would also be mandated to frame policy recommendations for safeguarding and protecting minorities' rights by the provincial and federal governments. Formation of a special task force to protect minorities' worship places, "Special Police Force to be established with professional training to protect the places of worship of minorities" is also under process. In general the minorities are jelled with the society.

4.7 Challenges Experienced and Lessons Learnt in Urban Governance and Legislation

City Governance in Pakistan poses many challenges. The third tier of Government i.e. Local Government does not exist on ground which is essential for improved governance and service delivery at the grass root level. For improved governance, the Local Governments should have adequate political, fiscal and administrative powers devolved up to the local councils to meet the emerging urban challenges. In the present set up the instinct is to "centralize," whereas brief experience with LG institutions depicts that decentralization not only pays off in identifying and implementing projects but also help involve and muster community support in their planning and implementation. Moreover it makes community feel empowered because it is they who elect their local leader by direct voting.

Present system of urban governance is inadequate in responding to the challenges of fast expanding urban economic activities. The needs of modern cities demand a higher level of management by a corps of managers who are familiar with new tools and technologies that can be applied to the modern city. The challenge is to transform cities and introduce a system of governance in them well equipped with the knowledge of alternative communication technologies, environmental economics, urban finance, geographic information systems, water and power systems, alternative transport systems, traffic management and skills in conflict resolution. Another challenge is to create laws that not only better clarify the division and balance of power and functions between the provincial and LGs but also give strength to the efficacy of local governance. Further, there are serious gaps in implementation of government policies and regulations.

Most of the man-made hazards have emerged due to lack of enforcement of existing laws, resulting in the breakdown of Law and order or governance. It can be controlled with political will, commitment and reforms. Among social challenges to governance, a major one is poverty. A high unemployment rate and an increase in prices (especially of fuel and food items) in urban areas have increased the incidence of urban poverty in Pakistan. "The rapid rate of urbanization across Pakistan makes it even more challenging for the government to keep urban poverty in check." In the wake of absence of urgent steps to alleviate it and consistent rural urban migration the situation of poverty may deteriorate further and may aggravate the law and order situation. One of the major urban issues is the recognition and protection of role of women in the informal urban economy.

Another challenge is to safeguard vulnerable segments of urban society. It demands protection and encouragement by revamping and expanding the social protection system and social safety nets. Creation of an environment of peace and security is another challenge without which economic and social development in cities can neither be meaningful nor sustainable. In terms of urban safety and security the challenge is to make governance system more responsive, efficient and accountable to control terrorism, crime, land tenure insecurity and disasters. An associated challenge is the engagement of civil society for vigilance and media for information dissemination and creation of awareness.

It is unthinkable that a governance system, no matter how efficient, will work without its backing by law. A big challenge therefore is to create laws that not only better clarify the division and balance of power between various tiers governments but also give strength to the efficacy of local governance particularly in day to day administration of affairs and formulating and implementing plans. An associated challenge is to bring the existing laws and regulations into flexible package that may be updated as and when needed.

4.8 Future challenges and issues in Urban Governance and Legislation that could be addressed by a New Urban Agenda

In order to bring any meaningful change into the governance system political will is the most important component as meaningful change cannot be brought in the system of local governance without this. If the LG is to have any real

meaning, provincial governments will need to ensure that newly elected local councils have sufficient resources and authority to address the development challenges in local communities. This will require provincial governments to recalibrate their approach towards this third tier of the government. The LG Acts enacted recently in all provinces will need to evolve over time as the LGs come into being and the provincial-LG relations attain a new balance of power. The federal government would need to explore supporting inter-provincial coordination and experience sharing to define guiding principles for LG reforms.

The Vision 2025 also seeks to create a just and equitable society in Pakistan where vulnerable and marginalized segments of the society would be mainstreamed. The Vision commits to implement Article 38 of the constitution of Pakistan which entails effective implementation of Plans of Action for Children; promotion of an inclusive education system for special children; enforcement of special quota in education and employment for non-Muslims and persons with special needs; encouraging sports activities for persons with disabilities; judicious utilization of Pakistan Bait-ul-maal and Zakat funds; eradication of beggary and special schemes for senior citizens to ensure their rights and make them socially and economically productive. Pakistan's rank in the world on the Gender Development Index is even lower than its Human Development Index ranking, indicating that the access to opportunities, resources and benefits between men and women are skewed. The challenge is to develop appropriate legislative framework to protect women's rights to make governance gender sensitive and to improve implementation. The associated challenges are to increase women's participation in decision making, promote gender parity in education, increase affirmative action in all public spheres and enhance economic empowerment of women through ensuring access to education and enterprise.

Enhancing the capacity of LG would also be imperative for better management of urban areas whether it relates to the development of a city cluster or an individual city. Further, a competent bureaucracy and a group of technical experts must support LG management and control. Also the support of bureaucrats and technocrats to urban governance needs to be redefined with a focus on urban planning and management. Moreover, the legal context following the Eighteenth Amendment in the Constitution would require the local/city governments to largely undertake urban development. Therefore, it would be important to provide greater administrative and financial autonomy to the LGs in the on-going restructuring process.

In terms of legal and regulatory mechanisms, several flaws have been pointed out about the efficacy of planning and zoning regulations, development standards, land registration/transfer procedures, rent control laws, property taxation, etc. It has also been noted that the flaws in the regulatory framework have severely constrained land supply and abnormally raised its prices given the strong demand for businesses and residences to locate in cities. Also, these have seriously affected the quality of architecture and urban design and suppressed initiatives for design creativity and excellence. Therefore a thorough review of the existing laws and procedures and suitable amendments in these is the need of the time.

In terms of urban safety and security there is a need to make governance system more responsive, efficient and accountable to control terrorism, crime, land tenure insecurity and disasters. Alleviation of urban poverty may require interventions in skill training and education, credit services with no or low interest rate, labor markets, housing sector and food prices to effectively tackle it. Government is encouraging programs like Benazir Income Support Program and technical education to create job market for urban poor.

In addition, positive results of Non-Governmental Organizations (NGOs) efforts in tackling urban poverty in Orangi and Baldia in Karachi and elsewhere in cities of Pakistan highlight the importance of collaboration between the government and NGOs/ Community Based Organization (CBOs) to achieve tangible and sustainable results in alleviating poverty. In

addition LG structures across cities also need to be strengthened and made functional in this regard. Experience shows that it has a profound effect on quality of service delivery and mobilization of communities. Unlike the national or provincial governments, LGs can develop tailor made policies that are suited to local conditions and deliver by tackling challenges specific to the local situation. There is a need to expand programs like Citizen Police Liaison Committees in the entire country as well as promote social and economic justice, enabling all to achieve a secure and meaningful livelihood that is ecologically responsible. There is also a need to enhance role of mass media in raising awareness of ecological and social challenges.

To effectively respond to the challenges of governance, it is imperative to improve urban legislation; ensuring involvement of local communities including women, special persons, minorities and youth; and improve enforcement of existing legislation. Further there is a need for paradigm shift from "centralization" to 'de-centralization' of powers and resources up to the local councils level to effectively meet the expectations and aspirations of the people. To enhance urban safety and security, engagement of civil society in decision making pertaining to safety and security of people may be ensured, periodically reviewed and a forum should be provided for this purpose.

Chapter 5: Urban Economy: Issues and Challenges for a New Urban Agenda

5.1 Introduction

Urban economy is focused on promoting urban strategies and policies that strengthen capacity of cities to realize their full potential as drivers of economic development, and of wealth and employment creation. Special attention is paid to formulation and implementation of urban strategies and policies that promote and boost participation of both men and women, enhance municipal finance and contribute to the creation of decent urban jobs and livelihoods that increase economic empowerment, in particular for youth and women.

Pakistan is striving hard to achieve macro-economic stability in the face of burgeoning pressure on public finance. The structural problems are: low tax GDP ratio, increasing recurrent expenditure due to higher untargeted subsidies and inadequate monitoring and evaluation of development expenditure. Moreover, financing of fiscal deficit through bank borrowing has been an area of concern in view of drying up foreign sources and low domestic savings. Framework for Economic Growth envisages attaining fiscal discipline through broadening the tax net, enhancing the tax compliance, improving the service delivery, minimizing the untargeted subsidies, restructuring of Public Sector Enterprises (PSEs) and result based management of development expenditure.

The most compelling facts for formulation of Framework for Economic Growth (FEG) were preparing to reap the fruits of demographic transition, low and declining productivity and long standing search for macroeconomic stabilization. These three factor share impeding growth, as well as breeding poverty. The pillar of FEG aims at skill development, employability and productivity of population especially youth, which in turn would result in poverty alleviation.

Pakistan Vision 2025, which is the main policy document of the government, sets direction of the country's economy. It takes into account national context, particularly demographic features, i.e., youth bulge, urbanization, energy, food and water security as well as regional and global contexts. It envision for developing united and equitable society through a balanced development approach, social uplift and rapid broad based growth. This will ensure provision of opportunities and fruits of economic development to all segments of society. The Vision also focuses on ending discrimination faced by women, and providing an enabling environment for them to realize their full potential and make their contribution to the socio-economic growth of Pakistan. Government of Sindh has initiated Investment Management Study to explore investment potential lying in the sectoral as well as geographical area for providing a window of opportunity for Sindh cities to improve local economy.

Cities are playing a vital role in Pakistan's economy. Economic activities in cities contributed more than three fourth of the national GDP (78% of GDP in 2011)¹⁰. In Pakistan, Karachi alone, handles almost 95% of Pakistan's foreign trade, and has approximately 20% share in national GDP and accounts for 30% of Pakistan's manufacturing sector. Contribution of Lahore to the national economy is around 13.2%. Faisalabad generates 25% revenue for the trade and commerce activity of Pakistan.

Cities in Pakistan portray better development indicators with higher incomes and better facilities, services and consumer amenities. However, what is missing are “productive commercial cities that would act as a magnet for trade and commerce”. Over the last three decades, GDP growth in Pakistani cities has come about mainly by adding more units of capital and labor rather than from boosting productivity.

10. Planning Commission's Task Force on Urbanization

5.2 Improving Municipal and Local Financing

The 18th amendment to the constitution of Pakistan heralded an era of devolution of powers from the centre to the provinces. However, city level local governance has received little attention in the devolution plan. Capacity and resources of city governments and their associated entities remained at low levels due to poor municipal finance systems. This has been a big constraint to holistic urban development in cities of Pakistan. Cash-strapped city governments have been looking to provincial and federal funding for infrastructure projects. Provincial and federal governments, in turn, obtained the capital to undertake large urban development projects from multilateral funding organizations. Hence, this led to limited urban development that was restrained to the projects that could be financed and implemented.

Punjab Cities Governance Improvement Program is streamlining different financial streams of five largest cities, and improving transparency in their operations. Furthermore, the program has also developed environmental and social framework which is being implemented under this program. Urban immovable property tax system has been upgraded through digitization of land records. This has resulted in an enormous increase in financial resources of the municipalities. Resource efficiency has been brought in, with the introduction of new technologies for different municipal functions and services. Similarly, Government of Sindh has also a similar initiative and introduced “Sindh Cities Improvement Initiative Program” (SCIP) and “Municipal Service Delivery Program” (MSDP) which is running successfully. The SCIP is ADB assisted, US\$ 400 million infrastructure and service delivery reform program which aims to improve water supply, wastewater management, and solid waste management (SWM) services in participating 20 secondary cities through establishment of government-owned, professionally managed Urban Services Corporations; urban sector reforms and investment in water supply, wastewater and solid waste management infrastructure. While MSDP is USAID funded (US\$ 66 million), for development of municipal infrastructure in smaller towns, falling outside the purview of SCIP. “Municipal Finance Assessment Study” is being carried out to assess municipal finance system and explore revenue generating avenues for municipalities, aimed at making them financially self-reliant.

5.3 Strengthening and Improving Access to Housing Finance

House Building Finance Corporation Limited (HBFC) was historically providing housing finance to lower or average income group since 1952. In 1994, the Government decided that HBFC should operate as a market oriented financial institution. Commercial banks though providing mortgage loans on a much-selected basis entered mortgage business during 2002 in a structured way and registered their share in housing finance system. Majority of commercial banks' loans are granted to middle and high-income group particularly in major cities. As more banks entered the mortgage market, share of HBFC in terms of value reduced from 90% in 2003 to 19% during 2008 though it remained the only institution that continues to cater mainly to the lower middle and low income groups, and enjoys the largest customer base. This is evident from the fact that the average loan size of HBFC is reported to be Rs. 860,000, whereas average loan size of commercial banks is reported at Rs. 2.35 million. Despite being late initiation of housing mortgage market of Pakistan has been consistent. It has also witnessed an increasing participation in housing finance by Islamic banks since 2007.

State Bank of Pakistan¹¹ states that “At present, 27 commercial banks, the HBFC and one micro finance bank are catering to the housing finance needs. During current quarter, an increase of Rs 0.8 billion was witnessed in gross outstanding of housing finance (1.49 percent). Continued growth in housing finance portfolio is an encouraging sign. Overall housing finance portfolio currently stands at Rs. 53.7 Billion. The HBFC remained the largest shareholder, in terms of gross outstanding, with the share of 23.65 percent. However, based on category, Private Banks remained the largest players with 36 percent share in gross outstanding. Fresh disbursement for the quarter accounted for Rs. 3.43

11. quarterly report on “Housing Finance Review” of December 2014

billion with 937 new borrowers. NPLs, however, in terms of their ratio to outstanding, declined at the level of 28.9 percent of the total outstanding portfolio during current quarter compared to 30 percent in preceding quarter. HBFCL, being the largest player in the housing finance market, accounted for 57.61 percent of new borrowers and contributed 22.71 percent of the new disbursements equivalent to Rs. 772 million. Islamic banks disbursed Rs. 1.90 billion as of December 31, 2014.”

Moreover, the Discount Rate, which is the biggest impacting factor of determining Interest Rates in the financial market, stands in single digit at 8.5% which is lowest in last 10 years. This slash in lowering discount rate has opened window for Banks / Financial Institutions to look up for lending avenues other than investing in Government Paper. This is a very right time to introduce customer-friendly Housing Finance Products to tap this potential market of Housing Sector. Furthermore, State Bank of Pakistan has established a dedicated Infrastructure and Housing Finance Department to strengthen market based housing finance mechanism.

5.4 Supporting Local Economic Development

In the current policy set up, private sector and entrepreneurship led growth has been identified as the main driver of economic development both local and national. Vision 2025 has identified a variety of programs such as building of Gwadar Kashgar Economic Corridor which will open up socio-economic development of the backward areas of Balochistan, KP, FATA, GB and Punjab. Hence, a key goal of Vision 2025 is to see Pakistan ranked in the top 50 countries for Ease of Doing Business by the year 2025 by improving business environment substantially through a number of steps. Further, it has committed to give greater attention to service sector and small, medium and micro enterprises, which are crucial for local economic development.

Pakistan's services sector has emerged as main driver of economic growth, contributing 57.7% of Pakistan's GDP. Transport and communication sectors, financial services, telecommunications and domestic commerce (wholesale & retail) are major contributors. Among these activities, domestic commerce is an important area, providing employment to 40 percent of the non-agricultural workforce. According to Vision 2025 improvements in domestic commerce have the potential to add 2 percentage points to GDP growth. Hence it commits to enhance the infrastructure for domestic commerce in wholesale and retail sectors by developing business centers, markets and shopping malls with necessary amenities with the help of local governments. It also envisages establishing a regulatory frameworks where needed and strengthening existing ones, with legislative powers for each service sub-sector.

Micro enterprises constitute a very important part of informal economy in urban areas. They are labor-intensive and as such with limited utilization of capital generate substantial productive employment. Women play a vital role in non-formal sector Non-intervention of the government has been the main factor-giving rise to their buoyancy. In order to promote these, Vision 2025 seeks to provide them along with small and medium enterprises a level playing field, and a fair competitive environment. The government would ameliorate problems faced by micro enterprises and SMEs and help them in accessing capital through small business loans. Micro-businesses will be encouraged, thus promoting entrepreneurship and innovation particularly at local level.

Pakistan Vision 2025 promises to focus on the least developed and backward areas including FATA, AJK and GB with massive investments in infrastructure, and social services. In AJK large hydroelectric projects are being constructed, development of industrial estates for small and medium industries is in progress and tourism industry is being promoted. In GB, small and medium hydroelectric projects, Karakoram Highway and roads are being constructed in collaboration with China. This has increased the volume of trade with China and opened up the area for expansion of Tourism activities. The brief of provincial interventions for supporting Local Economic Development is at Annex-XII.

5.5 Creating Decent Jobs and Livelihoods

Employment is the key mechanism through which the benefits of the growth can be distributed to the poor segment of the society. Access to decent work is thereby vital in the process towards reduction in poverty and income inequality. Provision of employment opportunities depends upon available resources, technological base, advancement, and institutional strategies. Similarly, human resource, skills, and technical competency determine the outcome of employment, which contributes in achieving sustained economic growth.

High rate of unemployment in urban areas is due to rural urban migration of unskilled workers which is cause of increasing urban population whereas job opportunities are not increasing accordingly; and industrial development which is not yet reached up to the position to address the issues of unemployment on account of its dismal performance in the past few years. Other main causes of unemployment are increasing population, law and order situation, and lack of technical education and shortage of skill training institutes. Youth is also facing many challenges but some of these are common in the overall labor market. However, government is well aware of these issues and focusing on long term investment in human capital through formal and informal education and strategically strengthening the links between education, skill development and the labor market which would greatly benefit youth in the long term.

National Labor Policy 2010 has set parameters to also address issue of workers in the informal economy. Under the policy, the government is aiming to provide benefits to the workers in the informal economy, including home workers and domestic workers, from improved safety and health arrangements, access to social security arrangements, and the payment of minimum wages, where an employee-employer relation is evident.

The policy focus is to create decent jobs and livelihood for enhancing employment opportunities and to promote human resource development. The Government of Pakistan has launched several schemes like Prime Minister's Youth Program and Benazir Income Support Program (BISP) to enable the un-employed youth and other segments of society to earn their livelihood effectively through provision of decent employment opportunities and come out of poverty cycle. The Prime Minister's Program for Youth has broad canvas of schemes enabling youth and poor segments of population to get good opportunities of employment, economic empowerment, acquiring skills needed for gainful employment, spreading use of computers and imparting on-the-job training for young graduates to improve the probability of getting a productive job. Un-employed youth are provided with Prime Minister's Youth Business Loan from Rs. 0.1 to 2.0 Million, for young entrepreneurs, is designed to provide subsidized financing, 50% of loans will be granted to women; Under PM's Qarz-e-Hasna program poor people will get Qarz-e-Hasana or the interest free micro financing loan facility of an average amount of Rs. 25,000 per family. Under PM's Youth Training Scheme, young individuals with 16 years of education from recognized institutions will be provided on-the-job- training/internships at private and public sector offices and a monthly stipend of Rs. 10,000 for a period of 12 months. Programs like Waseel-e-Rozgar, Vocational Training Program under BISP that aimed at providing recipients with necessary knowledge and skills to exercise a profession enabling him/ her to earn a livelihood and subsequent integration in the labor market and Waseela-e-Haq under BISP to provide loan amounting up to Rs.300, 000/- to randomly selected beneficiary families currently receiving the cash transfers under BISP to be validated through the program eligibility criteria.

To provide maximum relief to the masses, Punjab government has initiated a number of public welfare projects including Apna Rozgar Yellow Cab Scheme 2014 -2015, Sasti Rooti Scheme, 'Khud Rozgar' Scheme and Punjab Khidmat Card. The scheme has been launched to provide a decent livelihood to the educated unemployed youth. Under this scheme total of 50000 taxis are being distributed under this scheme in the financial year 2014-15. Under Sasti Rooti Scheme more than 1,200 'tandoors' and 47 mechanical 'roti' plants were providing 'roti' at Rs2 by getting subsidized flour and interest free loan up to Rs. 258,000 for mechanical tandoors. Under 'Khud Rozgar' Scheme, interest-free loans of Rs 4.8 billion are

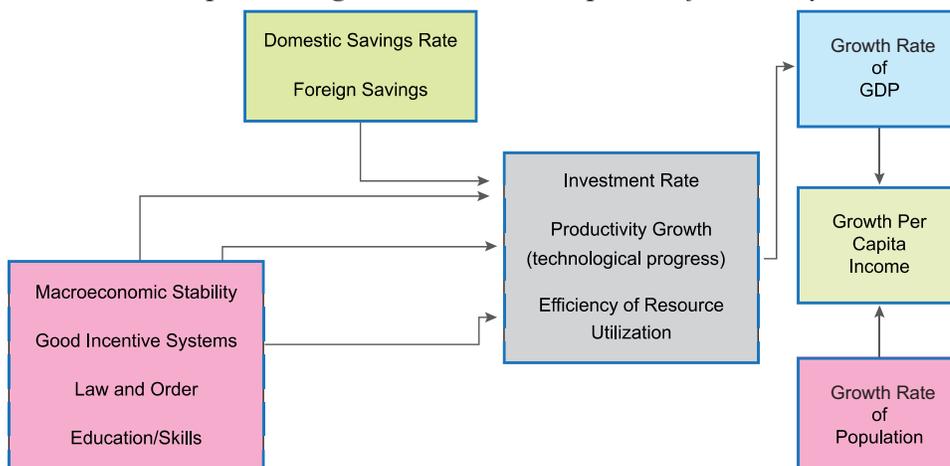
being provided in a manner so that maximum number of deserving persons could benefit. Through Punjab Khidmat Card, deserving families will be extended relief by getting decent opportunities of livelihood. Government of Sindh has like Benazir Bhutto Shaheed Youth Development Program (BBSYDP). The BBSYDP was initiated in the year 2008 which has trained 198,000 (Approx.) educated, semi-literate, uneducated youth [18 to 35 Years] in 386 trades of 89 employable sectors with an objective to facilitate them for employment and curtail poverty. Furthermore, it established Sindh Enterprise Development Fund to provide legal as well as institutional mechanism to introduce technology & bring value addition in non-conventional yet vital sectors of the economy by extending technical and credit assistance. Technical and Vocational Training Authority and Youth Skill Development Program (TAVTA) are providing technical and vocational Training to the people of the province to produce quality skill workers for different sectors. Technology University is being established that would be first of its kind in Pakistan. The University and its affiliated institutions would provide programs (up to PhD.) to the local artisans like carpenter, plumber etc. leading up to award of Degrees in various streams of technology. The Youth Challenge Fund has been established with about Rs. 1.3 billion for providing credit of Rs. 50,000 to Rs. 300,000 for business development of skilled workers among youth. Under KhudKafalat Scheme, credit amount up to Rs. 200,000 is being provided free of interest to skilled as well as un-skilled persons for self-employment. The TEVTA is also providing skill training to the youth in remote areas like Balochistan, AJK, GB and Federally Administered Tribal Areas. Economic Revitalization of FATA has also been initiated.

5.6 Integrating Urban Economy into National Development

Coordination and synchronization between fiscal, monetary, investment, commercial and industrial policies is being enhanced, under Vision 2025, which will also facilitate integration of urban economy into national development, promote investment flows and increase competitiveness thereby promoting efficiency. In addition, a multi-pronged approach will be followed to: promote formal economy through enhanced total factor productivity, which has considerably declined lately, and formalize informal sector, the share of which has increased considerably.

The Vision 2025 has committed to enhance total factor productivity (TFP) exponentially by undertaking a number of steps as Indicated in fig. 1. It has decided particularly to raise investment rate from the current rate of 14 percent of GDP (public and private sector) to at least 25 percent– with special attention on human and social development. Although ambitious, it is an entirely feasible target, as Pakistan has attained an investment rate in excess of 20 percent of GDP in the past. Since GDP growth is driven both by 'quality' and 'quantity' of investment, therefore it is also envisaged that the increase in investment would be accompanied by strengthening of key institutional structures, improving governance, and reforming the framework of incentives to boost overall performance.

Fig.5.1 Pakistan Vision 2025 Steps Envisaged to Boost Development of Economy



An industrial and urban development approach which has already emerged whereby specialized industrial clusters have emerged like textile in and around Faisalabad, sports goods in Sialkot, small arms in Wah, aerospace in Kamrah and so on. The vision would not only promote the established clusters but also help develop new clusters to enhance economic development by improving the competitiveness of designated business sectors. Vision 2025 has planned to strengthen such clusters in urban areas by promoting collaborations between private firms, the government, and academic and research institutions. Competitiveness is also being enhanced throughout the value chain including e.g. supply-chain development, market intelligence, incubator services, attraction of foreign direct investment, management training, and joint R&D projects, marketing of the region, and setting technical standards. Informal sector plays a momentous role in the economy particularly of urban Pakistan. It consists of all shades of untaxed, unmeasured and unregulated economy. The importance of this sector is evident from its role in national income and employment and its contribution to financial credit as compared to that of the formal sector. Informal sector is the backbone of the urban economy and has been quoted to contribute over 50 percent to the national economy.

Informal sector in Pakistan accounted for almost 74 percent of the employment in non-agricultural jobs and almost 70 percent of employment in urban areas during the financial year 2012-13. The key sectors of employment in the informal economy of the cities are wholesale & retail trade, manufacturing, community/social & personal services, construction and transport. In fact, everything from auto parts to sports goods, knitwear, clinics, and beauty salons fall into the informal economy.” Further, these make a significant contribution to employment and income, services and value addition and that's one reason why the economy is still growing.

Accordingly, Vision 2025 commits to provide strong incentives, reform governance and simplify the regulatory environment to help formalize this sector, which will pay huge dividends to the economy in the form of revenue and ensure a level playing field among entrepreneurs. The Government has targeted that by 2025; at least half of the businesses in the informal economy will have entered the formal economy.

5.7 Challenges Experienced and Lessons Learnt in Urban Economy

Urban economy has experienced rise and fall during the development of Pakistan but has consistently contributed to the growth of economy. Nevertheless it is encountering a number of challenges like energy crisis, inflation, unemployment, poor social conditions, extremism and security challenge. Many of these problems are a product of either poor planning or no planning for the future. While technology, information, globalization, and innovation are shifting the paradigms of development and wealth creation, there is a need for fundamental changes in the economic and social environment and behavioral structures of population to create new capabilities and capacities to compete in a globalizing world.

Major challenges faced by Metropolitan Corporations, Municipal and Town Committees are lack of financial resources; adequate powers to generate funding; lack of involvement of local communities from planning to implementation and monitoring; and limited Public Private Partnership for Slum Up-gradation.

5.8 Future Challenges and Issues in Urban Economy that could be Addressed by a New Urban Agenda

5.8.1 Increasing Local Government Revenue through Reforms

Assets of municipal and Town Committees and Metropolitan Corporations, particularly those leased on short term basis may be reviewed, revoked or re-negotiated the terms of lease to bring in conformity with market prices and a New clause providing for incremental increase in the lease rent annually after the end of each calendar year. The Long-term leases after its expiry may also be repossessed or re-negotiated as per the market price and with the built in clause on incremental increase with the passage of time. Such actions have proven successful in Tanzania where the Local Government Reforms contributed to positive changes in Local Authorities' provision of basic services to the public,

enhanced capacity for financial management and revenue enhancement, improved governance including accountability and responsiveness of local government.

5.8.2 Accessing Domestic Capital Market

The devolution plan in Pakistan pre-empts local governments from raising funds in the capital markets. Municipal bonds are unheard of in Pakistan. There is an immediate need of financial restructuring in Pakistan so that local governments can expand revenue base by relying on direct taxation rather than on transfer of payments. In addition, large municipalities, which have high-value assets, should be permitted to float bonds and debentures in open markets to finance development.

5.8.3 Community Led Municipal Services Financing Facility

Pakistan Poverty Alleviation Fund is an example of Municipal Services Financing Facility that implements its schemes through the NGOs by following CBO led approach. Projects like Orangi Pilot Project (OPP) have raised self-finances for providing municipal services from the CBOs own savings.

5.8.4 Public Private Community Participation for Low Income Housing and Slum Up-Gradation

It is another mode for raising financial resources for addressing the emerging challenges of improving the quality of life in the urban and peri-urban slums where influx of large migrants into the cities find their abode. In this model the private sector and the local community/ Community Based Organizations join hands to improve the basic urban services within their community by voluntarily vacating the commercially attractive strip of land and those affected are provided with alternate residence for low income families in the remaining space of the community by building low income houses; undertaking slum improvement and upgrading plans with realignment of streets, laying of basic infrastructure services, providing educational, health and re-creational facilities as well as redesigning of the squatter settlement. In big cities of Pakistan, this approach can work very well if the local body institutions plans to implement this approach through grant of proprietary rights to the residents of slums and squatter settlements and encouraging the private sector to invest in lieu of attractive commercial space made available to them to them for undertaking commercial venture.

5.8.5 Trade Initiatives

Ensure that all trade supports sustainable resource use, environmental protection, and progressive labor Standards to become competitive in global market.

Chapter 6: Housing and Basic Services: Issues and Challenges for a New Urban Agenda

6.1 Introduction

Housing is a basic and fundamental human need. Currently, Pakistan has a serious housing crisis and housing backlog, estimated at 4.3 million units in 1998, has reached to about 9 million additional housing units. Average national occupancy rate per dwelling in Pakistan is over 6 whereas per room density is 3.5 as compared to international standard of 1.1 per room. With fast growing urbanization, major cities like Karachi and Lahore will see more than 20 percent increase in housing demand over next two decades.

Roughly 30-40 percent of housing demand is addressed by mainstream developers who cater to high-end market. Remaining units fall under the category of low-income segment. Current low income housing deficit within Pakistan is 4.5 million units with an addition of 150,000 units per annum. Country's real estate sector continues to be dominated by two major issues of a chronic shortage of housing against a backdrop of rapid urbanization and rising urban population and impact of security factors on risk appetite of investors and developers. Current deficiencies in basic infrastructure and urban services is inhibiting economic growth, and severely constraining potential for urban areas to play a more significant role in Pakistan's economic growth. Resulting deficiencies particularly affected urban poor are leading to a considerably reduced quality of life, including poor health and increased poverty. There has been marked increase in access to basic services in urban areas of Pakistan since 1996. However, there is a need to build an effective mechanism for ensuring operations and routine maintenance of basic urban infrastructure services and utilities. Housing sector can be very instrumental in poverty reduction and economic growth as it is labor intensive and has forward and backward linkages with more than forty industries.

6.2 Slum Upgrading and Prevention

Due to unavailability of affordable housing for low income population, people are compelled to live in slums and squatter settlements. Slums and squatter settlements are initially developed as unauthorized settlements constructed in less attractive areas such as, along natural water way or drains, closest to places of employment in peripheries of low income housing colonies. There are approximately 308 slums and squatter settlements in Lahore, housing an estimated 1.7 million people or 38% of city's population. Karachi has an estimated 700-800 slums and squatter settlements, housing about 7.6 million people. In province of Sindh, Karachi is the worst with some 1,300 slums and squatter settlements, occupying 24,300 acres of government land and 1,700 acres of privately owned land. About 45 percent population of Karachi lives in Katchi abadies. They have well connected drinking water facility up to household level but they do not pay water charges. Most of Slums and squatter settlements lack basic urban infrastructure facilities and utilities and have poor hygienic conditions.

To address issue of slums and squatter settlements, government of Pakistan has approved National Policy on Katchi Abadi, Urban Renewal and Slum Up-gradation in 2000. However, government of Sindh undertook pilot initiative with the assistance of UNDP in collaboration with Government of Netherlands to improve slums and squatter settlements in Karachi in 1977 and established the Directorate of Katchi abadis. Subsequently, all provincial governments followed the suit. Government of Sindh has approved Sindh Special Development Board Bill, 2014. According to this Bill, all squatter settlements and slums will be rehabilitated. Each household will be given an alternative space to live in, 600 square feet (one bedroom and lounge) "preferably" (but not necessarily) in the same area. Meanwhile, the builder will construct free units for them on the land they have vacated. In return, the builder gets 25% of Katchi abadi land for free where he can build a commercial project to sell. Since establishment of Katchi abadi Authority, the government has granted land titles and helped people build 6,000 units and has entered a second phase of building 6,000 more. Punjab Government

has launched a program for up-gradation of slums and squatter settlements and giving ownership rights to residential units for 326,516 residents in slums and squatter settlements. This program covers all slums and squatter settlements in Punjab established before year 2011.

Pakistan Railways has consented to regularization of an illegal katchi abadi (slum) established on its land in downtown. Peshawar housing about 5,000 people. The provincial governments in other areas are being provided with basic urban services like drinking water and sanitation. The Slums and squatter settlements enjoy political patronage because they constitute a large number of vote banks.

6.3 Improving Access to Adequate Housing

In 1998, there were 19.3 million households in Pakistan, with average household size of 6.6 persons and occupancy at 3.3 persons per room. The overall housing stock comprised 39 percent shacks (katcha houses mostly without proper water supply), 40 percent semi-permanent (semi-pucca houses mostly without planned sanitation or sewerage system), and 21 percent permanent (pucca) houses.

The draft of National Housing Policy 2013 was developed to facilitate provision of shelter to the poor throughout Pakistan with suitably located and affordable land. Main features of the policy include Prime Minister's vision of constructing 500,000 housing units in Pakistan within next five years. The scheme would be called 'Apna Ghar' scheme, through which houses will be provided to low-income group on easy installments. It will include the following:

* 3 marla housing schemes will be developed on government land for the homeless, to whom plots will be given free of cost.

* At least, 1,000 clusters of 500 houses each will be developed for low-income families through public-private partnership.

In pursuance to the above policy measures, government of Pakistan has taken several measures which include Housing schemes, digitization of land records: reforms in land acquisition and disposal system; and encouragement of private sector in housing sector. Some of such initiatives in provinces are described below:

Government of Punjab under Ashiana (Apna Ghar Housing scheme) is providing affordable housing on easy installments in 10 years. So far 10,000 housing units have been delivered to the low income families. Government of Sindh has initiated two low income housing schemes: (i) Behan Benazir Basti (Benazir Housing Program) and (ii) Shaheed Benazir Bhutto Towns. Under Behan Benazir Basti Scheme 7000 built up low income houses have been allotted to the deserving families in Sindh. Under Shaheed Benazir Bhutto Town Scheme, 50,000 built up houses are being provided to the poor people of Sindh through balloting free of cost. Government of KP launched Regi Lalma Housing Scheme and more than 20,000 plots had been allotted to 42 cooperative societies including employees of different departments. In Balochistan since 1975, 12 housing schemes have been developed over an area of about 2,000 acres. In AJK and GB, the focus is to provide shelter to the families affected by natural disasters. The AJK government with the help of international and national donors assisted in rehabilitation of 314,474 beneficiaries. Government of GB has rehabilitated about 500 families affected from Attabad landslide incidence in 2010.

Banks/DFIs are providing housing finance to borrowers for Purchase, construction, renovation or extension of residential units to individuals, co-borrowers including non-resident Pakistanis.

6.4 Ensuring Sustainable Access to Safe Drinking Water

Government of Pakistan, recognizing that access to safe drinking water is the basic human right of every citizen, is committed to provision of safe drinking water to the entire population in an efficient and sustainable manner. According to the Pakistan Social and Living Standards Measurement Survey of 2010-11, assuming that other sources are identical to unimproved water sources, access to an improved water source was 91%, while the MDG target was 90%.

Government has approved the National Drinking Water Policy in 2009 as well as Drinking Water Quality Standards for Pakistan; and National Surface Water Classification Criteria. Furthermore, specification for Bottled Natural Mineral Water was revised and bottled water in Pakistan is being regularly monitored. The groundwater quality in different parts of Pakistan is being monitored by PCRWR and higher level educational institutions.

Rainwater harvesting is being practiced by constructing tanks (small water reservoir) at the household level in arid regions in Tharparkar and Cholistan; ponds, mini dams, delay action dams and dykes. Due to government's policy of subsidy in tube-well electricity charges, excessive tube-wells were installed and this resulted in drying of many karezes. Government has withdrawn this subsidy to minimize the misuse of underground water through tube-well.

Government of Pakistan launched nation-wide Clean Drinking Water for All project. Under this project, more than 6000 water filtration plants at Tehsil level were installed to provide clean drinking water in all parts of Pakistan. Pakistan Arsenic Mitigation Plan has been prepared to tackle Arsenic and fluoride contents in groundwater exceed the permissible limits in the groundwater in selected areas of Pakistan. Fluoride contents in water are being managed through water treatment plants established at Union Council level. In addition some private developers of major housing schemes are also installing Water Filtration plants. In addition, desalination plants have been installed in Tharparkar and Gwadar. Similarly, the provincial governments and CDA are installing the water filtration plants up to Union Council levels. Provincial policies and strategies have been prepared to provide clean drinking water.

The UNICEF and World Bank's Water and Sanitation Program (WSP) are assisting federal and provincial governments in their initiatives. Provincial governments and Civil Society Organizations like Pakistan Poverty Alleviation Fund, Water Aid, Plan International, Rural Support Programs are also very active in installation of community-led drinking water supply schemes.

6.5 Ensuring Sustainable Access to Basic Sanitation and Drainage

Sanitation is one of the basic necessities, which contributes to human dignity, quality of living, sustainable livelihood. Inadequate sanitation costs Pakistan Rs. 343.7 billion (US\$5.7 billion) annually which is 3.9% of GDP. Pakistan has high mortality rate of children under 5 years i.e. 72 per 1000 children ranking second highest in South Asia. Pakistani children suffer 25 million cases of diarrhea annually and approximately 395 children die every day due to poor sanitation and hygiene in Pakistan. Polio is also a big problem which is also not getting in control due to inadequate and inappropriate sanitation

National Sanitation Policy 2006 envisions creation of an open defecation free environment with safe disposal of liquid and solid waste and the promotion of health and hygiene practices. Furthermore, government has also prepared Standards for School Water, Sanitation and Hygiene Facilities in Pakistan, 2009. Provision, and proper maintenance, of sanitation facilities in schools is necessary to reduce transmission of diseases. Sanitation is closely related to all seven MDGs (Annex-XIII).

Sanitation Action Plan has been prepared and is being implemented by the provinces through different projects and programs either through their own funding or through donor assistance: The provincial governments have developed the following policies and strategies: Punjab Urban Water and Sanitation Policy, 2007; Punjab Sanitation Strategy, 2007; Sindh Sanitation Strategy, 2011; Balochistan Sanitation Strategy and Action Plan, 2008; Sector Strategy for Drinking Water Supply, Sanitation and Hygiene Improvement Balochistan, 2006; AJK Sanitation Policy and Strategy, 2008; and Northern Areas Sanitation Strategy, 2008. For improving sanitation facilities, the government has implemented several projects (Annex-XIV). Some of these projects are as follows:

Pakistan is an active member of SACOSAN and global platform of “Sanitation and Water for All”. Pakistan represents the government constituency of South Asian region in “Sanitation and Water for All”. 2nd SACOSAN was held in Pakistan in 2006. To keep the momentum of SACOSAN and accelerate progress on sanitation and hygiene, the government has developed the platform of PAKOSAN which provides a unique national platform that brings together sanitation stakeholders to share, learn and collaborate to address the sanitation challenges. Pakistan is a member of World Toilet Council, celebrates Global Hand washing Day and World Toilet day every year. On that day awareness messages are disseminated through print and electronic media. Programs are also held in schools and children are educated on the importance of toilet hygiene and hand washing for improved health of children and society at large. The UNICEF, WSP and Civil Society Organizations are also implementing various programs to improve sanitation and hygiene conditions in Pakistan. In spite of these efforts, the problem is very severe. Pakistan is currently off-track in meeting its sanitation MDG targets i.e. ensuring that 90 percent of its people have access to improved sanitation by 2015. Pakistan has achieved coverage of 72% in sanitation¹².

However, significant improvements in the availability of flush toilets were achieved during the nine-year period ending 2011-2012 when the nationwide availability in urban areas increased from 89% to 97%. In addition, non-availability of toilets decreased from 5% to 1%. According to PLSM 2011-2012, the no toilet in urban areas ranges 0% in Sindh, 1% in Punjab, 2% in KP and 4% in Balochistan.

6.6 Improving Access to Clean Domestic Energy

Primary energy supply by source in Pakistan in percentage terms is as follows:

Fig 6.1: Primary energy supply by source in Pakistan in percentage terms

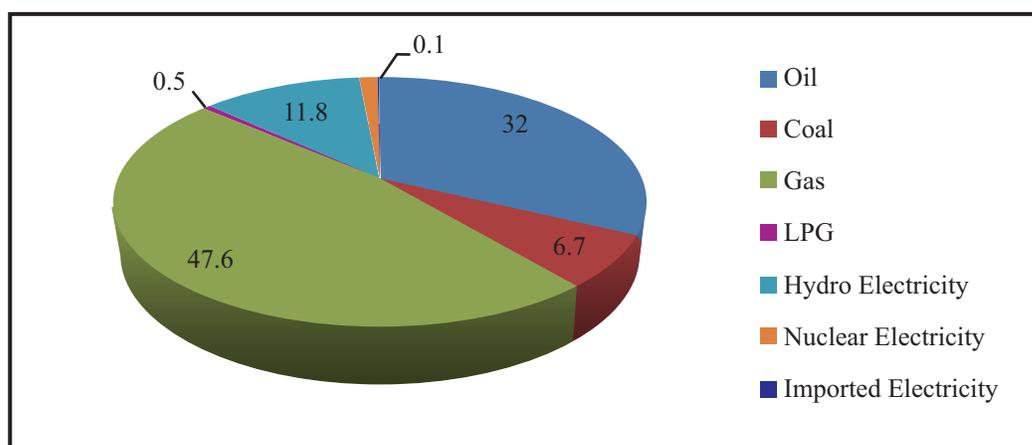
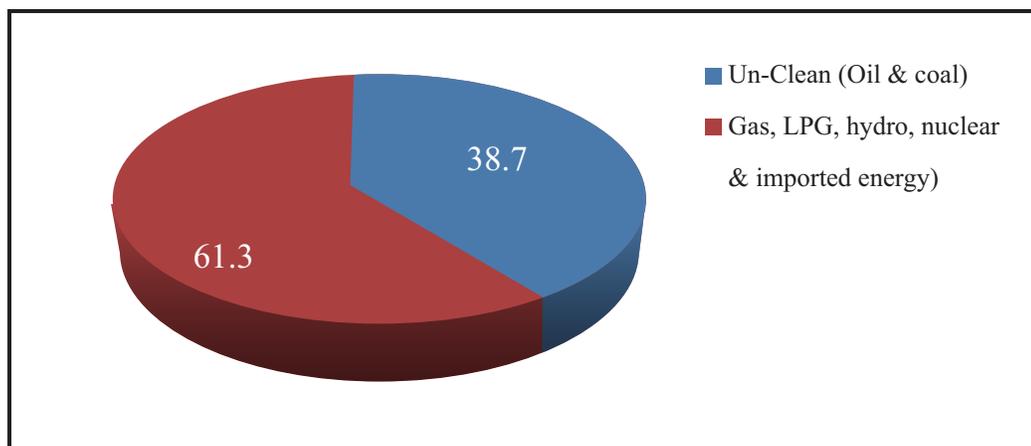


Fig 6.2: Primary energy supply by clean and un-clean source in Pakistan in percentage terms



6.6.1 Electricity

Electricity demand is to double in the next ten years in Pakistan. At present, Load shedding in urban areas is from 6 hours to 12 hours per day in winter and from 9 hours to 18 hours per day in summer season. This means that by 2017 around 15,000 MW new capacities need to be installed.

Realizing magnitude of the challenge, government has approved National Policies on Development of Renewable Energy 2006; Energy Conservation Policy 2006; and National Power Policy 2013. The purpose of Integrated Energy Plan 2009-2022 is to provide a road map for Pakistan to achieve greater energy self-sufficiency by pursuing policies that are sustainable, provide for energy security and conservation, and are environmentally friendly. Furthermore, the government launched a massive program which comprise of projects of accumulative capacity of 16,564 MW by 2018, based on coal, hydroelectric, natural gas and solar. Approximately 10,000 MW electricity would be generated through renewable energy sources by year 2030 besides replacement of 5% diesel with bio-diesel by year 2015 and 10% by 2025. Other renewable energy sources including biomass, bio gas, micro-hydroelectric and wind should also be explored. Natural gas-based projects would add 2,600 MW of energy to the system by April 2015.

In Pakistan, biomass consisting of fuel wood, agricultural waste and animal dung contributes 30% of the total energy consumption. The main supply of commercial wood fuel comes from forests and this activity is causing deforestation. This biomass is mostly used in the traditional way with an efficiency varying from 5 to 15%.

Micro hydroelectric land wind in the coastal belt is potential renewable resources for Pakistan. First commercial Wind Farm project has started producing 50MW of electricity from 2014 at Sindh. Government has approved proposals of more than 40 companies in Sindh province to produce 3,000 MW from the wind corridor. The KP government has planned to generate 2100 megawatts of electricity by 2025. Neelum-Jeelum hydroelectric project will add 969 MW of electricity by 2016. Diامر-Bhasha Dam in GB will add 4,500 MW of electricity to the national grid by year 2020.

6.6.2 Natural gas, CNG, and LNG

Currently out of 25 million households in Pakistan, 4.3 million are connected to natural gas network and the rest are relying on LPG and conventional fuels like coal, firewood, kerosene, dung cake etc. Against the demand of 8 billion cfd Pakistan's natural gas production is expected to fall from the current 4 billion cubic feet per day (cfd) to 2 billion cfd by 2020. Pakistan is currently planning –a pipeline from Iran, large offshore gas import terminals, and pipeline from Turkmenistan. Government has approved Liquefied Natural Gas (LNG) Policy 2011. Use of LNG in transport sector will save over \$2.5 billion per annum, generate one million jobs, protect Rs450 billion worth of industry and ensure a clean environment, besides providing at least 30 percent cheaper fuel to consumers.

6.6.3 Energy Conservation

Energy conservation is the least cost energy option for Pakistan to overcome its formidable energy challenge. There is a need to conserve energy in the building, transport, Agriculture, Industry, Power, and domestic sectors. Government has taken a number of initiatives such as energy audits and retrofitting of industries, buildings and tube-wells. Energy Efficiency and Conservation Bill has been prepared. Energy Conservation standards, Energy labeling energy and efficiency campaigns are among the main initiatives.

6.7 Improving Access to Sustainable means of Transport

Transport sector contributes to about 10% to the GDP and accounts for over 6% of employment in Pakistan. The automotive industry alone contributes over Rs 30 billion annually to Pakistan's GDP and is also paying approximately Rs. 8 billion per year in the form of taxes (second largest tax payer) and thereby playing a pivotal role in the development of Pakistan's economy.

Total roads network in Pakistan is around 263,775 kms. out of which about 70 percent are paved. Number of cars per thousand persons has increased from 9 in 1998 to 13 in 2013, whereas number of motorcycles during the same period has increased from 16 to 47. On the other hand the growth of public transport from 1998 to 2013 has increased from 1.5 to 2.0 per thousand persons. This indicates that due to absence of Mass transit system and lesser growth of public transport in Pakistan, the common man is forced to purchase their own transport either motorcycle or a car depending on their affordability. The increase in private vehicles is leading to traffic congestion in cities.

Table 6.1: Number of Motor Vehicles Registered (in thousand numbers)

Calendar Year	Motor Cycle (2 Wheels)	Motor Cycle (3 Wheels)	Motor Cars Jeeps & Station Wagons	Motor Cabs/ Taxis	Buses	Trucks	Others	Total
1996	1,842.5	69.8	966.7	54.5	114.4	123.7	666.5	3,838.2
2012	7,476.0	333.1	2,094.2	143.8	215.4	240.9	1,270.0	11,763.2
2013 P	8,134.9	357.4	2,164.7	144.5	217.1	244.3	1,302.8	12,565.6
% increase between 1996 to 2013	442%	512%	224%	265%	190%	197%	195%	327%

6.7.1 Integrated Mass transit System: Metro Bus and Metro-rail

Government introduced Metro-bus service in Lahore. To address the huge commuting problem of about 153,000 passengers daily between Rawalpindi and Islamabad and to reduce traffic congestion created by over 210,000 vehicles, the government is developing Mass transit system for which dedicated track is under construction. Mass Transit Master Plan of Karachi has following components: (i) Revival of Karachi Circular Railway. The project is in process with the federal government; (ii) Plan of Metro Rail Base two lines in different parts of city; (iii) Bus Rapid Transport 6 lines connecting different parts of the city. Pre-feasibility of the system in KP is under implementation. The system will be initiated on the routes that can serve most of the passengers.

6.8 Challenges Experienced and Lessons Learnt in Housing and Basic Services

As against the current incremental demand for housing estimated at 600,000 units annually, only about 370,000 units are being built annually, mostly in urban areas. The most fundamental challenge caused due to rapid urbanization in Pakistan is the development of slums and squatter settlements due to unavailability of affordable housing for the low income population in the major urban areas. About half the urban population is living in slums and squatter settlements, with inadequate housing and living conditions.

Cities are losing multi-class social, cultural and entertainment activities and the infrastructure that supports and promotes them, such as Art Galleries, Theaters, Cinemas, Exhibition Halls, Fair and Festival Grounds, Parks and Play fields, Public meeting places, City Halls, Art Schools and Libraries are close to extinction.

Limited institutional financing continue to be a major constraint in housing production and maintenance of old dilapidated housing stock. In addition, more than 80 percent of the total population cannot afford the financing terms provided by the HBFCL and other housing financial institutions.

Though Pakistan has met the MDG drinking water target in quantitative terms but in qualitative terms, this problem is still not fully met because the quality of water has not much improved because of different reasons including old infrastructure and contamination of water sources.

Pakistan has not met the MDG target of sanitation. Sanitation related diseases are one of the major causes for high morbidity and mortality of Pakistan children.

As Energy drives the economy, the shortage of energy is retarding Pakistan's economic growth (reflected by an estimated 4-7% loss to Pakistan's GDP), and seriously affecting livelihood of common man. New industries are not being added rather the existing industries are moving to other countries. The current shortfall in supply of energy has also resulted in a massive negative impact on the social life of citizens of Pakistan. Furthermore, inefficient energy utilization, the indiscriminate use of subsidies, lack of public awareness, ineffective or unenforced legislation, poor governance and under developed infrastructure are among the other issues in energy sector in Pakistan.

Poor performance of the transport sector is costing Pakistan about five percent of its GDP. There is a huge commuting problem due to lesser public transport and absence of public transport in less developed areas. Due to shortage of transport between cities transportation of goods and people is a serious issue. The frequency of road accidents is increasing due to reckless driving, non-maintenance and Aging transport. Urban facilities in Lahore like public buildings and Metro bus service is not very user friendly for elderly and handicapped persons. Female do not feel safe while crossing Underpasses built for pedestrian, especially during evening.

6.9 Future Challenges and Issues in Housing and Basic Services that could be Addressed by a New Urban Agenda

Production of housing stock for all income groups may be ensured by removing bottlenecks such as housing finance, acquisition of land, trained manpower and modern machinery for construction of houses and standardization of building components such as doors, windows etc. There is a strong need for advance planning to ensure that adequate spaces are reserved to reduce congestion in future, compliance of the land use and zoning regulations. Furthermore, it will also ensure timely completion of housing schemes and new towns to catch up with the housing backlog. To protect the land acquired by public institutions from encroachment, mechanisms for enforcement of laws may be strengthened.

Private sector participation may be encouraged and bottlenecks discouraging their participation may be removed. Transaction costs associated with acquisition, development of land, dispute resolution, legal lacunae, difficulties in entitlement, simplification of procedures for registration etc. need to be reduced.

Laws to provide basic housing facilities to the employees of public or private institutions may be strengthened. Stringent laws need to be developed to discourage withholding of developed vacant land and speculation on land prices. Mechanism of land bank may be introduced so that any allottee of plot who does not build the house within the prescribed time period, the allotment of plot may be cancelled and the ownership of the plot is reverted to the land bank. New modes of housing finance may be explored such as utilization of pension, benevolent and insurance fund to increase the flow of funds into housing sector. The government may introduce housing bonds to raise money from the Capital market. There should be some legislation in Pakistan to construct energy efficient houses.

As per Vision 2025, government plans to develop housing sector keeping in mind increasing urbanization and growth in population to cater to commercial demands. A 'Housing information system' to provide data on housing demand and supply will be established. The private sector will be encouraged to provide housing facilities. 'Slums and squatter settlements' will be replaced by low income residential buildings and service plots developed with local community participation for adequate provision of sewerage, clean water, and basic utilities such as gas and electricity. A move towards vertical expansion in city centers will provide residential facilities in addition to commercial space to city inhabitants. With increased urban expansion, additional demand of public services such as fire and rescue services, emergency medical services including ambulances as well as law enforcement would be met.

Key targets identified in Vision 2025 in the sector of drinking water and sanitation include providing safe drinking water, sanitation and hygiene services for all, promoting water conservation, eliminating open defecation, domestic and industrial wastewater treatment and reuse, reducing pollution from water sources, water resource management, water related disaster resilience and sustainable extraction from water resources. Further, massive awareness campaigns would be launched through electronic and print media.

Pakistan Vision 2025 aims at ensuring uninterrupted access to affordable and clean energy for all sections of the population. Following top 10 goals in this respect have been identified: Eliminate current electricity supply-demand gap by 2018, and cater to growing future demand by addition of 25,000 MW by 2025; Optimize energy generation mix between oil, gas, hydro, coal, nuclear, solar, wind and biomass – with reference to its indigenouslyness, economic feasibility, scalability, risk assessment and environmental impact; Complete two major hydroelectric projects: Diamer-Bhasha and Dasu dams; Operationalize the immense potential of Thar coal and complete Gaddani Energy Park with 6600 MW capacity; Tap Pakistan's huge potential for alternative energy; Complete new Nuclear power generation plants; Maximize distribution efficiency and cut wasteful losses through investment in transmission and distribution infrastructure and effective enforcement of controls; Address institutional fragmentation and decay of the sector due to poor capacity; Focus on demand management and conservation to ensure prioritization in allocation, elimination of wasteful use, incentives to use more energy efficient equipment and appliances and achieve better balance between peak and off-peak hours; and Introduce institutional reform and strengthen regulatory frameworks to improve transparency and efficiency. The concept of using smart technology, coupled with smart consumer behavior would be instilled into the nation by the government through education, sensible pricing and through incentivizing consumers.

Government of Pakistan had undertaken two major initiatives in the form of National Trade Corridor Improvement Program (NTCIP) and Auto Industry Development Program (AIDP). The targets set forth in Vision 2025 are to ensure reduction in transport cost, safety, effective connectivity between rural areas and urban areas markets interprovincial

high speed connectivity, integrated roads network and transportation corridor connectivity with major regional trade partner countries.

The government has initiated China-Pak Economic Corridor (CPEC) connecting Gwadar to Kashghar (China) and Karachi-Lahore Motorway (KLM) to serve initially as Economic Corridor to ensure optimal utilization of existing network. Its strategic objectives also include opening hinder-land areas and will bring more population into the stream of benefits, which in turn will ensure the social uplift of people living around this corridor.

Chapter 7: Indicators

7.1 Introduction

In Pakistan urban indicators have been developed and monitored in line with the national perspective plans, vision and strategies as well international commitments. For example Poverty Reduction Strategy of Pakistan and MDGs are examples of indicators monitoring system in Pakistan. The Pakistan Vision 2025 is in the process of developing Key Performance Indicators.

As regards Guidelines for the preparation of National Reports for Habitat III, while reporting the progress in respect of desired 12 indicators, an attempt has been made to respond to the indicators on which data is available.

Table 7.1: Progress of Urban Indicators

#	Urban Indicators	Progress in Percentages		
		1996	2006	2013
1	Percentage of urban population living in slums	24	30	50
2	Percentage of urban population with access to adequate housing	61.5	60	60
3	Percentage of people residing in urban areas with access to improved drinking water	85	-	91
4	Percentage people residing in urban areas with access to adequate sanitation	60	65	72
5	Percentage people residing in urban areas with access to regular waste collection	30	50	53
6	Percentage people residing in urban areas with access to clean domestic energy	-	-	-
7	Percentage people residing in urban areas with access to public transport	-	-	-
8	Level of effective decentralization for sustainable urban development measured by:	-	-	-
	(I) Percentage of policies & legislation on urban issues in whose formulation local and regional governments participated from 1996 to the present;	100	100	100
	(ii) Percentage share of both income & expenditure allocated to local and regional governments from the national budget;	-	-	-
	(iii) Percentage share of local authorities' expenditure financed from local revenue	-	-	-
9	Percentage of city, regional and national authorities that have implemented urban policies supportive of local economic development, creation of decent jobs and livelihoods	-	50	-

10	Percentage of city, regional and national authorities that have adopted or implemented urban safety & security policies or strategies	50	50	70
11	Percentage of city, regional and national authorities that have implemented plans and designs for sustainable and resilient cities that are inclusive and respond to urban population growth adequately	15	20	25
12	Share of national GDP that is produced in urban areas	-	-	78 ¹³

Chapter 8: Case studies and Policy Documents

8.1 Country-Wide Adoption of Pakistan's Approach to Total Sanitation

8.1.1 Orangi Pilot Project

Pakistan has Championed community-based innovative approach in laying of closed sewerage system and other basic urban infrastructure services in the Asia's largest slum called Orangi through Orangi Pilot Project under the leadership of Dr. Akhtar Hameed Khan through sustainable community participation. This innovative approach has been recognized by the World Community and it received Magsaysay Award. The OPP model was applied in Punjab in the form of Lodhran Pilot Project.

8.1.2 Lodhran Pilot Project

In Lodhran Pilot Project (LPP), sanitation improvement activities were divided between internal and external works. Internal development was self-financed by the community who paid for construction of in-house latrines and laying of drains in the lanes. External works were financed and developed by the local government which linked neighborhood drains with the trunk sewer.

The LPP works on the concept of component sharing; which clearly allocates responsibility of services between the community and other stakeholder (independent donor, government, or LPP). With community contributions approaching 50% of the total cost of scheme, allocating responsibility is paramount, as it creates a sense of ownership, and ensures proper maintenance. Community participation has eliminated intermediaries, resulting in huge savings. Effectiveness of LPP's community-based approach has given it an eminent position within the sanitation management of Southern Punjab. In order to improve urban sanitation conditions, the LPP provides technical expertise and design solutions tailored for small communities to Local Governments on urban sanitation. The LPP serves as an excellent example of the synergies resulting from the combined efforts of community and local governments.

8.1.3 Pakistan Approaches to Total Sanitation

Pakistan Approaches to Total Sanitation (PATS) is based on OPP model of sewerage system where the effluents were disposed of in the natural drain outside the community whereas the PATS has devised end of the pipe environmentally safe disposal system of sewerage. The PATS underpins an Integrated Total Sanitation approach that seeks for sanitation demand creation, sustaining the demand through supply side interventions, promoting participatory hygiene and attaining 100% adequate drainage and wastewater treatments. PATS extends an active social mobilization strategy by building a cadre of community resource persons who inspire and empower the communities to stop open defecation and to use improved sanitation facilities, construction of latrines and hygiene practices. This approach was developed under the leadership of Ministry of Climate Change has now been successfully integrated in the sanitation program of provincial governments. The UNICEF has adopted PATS as a Sector Wide Approach for bringing about improvement in the sanitation sector.

The PATS efforts have culminated in adoption of scaling up peri-urban and rural sanitation programs by the provinces that are targeted to promote synergies and develop linkages among key actors for the overall sector development. These programs are being implemented through various departments (i.e. Local Government, Public Health Engineering, Health and district administration etc.) coordinated by the local government departments. The partners seek to apply this outcome/Open Defecation Free (ODF) jurisdiction-based approach to the Pakistan context – with a special emphasis on a private enterprise model for scaling up.

Scaling up of PATS in Punjab has been piloted successfully with an innovative approach by creating collaboration among Community Development unit of PHED and Lady Health Workers (LHWs) of Health Department in 2011-2012. The interventions focused on raising awareness for behavioral change among the target communities. The project has covered 3360 villages out of 25,914 settlements of the province by forming village level WASH Committees. The coverage of sanitation has been increased from 1-2 percent to 9 percent and has successfully achieved its target of 980 ODF villages.

Up-scaling program for PATS has been initiated in four districts of Sindh i.e. Shaheed Benazirabad, Kashmore, Jacobabad and Shikarpur; three districts of KP province (D.I. Khan, Tank and Kohat) and three Agencies (Kurram, Bajaur and Mohmand) of FATA. The PATS interventions were launched in target villages by mobilizing the community to attain Open Defecation Free (ODF) status and help them adopt better hygiene practices through behavior change communication campaigns.

Sanitation policy for Azad Jammu and Kashmir (AJK) commits to promote PATS approach. The Plan International is developing Information, Education and Communication (IEC) material on PATS. It is expected that the PATS approach will help Pakistan to achieve improved sanitation coverage throughout Pakistan.

8.2 Promotion of Energy Efficient Housing and Heating Technologies in Sindh, KP and GB through BACIP

Due to physiographic condition of Pakistan, Pakistan experiences extreme weather events in summer and winter. These have been addressed through successful interventions in Energy Efficient Housing and Heating technologies. The Building and Construction Improvement program (BACIP) was set up by the Aga Khan in 1997 and it works in Sindh, GB and KP (Chitral and Nathia gali) to analyse people's problems related to housing and developing realistic and cost effective solutions. It has introduced over 70 products and technologies in local communities. To date, over 15,000 energy efficient and living condition improvement products have been installed in various households. Some of BACIP's standard products are at Annex-XV.

The BASIP techniques and products when applied, on an average reduce biomass consumption up to 60 percent (Pak RS 1,800-2,200/ month); reduce the incidence of Acute Respiratory Infections (ARI), pneumonia and other health related disease in women and children by up to 50 percent (especially during winters). It saves health related household expenditure amounting to approximately US \$ 58/ annum; increase household disposal income by 25 percent; and reduce recurring house maintenance cost by 10 percent. The BACIP program activities have recently been accorded a Global Best Practice status by the UNDP/ GEF Small Grants program. Clean Energy Pioneer Aga Khan Planning and Building Services (AKPBS) receives Prestigious Environmental Prize, Partnership for Clean Indoor Air Global Leadership Award 2009 in Uganda; National Energy Globe Award 2008 in Prague and ALCAN Prize for Sustainability in 2005 for BACIP Program in Pakistan.

8.3 Water and Sanitation Extension Program in GB

Water and sanitation infrastructure is a major issue and about 30% of reported illnesses and 40% of deaths in Pakistan are attributed to water-borne diseases. The objective of Water and Sanitation Extension Program (WASEP), an initiative of Aga Khan Planning and Building Service, Pakistan (AKPBS,P), is to supply integrated water supply infrastructure and preventing the incidence of water-related diseases. The WASEP has provided potable water and installed over 9200 latrines in 250 villages, benefitting over 200,000 people across Pakistan. According to World Health Organization, the WASEP has reduced incidences of diarrhea reported in local health centers by at least 25%, while at the household level the reduction has been approximately 60%. The AKPBS-Pakistan also received World Habitat Award in 2006 for BACIP and its WASEP.

The WASEP was declared as one of the twelve winners of the Dubai International Award for Best Practices (DIABP) out of 500 international submissions. This is the first ever social project from Pakistan to receive this prestigious award in the fourteen year history of the DIABP.

References

- Abadie, A & Gardeazabal J 2007. Terrorism and the world economy. *European Economic Review*.
- ADB/DFID and WB, 2004, Devolution in Pakistan. Asian Development Bank, Department for International Development, UK and World Bank
- ADB-WB, Asian Development Bank; World Bank. 2007. Pakistan Cyclone and Floods 2007: Preliminary Damage and Needs Assessment, Balochistan and Sindh. World Bank, Islamabad.
- ADB-WB, Asian Development Bank and The World Bank. 2010. The Pakistan 2010 Floods: Preliminary Damage and Needs Assessment, World Bank, Islamabad
- Afzal NS 2013, Pakistan With and Without LG, Spearhead Research, http://spearheadresearch.org/SR_CMS/index.php/researchopinions/pakistan-with-and-without-local-government
- Arif, G., & Hamid, S. 2009. Urbanization, City Growth and Quality of Life in Pakistan. *European Journal of Social Sciences*, 196-215.
- Armytage, R., & Javed, U. 2012. LG Critical in Pakistan's 2013 Political Landscape. *Wkly Insight Anal Found*. Available: <http://asiafoundation.org/in-asia/2012/07/11/local-government-critical-in-pakistans-2013-political-landscape/>. Accessed 5 November 2013.
- Azeem R 2005, Preserving the Urban Character: Appropriate Building Control Strategies for Culturally Important Urban Areas, paper presented at 2nd Seminar on Urban and Regional Planning 'Learning from Experiences' at NED University of Engineering and Technology, Karachi
- Balsari S., 2014, Karachi, Pakistan: Disaster Mitigation in the City of Migrants. <http://www.epijournal.com/articles/149/karachi-pakistan-disaster-mitigation-in-the-city-of-migrants>
- Dowall, D. and Ellis, P. 2007, "Urban land and housing markets in the Punjab, Pakistan." IURD Working Paper 2007-04.
- Dowall, D and Peter E. 2007. Urban land and housing markets in the Punjab, Pakistan. Working Paper, University of California Berkeley Institute of Urban and Regional Development (IURD), Working Paper 2007/4. Berkeley: IURD.
- Federal govt. involved provincial governments in all policy formulation on urban issues
- GOP (1994); Planning Commission, 'Eighth 5 Year Plan', Islamabad
- GoP 2000, Poverty Reduction Strategy Paper (PRSP I), Ministry of Finance, Islamabad.
- GOP (2000); National Policy on Katchi Abadis, Urban Renewal and Slum Up-gradation, Ministry of Environment, Local Government and Rural Development, Islamabad
- GOP (2001); National Housing Policy, Ministry of Housing and Works, Islamabad
- GoP 2005, Medium Term Development Framework, Planning Commission, Islamabad.
- GOP (2006); Poverty Reduction Strategy Paper (PRSP) – II, Finance Division, Islamabad
- GOP 2006. Clean Development Mechanism: National Operational Strategy. Ministry of Environment, Islamabad
- GOP (2006); Air Quality study, Pakistan Environmental Protection Agency, Islamabad
- GOP (2006); National Sanitation Policy, Ministry of Environment, Islamabad
- GOP 2007; NDMA, National Disaster Risk Management Framework Pakistan, 2007-2012, Islamabad
- GOP, (2007); Pakistan in the 21st Century: Vision 2030. Planning Commission, Islamabad.
- GOP (2008); Mid Term Review of the Medium Term Development Framework (2005-10), Planning Commission GOP 2008; NDMA, Winter Contingency Plan, Islamabad

GOP (2009); Integrated Energy Plan 2009-2022, Report of the Energy Expert Group, Ministry of Finance, Government of Pakistan

GOP (2009); National Clean Drinking Water Policy, Ministry of Environment, Islamabad

GOP, (2009); Pakistan Economic Survey 2008-2009. Ministry of Finance, Economic Advisor Wing, Islamabad. GOP, (2010). National Forest Policy, Ministry of Environment, Islamabad

GOP 2010; NDMA, National Contingency Plan to Manage Industrial/ Technical Disasters, Islamabad GOP 2010; NDMA, National Disaster Response Plan, Islamabad

GoP 2011b. Pakistan Economic Survey 2010-2011, Ministry of Finance, Economic Advisor Wing, Islamabad GoP; 2011a, Task Force Report on Urban Development, Planning Commission, Islamabad

GOP (2011); Pakistan Urban Sector Profile (draft) 1993, ADB, GOP, Planning Commission, Task Force Report on Urban Development

GOP, Government of Pakistan (2011b). Pakistan Framework for Economic Growth. Planning Commission, Islamabad.

GOP, Government of Pakistan (2012); Pakistan Economic Survey 2011-2012. Ministry of Finance, Economic Advisor Wing, Islamabad.

GOP (2012); Population Census Organization, National Institute of Population Studies, Islamabad.

GOP (2012-13); Pakistan Social and Living Standards Measurement Survey (PSLM) National / Provincial / District, Government of Pakistan, Statistics Division, Pakistan Bureau of Statistics, Islamabad

GoP 2013; Pakistan Millennium Development Goal Report 2013, Planning Commission. Published by UNDP, Islamabad.

GOP 2013; Social Determinants of Health, (Issues and challenges in Pakistan), <http://www.pc.gov.pk/wp-content/uploads/2013/10/Social-Determinants-of-Health-04.12.2012.pdf>

GOP (2013) Pakistan: Sanitation Country Paper, Ministry of Climate Change, Islamabad GOP 2013; NDMA, Monsoon Contingency Plan, Islamabad

GOP (2013-14); Pakistan Economic Survey, Ministry of Finance, Government of Pakistan, Islamabad GOP (2014a); Pakistan Vision 2025, Planning Commission, Islamabad

GOP, Government of Pakistan (2014b). Pakistan Economic Survey 2013-14, Ministry of Finance, Economic Adviser Wing, Islamabad.

GOP, Government of Pakistan (2014). Environmental Atlas of Pakistan, Climate Change Division, University of Peshawar and SUPARCO.

GOP, (2015); Environment and Climate Change Outlook of Pakistan, Climates Change Division, Islamabad. GOP; specification for Bottled Natural Mineral Water (2nd Rev.). Standards Development Centre, Karachi,

GOP, Study on The State Of Domestic Commerce In Pakistan, Study 9, Real Estate In Pakistan (Draft), The Ministry of Commerce, Islamabad (Compiled by Niazi, M.K.; Khetran, Ahmed Jamal Khan)

GOP and UNFCCC (2011). National Economic and Environmental Development Study (NEEDS), unfccc.int/files/adaptation/application/pdf/pakistanneeds.pdf

GOP and UNDP 2012; Info graphic on Pakistan's MDG Status for 2012, Islamabad.

Government of the Punjab (2006); Poverty Focused Investment Strategy for Punjab, Lahore

Gulzar A, Junaid N and Haider A, 2010, What is Hidden in the Hidden Economy of Pakistan? Size, Causes, Issues and Implications, Munich Personal RePEc Archive, MPRA paper no 28571, http://mpra.ub.uni-muenchen.de/28571/1/MPRA_paper_28571.pdf

Haider M and Badami MG 2010, Urbanization and Local Governance Challenges in Pakistan, *Environment and Urbanization Asia*, 1, (1), PP 81-96

Harmeling, S, 2011, *Global Climate Risk Index, 2012*, Germanwatch

Hamid S, 2010. *Rural to Urban Migration in Pakistan: The Gender Perspective*, PIDE Working Paper no 2010:56, Pakistan Institute of Development Economics, Islamabad

Haque NU. 2007. *Pakistan 25 Years Hence: A Vision*. Pakistan Institute of Development Economics. Page 13.

Haque NU (2010); 'Towards Growth Strategy and Economic Reforms', Presentation at Pakistan Development Forum (PDF), Islamabad, 2010.

Hasan, A. 2008. *Housing Security and Related Issues: The Case of Karachi*.

Hasan A, Ahmed A, Raza M, Sadiq A, Ahmed SUD, Sarwar MB, 2013, *Land Ownership Control and Contestation in Karachi and Implications for Low Income Housing, Urbanization and Emerging Population Issues*, Working Paper 10, IIED and UNFPA.

Hawksworth, J., Hoehn, T. and Tiwari, A. 2009. "Which are the largest city economies in the world and how might this change by 2025?" *Price Waterhouse Coopers. UK Economic Outlook November 2009*.

HBFC, House Building Finance Corporation 2008, *Country Report. Pakistan*

Hutton, Tim. 2009. "Who's Your City? How the Creative Economy Is Making Where to Live the Most Important Decision of Your Life-By Richard Florida". *Economic Geography. ClarkUniversity. Vol. 85(3).pp. 335-336, 07*.

IUCN Pakistan 2005. *Environmental Law in Pakistan — Federal*. International Union for Conservation of Nature and Natural Resources Pakistan, Environmental Law Programme, Karachi, Pakistan.

IFPRI 2011, *Food Security Portal: Pakistan*<http://www.foodsecurityportal.org/rganiza>. Accessed September 08 2011.

ITOPF, International Tanker Owners Pollution Federation. (2010). *Pakistan Country Profile*, www.itopf.com/country_profiles

Impact Design Hub (2014): <http://www.impactdesignhub.org/2014/08/25/watch-rebel-architecture-episode-on-yasmeen-lari/>

Jacoby HG and Mansuri G. 2006 *Incomplete Contracts and Investment: A Study of Land Tenancy in Pakistan*, World Bank Policy Research Working Paper 3826. World Bank, Washington DC

Joint Monitoring Program (JMP) report 2013

Kalim, R., & Bhatti, S. A. 2006. *Quantification of Socio Economic Deprivations of Squatter Settlements Inhabitants: A Case Study of Lahore*. 6th Global Conference on Business & Economics, pp. 1-11.

KCDG, Karachi City District Government (2007); *Karachi Strategic Development Plan 2020*, Karachi

Khan, AU, 2010, *Evaluation of Industrial Environmental Management, Pakistan*, Report Prepared for the Ministry of Industry and the World Bank, Islamabad

Khan, MA and Samiullah 2015, *Financing for Disaster Risk Reduction in Pakistan* in Rehman AU et al, *Disaster Risk Reduction Approaches in Pakistan*, Disaster Risk Reduction, Springer, Japan, 2015.

Khan, R. 2011, February 11. *Shah Alam Market in Flames*. Retrieved March 24, 2011, from *The Express Tribune*: <http://tribune.com.pk/story/115295/fire-engulfs-market-in-lahore-22-injured/>

King, A.D. 1990. "Urbanism, Colonialism and the World-Economy: Cultural and Spatial Foundations of the World Urban System."; Jenkins, P., Smith, H. and Wang, Y.P. 2006. "Planning and Housing in the Rapidly Urbanizing World." Taylor & Francis.

Landry C. 2000. The Creative City. Earthscan

LDA, Lahore Development Authority 2004. Integrated Master Plan for Lahore 2021, Final Report Volume 1

Luken, R. (2008). Industrial Environmental Regulation, 1997-2007: Reasons for the Failure of Existing Manufacturing Plants to Comply with the NEQS. UNIDO.

M a n g i n A 2 0 1 2 , T h e S e c r e t S t r e n g t h o f P a k i s t a n ' s E c o n o m y , G l o b a l E c o n o m i c s
<http://www.businessweek.com/articles/2012-04-05/the-secret-strength-of-pakistans-economy#p1>

Maplecroft – Global Risks Portfolio and services 2011 .Maplecroft's Climate Change Risk Atlas.https://www.maplecroft.com/about/news/gra_2011.html

Overman HG and Venables A J 2005. Cities in the developing world.CEP Discussion Paper No 695. The Centre for Economic Performance, London School of Economics and Political Science; McKinsey Global Institute. 2011. "Urban World: Mapping the Economic Power of Cities."

Oxfam, GB (2014); Urbanization in Pakistan, a synthesis and Policy Option Study for Urban Programming, Islamabad

Oxfam, GB (2014); Towards and Urban Program Focus, a synthesis of Urban Poverty Assessment and Pathways to an urban Program, Islamabad

P W P, P a k i s t a n W e a t h e r P o r t a l , 2 0 1 1 , C l i m a t e o f K a r a c h i , P a k i s t a n M e t e o r o l o g i c a l
Department,<http://pakistanweatherportal.com/2011/05/10/climate-of-karachi-part-ii-the-most-extreme-events/>

Qadeer MA, 1996, An Assessment of Pakistan's Urban Policies, The Pakistan Development Review, 35:4 Part II (Winter 1996), PP 443-465

Qadeer MA 2014Do's and Don'ts of Urban Policies in Pakistan in Ed. Kugleman M, Pakistan's Runaway Urbanization, What Can be Done, Wilson Centre.

R a f i q , M A , 2 0 1 2 , T h e C l e a n e r P r o d u c t i o n a n d I n s t i t u t i o n a l D e v e l o p m e n t i n P a k i s t a n
<http://www.lead.org.pk/attachments/mtd50/attachments/fellow case study.pdf>

Rafiq A 2014, Improving Municipal Finance for Climate Smart Cities' Governance, Outreach,
<http://www.stakeholderforum.org/sf/outreach/index.php/previous-editions/cop-20/cop20-day10-cities-urbangov-transport/11866-cop20-day10-improving-municipal-finance-climate-smart-cities-governance>

Rehman; I.A. 2015; State vandalism in Lahore, <http://iarehman.com/?p=575>

Samiullah, 2014, Expansion of built up area and its impact on urban agriculture in Peshawar: A Case Study of Peshawar, Ph D thesis, University of Peshawar

Sherani S 2013 The Informal Economy, Dawn, <http://www.dawn.com/news/787833/the-informal-economy>

Siddiqi AA and Siddiqi SA, (2011), Urban Sprawl in Pakistan and Architect's Role in the War Against A Waterless W o r l d ,
http://www.academia.edu/2495182/URBAN_SPRAWL_IN_PAKISTAN_AND_ARCHITECTSROLE_IN_THE_WAR_AGAINST_A_WATERLESS_WORLD

UNDP 2013, LG Acts 2013 and Province LG Relations,

http://www.undp.org/content/pakistan/en/home/library/hiv_aids/development-advocate-pakistan/local-government-acts-2013-and-province-local-government-relatio/

UNDP; 2014, MDG Report 2014

UNDP, IUCN, Care, FAO, UNEP and others (2010). Pakistan: National Strategy and Action Plan for Mangroves for the Future. www.mangrovesforthefuture.org

UNFPA and Help Age International (2012); "Ageing in the Twenty First Century – A Celebration and a Challenge."

Islamabad.

UN-Habitat 2007, Enhancing Safety and Security, Earth Scan London.

UN-Habitat. (2008). Country Programme Document 2008-2009 – Pakistan, United Nations Human Settlements Programme (UN-Habitat).

United Nations (2009); World Urbanization Prospects, The 2008 Revision. Population Division, Department of Economic and Social Affairs, New York

United Nations (2009); IANWGE, Initiative of the Inter-Agency Network on Women and Gender Equality, Gender Equality and Sustainable Urbanization, Fact Sheet, Women Watch, <http://www.un.org/womenwatch/>

United Nations (2014); The Millennium Development Goals Report, Islamabad

USAID, 2008, Pakistan: Property Rights and Resource Governance, Pakistan Country Profile, http://usaidlantennure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Pakistan_Profile_0.pdf

WHO, 2010, Pakistan Dengue Fever, <http://www.emro.who.int/pak/programmes/dengue-fever.html>

WHO, World Health Organization. 2012. Use of Drinking Water Sources in Regional and Global Estimates on Water and Sanitation 2012 Update, WHO, Geneva

World Bank. 2006. Pakistan Strategic Country Environment Assessment. South Asia Environment and Social Unit, Islamabad.

World Bank. 2007. Pakistan: Current projects, <http://www.worldbank.org.pk/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=293052&menuPK=2930>

84&Projectid=P090501

World Bank. 2009. World Development Report 2009: Reshaping Economic Geography, The World Bank. World Economic Forum (2010); Global Information Technology Report

World Bank; Environment and Social Development Unit, (In Sustainability of Sanitation Systems in Pakistan, Husnain Haider and Waris Ali, www.researchgate.net/.../02e7e521ef77011d7d000000.pdf)

www.akdn.org

www.watson.mov.gov.pk

Yuen B and Choi S (2011); Making Spatial Change in Pakistan Cities Growth Enhancing, World Bank Policy Paper Series on Pakistan, PK11/12, Islamabad

Yuen B and Choi S, 2012, Making Spatial Change in Pakistan Cities Growth Enhancing, World Bank Policy Paper Series on Pakistan, PK 11/12, World Bank, Islamabad

Shehzad, K 2009, Pakistan housing finance sector, challenges and opportunities, paper presented at the Workshop on Housing Finance in South Asia May 27, 2009, Jakarta, Indonesia.

Zaidi SH, 2011 Urban Poverty in Pakistan, Master's Dissertation, University of Texas, Austin.

Zaman KU 2012, Urbanization of Arable Land in Lahore City in Pakistan: A Case Study, European Journal of Sustainable Development, Vol 1, no 1

List of Major National Policies Related to Urban Issues

- Draft National Human Settlement Policy (1989)
- Draft Management of Cities Policy (1990)
- National Housing Policy 2001
- National Katchi abadi Policy 2001
- National Sanitation Policy 2006
- National Energy Conservation Policy 2006
- National Environment Policy 2005
- National Drinking Water Policy 2009
- Draft National Water Policy 2006
- National Climate Change Policy 2013
- Draft National Sustainable Development Policy 2012
- National Disaster Risk Reduction Policy 2013

Urban Design and Heritage

Pakistan is endowed with a large number of ancient sites, historic structures and urban design in terms of architectural beauty. These historic assets are our link with our past, which range from archaeological sites like Mohenjo-Daro and Harappa, Uch Sharif, a fusion of local trabeated and imported architecture, representing successive Sultanate dynasties, Thatta mosques and residential urban historic architecture as depicted in Walled City of Lahore in 13 gates and Mohallah Sethian in Walled City of Peshawar. It also has vernacular traditions in terms of practicality of design to suit weather and climatic conditions, construction material etc. These can be witnessed in wind catchers in Sindh and wooden brackets on large windows in the houses in walled city of Peshawar which can be kept open in summer and closed to insulate windows from cold in winter. However many of these are under threat from rapid population increase during the past few decades, unchecked commercialization, expansion of transportation network and irregularities due to the absence or non-observance of zoning regulations and building control. Only 146 out of 1,799 historical monuments and 33 out of 112 archaeological sites identified thus far have been conserved to-date. Urban pressures, encroachments, and insensitive restoration are accelerating natural deterioration of these sites. There is a need to divert a major part of growing revenues from tourism to restoration of these sites and other neglected locations for future benefits. The efforts of association like Lahore Conservation Society (LHC), which initiated Lahore Conservation Initiative, for conservation is laudable.

In terms of contemporary buildings, the realities of climate change, recurring natural disasters and growing cost of construction has created the need for urban design responsive to these issues in Pakistan. Some latest work has offered many solutions to sustainable development of cities.

Some civil society organizations in Pakistan like Lahore Conservation Society and Heritage Foundation of Pakistan have been most successful in conserving heritage sites and providing disaster relief shelters in the world through indigenous solutions, respectively. The Lahore Conservation Society and the Lahore Bachao Committee have been established as pressure groups by civil society organizations. These societies work for preservation and conservation of heritage of Lahore city. Their recent efforts include drawing attention of government institutions towards monstrous projects like widening of Canal road and Ravi River front housing scheme in Lahore. They are working for the community's pride in its heritage and the people's right to their environment.

Heritage Foundation of Pakistan has helped built over 36,000 houses for those hit by floods and earthquakes in Pakistan since 2010. Shunning the weak, mass-produced houses offered by international organizations, the foundation used vernacular techniques and local materials like lime and bamboo, with a tiny carbon footprint and simple enough for people to build themselves. With this they hoped to demonstrate the role that architecture can play in humanitarian aid. Philanthropic organizations like Aga Khan Foundation and private sector like Bahria Town also helped in rehabilitation of affectees of natural disasters and rebuilding shelters.

Pakistan Clean Air Program

Salient features are as follows:

- Gradual exclusion of diesel run vehicles from urban centers.
- Establishment of Environmental Squad of Traffic Police in all major cities to control smoke.
- Introduction of low sulfur diesel and furnace oil and promotion of alternate fuels in the country.
- Encouragement for installation of pollution control devices and other technologies in vehicles and industry.
Relocation of brick Kilns and adoption of alternate technology for brick manufacturing.
- Establishment of Indoor Air Quality Standards.
- Urban tree plantation, forestation in deserts and sand dune stabilization
- Proper disposal of solid waste.-

Other Urban Environmental Concerns and Achievements

It is estimated that the per capita availability of water is depleting fast and would be less than 1000 m³ in the coming few years which is the threshold for declaring country water scarce. The land and water pollution caused by untreated disposal of industrial, hospital and municipal waste including sewage water is resulting in a total health cost to the tune of Rs.114 billion or approximately 1.8 percent of the GDP¹⁴. The land and water pollution is causing increase in arsenic, lead, cadmium and fluoride levels in drinking water that is resulting in diseases like Diarrhea, jaundice, typhoid and other diseases caused by chemical poisoning. The Biological Oxygen Demand (BOD) levels in fresh water bodies including rivers are being increased due to water and land pollution. Land pollution is increasing desertification, deforestation and degradation of agricultural lands in the country. Tarbela Dam capacity has decreased by 29.32% due to siltation of its reservoir. The main cause of which is upstream deforestation.

Lesser green-cover in urban areas, urban water supply and sanitation, marine water pollution, urban industrial pollution and un-sustainable production and consumption are among the other environmental concerns in the urban areas. The most significant action undertaken in immediate aftermath of Habitat was promulgation of the Pakistan Environmental Protection Act of 1997 (PEPA).

The Environment Policy was approved in 2005 focusing on integration of environment into development planning; legislation and regulatory framework; capacity building; economic and market based instruments; public awareness and education; and public-private-civil society partnership.

A number of major steps have been introduced to control pollution in urban areas such as the establishment of National Environmental Quality Standards (NEQS) in 2000 for both municipal and industrial waste. Another important step to control pollution was serious efforts of Pakistan and Provincial EPAs for the implementation of IEE/EIA (Initial Environmental Examination/Environmental Impact Assessment) Regulations and 1997 guidelines under PEPA. The introduction of IEEs and EIAs is quite impressive. During the period 2000-09 in total 1,321 applications were submitted, No Objection Certificates (NOCs) were issued to 69 percent of applications. A major success in this regard was that the IEE or EIAs was conducted for many public sector projects such as infrastructure projects in Islamabad by Capital Development Authority (CDA), New Murree Project, widening of Lahore Canal Road project, open pit mining in Thar and nuclear power plants close to large urban centers (such as Karachi).

Protection of urban fresh water reservoirs and marine resources of coastal cities from depletion and degradation is also extremely important. Steps have been taken to check degradation of fresh water resources from pollution by establishing institutions such as Water and Sanitation Authorities (WASA) in major cities to control freshwater contamination from municipal wastewater. A number of these agencies have planned and developed wastewater treatment plants in Rawalpindi, Lahore, Faisalabad and Multan. However, the capacity of these plants is far below the amount of wastewater generated. Efforts have also been made to control release of industrial pollutants by installing effluent treatment plants for primary waste water treatment.

Under MDG 7, Pakistan aims to promote sustainable development, halve the proportion of people without sustainable access to improved drinking water and basic sanitation, and bring about a significant improvement in the lives of slum dwellers (by 2020). Of the seven MDG 7 indicators, Pakistan is on track to achieve four. Pakistan has made inroads in relation to protecting areas for wildlife conservation, reducing Sulfur content in high-speed diesel, GDP per unit energy and access to safe drinking water. MDG 7 is the only goal, which Pakistan is currently on-track to achieve by 2015 (more indicators on-track).

14. World Bank. 2006. Pakistan Strategic Country Environment Assessment. South Asia Environment and Social Unit, Islamabad

Status of Indicators – MDGs 7

Indicators	Latest National Value	Target	Status
Forest Cover (%)	5.2	12	Off Track
Land Area Protected for Conservation of Wildlife (%)	11.6	28,000	On Track
GDP (in 1980/81 Rs) per ton of oil equivalent (energy efficiency)	26,543	0.5-0.25	On Track
Sulfur Content in High Speed Diesed	0.6	93	On Track
Proportion of Population with Access to Improved Water Sources	89	90	On Track
Proportion of Population with Access to Sanitation	72	95	Off Track
Proportion of Katchi Abadies Regularized	n/a		

Laws Enacted by Federal and Provincial Governments Since Habitat II

The main federal level legislation promulgated in the aftermath of Habitat II included Pakistan Environmental Protection Act 1997, Land Disposal Act 1998, Pakistan LG Ordinance 2001 and Illegal Dispossession Act, 2005. Environmental Protection Act of 1997 is the most significant environmental legislation in Pakistan. It requires industrial facilities to restrict their emissions and effluents to the limits specified in the National Environmental Quality Standards and establish the penalties for noncompliance. It also outlines the institutional framework for environmental protection in Pakistan, including creating the Environmental Protection Agency, responsible for ensuring compliance with the rules, standards and regulations set forth in this and subsequent environmental legislation. It is charged with the promotion of R&D, environmental education, and encouraging the development of NGOs to bolster governmental activities. It also provides fiscal incentives, awards, tax exemptions, allowances, or subsidies for the promotion of environmentally efficient activities, equipment or processes. In addition, the legislation established Provincial Sustainable Development Funds, provincial environmental Protection agencies and environmental tribunal; and made Environmental Impact Assessments for public and private projects mandatory.

Land Disposal Act of 1998 provides for the disposal of land by City Development Authorities. According to its section 3, Development Authorities shall prepare housing schemes by categorizing land in residential, commercial, industrial and public amenity plots. Its section 5 prevents conversion public amenity plot in a housing scheme to any other use. The Local Government Ordinance 2001 was introduced for devolution of power to local governments, details of which have been discussed in section 4.3 below The illegal dispossession act 2005 has been enacted to control illegal transaction of properties particularly to dispossess the lawful owners or occupiers of those properties. Its main purpose is to control property grabbing and their illegal occupation.

The provinces also enacted many acts, rules and regulations of diverse type to dovetail federal legislation as well as for the purpose of strengthening local governments, creation of institutions for urban governance, improvement of housing and transportation, environmental management etc. A list of sample acts enacted in the Punjab and Sindh provinces is provided as follows:

- The Punjab Local Government Act 2013
- The Parks and Horticulture Authority Act 2012
- The Lahore Ring Road Authority Act 2011
- The Punjab Rented Premises Act, 2009
- The Punjab Heritage Foundation Act 2005
- The Punjab Consumer Protection Act 2005
- The New Murree Development Authority Act, 2004
- The Punjab Government Servants Housing Foundation Act 2004
- The Punjab Journalists Housing Foundation Act 2004
- The Punjab Housing and Town Planning Agency Ordinance, 2002
- The Punjab Local Government Ordinance, 2001
- The Punjab Environmental Protection Act, 1997
- The Prevention of Defacement Of Property Act, 2014
- The Sindh Solid Waste Management Board Act, 2014
- The Sindh Land Revenue (Amendment) Act, 2014
- The Registration (Sindh Amendment) Act, 2014

- The Sindh Environmental Protection Act, 2014
- The Sindh Building Control (Amendment) Act, 2014
- The Sindh Local Government (Amendment) Act, 2010
- The Sindh Public-Private Partnership Act, 2010
- The Sindh High Density Development Board Act, 2010
- The Sindh Finance Act, 2010
- The Land Acquisition(Sindh Amendment) Act, 2009
- The Sindh Public Property (Removal Of Encroachment) Act, 2010
- The Zulfikarabad Development Authority Act, 2010
- The Larkana Development Authority(Revival And Amending) Act, 2009
- The Cancellation Of Bogus Entries(In The Record Of Rights)Of Government Land Act, 2009
- The Sindh Land Revenue (Amendment) Act, 2008
- The Sindh Freedom of Information Act, 2006
- The Sindh Building Control (Amendment) Act, 1998
- The Sindh Irrigation and Drainage Authority Act, 1997
- The Karachi Water and Sewerage Board Act, 1996
- The Gorakh Hills Development Authority Act, 2008
- Karachi Building Town Planning Regulations 2002 is replaced by Karachi Building & Town Planning Regulations (Amendment) 2011.
- Karachi Development Authority (Amendment) Act 1967 is also made redundant and the powers are given to Sindh Building Control Authority -SBCA (Amendment) Act, 2013.

Similar Acts, Rules and Regulations were also enacted in other provinces and territories.

At local level cities in Pakistan are governed under a mixture of previous and new laws, acts and regulations. The important ones include Land Acquisition Act 1894; Development of Cities Act 1976; Land Disposal Act 1998: and Defence Housing Authority (DHA) Order, 2002. There are also several other regulations and by-laws including those on zoning, subdivision and building regulations.

In many cases at the city level, there are multiple regulations for example Islamabad has no less than 70 laws and regulations. It has been estimated that there are more than 24 laws governing various land matters at the national and provincial levels, e.g. Defence Housing Authority Lahore Ordinance 1999, Commercial Policy of Punjab 1999, The Punjab LG (Commercialization) Rules 2004, Capital Development Authority Ordinance 1960, Cantonment Ordinance 2002, Cantonments Act 1924, Registration Act 1908, Land Acquisition Act 1894, Rent Control Act 1959 etc. Several of the land administration regulations, e.g. land acquisition, registration and rent control, are outdated (rooted in practices established during colonial administration), requiring modernization to enable Pakistan's spatial planning and effect sustainable development. In fact there is a need to consolidate the multiple legislations relating to spatial development and introduce a clear, unambiguous enabling statutory environment to improve the legitimacy of spatial planning for individual city, system of cities as well as urban milieu as a whole.

In fact, imperfect, fragmented and piecemeal statutory law is a major problem in urban planning. According to Pakistan Planning Commission's Task Force on Urbanization, "existing laws, by-laws, zoning regulations and policies impede an efficient and economical use of land. Principles of healthy and safe environment, social cohesiveness and pleasing aesthetics are often violated. These laws and regulations are mostly anti-street, anti-pedestrian, anti-mixed land use, anti-high densities and anti-public space. They do not provide sufficient space for amenities such as schools, health facilities, parks and playgrounds".

There are multiple regulations for example the capital development territory alone has no less than 70 laws and regulations. It has been estimated that there are more than 24 laws governing various land matters at the national and provincial levels, e.g. Defence Housing Authority Lahore Ordinance 1999, Commercial Policy of Punjab 1999, The Punjab LG (Commercialization) Rules 2004, Capital Development Authority Ordinance 1960, Cantonment Ordinance 2002, Cantonments Act 1924, Registration Act 1908, Land Acquisition Act 1894, Rent Control Act 1959 etc. Several of the land administration regulations, e.g. land acquisition, registration and rent control, are outdated (rooted in practices established during colonial administration), requiring modernization to enable Pakistan's spatial planning and effect sustainable development. The regulatory environment has been complicated by a weak institutional structure characterized by a multiplicity of institutions with each agency responsible for its range of services within its own jurisdiction.

There is a need to consolidate the multiple legislations relating to spatial development and introduce a clear, unambiguous enabling statutory environment to improve the legitimacy of spatial planning as a whole. At the fundamental level, there is urgent need to comprehensively review and overhaul the laws governing land rights, transactions (property tax, rent control and stamp duty), planning and development in Pakistan with a view to update, streamline and clarify the legal framework for land registration, land use development and property taxes.

Salient Features of Provincial Local Government Acts 2013/2014

Powers	Category	Punjab Local Government Act 2013	Sindh Local Government Act 2013	KP Local Government Act 2013	Balochistan Local Government Act 2013
Administrative	LG Tier	<ul style="list-style-type: none"> ➤ Metropolitan Corporations in provincial capital ➤ District Councils in rural areas ➤ Municipal Corporations & Municipal Committees ➤ Union Councils (UC) for both urban and rural areas (except for Lahore) ➤ All councils led by Chairman and Vice Chairman 	<ul style="list-style-type: none"> ➤ Metropolitan Corporations in urban areas ➤ District Councils in rural areas ➤ Municipal Corporations & Municipal Committees ➤ Union Councils for both urban and rural areas ➤ All councils led by Chairman and Vice Chairman 	<ul style="list-style-type: none"> ➤ City Districts Councils ➤ Districts Councils ➤ Tehsils/ Towns Councils ➤ Village Councils for rural areas ➤ Neighborhood Councils for urban areas ➤ The tier of Unions has been omitted in the Act ➤ All councils led by Nazim and Naib Nazim 	<ul style="list-style-type: none"> ➤ Metropolitan Corporations in urban areas ➤ District Councils in rural areas ➤ Municipal Corporations & Municipal Committees ➤ Union Councils for both urban and rural areas ➤ All councils led by Chairman and Vice Chairman
	Key Functions	<ul style="list-style-type: none"> ➤ Municipal functions of health and education under indirectly elected members & technocrats 	<ul style="list-style-type: none"> ➤ LGs Council municipal mandate include functions of water, health, education, and town planning 	<ul style="list-style-type: none"> ➤ LGs Council municipal mandate include functions of health, education, social welfare, revenue & estate, rural development, etc 	<ul style="list-style-type: none"> ➤ LGs Council municipal mandate include functions of health, education, town planning, public safety etc
	Public Safety/ Policing Function	<ul style="list-style-type: none"> ➤ Allows for urban local councils to maintain such police force as directed by the 	<ul style="list-style-type: none"> ➤ Public Safety is limited to fire fighting, civil defense, floods, famine, dangerous and offensive 	<ul style="list-style-type: none"> ➤ Local government may requisition a police contingent in accordance with Police 	<ul style="list-style-type: none"> ➤ Public Safety is limited to providing relief during natural disasters ➤ No mention of the role of

		<ul style="list-style-type: none"> government or create a municipal police ➤ Rural councils may report to the police the commission of offences and assist local police in investigation, prevention and arresting of criminals ➤ Public Safety measures related only to fire, flood, hailstorm, earthquake, famine and other natural calamities and disasters ➤ No mention of Police Order 2002 in Act 	<ul style="list-style-type: none"> articles and trades ➤ No mention of the role of local elected officials and/or citizens in matters related to police or community policing ➤ No mention of Police Act 1861 	<ul style="list-style-type: none"> ➤ Order 2002 Village Council may supervise performance of police and undertake accountability by making inquiries and sending quarterly performance reports to the concerned authorities 	<ul style="list-style-type: none"> local elected officials and/or citizens in matters related to police or community policing ➤ No mention of Balochistan Police Act 2011
Political	Tenure	➤ 5 year term of office	➤ 4 year term of office	➤ 4 year term of office	➤ 4 year term of office
	Provincial Influence	➤ Punjab Chief Minister can suspend elected LG heads for 90 days	➤ The Sindh LG Minister may suspend elected LG heads for 6 months as well as LG departments and institutions	➤ KP Chief Minister may suspend elected LG heads for maximum of 30 days	➤ The Baluchistan Provincial Government is empowered to remove elected LG heads and/or council members
	Political Independence	➤ Administration of Local Councils business as prescribed by provincial government	➤ Provincial government empowered to supervise and inspect local councils	➤ LG Councils empowered to appoint inspecting officers	➤ Provincial government empowered to supervise and inspect local councils

					➤ Administration of Local Councils business as prescribed by provincial government
Financial	Finance & Revenue	<ul style="list-style-type: none"> ➤ LG councils dependent on Provincial Finance Commission Award (PFCA) ➤ Revenue Departments will work under control of provincial governments 			

Current Administrative Set up at the District Level

After the Devolution Plan 2001 the slot of Deputy Commissioner was changed into District Coordination Officer (DCO) and the District Officer was left with the powers of Coordination only. The District Nazim (Elected Representative at the District level) was made the administrative head of his district. In a nutshell, the powerful District officer of the yore lost all his authority to the District Nazim, even District Nazim was evaluation and Reporting Officer of the annual performance of the DCO and District Police Officer.

Since the local government system established under local government ordinance 2001 completed its tenure in 2007, there has been no local government in place. In the interim period, the functions of the local government are being performed under the Commissioner system whereby the provincial governments manage local government functions directly through the provincial bureaucracy, rather than continuing with the devolution reforms elected by the previous LG Act of 2001. The Commissioner is the Administrative Head of the Division and oversees the civil administration at the division level which consists of a number of Districts. The Deputy Commissioner serves as the district administrative Head as well as of the magistracy and revenue collection at the district level. The Deputy Commissioners of districts is Project Directors/Administrators and supervises and completes the development schemes as per laid down policy of the government. The Divisional Commissioners monitors the development works of respective districts. Deputy Commissioners utilize the funds provided by the provincial government against approved schemes through Annual Development Plans. The Provincial Planning & Development Department oversees and monitors the schemes to be completed by Commissioners in their respective districts of the division. The Deputy Commissioner, in his capacity as the Head of the District Administration, implements different schemes through its relative department at the district level. Judiciary is independent from the District Administration.

Comparison of Provincial Local Government Acts

Powers	Category	Punjab Local Government Act 2013	Sindh Local Government Act 2013	KP Local Government Act 2013	Balochistan Local Government Act 2013
Administrative	Eserved Seats	<ul style="list-style-type: none"> ➤ Women: 2 at UC and maximum of 15 District levels ➤ Peasant/ laborer: 1 seat at UC and maximum 3 at District levels ➤ Minorities: 1 seat at UC, 10 at Metropolitan Corporation, maximum 5 each at District Council and Municipal Corporation, maximum 3 at Municipal Committee ➤ Youth: 1 seat at UC, 1 at District Council, 2 at Metropolitan Corporation, 1 at Municipal Corporation and 1 at Municipal Committee 	<ul style="list-style-type: none"> ➤ Women: 1 seat at UC and 22% at remaining tiers ➤ Peasants/ laborer: 1 seat at UC and 5% at District level ➤ Minorities: 1 seat at UC and 5% at District levels ➤ Youth: no reserved seats 	<ul style="list-style-type: none"> ➤ Women: 2 at VNC level and 33% at the District level ➤ Peasant/ laborer: 1 seat at VNC and 5% rep at District ➤ Minorities: 1 seat at VNC and 5% at District ➤ Youth: 1 seat at VNC 5% at District 	<ul style="list-style-type: none"> ➤ New category of professional/ social worker has been created for all local councils ➤ Women: 33% of the number of general seats at all levels ➤ Peasant/ worker: 5% at UC and District levels (peasant and worker categories have been merged) ➤ Minorities: 5% at UC and District levels ➤ Youth: no reserved seats
Political	Elections	<ul style="list-style-type: none"> ➤ Party based elections at all tiers ➤ Direct election at Union level 	<ul style="list-style-type: none"> ➤ Party based elections at all tiers ➤ Indirect election at all tiers 	<ul style="list-style-type: none"> ➤ Non-party based for Village and Neighborhood Councils (VNC) ➤ Party based 	<ul style="list-style-type: none"> ➤ Party based elections at all tiers ➤ As per procedure to be prescribed by the

				<p>elections for Tehsil and District Councils</p> <ul style="list-style-type: none">➤ Direct election at VNC levels➤ Indirect election at District and Tehsil tiers	<p>provincial Government</p>
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Human Rights

The respect and implementation of basic human rights norms and standards such as for social, economic, cultural, political, civil, women's, children's or migration issues might provide answers to new forms of urban governance. These include a wide range of human rights, principles and standards such as equal participation, ethnic and religious tolerance, gender equity, health and education initiatives, access to food supplies, safe drinking water, sanitation, property rights, and access to information.

Urban governance on the basis of human rights can help to set up problem solving mechanisms to guarantee social peace, economic growth and political participation.

Fundamental human rights are considered while formulating policies e.g. the National Policy on Drinking water recognizes that access to safe drinking water is the basic human right of every citizen; National Policy on Sanitation has recognized that provision of sanitation is basic necessity which contributes to human dignity and quality of life. Because of the due consideration of human rights, the federal and provincial governments made policies and legislative framework and have regularized many of the Slums and squatter settlements and provided land titles and basic urban services in these slums and squatter settlements for improving the quality of life of the people. However, the magnitude of the problem is too large because of rapid urbanization in Pakistan, the pace of regularization and improvement of slums and squatter settlements are inadequate. Social security and social welfare organizations, Benazir Income Support Program, Zakat and Usher system, civil society organizations are helping the deserving people to safeguard the basic human rights.

Major Concerns Relating to Terrorism, Crime, Violence and Disasters in Urban Areas

Terrorism in Pakistan is an unfortunate by-product of the political and geo-strategic developments in the region over the past 30 years and their negative fallout on Pakistan. The conflict and instability in Afghanistan in the aftermath of 9/11 attacks and their regional implications had very negative repercussions for Pakistan. The years following the US invasion of Afghanistan not only saw a huge influx of Afghan refugees across the border into Pakistan but also witnessed a sudden spike in the frequency and scale of terrorist attacks in Pakistan. According to estimates, during the last 14 years, the direct and indirect cost incurred by Pakistan due to terrorist attacks amounts to around \$107 billion (Rs. 8702,75),

The impact on urban economy has been enormous where the inflow of foreign investment and the pace of privatization programmes have been greatly reduced, the overall economic activity has been slowed, exports and tax collection have been reduced, and tourism industry has been affected. Thousands of jobs could have been created if economic activity had not slowed. Thousands of jobs were lost because of the destruction of the tourism industry. In addition, there has been destruction of physical infrastructure, a massive surge in security related spending.

During the course of the past years, the government of Pakistan has taken numerous steps that have helped improving situation significantly although the long term impact of these actions is likely to be taken in due course. The law enforcement action Zarb-e-Azb started by the Government of Pakistan has achieved remarkable success on ground and is contributing to overall improvement in the security situation.

Government of Pakistan has also formulated a comprehensive National Action Plan against terrorism which is one of the most comprehensive strategies enacted by Pakistan to date to deal with the menace of terrorism. There has been very encouraging progress on NAP on a number of areas within a few months.

One of the successful measures taken by the provincial governments of Punjab and Sindh include creation of Citizen Police Liaison Committees. The World Bank funded Land Records Management and Information System project being implemented in all provinces of Pakistan is contributing towards providing long-lasting tenure security and more efficient operation of land markets by upgrading the land records management system. The project includes revising current business processes and associated legislation and regulations, establishing Service Centers where land records will be maintained and available to the public in digital form, and establishing linkages between the land records system and the system for registration of deeds.

Urban areas of Pakistan are also prone to a number of natural hazards such as floods, cyclones, earthquakes and landslides, as well as fogs and dust storms. Further, cities are also susceptible to man-made hazards such as fires, industrial and traffic accidents as well as periodic outburst of diseases such as dengue fever. A number of factors lie behind vulnerabilities of Pakistani cities to hazards. These include unsuitable construction practices, fragile natural environment, weak early warning systems, lack of awareness and education as well as poverty. Poor communication infrastructure and lack of critical facilities have also aggravated the vulnerabilities of communities. Further, lack of effective urban planning and development including Disaster Risk Reduction is a major contributor to the disastrous effects of natural hazards in urban areas. For example unsound construction has left dense urban populations vulnerable to seismic and flood hazards. The climate change impact is also significant, as it has enhanced frequency and severity of such hazards such as floods and cyclones. After Habitat II, floods in monsoon season of 1997, 2003, 2006, 2010, 2012, 2013 and 2014 affected a large number of cities. The floods of 2010 affected more than 20 million people; destroyed nearly 500,000 housing units and estimated cost of damage was US\$10 billion.

Among man-made disasters the worst have been fires. One of the most serious man-made disasters in Pakistan was the oil spill from the tanker Tasman Spirit, which ran on ground in 2003 on the Karachi coast. The impacted areas included the most popular recreational beaches of Clifton and Defence Housing Authorities covering about 16 km of coastline

Disabled Persons

The World Report on Disability found that 13.4 percent of the population in Pakistan suffers from disabilities –which cover all forms of difficulties in human functioning due to impairments, activity limitations, and participation restrictions. Disability prevalence among the working-age group stands at 6 percent and out of these, only 29 percent of persons with disabilities are employed, compared to 52 percent of persons without disabilities. While there are charitable organizations that are working for persons with disabilities, they are mostly focused on provision of healthcare facilities or special schools for those suffering from intellectual disabilities or visual and hearing impairment. Very few organizations address the issues of disability through an integrated approach as is done with gender in the development process. The Millennium Development Goals (MDGs) agreed upon at the turn of the millennium also failed to include disability in any of the eight goals that the world community set out to achieve by 2015. Many argue that this is the main reason that the disabled have been excluded from having a say in the development programs that were designed to accomplish these goals, making the efforts counter-productive.

Brief of Provincial Interventions for Supporting Local Economic Development

The Punjab Growth Strategy has acknowledge that for social and environmental sustainability, economic growth in Punjab must be regionally balanced and environmentally sound. The strategy aims to double the GDP growth from the current 3.5% to 7%. For sustained job creation and improvement in living standards, the strategy focuses on following drivers of growth: (i) Led by the Private sector; (ii) Based on improvements in Productivity of resources; (iii) Focused on employment intensive job creation; (iv) Anchored in better functioning urban clusters; (v) Export oriented; and (vi) Bolstered by better skilled and more employable youth by addressing critical gaps in human capital. The Government of Punjab is focusing on textile-led industrialization; establishing Garments City industrial cluster and 4 new “Small Industrial Estates” for cottage industries at District and Tehsil levels. The strategy also focuses on improving the investment climate by upgrading infrastructure and addressing energy shortages and streamlining regulations for manufacturing, and services sectors. The government is taking measures like Tax rebate, export and warehouse facilities to increase the production of industries. Technical Education and Vocational Training Authority (TEVTA), Punjab Skill Development Fund Company are some of the other important initiatives that is leading to accelerated industries development and creation of job market to absorb the youth bulge including women. The GoS has developed Local Economic Development Guidelines for the province, through financial assistance of ADB. World Bank has engaged itself with GoS on “Karachi Transformation Strategy” aimed at transforming Karachi into a green, sustainable, and resilient metropolitan city.

Sindh is most industrialized province in the country and the share of industrial sector in the provincial economy is much higher than the national average. The Focus of Vision 2025 in Sindh is to develop Industrial Estates for Small and Medium Industries at Urban Growth Points, development of large and medium cities, Sindh has 8 large industrial parks and 17 Small and Medium Industrial Estates. With Karachi Stock Exchange in Sindh, one of the best exchange markets in the world, businesses seek to start their roots from Karachi. Most of the growth in the provincial economy can be attributed to the Services Sector followed by the industry sector. Large Scale manufacturing now exceeds the agriculture sector value added.

The Economic Growth Strategy of KP envisions that acceleration of growth will be realized by concentrating on natural resource endowments of the province whether in Hydroelectric power, mining and minerals or Oil & Gas. At the same time, Government of KP (GoKP) will develop the supporting sectors i.e. Utilities (energy and water), telecommunication, Infrastructure and Irrigation to remove the impediments hindering growth in 'priority sectors'. The government of Go KP has initiated work on Commercial Zone Chughalpura and Rashakai – Peshawar on about 1000 acres of land; Tourist City Kaghlasht, Chitral; and Damtor, Abottabad. It is also managing 10 medium/ large scale industrial estates; seven small scale or cottage industrial estates; establishing KP Board of Investment and Trade for providing all related industrial facilitation services under one roof on the concept of one window operation to minimize the bottlenecks in promotion of investment and trade.

The Balochistan Development Vision and Strategy focuses on creating an egalitarian, enlightened, educated and healthy society that ensures full employment for every able-bodied adult citizen of Balochistan seeking work at a reasonable level of income to enable access to all basic needs and minimum level of comfort through sustainable exploitation and development of natural resources of the province. The strategy document identifies 6 following Economic Corridors: (i) Non-Staple High value products, coal and other minerals in north-east; (ii) Natural gas and crops in canal irrigated areas in North; (iii) Trade route, Karachi-Khuzdar-Quetta-Chamman Corridor; (iv) Trade route, Gwadar Mastung Corridor; (v) Port-Mineral (Copper etc.) Corridor; and (vi) Fisheries Corridor. The strategy promises to provide job to each adult person in Balochistan through optimum exploitation of resources in the above mentioned 6 Corridors.

Relation of Sanitation to MGDs

Millennium Development Goals	Relation to sanitation
MDG 1: Eradicate extreme poverty and hunger:	Lack of sanitation results in diseases which leads to loss of income opportunities and increased health related costs, that causes more Poverty;
MDG 2: Achieve universal primary education:	Globally 443 million school days are lost each year due to poor hygiene and sanitation. Increases children's performance at school and reduces absenteeism. Presence of adequate school sanitation facilities increases girls attendance at school and enhances teacher recruitment, attendance and retention;
MDG 3: Promote gender equality and empower women:	Women bear the burden when sanitation is unavailable – less likely to go school; as the primary caregivers, they dedicate more resources caring for sick children. Sanitation facilities enhance women privacy, dignity, status and opportunity;
MDG 4: Reduce child mortality:	1.9 million world-wide diarrhea related U-5 deaths each year, 88% due lack of hygiene + sanitation. Children weakened by frequent diarrhea episodes are also more likely to be undernourished and suffer from opportunistic infections such as acute respiratory infections;
MDG 5: Improve maternal health:	More than half a million women die in pregnancy and childbirth every year that's one death every minute. Only 28 in 100 women giving birth are attended by trained health personnel in the least developed countries Reduce by three quarters the maternal mortality ratio;
MDG 6: Combat HIV/AIDS, malaria and other diseases:	Diarrhea and skin disease are common infections affecting People Living With HIV/AIDS; access to reliable, affordable and safe water and sanitation can mitigate these infections and greatly improve quality of life, and make home based care of these persons easier and more dignified; and
MDG 7: To halve, by 2015, the proportion of people without sustainable access to sanitation:	Ensure environmental sustainability

Government's Projects in the Field of Sanitation

- Pakistan Approach to Total Sanitation (PATS) concept was developed by the federal government. The concept has been adopted and is being implemented through provincial funding;
- Programs for Community Led Total Sanitation (CLTS) were implemented to create open defecation free environment in countryside, slums and peri-urban areas. Khushal Pakistan Program made it conditional for civil society organizations to achieve open defecation free environment for becoming eligible for grants of funds;
- National Drainage Sector Project to assist the Government in the implementation of the National Drainage Program (NDP) designed to protect land and water resources and thereby sustain and enhance agricultural production against a backdrop of increasing, competing demands for water;
- Punjab Community Water Supply and Sanitation Sector Project to reduce poverty and improve the living conditions and quality of life of the communities in Punjab province, where water is scarce and groundwater brackish;
- Lahore Composting Project reducing carbon emission in a financially sustainable way; promoting and providing organic conditioner for agriculture; increasing recycling of valuable materials; reducing health hazard by overall reduction of waste disposed of in the landfill; and reducing the demand for landfill capacity;
- Lahore Waste Management Company is responsible for solid waste collection, transportation and disposal etc. in Lahore with initial funding from the government; Similar companies are being established in other cities of Punjab;
- Urban Water Supply and Sanitation Project to (i) provide safe and reliable water supply, improved sanitation, sewerage and drainage facilities in Rawalpindi; (ii) help the Government implement selected policy reforms to achieve long-term sustainability of water supply services at the local level; and (iii) provide the required institutional and management support to the newly established Rawalpindi Water and Sanitation Agency (RWASA) to enable it to be more self-disciplined in financial, managerial, and technical aspects.
- Sindh Solid Waste Management Board has been established for the collection and disposal of solid and other waste.
- Pakistan's first corporate utility company the North Sindh Urban Services Corporation (NSUSC) has been established for delivery of water and sanitation services in small and medium towns.
- The scaling up of PATS in Punjab has successfully achieved its target of 980 Open Defecation Free (ODF) villages, and now extended into six districts. In Khyber Pakhtunkhwa province, over 300 villages have been made ODF through Community and School led total sanitation approaches implemented by the civil society partners with the support of the Local Government Department of KP province. In Balochistan 1,775 villages were certified as ODF with the support of Balochistan Rural Support Program. Sindh has launched Saaf Suthro Sindh (SSS) program to achieve an ODF Sindh by 2020.
- The Greater Karachi Sewerage Plan (S-III 2007-2011) has been envisaged by KW&SB to improve environmental conditions in city through an integrated system of collection, treatment and disposal of sewage. Similar projects are being implemented by Water and Sanitation Agencies in most of the districts of Pakistan.
- The Greater Karachi Bulk Water Supply Scheme was launched to augment 260 MGD of water supply in phase-I to the masses of Karachi by KW&SB.
- The WASA is responsible for planning, designing and construction of water supply, sewerage & drainage facilities for: (i) Rehabilitation and augmentation of the existing system; (ii) Operation and maintenance of water supply, sewerage & drainage system; (iii) Billing and collection of all rates, fees and charges for the services provided to its consumer; (iv) Undertaking bulk production, filtration/treatment, transmission and retail distribution purifying of water; (v) Collection, pumping, treatment & disposal of sewage & industrial waste; (vi) Enforcement against defaulters and unauthorized connections etc.; and (vii) Short term and long term planning for tapping additional water sources & its implementation to meet water supply and sewerage demand projected.
- A pilot project to produce 486 meters cubic feet of bio-gas and 25 kilowatts of electricity per day from cow dung has been commissioned in the Landhi Cattle Colony, Karachi by British company, M/S HiRAD Technology, Plc, UK. Pakistan

is one of the leading dairy farming countries and has rich potential of production of bio gas from dung.

- Three projects of waste to energy are in the advanced stage of implementation in Mirpurkhas (Sindh), Jhang (Punjab) and Peshawar (KP).

BACIP's Standard Products

(i) Roof hatch windows; (ii) double glazed windows which allow for more light while conserving heat; (iii) Fuel-efficient stoves with water and room warming facilities attached that use the same fuel; (iv) Floor insulation, (v) wall insulation and (vi) roof treatment techniques for thermal efficiency; (vii) Light-weight and low-cost galvanized iron wire reinforcements for walls to strengthen housing structures against earthquakes and encourage multi-storey construction, thereby reducing the paving of scarce arable land; (viii) Wooden bow-string composite beam for earthquake-proof light roof construction reducing timber use in roof construction by 500 percent/ roof; (ix) Solar cookers and (x) solar water heaters for fuel conservation; (xi) Bedding racks and shelving to protect items from dampness dust and dirt; (x) Fanoos (candle wick lamp) for energy conservation in indoor lighting; (xi) Household level Bio-gas plants for alternative energy source for cooking and water heating; (xii) Locally adaptable Arch foundation construction techniques to address construction in high water table areas in coastal areas of Sindh.

All BACIP models have detailed manufacturing modules for their manufacturing and training is imparted on the basis of these modules. In terms of sustainability, products are said to be economically viable and studies indicate that there is a lot of potential for wide scale replication of the products. Of the existing products the fuel-efficient stoves, Water Warming Facility, Roof Hatch Window and gender specific home improvement products can be categorized as highly sustainable and replicable products in terms of economic viability and social acceptability.

New Urban Agenda – Proposed Short, Medium & Long Term Actions

Chapter I: Urban Demographic Issues & Challenges for a New Urban Agenda

Short-Term

- Devise a strategic vision & National & Provincial Urbanization Policies to guide sustainable growth & utilize economic & social potential of towns & cities
- Involve all tiers of govt. for executing broad spectrum of spatial planning
- Play an active role by the women in development of towns & cities by providing equal opportunities for greater social & economic benefits; developing proactive legislation & practical operational programs for women
- Create social & economic entrepreneurship opportunities for involvement of youth through development of their skills
- Promote career counseling services at community & school level
- Expand national internship program with the involvement of both public & private sector
- Enhance technical skills as per market demand & provide affordable credit facilities for youth, especially women
- Expedite holding of population census so that updated data on demographic issues may be available to facilitate formulation of comprehensive actions for New Urban Agenda

Medium-Term

- Strengthen linkages between urban centers & rural areas to ensure that the two remain mutually reinforcing
- devise health insurance schemes & make public healthcare facilities elderly-friendly
- Develop medium & secondary towns to serve as filters to reduce migration to large cities

Long-Term

- Develop creative, smart & green cities
- Develop schemes like pension system for employees of private organizations

Chapter II: Land & Urban Planning

Short-Term

- Formulate National Urban policy, regulatory framework & Spatial plan to provide guidelines to streamline urbanization process
- Simplify city planning procedures & promote integrated & participatory planning
- Establish supra-urban planning, service delivery & regulatory Authority for integrated planning, designing & delivery of basic services & utilities
- Strengthen financial & technical capacity of local/city governments.
- Urban planning & design based on participatory & holistic approach, efficient use of resources in line with environmental concerns & future needs of cities

Medium-Term

- Introduce interprovincial high speed connectivity
- Introduce city information management system/ Urban Observatory
- Reduce carbon footprints & optimize resource efficiency in cities

- Develop small & medium towns to check growth of squatter settlements
- Prepare Smart City Strategic plans & regulatory mechanism
- Laws & regulations related to land acquisition, land use planning, building code/By-laws, town planning need to address emerging challenges of urbanization, climate change, disasters & ecosystem rehabilitation

Long-Term

- Make urban centers engines of economic growth by integrating urbanization & sectoral policies
- Introduce transportation corridor connectivity with neighboring countries

Chapter III: Urbanization & Environment

Short-Term

- Pakistan's Vision 2025 includes addressing climate change as one of the priority areas.
- Develop provincial and city levels Climate change action plans
- Provincial Policy on Climate Change would be prepared
- DRR Program up to 2030 would be prepared focusing on Strengthening disaster risk governance to manage disaster risk; Investing in disaster risk reduction for resilience; Enhancing disaster preparedness for effective response, & to “Build Back Better” in recovery, rehabilitation & reconstruction
- Integrated mass transit & rapid transport networks
- Introduction of environment friendly technologies
- Enforcement of approved NEQS
- Promotion of Renewables & Energy Conservation

Medium-Term

- Improving urban environmental governance
- Capacity building of stakeholders
- sustainable development plans & regulations

Long-Term

- Reduce, reuse, & recycle materials used in production & consumption systems

Chapter IV: Urban Governance & Legislation

Short-Term

- Initiate expeditious action to operationalize Local Govt. system at district and city levels in all the provinces, GB, ICT, FATA & AJK. The LG system should work towards improving efficiency of police, local level service delivery institutions, like education, fire and disaster control, social welfare, drinking water and sanitation etc.
- Bring paradigm shift from “centralization” to ‘de-centralization’ of powers & resources up to local councils level to effectively meet expectations & aspirations of people
- Effective implementation of Plans of Action for women, youth, children; special children; non-Muslims & persons with special needs; persons with disabilities; senior citizens & eradication of beggary
- Provincial governments need to ensure that newly elected local councils have sufficient resources & authority to address development challenges of local communities
- Make governance system more responsive, efficient & accountable to control terrorism, crime, land tenure insecurity & disasters
- Improve collaboration between the Government, NGOs & CBOs to achieve tangible & sustainable results in

alleviating poverty.

- Increase social mobility in cities by improving basic services such as free elementary education; lending facilities for the poor at interest free or low interest rates, and skill enhancement to increase their income for affordable housing and reducing rate of un-employment.
- Expand programs like Citizen Police Liaison Committees in the entire country
- Involve civil society in decision making pertaining to safety & security of people
- Promote social & economic justice
- Enhance role of mass media in raising awareness of ecological & social challenges & their safety measures

Medium-Term

- Vision 2025 seeks to create a just & equitable society in Pakistan where vulnerable & marginalized segments of the society would be mainstreamed
- improve urban legislation; ensuring involvement of local communities including women, special persons, minorities & youth; & improve enforcement of existing legislation

Long-Term

- Flaws in regulatory framework planning & zoning regulations, development standards, land registration/transfer procedures, rent control laws, property taxation, etc. need to be removed as these constraint land supply & abnormally raise its price

Chapter V: Urban Economy

Short-Term

- Increasing LG revenue by renegotiating terms of revocable leases of assets as per market based system
- Enhance capacity for financial management & revenue generation through improved governance including accountability & responsiveness of LG institutions
- Promoting community led Municipal Services Financing Facility

Medium-Term

- Access domestic capital market through floating municipal bonds & financial restructuring to expand revenue base
- Increase Public Private Community Participation for Slum up-gradation
- Build at least 10 percent of housing units in a housing colonies developed by the private sector for low income segment of society based on the concept of cross subsidization i.e. rich pays a certain percentage of the cost to make decent housing affordable for low income people including service population.
- Vision commits to provide strong incentives, reform governance & simplify regulatory environment to help formalize informal sector

Long-Term

- Ensure that trade supports sustainable resource use, environmental protection & progressive labor standards to become competitive in global market
- Promote existing & develop industrial clusters along main transportation corridors to enhance economic dev.

Chapter VI: Housing & Basic Services

Short-Term

- Removing bottlenecks such as acquisition of land, un-standardized building components, un-trained manpower, obsolete machinery used in housing
- Promote water & energy efficient buildings
- Modes of housing finance explored, such as housing bond, utilization of pension, benevolent & insurance fund
- Reduce transaction cost in housing sector associated with acquisition & development of land etc.
- Ensure timely completion of housing schemes, new towns, discourage withholding of developed vacant land, land speculation & protect public land from encroachments by regulatory measures
- Introduce Housing information system
- Replace 'Slums and squatter settlements ' by low income residential buildings & service plots developed with local community participation for adequate provision of utilities
- Integrated Energy Plan 2009-2022: To add 16,564 MW by 2018, based on hydroelectric, natural gas, solar, wind, coal
- Promote programs like CLTS, SLTS, PATS & ODF free villages
- LGs to expand coverage of clean drinking water up to Union Council & neighborhood level
- Complete mass transit service projects in urban areas and expand the network to cover major routes of the city public transport system in an integrated manner.

Medium-Term

- Complete hydro power projects like Neelum Jhelum
- Complete Pak China Economic Corridor infrastructure development program & Karachi-Lahore Motorway
- Promote energy & water conservation

Long-Term

- Complete major hydro power projects, Diam Bhasha, Dasu & Bunji, etc. to increase water reservoir capacity, reduce floods & increase electricity production.



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