SOCIAL DEVELOPMENT IN PAKISTAN

ANNUAL REVIEW 2014-15

SPDC
SOCIAL POLICY AND DEVELOPMENT CENTRE
KARACHI

Photographs: Majid Hussain | Ikram Bukhari

Published by Social Policy and Development Centre
Printed in Karachi by Times Press (Pvt.) Ltd.
ISBN 978-969-8407-18-6

FOREWORD

The previous Annual Review of SPDC (2012-13) explored various aspects of social development in rural Pakistan. The report helped in identifying the rural-urban inequalities in the social sector. The response generated by the report in the print media encouraged SPDC to examine the state of social development of urban Pakistan.

Pakistan is urbanising at an annual rate of over 3 percent – the fastest pace in South Asia. About 39 percent of the country's population lives in urban areas. Rural-urban migration and natural increase in population are believed to be two major factors responsible for urbanisation. People migrate to urban areas mainly due to economic reasons since cities are considered the main drivers of growth. Therefore, urban planning and provision of services assume greater importance. Rapid urbanisation thus poses serious challenges in terms of governance, public service delivery and urban poverty. In an increasingly urbanised country, it is crucial to ensure that effective and efficient delivery of public services in urban areas is ensured for poor people as well as for the wider population.

SPDC's current Annual Review, the thirteenth in the series, deals with the various aspects of development issues in urban Pakistan, with a particular focus on social service delivery. Chapter 1 focuses on the pattern and size of the urban economy and inter-city migration of Pakistan; province-wise urban income inequality; and the population patterns of the major cities. Chapter 2 presents the structure of the urban labour market of all the four provinces. One very interesting finding of the study is that the highest growth rate of the labour force has been experienced by Baluchistan between 2001-02 and 2013-14. Chapter 3 discusses in detail, the different aspects of access to and utilization of public services, particularly in the urban areas of Pakistan. Chapter 4 reviews the financing realities of urban social service delivery and identifies the gaps and needs for provision of these services.

Chapter 5 is based on the findings of the survey undertaken of the people's perception of the urban public services including water services, garbage collection and waste disposal, public sewerage services, public hospitals, public transport, and law and order. Chapter 6 focuses on local governments and urban service delivery, and highlights the need to ensure that public services in urban areas are effectively delivered. Chapter 7 draws attention to the geographical unevenness in urban human development, and for the first time constructed sub-national human development indices for urban Pakistan. The estimates of per capita income presented have brought the differentials forward between the large and small cities of the provinces. Chapter 8 examines poverty in the urban context, and identifies issues such as employment and health as the main priorities for the urban population. It calls for developing specific interventions for addressing urban poverty. Chapter 9 identifies the factors which determine the sustainability of the process of urban development.

The report reveals that urban households are generally experiencing a deterioration of their economic situation in Pakistan, and the metropolitan cities are approaching a stage where the cost of urban development is alarmingly high. We sincerely hope that the analyses presented in the report will benefit policy formulators, advocacy groups and civil society

Khalida Ghaus
Managing Director

THE TEAM

Core Research Team	Hafiz A. Pasha (*Senior Technical Advisor)*
	Khalida Ghaus
	Haroon Jamal
	Muhammad Asif Iqbal
	Muhammad Sabir
	Nadeem Ahmed
	Zia-ul-Haq Khan
Consultant	Farooque A. Siddiqui
Research Support	Naveed Aamir
	Tabinda Areeb
	Manzoor Hussain Memon
	Rafea Anis
	Rabia Sidat
	Sumrin Kalia
Editing Support	Meher M. Noshirwani
Design and Layout	Muhammad Rizwanullah Khan

SOCIAL POLICY AND DEVELOPMENT CENTRE

Established in 1995, SPDC is a private sector research organisation that serves as a focal point for policy-relevant research on social sector development. Using a multidisciplinary approach, the Centre assists both public and private sector institutions including non-governmental organisations (NGOs) to plan, design, finance, execute and manage social sector programmes in a cost-effective manner. The results of its research are made available to policy makers, interested groups and the general public to promote informed discussion and action on vital social sector issues.

SPDC being an independent and non-partisan organisation cooperates and collaborates with organisations/institutions working on issues of common concerns (both) within Pakistan and abroad. Being an autonomous and independent organisation, the Centre identifies its own research agenda and parameters remaining within the mandate and objectives identified. Key activities include research and policy analysis in the areas of governance, poverty, public finance and macro economy, and gender; social sector government database support; pilot project monitoring and evaluation; training of personnel in government, private sector and non-governmental organisations; and information dissemination through publications, conferences, seminars and workshops.

In addition to the core funding from International Development Research Centre (IDRC - Canada), SPDC generates its alternate funding through contract research.

The Board of Directors consists of eminent personalities selected for their commitment to social sector development and their belief in the use of analytical tools in developing public policy to ensure sustainable social sector development. The Board members are:

Moeen A. Qureshi - Patron
Saeed A. Qureshi - Chairman
Javed Jabbar - Vice Chairman
Ishrat Hussain
Muhammad Sakib Sherani
Shahnaz Wazir Ali
Muhammad Ayub Baloch
Khalida Ghaus - Managing Director

Social Policy and Development Centre
15-Maqbool Co-operative Housing Society
Block 7 & 8, Karachi 75350, Pakistan
Tel: (92-21) 111-113-113
Fax: (92-21) 4534285
Website: http://www.spdc.org.pk
E-mail: spdc@cyber.net.pk

Islamabad Office:
209, 2nd Floor, Emirates Towers
F-7 Markaz, Islamabad
Tel: (92-51) 2099146

CONTENTS

Boxes

Exhibits

LIST OF ACRONYMS

ACGR	Annual Compound Growth Rate
AEPAM	Academy of Educational Planning and Management
AJK	Azad Jammu and Kashmir
ASYB	Agricultural Statistics Year Book
BISP	Benazir Income Support Programme
BMI	Body Mass Index
CCF	Calorie Consumption Function
CCPR	Climate Change Project Report
CCT	Conditional Cash Transfer
CE	Central Excise
CIET	Community Information Empowerment & Training International
CMI	Census of Manufacturing Industries
COS	Chief of Staff
CP	Conference Paper
CPP	Conference Proceeding Papers
CSW	Civil Society Wing
DAs	Development Authorities
DB	Database
DCO	District Coordinating Officer
DMCs	District Municipal Corporations
DRGO	Distribution of Revenues and Grants-in-Aid Order
EIU	Economist Intelligence Unit
EOBI	Employees Old Age Benefits Institutions
EPI	Extended Program on Immunization
ESSI	Employees Social Security Institutions
EU	European Union
FBR	Federal Board of Revenue
FESCO	Faisalabad Electric Supply Company
FGT	Foster, Greer, and Thorbeke
GB	Gilgit Baltistan
GDP	Gross Domestic Product
GDS	Gas Development Surcharge
GEPCO	Gujranwala Electric Power Company
GNI	Gross National Income
GoP	Government of Pakistan
GRP	Gender Research Programme
GRP	Gross Regional Product
GST	General Sales tax
HD	Human Development
HDI	Human Development Index
HDR	Human Development Report
HEC	Higher Education Commission
HESCO	Hyderabad Electric Supply Company

HIES	Household Integrated Economic Surveys
IESCO	Islamabad Electric Supply Company
IFA	Individual Financial Assistance
ILO	International Labor Organization
Kcl	Kilocalorie
K-Electric	Karachi Electric Supply Company Limited
KPK	Khyber Pakhtunkhwa
KWSB	Karachi Water & Sewerage Board
LDA	Lahore Development Authority
LDCs	Least Developed Countries
LESCO	Lahore Electric Supply Company
LFP	Labour Force Participation
LFS	Labor Force Survey
LGA	Local Government Act
LGC	Local Government Commission
LG	Local Government
LGO	Local Government Ordinance
LSM	Large Scale Manufacturing
MEPCO	Multan Electric Supply Corporation
MFBs	Microfinance Banks
MGD	Million Gallons per Day
MMBTU	Million Metric British Thermal Units
MTDF	Medium Term Development Framework
NCsRCL	National Center for Rehabilitation of Child Labour
NEMIS	National Education Management Information System
NEPRA	National Electric Power Regulatory Authority
NFC	National Finance Commission
NGOs	Non-Governmental Organizations
NNS	National Nutrition Survey
O&M	Operations & Maintenance
OP	Other Publications
OZT	Octroi and Zila Tax
PBM	Pakistan Bait-ul-Mal
PBS	Pakistan Bureau of Statistics
PBS	Provincial Bureau of Statistics
PDS	Provincial Development Statistics
PEPCO	Pakistan Electric Power Company
PES	Pakistan Economic Survey
PESCO	Peshawar Electric Supply Corporation
PFC	Provincial Finance Commission
PG	Proportionate Gap Index or Poverty Gap
PGI	Poverty Gap Index
PINS	Pakistan Integrated Nutrition Strategy
PM	Particulate Matter (Particle Pollution)
PMN	Pakistan Microfinance Network

PPAF	Pakistan Poverty Alleviation Fund
PP	Policy Paper
PPP	Pakistan Peoples Party
PPP	Purchasing Power Parity
PPS	Probability Proportional to size
PRSP	Poverty Reduction Strategy Paper
PSLMS	Pakistan Social and Living Standards Measurement Survey
PSU	Primary Sampling Units
PTCL	Pakistan Telecommunication Company Limited
QESCO	Quetta Electric Supply Corporation
RR	Research Report
RSPs	Rural Support Programmes
SAP	Social Action Program
SBA	Sindh Building Authority
SDGs	Sustainable Development Goals
SMEs	Small and Medium-sized Enterprises
SPDC	Social Policy and Development Centre
SPECO	Sukkur Electric Power Company
SSM	Small-Scale Manufacturing
SYB	Statistical Year Book
TESCO	Tribal Electric Supply Company
TMAs	Tehsil Municipal Administrations
TOR	Terms of Reference
TV	Television
UC	Union Council
UNDP	United Nations Development Program
UNICEF	United Nations Children's Emergency Fund
VCR	Video Cassette Recorder
WASAs	Water and Sanitation Agencies
WDI	World Development Indicators
WHO	World Health Organization
WP	Working Paper
WSS	Water Supply and Sanitation
WWF	Workers Welfare Funds

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

THE URBAN ECONOMY

This chapter quantifies the size, growth and composition of the urban economy of Pakistan and reveals the inequalities in the distribution of urban income. Urban areas have a share of about 39 percent in the population of Pakistan. However, rural-urban migration has decreased in recent years mainly due to the poor law and order and security situation in the large cities. It is estimated that after 2008, the urban population growth was closer to 2.8 percent implying an urban population of 70.4 million in 2014. As far as the size of the urban economy is concerned, it is estimated to be roughly half of the national Gross Domestic Product (GDP) with a concentration of industrial and services sectors. The urban economy exhibited signs of considerable dynamism from 2001-02 to 2007-08 with a high growth rate of 6.5 percent but then fell sharply due to a decline in industrial growth. The sectors where the valued added in urban areas exceeds 50 percent of the national value added include banking and insurance, large-scale manufacturing, wholesale and retail trade, ownership of dwellings, electricity and gas, transport and communication, and social and community services.

Karachi, the primate city, is the world's third largest metropolitan city with an estimated population of 18 million based on World Bank projections. Seven other cities in Pakistan have a population of at least 2 million. However, the analysis based on Rank Size Rule shows that two largest cities, Karachi and Lahore, are overdeveloped. In contrast, there is a need to promote growth of medium sized cities, especially in Punjab, and smaller cities like Quetta. There is also evidence of substantial variation in the urban per capita income especially between cities in Sindh. On average, per capita income in large cities of Pakistan is 33 percent higher than small cities. This proportion is highest (51 percent) in Sindh, while in Punjab and Khyber Pakhtunkhwa the average per capita income is about 23 percent higher in large cities than in small cities.

THE LABOUR MARKET OF URBAN PAKISTAN

According to estimates based on the Labour Force Survey (LFS), the magnitude of the labour force in Pakistan has increased from 43 million in 2001-02 to 60 million in 2013-14 with an annual average growth rate of 2.8 percent. In 2013-14, the size of urban labour force is estimated at 18.9 million which constitutes 31.5 percent of the total labour force. The provinces of Punjab and Balochistan have the highest (57 percent) and

lowest (4 percent) share of urban labour force respectively. In terms of average cumulative growth in urban labour force, Balochistan attained highest growth of 7.3 percent per annum while Sindh and Punjab experienced the lowest growth of 2.5 percent per annum during 2001-02 and 2013-14. Banking and finance, public administration and defence, and wholesale and retail trade rank high based on the urban share in sectoral employment whereas agriculture, construction and transport have the lowest share.

The overall labour force participation (LFP) rate in Pakistan increased by 5 percent between 2001-02 and 2013-14 while urban LFP rate increased marginally by 0.8 percent. At the provincial level, Balochistan experienced the highest increase in urban LFP rate while it declined in Punjab and Khyber Pakhtunkhwa. The reason for a decline in these two provinces is that the population growth and migration have increased dependency ratios while job creation to absorb the new urban labour force entrants remained comparatively slow. Moreover, the low urban participation rates indicate sluggish expansion of an urban economic base that eventually negates the benefits of rapid urbanization in Pakistan. As far as the gender differentials in participation rates are concerned, there is an increasing trend among females while male participation rates declined significantly between 2001-02 and 2013-14. The highest increase in urban female LFP of 2.8 percent was witnessed in Khyber Pakhtunkhwa, followed by 1.7 percent increase in Sindh. With respect to urban unemployment, the LFS data indicates that growth in urban unemployment rate is higher in all provinces except Balochistan. Sindh has experienced the highest average unemployment rate at 1.8 percent. The analysis also shows an encouraging sign of low unemployment rates for females over the last 12 years both at aggregate and urban levels. An interesting finding is that while male-female ratio in the total labour force improved, the urban male-female ratio remained stagnant over the same period.

Successive labour policies have been unsuccessful in addressing the core issues confronted by the urban labour force. Analysis of the form and structure of the urban labour market shows that it is largely dominated by the informal sector. The manufacturing, construction, transport and communication, wholesale and retail trade and human health sectors constitute more than 80 percent of urban informal employment. Wage discrimination, gender inequality, labour market segmentation, job creation for new entrants, and poor and hazardous working conditions are some of the challenges that have substantial implications for the urban labour productivity. On a positive side, the thriving urban informal sector has absorbed female labour force particularly in industry where the formal sector seems to have restricted female employment.

ACCESS TO AND UTILIZATION OF PUBLIC SERVICES IN URBAN PAKISTAN

The rapid pace of urbanization has resulted in a severe strain on the existing urban infrastructure in terms of education, health, drinking water, sewerage and solid waste management. This chapter presents a situation analysis of access to and utilization of important public services in urban areas of Pakistan.

Over the last two decades, the educational landscape of Pakistan has been completely transformed. The private sector has emerged as a key provider of education services especially in the urban areas. According to the Pakistan Social and Living Standards Measurement (PSLM) Survey, the share of primary enrollment in government schools has declined from 75 to 60 percent between 2001 and 2014, whereas, it is 40 percent in the case of primary enrollment in urban areas. A comparatively better quality of teaching has contributed to the expansion of enrollment in private schools. The statistics show that overall, 35 percent of total children (5-9 age cohort) of small cities are enrolled in government schools whereas this is 22 percent in the case of capital cities. This clearly indicates an inverse relationship between public schooling and size of a city.

The situation is similar in the urban health sector where the utilization rate of public health facilities is continuously declining due to poor access and quality issues. As a result, the private health sector has emerged to fill the gaps but it has assumed a fairly exploitative role in the absence of a proper regulation and control system. With the exception of immunization, utilization of basic public health services is very low in the urban areas for treatment of diarrhoea and malaria. Utilization of public facilities by women for pre and post natal consultancies is also quite low although slight improvements have been observed in recent years.

Urban areas are also increasingly facing water scarcity and poor quality of water supplies due to depletion in underground sources of water and leakages and theft in water distribution networks. According to estimates based on the PSLM Survey, 52 percent of urban households have piped water connections but with substantial provincial variations. For instance, about 41 and 35 percent of households in urban Punjab and Khyber Pakhtunkhwa respectively use motorized pumps and tube wells for drinking water. The trends in providing piped water to urban citizen's shows deterioration in the level of public services particularly in the smaller cities. In terms of availability of water, excluding Punjab, the situation is deplorable. For instance, 82 percent of urban households in Balochistan and Sindh reportedly receive water for less than 3 hours per day, while the corresponding percentage is 22 in Punjab.

A critical health concern is sewerage and solid waste management. Overall, 59 percent of the urban households are connected to the public sewerage system although the provincial capitals and other large cities have better coverage in comparison to the smaller cities. An alarming statistic is that only 7 percent of households in urban Khyber Pakhtunkhwa have this facility. In terms of utilization, urban Sindh and urban Balochistan have the highest and lowest incidence of using these facilities, respectively. It is interesting to note that even in urban Punjab, roughly 45 percent of the households do not use public sewerage facilities. It is also a matter of great concern that only 43 percent of urban households reportedly have a formal system for solid waste disposal from their neighbourhoods while the corresponding figure is 26 percent in case of garbage collection from households. As far as access to basic housing utilities such as electricity, cooking gas and land-line telephone connections is concerned, although a majority of urban households have access to these utilities there are widespread problems of severe electricity outages and gas load shedding irrespective of city size.

FINANCING OF URBAN SOCIAL SERVICE DELIVERY IN PAKISTAN

Provincial and local governments require a well-functioning financing system for an equitable and efficient level of social service delivery in urban areas. However, analysis of the management of public finances shows that historically, allocation for social sector expenditure in Pakistan has been inadequate and inconsistent in comparison with other developing countries. The financial status of provincial governments depends largely on federal transfers to the provinces constituted through the National Finance Commission (NFC) Awards. One of the major developments of the 7th NFC Award was changes in the divisible pool and straight transfers which had a positive effect on the financial status of provinces. The analysis show that the 7th NFC transferred an additional Rs. 1.2 trillion to the four provincial governments during 2010-11 to 2014-15 or 22 percent higher revenues in comparison to an earlier revenue sharing arrangement. Among the provinces, Balochistan has benefited the most in relative terms with 60 percent higher transfers during the Award period. This suggests that the 7th NFC Award is fiscally equalizing as its provisions disproportionately benefit the relatively neglected provinces. Overall, provincial resources grew from 5.9 percent of GDP in 2009-10 to 6.9 percent in 2014-15.

An analysis of the trends in social sector spending as a percentage of GDP at federal and provincial levels shows an increase from 1.9 percent to 2.6 percent of GDP from 2000-01 to 2007-08, followed by a marginal decline in 2010-11 and then an increase to 3.2 percent of GDP in 2014-15. Provincial governments of all the provinces played a pivotal role in this growth. In the education sector, public spending increased from 1.3

percent to 1.8 percent of GDP from 2000-01 to 2007-08 and reached 2.2 percent of GDP in 2014-15. Similarly, health expenditures in all the provinces increased as a percentage of GDP after the promulgation of the Award. However, public spending on water supply has not increased, possibly due to the absence of elected local governments, which is a matter of great concern. It is important to note that increased social spending does not seem to be translated into better service delivery. For instance, during 2008-09 to 2013-14, growth in real expenditure on primary education in urban areas was 5.4 percent while growth in enrollment was only 2.1 percent.

CITIZENS' PERCEPTIONS ON URBAN PUBLIC SERVICES

This chapter presents findings from an opinion survey capturing citizens' perceptions about public service delivery in the urban areas. Users' feedback was gathered in terms of access, quality and reliability of services, and responsiveness of service providers regarding six public services. The sample of 4,282 urban citizens across Pakistan was well represented in terms of socio-economic characteristics. Findings show that 25 percent of the urban residents perceive corruption as the main impediment for national and local development followed by the security situation (20 percent) and poverty (13 percent). In terms of priorities for provision of public services, solid waste management services and improvements in quality and supply of drinking water were ranked first and second respectively. It is interesting to note that responses of urban residents of Balochistan are quite dissimilar from other provinces, as improvement in education and law and order were prioritized by 60 percent of the citizens in this province. On the other hand, majority of respondents (55 to 61 percent) in other provinces prioritized improvements in garbage collection, water supply and roads/streets.

As far as availability of drinking water is concerned, government performance is evaluated based on the incidence of acquiring water from private sources. High incidences of purchasing water by households which have access to tap water are evident in the opinion survey with variations among different tiers of local government. Overall, about 60, 53, 40 and 74 percent households purchase water in Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan respectively. The quality of water appears to be a bigger issue in urban Punjab while inadequate supply and low pressure in taps are more pertinent issues in Balochistan. The findings also show that households in urban Punjab and Khyber Pakhtunkhwa are relatively better off in terms of street cleanliness, disposal and collection of garbage from fixed collection areas, and concealed connection to public sewerage services. It is noteworthy that about 30 percent of households use a private facility of garbage collection, except Khyber Pakhtunkhwa where the corresponding figure is only 9 percent.

With respect to access to and quality of public hospitals the highest percentage of users (73 percent) belong to Khyber Pakhtunkhwa while the lowest (44 percent) belong to Sindh. Major reasons for not accessing public hospitals are lack of satisfaction with medical professionals' expertise and distance to government hospitals. An important finding is that Khyber Pakhtunkhwa has the highest incidence of using public transport in urban areas. On the whole, it is disconcerting that despite encountering problems in service delivery only a small percentage of urban users (12 to 14 percent) lodge a complaint with relevant departments because they perceive it as a futile exercise.

The survey results do not substantiate the popular perception that citizens' overwhelmingly are in favour of elected councillors for provision of essential public services. For instance, around 40 percent of the urban residents of Punjab and Khyber Pakhtunkhwa do not agree with the role of elected councillors in terms of effective communication, access and better provision of services. Interestingly, this figure is as high as 60 percent in the case of Balochistan which was the only province experiencing elected local governance at the time of the survey. Political partiality and corruption are some of the reasons which emerge for the negative perception held by urban citizens.

LOCAL GOVERNMENTS AND URBAN SERVICE DELIVERY

Following the 18th Constitutional Amendment, responsibility of all social services has been transferred to the provinces which further share their functional responsibilities and fiscal powers with local governments. However, municipal infrastructure and services have failed to keep pace with the increase in urban population, resulting in a gap between supply and demand of essential services. A comparative analysis of the Local Government Acts of the four provinces reveals that the system in Khyber Pakhtunkhwa is inspired by the LGO 2001, whereas, the structure of local government legislation promulgated in the other provinces closely resembles LGO 1979. In general, the current process of local government reform initiated by the provinces can be termed as 'devolution without delegation', with the exception of Khyber Pakhtunkhwa where offices of several social and economic service departments including education, health, social welfare, water supply and sanitation have been devolved to local governments. In the other provinces, only basic municipal functions are delegated to local governments such as water supply and sanitation, solid waste collection, roads and streets, streets lighting, parks and playgrounds.

As far as the potential implications of devolution for social service delivery are concerned, keeping in view the trend during the Devolution Plan 2001, it can be expected that the new local governments will be able to

play a significant role in improving the deteriorating condition of social services if they are provided with sufficient authority and resources. Progress in social indicators may nevertheless vary according to the degree of decentralization in each province. In this respect, prospects of improvement in delivery of social services appear to be higher in Khyber Pakhtunkhwa as compared with other provinces.

GEOGRAPHICAL UNEVENNESS IN URBAN HUMAN DEVELOPMENT

There are large spatial disparities in the level of human development across cities of diverse size. In this context, this chapter develops sub-national Human Development Index (HDIs) for urban Pakistan. Regional HDIs for Pakistan are estimated using data from PSLM Survey.

Gini coefficients are used to represent the magnitude of inequality in district per capita income. The estimates show that inequality is comparatively low for Khyber Pakhtunkhwa and Balochistan while highest in urban Sindh. Overall, the magnitude of the Gini coefficient for per capita income in urban Pakistan is estimated to be 0.419.

In contrast, the estimated magnitude of Human Development Indices for urban Pakistan is 0.58. The findings also show the highest level of urban human development for cities in Punjab followed by Sindh, Khyber Pakhtunkhwa and Balochistan.

Following the UNDP classification of levels of human development, all cities of Sindh province (except Karachi with medium level HDI) and all cities of Balochistan including the capital city Quetta fall in the category of low level of human development. In contrast, the federal capital and the provincial capital of Punjab lie in the very high and high category of level of human development respectively, while about 50 percent cities of Punjab are classified in the category of medium level of human development. The distribution of cities in Khyber Pakhtunkhwa province is also not lopsided and the magnitudes of HDIs in three cities (Peshawar, Manshera and Haripur) fall in the category of medium level of development while Abbottabad is included in the category of high level of human development.

COUNTING THE POOR IN THE URBAN CONTEXT

Policy makers generally consider poverty as primarily a rural phenomenon and the majority of poverty alleviation programmes focus on development of rural infrastructure and safety nets for the rural population. In contrast, the urban poor which face issues of gainful employment and health infrastructure are usually less mentioned. It is therefore imperative for governments to develop specific interventions to address urban poverty.

The estimates of poverty incidence (headcounts) reveal that about 35 percent of the urban population of Pakistan was poor during 2011-12. As expected, urban poverty is lowest in Punjab at 34 percent and highest in Balochistan at 48 percent. The results also show a rising trend in urban poverty till 2001-02, followed by a slight decline between 2002 and 2005 and rising again thereafter. The estimates of disaggregated incidence of urban poverty reveal the highest incidence of urban poverty in the small cities and towns. On average, 43 percent residents of towns are categorized as poor while the corresponding figure is 26 percent in the provincial and federal capitals.

The formulation of an effective and meaningful poverty alleviation strategy should consider the links between consumption poverty and social, demographic and economic attributes of urban households. A multivariate analysis is carried out by estimating a logistic regression function for poverty incidence based on household characteristics, access to asset endowments, and impact of remittances. Results show that the incidence of poverty increases significantly with the increase in family size and dependency ratio which reinforces the importance of population welfare programmes in poverty alleviation efforts. However, poverty is decreasing with the increase in education level of the head or spouse of household and the stock of household assets. Another important finding of this analysis is that female headed households and urban poverty are positively correlated, especially in cases where women assume responsibility for the family due to death or absence of the male counterpart. It is also observed that overseas remittances play an instrumental role in improving the standard of living of recipient households.

The phenomenon of severe deficiency of other micronutrient intakes, besides calories is also analysed. The analysis reveals that in more than 80 percent households, daily consumption of vitamin A, iron, iodine and zinc is below the recommended daily allowance. According to the disaggregated data with respect to poverty status, almost more than 95 percent of poor households are deprived in terms of the above mentioned micronutrients. This situation clearly requires direct nutritional intervention schemes for the poor. On the other hand, the trend in non-poor households calls for enhancing the level of awareness regarding the sources of micronutrients.

SUSTAINABLE URBAN DEVELOPMENT

An increase in the share of industry and services, concentrated mostly in cities and towns, implies large-scale migration from rural to urban areas. It is, therefore, important to ensure that this development transition remains an orderly process. However, the analysis reveals that a severe deterioration in the law and order situation compounded by under-

investment in infrastructure, has had a negative impact on urban development in Pakistan. The two mega cities, Karachi and Lahore, have intermediate levels of population density when compared to the population densities of major cities in Asia. In fact Karachi, with a population density of 17,400 per square km, has a land area second only to Delhi but lags far behind in terms of infrastructure such as a mass transit system. Moreover, the breakdown of human security in Pakistan's largest city due to terrorism, violence and crime has also imposed heavy costs in terms of disruption of economic activity and diversion of investment to other locations, both inside and outside Pakistan. Although a cumulative decline in acts of terror is observed in the four provincial capitals between 2010 and 2014, unfortunately, the damage per attack has increased. The sustainability of urban development is also fundamentally affected by the increase in the incidence of crime in all the major cities. Not surprisingly, there is evidence that the rate of migration from the rest of Pakistan to Karachi has declined sharply in the last five years.

There is also evidence of diseconomies of agglomeration such as traffic congestion at particular times of the day on main arterial routes in the mega cities. Rising vehicular pollution which is further magnified by emissions from polluting industries, either within city limits or at the urban periphery, also presents a challenge. Meanwhile, access to adequate quantity and quality of water is potentially one of the biggest constraints to urban growth. There are many other rising costs due to the growth in urban sprawl such as extension of electricity and gas, sewerage lines and security arrangements. A depressing finding is that cities in Pakistan rank at the bottom of most international rankings of quality of life in cities. This clearly has implications for the sustainability of the process of urban development and reaffirms the need to shift emphasis towards development of the secondary cities in the country.

Tribute to a Leading Social Sector Personality

(Late) Rafiq Ahmed Akhund
(1934 - 2015)

TRIBUTE TO A LEADING SOCIAL SECTOR PERSONALITY

Rafiq A. Akhund (1934 – 2015)

Mr. Rafiq A. Akhund, eminent civil servant, scholar and founding board member of Social Policy and Development Centre, passed away in Karachi on December 14, 2015. A distinguished officer of the Civil Service of Pakistan (CSP) 1957, Mr. Akhund served on various positions in both the Federal and Provincial Governments. He joined the civil service in an era replete with challenges for a state still in its evolution phase. Widely respected for his honesty, dedication, and professionalism he has left an indelible mark on the provincial administration in Sindh. During his eight year tenure as Additional Chief Secretary (Development), he reinvigorated the Planning & Development Department and reorganized it as a dynamic planning body with important attached/subordinate bodies such as the Bureau of Statistics and Sindh Regional Planning Organization. During this time he also mentored and trained a large number of planners and statisticians. In addition, he served as Federal Secretary for Agriculture, Finance, and Economic Affairs Division in the Government of Pakistan and after retirement as an Executive Director in the Asian Development Bank in Manila.

A true proponent of regional development, Mr. Akhund gave much-needed direction to the annual development plan for economic growth and prosperity of Sindh. He is credited with the development of Village (Rural Settlement) socio-economic data based on the 1971 census for about 68,000 rural settlements which proved instrumental for planning in rural education, health, and village electrification. The District Development Plans for Sindh were also first prepared during his tenure.

Besides professional excellence he displayed outstanding personal qualities. Impartial, honest, and uncompromising on principles, his opinions and suggestions were routinely sought and well respected amongst his seniors and peers alike. He also mentored both professionally and personally the people whom he met and encouraged them to strive for higher professional and personal goals. Though extremely proficient in his work, he was at the same time very humble, sincere, courteous, and a thorough gentleman. His contributions towards the growth and development of SPDC are invaluable and unforgettable.

MEMORIAL REFERENCE

A memorial reference was held in honour of (late) Mr. Rafiq Akhund on January 9, 2016 in Karachi bringing together senior and junior officers of the federal and provincial government, academicians, and members of civil society and the business community. Former colleagues, close

friends and family members reflected on their association with him and recounted personal anecdotes while highlighting his personal qualities and professional achievements.

In her first meeting with (late) Mr. Akhund in 2006, Prof. Dr. Khalida Ghaus, Managing Director SPDC, recalled her first interaction, and mentioned the interview in which (late) Mr. Akhund alongwith Begum Shahnaz Wazir Ali were present. Reflecting, she said despite it being a long interview he did not make me feel uncomfortable. Mr. Akhund talked and discussed research, research institutions and institution building. He wanted to know something about my views, thoughts and vision (if any) on all these issues, she said. As a founding board member of SPDC and member of the Endowment Committee and the Audit Committee, he attended all the meetings regularly and was always accessible for advice. "We have lost a very sincere, devoted and a humble board member of SPDC. He will always be remembered for his intellect and courtesy," she added.

Mr. Saeed Qureshi, Chairman SPDC Board of Directors, lamented on losing a friend and much respected colleague he had known since 1971. "We shared a closeness of around 40 years; our relationship had the sanctity of time. His death has come as a personal shock to me," he added. He recognized (late) Mr. Akhund's input in SPDC as "always regular and that of high standards" and lauded his genuine, sincere, and unassuming nature that was so rare in the civil service officers at the time.

Dr. Ishrat Hussain said he had lost a long-time mentor, guide and constant companion. "A sad moment in my personal life as I have lost my mentor, coach and guide. He always guided me both professionally and personally. He always believed in self improvement and was a voracious reader himself," he said in his tribute. Dr. Ishrat also reflected on their close association while working together in the Ministry of Finance and P&D Department which continued later at the State Bank, IBA and SPDC.

"A bureaucrat of remarkable sagacity, perceptive intellect, and yet a very mild temperament," were the words used by Ms. Shahnaz Wazir Ali to share her early impressions of (late) Mr. Akhund. She spoke about his passion for and commitment to the country and reflected on his personal attributes that garnered him great respect and admiration amongst people. Generous and gentle, though very principled, he was an example for all bureaucrats and civil servants, she added.

Former Governor of Sindh Barrister Kamaluddin Azfar, a close friend and colleague, commented that Mr. Akhund had a deep insight about the issues pertaining to Sindh and his legacy lives on through his young grandson Abdullah. "What a season Mr. Rafiq Akhund had as an officer and a gentleman. You [Abdullah] will follow his footsteps and continue making the contribution that [he] made in his life, so celebrate the time

you had with him and commemorate it with your own efforts for the betterment of Pakistan, for the war against poverty," he encouraged.

Politician and former diplomat Begum Syeda Abida Hussain, a close personal friend of Mr. and Mrs. Akhund, remembers him as "a great servant of the state, forthright, unsparable of criticism, extremely modest, he was also a wonderful family man." She recalled how he had guided her through the initial days in parliament and mused about their time together. "A very old family friend, spent many happy times together, nobody can fill the space that he left behind," she eulogized.

Recalling his first meeting with (late) Mr. Akhund, Mr. Zafar H. Ismail, former Company Secretary SPDC, spoke about how the former had encouraged him to always speak the truth and not to fear anyone because of it. "Rafiq was an icon; he inspired me to a great extent. His integrity is well known, we have lost one of the greatest and finest men. It was my immense pleasure to choose and select him as a member of the initial Board of Directors of SPDC," he said.

Mr. Kunwar Idrees, who belonged to the same batch of Civil Service of Pakistan Officers, said "he was one of the best students at the academy. He was a friend, very reserved man, very forthright. [I] consider him a great asset to the public service and to the society of Pakistan."

"An epoch of excellence" was how Additional Chief Secretary Mr. Ejaz Ali Khan saw Mr. Akhund's lengthy tenure at the P&D Department. "He had a quick grasp, an eye for merit, honesty of purpose, an excellent professional attitude and believed in an honest day's work. His noting on the files is a treat to read. A highly cultured man," he remarked. Condoling with the bereaved family, he added that "the province of Sindh in particular and Pakistan in general have lost a great scholar and planner who is difficult to replace."

But the true testament of Mr. Akhund's legacy is the high esteem in which he is held by those who never worked with him but were inspired by him. Mr. Sohail Rajput, Secretary Finance Government of Sindh, is one of them. Speaking at the memorial reference he said that "[Mr. Akhund] was one of the finest officers who have served the Government of Sindh. Through his legacy in the Finance Department I know for sure that he laid the foundations of a department which has professional competence and the wherewithal to meet the challenges of the modern days financial and economic management."

Towards the end of the memorial reference, Mr. Javed Jabbar, Vice Chairman SPDC Board of Directors, noted that the large and diverse audience was itself an indication of how (late) Mr. Rafiq Akhund was widely respected for his personal and professional character and contributions to society. As colleagues in government and later serving together in SPDC's board, Mr. Jabbar said he was always fascinated by

Mr. Akhund's equanimity in the midst of changes. "He served government through very tumultuous times with all sorts of leaders [both] elected and dictators. And yet he remained consistent and steadfast. He expressed himself with respect, being deliberately, benevolently deceptive, [but always] in the gentlest manner and in the softest of voices." Adding a lighter note to the otherwise somber occasion he concluded, "[Mr. Akhund] must be up there, may be [as] Minister of Finance."

Although no longer with us, (late) Mr. Rafiq A. Akhund will always live in the memories, minds and hearts of all those who worked with him or knew him closely. Truly a rare breed and a role model for bureaucrats and civil service officers of today. He leaves behind a beautiful legacy; his ethos is still remembered and cherished and provides a guide for future generations. His life and contributions will always be celebrated and cherished.


JF-0073
KARACHI

The Urban Economy

1

Urban areas account for almost half the GDP of Pakistan, with a concentration of industrial and services activities.

1 The Urban Economy

The objective of this first chapter is to quantify the size, growth and composition of the urban economy of Pakistan. This will enable answers, perhaps for the first time, to the following questions:

- How large is the urban economy of Pakistan in relation to the rural economy?
- Has the urban economy grown substantially faster than the rural economy?
- How much of the population growth in urban areas is due to migration?
- How large is the per capita income differential between urban and rural areas?
- What is the structure of the urban economy?
- Which sectors of the urban economy have a comparative advantage?
- Is the size distribution of cities in Pakistan balanced?
- How unequal is the distribution of urban income?

The chapter is organized as follows. The subsequent section focuses on the level and pattern of migration to the urban areas of Pakistan. The impact on growth of urban population is derived. This is followed by a section on the size and growth of the urban economy. The characteristics of this economy are also described. The last section focuses on the size distribution of cities and the magnitude of the primacy index (share of largest city) in Pakistan.

MIGRATION

The number and distribution of migrants to urban areas is given in Exhibit 1.1. One in six persons living in the cities and towns of Pakistan is a first-generation migrant. Contrary perhaps to perceptions, this ratio is the highest in Punjab. However, in the province over 80 percent of the migration is in the form of flows within the province, either in the form of rural-urban or urban-urban migration. The latter movement is referred to as 'leapfrogging', whereby a person leaves a small town to a metropolitan city.

The pattern of migration into Sindh is mostly from other provinces or other countries. The biggest inflows are from Punjab and Khyber-Pakhtunkhwa. It is of significance that, despite proximity, there is very little migration from Balochistan to Sindh.

There is evidence from the labour force surveys that migration into cities, especially to Karachi, has fallen sharply after 2007-08. It has declined to less than half the rate in earlier years. Clearly, this is attributable to the high incidence of acts of terrorism in large cities and the breakdown of law and order in Karachi, the primate city.

Exhibit 1.1 Number of migrants[a] in urban areas

	Number of migrants (000)	Share of urban population[b] (%)
Punjab	4853	18.95
Sindh	2585	15.42
Khyber-Pakhtunkhwa	543	16.33
Balochistan	53	4.16
Pakistan	8034	17.02

[a] first-generation migrants aged 10 years and above
[b] of population aged 10 years and above
Source: Labour Force Survey, 2012-13, PBS

Estimates of the rate of population growth, after the last Census of 1998, have been made by the Planning Commission. These are given in Exhibit 1.2. The population growth rate is estimated to have come down from 2.69 percent in the intercensal period, 1981 to 1998, to 2.06 percent in the last five years. As opposed to this, the rate of urban population growth has apparently accelerated. The high rate of growth of 4 percent between 1998 and 2008 may be justified on the grounds of a dynamic urban economy. However, the growth rate of 3.3 percent thereafter appears to be overstated, given the slowdown in the urban economy. Our estimate is that the growth rate was closer to 2.8 percent, implying an urban population of Pakistan in 2014 of 70.43 million. This is 2.07 million smaller than the projection by the Planning Commission.

Exhibit 1.2 Growth of population, urban and rural

	1981	1998	2008	2014
Population (million)				
Total	84.3	132.4	166.4	188.0
Rural	60.4	89.2	106.7	115.5
Urban	23.8	40.0	59.7	72.5
Urban Share (%)	28.3	30.2	35.9	38.6
Annual Growth Rate (%)				
Total	-	2.69	2.32	2.06
Rural	-	2.32	1.80	1.32
Urban	-	3.09	4.08	3.30

Source: Planning Commission, GoP

Box 1.1 What is urban or rural?

Globally, there is no concensus on the definition for what constitutes "urban" or “rural”. In practice, there are two main methods to define urban/rural. One methodology is to use a geopolitical definition that defines specific administrative units as urban and by exclusion defines all the rest as rural. The second methodology uses population agglomerations to define urban/rural. Since it establishes a clear threshold, this method seems more feasible. There is another less frequently used methodology which is nonetheless worth mentioning in view of its relevance for social protection and rural poverty analysis. This method considers the availability of municipal services to define rural/urban localities.

In the context of Pakistan, the 1951, 1961 and 1972 population censuses defined urban as areas with a minimum population base of 5,000 people, though exceptions were made for some localities with less than 5,000 people that had urban characteristics. In the 1981 and 1998 censuses, urban areas were defined according to an administrative definition.

According to the Population Census of 1998, “All localities which were metropolitan corporations, municipal corporations, municipal committees, town committees or cantonment at the time of the Census were treated as Urban”. The Census does not actually define “rural.” “Rural” encompasses all population, housing, and territory not included within an urban area. Whatever is not urban is considered rural. The analyses presented in this report use this official definition of urban/rural.

THE URBAN ECONOMY

Size and Growth

The methodology for estimating the size of the urban economy of Pakistan is given in Appendix A1. The results are presented in Exhibit 1.3. The urban economy is just under half the national economy of Pakistan. In 2013-14, the share in industry was almost 58 percent, while the share in services was 61 percent.

Exhibit 1.3 Size and growth of the urban GDP - 2001-02 to 2013-14
at constant prices of 1999-2000

	2001-02	2007-08	2013-14
Size of GDP (Rs billion)			
Agriculture	67	68	92
Industry	535	816	959
Services	1200	1743	2171
Urban GDP	1802	2627	3222
Urban Share in Pakistan's GDP (%)			
Agriculture	7.4	5.9	6.9
Industry	60.2	58.8	57.7
Services	61.4	61.2	60.8
Urban GDP	48.1	48.8	49.1
Annual Compound Growth Rate (%)			
Agriculture	-	0.22	5.15
Industry	-	7.31	2.73
Services	-	6.42	3.73
Urban GDP	-	6.49	3.46

Source: SPDC Estimates

The urban economy exhibited considerable dynamism from 2001-02 to 2007-08, the high growth period of the Musharraf era[1]. The growth rate in this period was 6.5 percent. Since then there has been a sharp fall in the growth rate of the urban Gross Domestic Product (GDP) to 3.5 percent. This is primarily due to a decline in the growth rate of industry from over 7 percent to below 3 percent.

Exhibit 1.4 gives the trend in the urban-rural income differentials. In 2001-02, the urban per capita income was 93 percent higher than its rural equivalent. The differential has narrowed down to 60 percent by 2013-14,

Exhibit 1.4 Urban-rural income differentials
at constant prices of 1999-2000

	Urban	Rural	Ratio
2001-02	38381	19875	1.931
2007-08	44018 (2.31)[a]	25832 (4.46)	1.704
2013-14	45748 (0.64)	28403 (1.59)	1.601

[a] Annual Compound Growth Rate
Source: SPDC estimates.

primarily because of rural-urban migration. It may be observed that the annual growth rate of urban per capita income was only 0.6 percent between 2007-08 and 2013-14. This is a reflection of unstable conditions in many cities, especially Karachi.

Structure

The structure of the urban economy of Pakistan is given in Exhibit 1.5. As expected, there is very little presence of agriculture in urban areas. Almost 30 percent of the value added is in industry and the bulk of the remainder in services. The share of industry increased from 2001-02 to 2007-08. In the later period, services showed somewhat more dynamism.

Exhibit 1.5 Structure of the urban economy

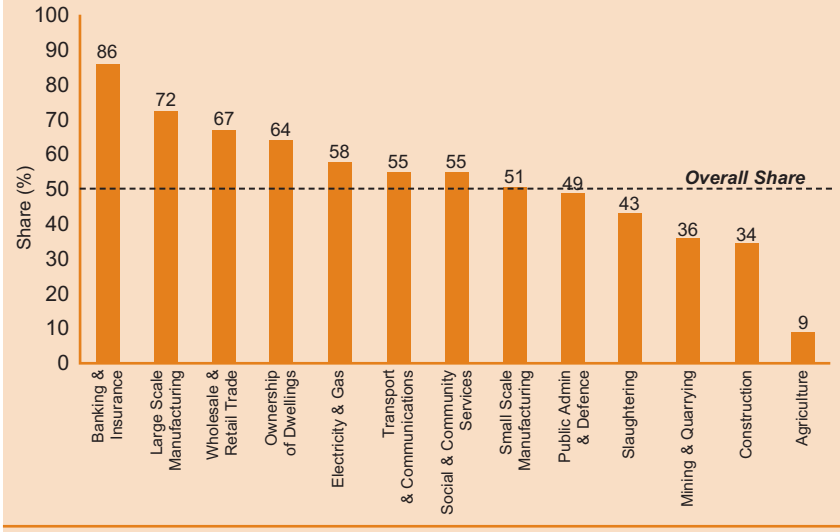
percentage share of urban GDP

	Agriculture	Industry	Services	Ratio
2001-02	3.7	29.7	66.6	100.0
2007-08	2.6	31.1	66.3	100.0
2013-14	2.9	29.8	67.4	100.0

Source: SPDC estimates.

What are the economic activities and in which cities and towns do they have a comparative advantage? This is determined by identifying sectors where the value added in urban areas exceeds 50 percent of the national value added. Exhibit 1.6 gives the urban share of each sub-sector. The share exceeds 50 percent in the case of banking and insurance (86 percent), large-scale manufacturing (72 percent), wholesale and retail trade (67 percent), ownership of dwellings (64 percent), electricity and gas (58 percent), transport and communications (55 percent), social and community services (55 percent) and small-scale manufacturing (51 percent). The only sectors which have a relatively large presence in rural areas are construction, mining and quarrying, slaughtering and public administration and defence.

Exhibit 1.6 Share of urban areas in national value added by sector



Source: SPDC estimates.

CITY SIZE DISTRIBUTION

There are two factors which define the characteristics of the city size distribution of a country, as follows:

(i) *Primary index:* the share of urban population in the largest city. In Pakistan, the primate city is Karachi.

(ii) *Population in agglomerations:* the share of urban population in cities with population above one million.

The trend in these two indicators is given for Pakistan in Exhibit 1.7. The share of Karachi in the urban population of the country declined during the period, 1981 to 1998. This was a period of fast agricultural growth and smaller cities/ towns at the urban-rural interface showed faster expansion. Between 1998 and 2008, the industrial sector exhibited a dynamism and Karachi increased its share of urban population. A similar trend is observed in the extent of urban agglomeration.

Exhibit 1.7 Trend in indicators of city size distribution (%)

	Primary index	Extent of urban agglomeration
1981	23.00	58.0
1998	21.77	54.7
2008	22.52	56.3
2014	22.75	56.7

Source: World Bank, World Development Indicators.

A comparison is made of indicators of urbanization in selected Asian countries in Exhibit 1.8. Pakistan has a relatively higher rate of urbanization than India, as well as a relatively higher extent of agglomerations. Perhaps surprisingly, the primacy index is relatively low in Pakistan. It is lower than in Bangladesh (Dhaka), Philippines (Manila), Thailand (Bangkok) and Turkey (Istanbul).

Exhibit 1.8 Comparison of urbanization indicators in selected Asian countries, 2014 (%)

	URBAN			
	Population	Population growth rate (last year)	Population in large city	Agglomerations
Pakistan	38.3	3.27	22.7	21.7
Bangladesh	33.5	3.57	31.9	14.1
China	54.4	2.93	3.1	23.1
India	32.4	2.39	6.0	14.2
Indonesia	53.0	2.76	7.5	10.0
Philippines	44.5	1.20	28.9	14.5
Thailand	49.2	3.07	27.3	15.9
Turkey	38.1	1.95	25.1	38.0

Source: WDI, World Bank

The share of urban population in relatively large cities in Pakistan is higher than in most of the countries shown in Exhibit 1.8 with the exception of China and Turkey.

The estimated population in 2015 in the major cities of Pakistan is given in Exhibit 1.9 based on projections from 1998 onwards, when the last Census was undertaken. Karachi now has a population ranging from 17.5 to 19 million. It is the third largest metropolitan city in the world, after Shanghai and Lagos. Lahore has a population approaching 10 million. There are six other cities with population approaching or exceeding 2 million. Four of these cities, namely, Faisalabad, Rawalpindi, Multan and Gujranwala, are in the largest province, Punjab. The fastest growing city is the Federal Capital, Islamabad, with its population probably well in excess of 1 million.

The basic question is whether Pakistan has a balanced distribution of cities or not. This can be answered by applying the *Rank Size Rule* to the distribution of cities in Pakistan. According to this Rule, the product of the rank and size of each city should be more or less, constant. If this is the case then the country can be considered as having a balanced distribution of cities.

Exhibit 1.9 Population in major cities of Pakistan - 1981 to 2015 *(projected)*

Number in thousands

Cities	1981	1998 (projected) I[a]	2015	II[b]
Karachi	5208	9339 (3.50)[c]	17548 (3.78)	19042 (4.28)
Lahore	2952	5143 (3.32)	9663 (3.78)	10116 (4.06)
Faisalabad	1104	2009 (3.58)	3775 (3.78)	4163 (4.38)
Rawalpindi	795	1409 (3.42)	2647 (3.78)	2826 (4.18)
Multan	732	1197 (2.94)	2249 (3.78)	2183 (3.60)
Hyderabad	752	1167 (2.62)	2192 (3.78)	1997 (3.21)
Gujranwala	601	1132 (3.79)	2127 (3.78)	2447 (4.64)
Peshawar	566	982 (3.29)	1845 (3.78)	1919 (4.02)
Quetta	286	565 (4.08)	1061 (3.78)	1294 (5.00)
Islamabad	204	529 (5.76)	994 (3.78)	1695 (7.09)

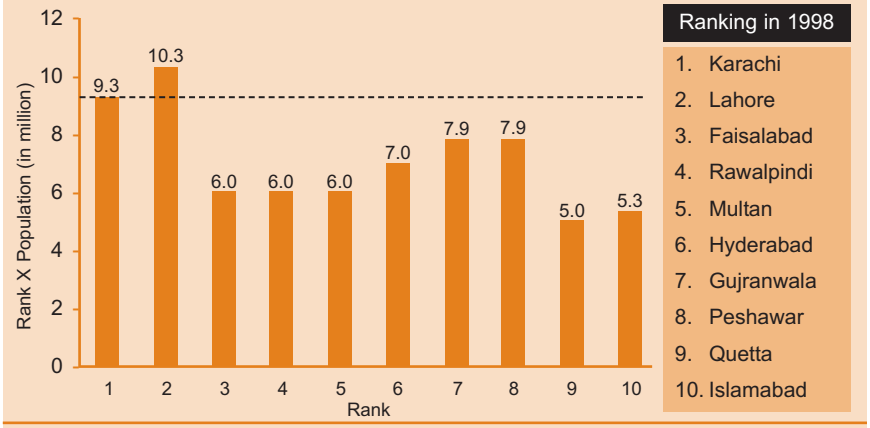
[a] Same Growth rate as total urban population

[b] Growth differential reflecting the variation in the intercensal rate

[c] Growth rate between 1981 and 1998

Source: WDI, World Bank

Exhibit 1.10 Product of the rank and population for the top ten cities of Pakistan

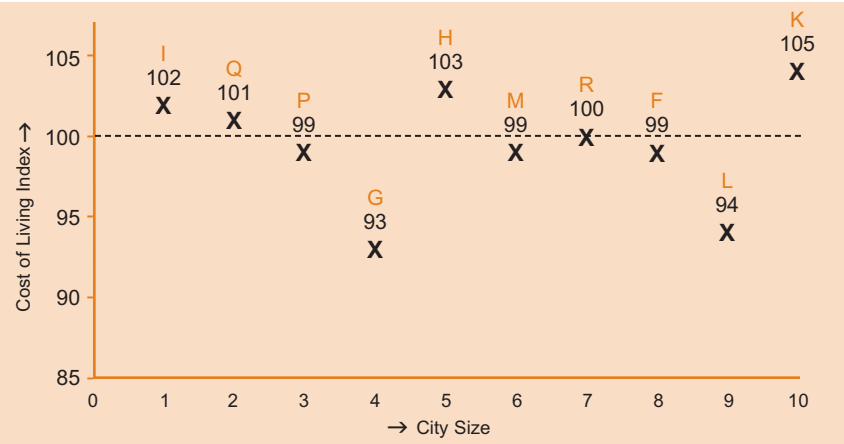


Source: SPDC estimates.

Exhibit 1.10 gives the results of applying the rank size rule to the top ten cities of Pakistan, as of 1998. Some interesting results are evident. It appears that the two largest cities, Karachi and Lahore, are overdeveloped. The medium sized cities, ranked from third to fifth, ought to be larger. These are the cities of Faisalabad, Rawalpindi and Multan. Similarly, smaller cities like Quetta need to experience faster growth.

This leads to the issue of whether there is an optimal size of a city. Larger cities tend to have more agglomeration economies and economies of scale. However, efficiency and costs are adversely affected by greater congestion and pollution and higher land values. Pasha and Pasha (2002) have analysed cities of Pakistan in terms of the relative cost of living. Their results are presented in Exhibit 1.11.

Exhibit 1.11 Relative cost of living by city size in Pakistan - 1998
National average = 100



I = Islamabad, Q = Quetta, P = Peshawar, G = Gujranwala, H = Hyderabad, M = Multan, R = Rawalpindi, F = Faisalabad, L = Lahore, K = Karachi

Conclusions indicate that there is limited variation in the cost of living for most cities. The cheapest cities are Gujranwala (93, index value, with national average at 100) and Lahore (94). The most expensive city is Karachi, with the next at 105. Generally, cities of Punjab have lower cost of living, because food items are generally cheaper.

URBAN INCOME INEQUALITY

We discuss finally the extent of urban inequality, first, among the urban areas in different provinces and, second, among urban households throughout Pakistan. The ratio of urban per capita income in each province to the national average is given in Exhibit 1.12.

There is substantial variation in the urban per capita income. It is 11 percent above the national average in the cities of Sindh, especially Karachi. At the other extreme are cities of Khyber-Pakhtunkhwa, including Peshawar, with per capita income 20 percent below the national average. Cities of Punjab have per capita incomes close to the national average.

Regional inequality is demonstrated by the distribution of income tax revenue among cities. Karachi, which has a share in the urban population of 23 percent, contributes as much as 47 percent to the national direct tax collection. Islamabad accounts for 24 percent of the revenue with a population just above 1 million. The share of Lahore is 14 percent. These three cities combined contribute 85 percent of the revenue.

Exhibit 1.12 Share of urban GDP and urban population of Pakistan by province

Province	Share of urban GDP[a]	Share of urban population[b]	Ratio
Punjab	52.2	54.2	0.963 (-3.7)[c]
Sindh	38.7	34.9	1.109 (10.9)
Khyber Pakhtunkhwa	5.7	7.1	0.803 (-19.7)
Balochistan	3.4	3.8	0.895 (-10.5)
Pakistan	**100.0**	**100.0**	**1.000**

[a] as of 2013-14

[b] as of 1998 Population Census

[c] Figures in parenthesis is the percentage deviation from the national average.

Source: SPDC estimates | Population Census, 1998.

Turning to income inequality among households, the latest estimates are from the Household Integrated and Economic Survey (HIES) of 2013-14, shown in Exhibit 1.13. Inequality is very high in urban areas, substantially higher than for the country as a whole. During the period of high growth, from 2001-02 to 2007-08, inequality increased sharply. Since then it has moderated somewhat.

In conclusion, primary research undertaken by SPDC has revealed the size, growth and characteristics of the urban economy of Pakistan. With a population share of less than 38 percent, urban areas account for almost half the GDP of Pakistan, with a concentration of industrial and services activities. In recent years, the growth process in large cities, especially Karachi, has faltered and rural-urban migration has decreased sharply.

Perhaps surprisingly, the primacy index is only moderately high in Pakistan. While Karachi and Lahore are somewhat overdeveloped, there is a need to promote the growth of medium-sized cities, especially in Punjab. A matter of great concern is the extremely high level of income inequality in urban areas of Pakistan. However, there is evidence that the urban-rural income differential has been reduced.

Exhibit 1.13 Extent of inequality in urban income

	Population share of income with		
	Bottom 20%	Top 20%	Ratio
2001-02	4.81	59.51	12.37
2007-08	3.02	67.81	22.45
2013-14	2.99	61.53	20.57

Source: PBS, HIES

NOTES:

1. General Musharraf took over in 1999 and declared himself the Chief Executive of the country. He became President in 2001. General elections were held in 2002 when his allied party formed the government. In March 2008, Pakistan Peoples Party (PPP) formed the government after general elections. Subsequently, General Musharraf resigned in August 2008.


PRECIOUS

The Labour Market of Urban Pakistan

2

The highest growth rate of labour force was experienced in Balochistan, despite confronting security challenges.

2

The Labour Market of Urban Pakistan

Over the years, the question of 'urban employment' is gaining importance in various poverty alleviation programmes and policies. Rapid urbanization and high rural to urban migration in Pakistan are the two critical factors that influence the formulation of development policy both at national and provincial levels. However, the urban employment question has not been addressed effectively as it continues to function on the pre-industrial model of informality and exploitation. The issues of wage discrimination, gender inequality, labour market segmentation and inhuman working conditions are also common in the formal sector in Pakistan. However, the fundamental difference between formal and informal labour markets in Pakistan is the social security coverage and old age benefits such as pension. The statistics show that the overall growth of informal employment was 3.36 percent per annum which was substantially higher than the formal employment 0.27 percent per annum from 2001-02 to 2013-14[1]. The urban informal employment growth was 3.47 percent per annum for the same period.

The pace of urbanization in Pakistan is unprecedented in South Asia. The rising urban population from 17 percent in 1951 to 38.5 percent in 2014 is alarming from the perspective of urban sprawl, congestion, delivery of social services and functioning of the labour market. The rural-urban distinction is not only restricted to the geographical demarcation of boundaries rather it is also based on the type of services and amenities available in a particular region. A recent report of the World Bank[2] on urbanization claimed that 55 percent of the population in Pakistan is living in areas that have urban characteristics. This will have strong implications on urban labour in job prospects, specialization and skills, wage differentials and working hours.

The rural areas of Pakistan are facing challenges of climate variability, water scarcity, deterioration of soil quality and reduction in cultivable land that has resulted in the substantial decline of agricultural activities. The idle labour is compelled to migrate to urban centers in search of work and livelihood. The migration of illiterate and unskilled rural population has profound implications on the urban labour market. The inelastic labour supply in urban areas has impacted minimum wages and contributed to the expansion of the informal sector. This chapter presents an analysis of the pattern and structure of employment in urban areas of Pakistan. The framework of analysis is described in Box 2.1.

Box 2.1 Framework of analysis

An analysis on the pattern and structure of employment in urban areas of Pakistan is presented in the chapter. The data is extracted from the Labour Force Survey that is carried out periodically by the Pakistan Bureau of Statistics, Government of Pakistan.

The labour force in the chapter is defined as "population comprising of all persons 15 years of age and above who fulfil the requirement for inclusion among employed or unemployed", which is in line with the definition of the labour force recommended by the International Labour Organization (ILO). The analysis includes the following aspects of labour force:

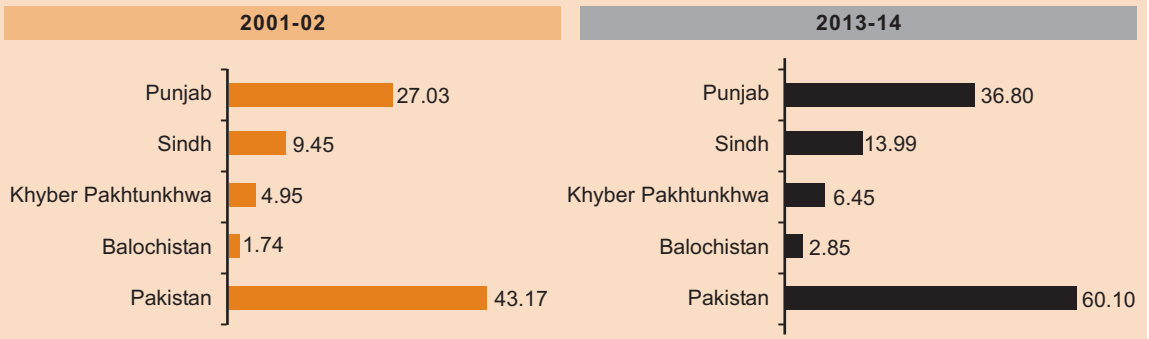
- The analysis of the labour market by comparing two years i.e. 2001-02 and 2013-14.
- Analysis of migration and informal sector employment (conducted only for the year 2013-14).
- Trend analysis of total labour force and urban labour force by gender, region and province.
- Analysis of total and urban employed labour force by gender, region and province
- Comparative analysis of labour force participation rate for the two periods.
- The changes over time in the level of education of employed labour force by gender, region, and province.
- Analysis of employment by sector, gender, region and province
- Comparative analysis of employment labour force by major occupation, gender, region and province with urban growth in major occupation
- Overview of the urban informal sector with the analysis of gender wage differentials.

STRUCTURE OF URBAN LABOUR FORCE

Pakistan inherited a weak economic base in terms of availability of capital and industry. The major urban centres were struggling to accommodate migrants and provide jobs. It was a time when the urban labour market started to shape its structure and configuration. The private sector led industrial growth in the early years of partition and was instrumental in providing jobs to urban migrants and rural agriculture labour in the import substitution industry. This trend continued till the 1960s when Pakistan's economy took a leap forward in terms of economic growth and urban economy. At that time no consideration was given to the question of formal and informal employment, rather job creation in the private sector was considered a major source of poverty alleviation for poor immigrants. For the first time in the history of Pakistan, the Pakistan Peoples Party (PPP) government in the 1970s placed "labour" at the centre of economic activity by giving the recognition to labour, enhancing remuneration and commencing social security benefits.

The successive labour policies, including the most recent policy of 2010, have been unsuccessful in addressing the core labour market issues particularly for urban labour force. The form and structure of the urban labour market is largely dominated by the informal sector activities and no substantive planning was brought forward to address the urban labour market challenges such as dangerous or hazardous work environment, wage discrimination, gender inequality, market rigidity and job creation for new entrants – challenges that have substantial implications for the urban labour productivity and well-being.

Exhibit 2.1 The size of total labour force in Pakistan (numbers in million)



Source: Pakistan Labour Force Survey, 2001-02 and 2013-14.

Total labour force in Pakistan has increased from 43.17 million in 2001-02 to 60.10 million in 2013-14 with an annual growth rate of 2.8 percent per annum (Exhibit 2.1). Between 2001-02 and 2013-14, the highest growth in labour force surprisingly has been found in Balochistan – which is 4.2 percent per annum; while the lowest growth of 2.2 percent per annum was in Khyber Pakhtunkhwa during the same period. The share of males in the total labour force was 85.4 percent in 2001-02 which fell to 75.3 in 20013-14.

The increase share of females in the total labour force is primarily due to accounting of unpaid family helpers particularly in the rural agriculture sector. The highest growth in total labour force in Balochistan from 2001-02 is surprising because the province was experiencing various security challenges and political, ethnic and religious issues. One possible explanation of this high growth could be the impending growth of the labour force in Khyber Pakhtunkhwa and migration from there as well.

The urban labour force in 2013-14 is estimated to be 18.9 million, which is 31.5 percent of total labour force in Pakistan. As shown in Exhibit 2.2, Punjab has the highest share of 56.8 percent while Balochistan has the lowest share of 3.8 percent. Nevertheless, the growth in urban share of labour force varies among the provinces. It is interesting to note that the urban share in total labour force of Balochistan has increased from 17.8 percent in 2001-02 to 25.3 percent in 2013-14 which clearly signifies the pace of urbanization and growth of urban middle class in the province.

Exhibit 2.2 The size of urban labour force in Pakistan

	2001-02	2013-14	2001-02	2013-14
	Labour force (million)		Share (%)	
Punjab	7.98	10.74	57.8	56.8
Sindh	4.69	6.30	34.0	33.3
Khyber Pakhtunkhwa	0.82	1.21	5.9	6.4
Balochistan	0.31	0.72	2.2	3.8
Pakistan	13.80	18.90	100.0	100.0

Source: Pakistan Labour Force Survey (2001-02 and 2013-14).

The share of urban labour force in Punjab remained stagnant at 29.0 percent. In terms of average cumulative growth in urban labour force, Balochistan approached highest growth of 7.27 percent per annum while Sindh and Punjab experienced the lowest growth of 2.5 percent per annum from 2001-02 to 2013-14.

Exhibit 2.3 Urban share in sectoral employment, 2014-15 (000)

Sectors	Urban	Share (%)	Ranking[a]	Rural	Share (%)
Total	**17570**	**31**		**39850**	**69**
Agriculture	908	4	9	23360	96
Manufacturing	4579	52	5	4224	48
Construction	1366	33	8	2829	67
Wholesale & Retail Trade	4721	56	4	3686	44
Transport	1243	43	7	1626	57
Finance	269	80	1	68	20
Public Administration & Defence	808	58	2	594	42
Other Services	1887	47	6	2164	53
Others	1789	58	3	1299	42

[a] Ranking of sectoral shares
Source: Pakistan Labour Force Survey

The distribution of employment in different sectors between urban and rural areas is presented in Exhibit 2.3. The highest share in sectoral employment of urban areas is in banking and finance of 80 percent. This is followed by Public Administration and Defence and other sectors with an urban share of 58 percent and wholesale and retail trade at 56 percent. The presence of sectors like agriculture, construction and transport is relatively limited in urban areas.

The overall labour force participation (LFP) rate in Pakistan has shown an increase of share 5.0 percent when compared with 2001-02 which is unfortunately significantly low in terms of decreasing dependency ratios (Exhibit 2.4). The lowest LFP rate was marked in Balochistan with 41.1 percent, while Punjab experienced the highest LFP rate of 57.0 in 2013-14. The urban LFP rate, however, has shown an increase of 0.8 percent with the highest increase of 2.7 percent in Balochistan. The urban LFP rate in Punjab and Khyber Pakhtunkhwa has declined by 1.7 and 1.8 percent respectively implying that population growth and migration is increasing the dependency ratios and these provinces have been unable to create jobs for new urban labour force entrants. The urban LFP rate in Sindh has shown an increase of 1.0

Exhibit 2.4 Labour force participation rates (%)

	2001-02	2013-14
Overall		
Punjab	53.0	57.0
Sindh	45.7	50.9
Khyber Pakhtunkhwa	41.7	43.1
Balochistan	45.7	41.1
Pakistan	49.5	54.5
Urban		
Punjab	47.9	46.2
Sindh	43.6	44.6
Khyber Pakhtunkhwa	42.1	40.3
Balochistan	42.4	45.1
Pakistan	45.8	46.7

Source: Pakistan Labour Force Survey, 2001-02 and 2013-14

Exhibit 2.5	Labour force participation rates by gender (%)			
	2001-02	2013-14	2001-02	2013-14
	Male		Female	
Punjab - urban	78.8	75.2	14.1	14.2
Sindh - urban	76.8	78.2	5.5	7.2
Khyber Pakhtunkhwa - urban	74.9	74.4	6.5	9.3
Balochistan - urban	74.2	76.9	5.0	5.4
Pakistan - urban	77.7	76.3	10.3	11.2
Pakistan - overall	82.1	79.4	14.9	23.9

Source: Pakistan Labour Force Survey (2001-02 and 2013-14).

percent for the period of 2001-02 to 2013-14. The low urban participation rates indicate sluggish expansion of an urban economic base that eventually negates the benefits of rapid urbanization in Pakistan.

Gender-wise comparison of LFP rates presents an increasing trend in females while male LFP rates have declined significantly except in Sindh and Balochistan where these rates increased by 1.4 percent and 2.7 percent respectively (Exhibit 2.5). The overall male LFP rate in Pakistan was 82.1 percent in 2001-02 which declined to 79.4 percent in 2013-14. On the other hand, the overall female participation rate increased from 14.9 percent in 2001-02 to 23.9 percent in 2013-14. The increase is partially attributed to the increase in overall rural female participation rate which was 17.2 percent in 2001-02 and increased to 31 percent in 2013-14. Comparison of urban male LFP rate among provinces indicates the highest decline of 3.6 percent in Punjab followed by 0.5 percent in Khyber Pakhtunkhwa. Whereas, urban female LFP rates indicate an increasing trend in all the four provinces with Punjab and Balochistan experiencing a modest increase.

The increasing trend in the participation rates signifies improved education and training conditions along with greater opportunities for urban females. The highest increase in urban female participation rate of 2.8 percent is observed in Khyber Pakhtunkhwa followed by 1.7 percent in Sindh and 0.4 percent in Balochistan. Whereas, Punjab managed to improve its urban female participation rate only by 0.1 percent. Focusing on gender-gaps in

Exhibit 2.6	Number of 'Idle' male youth[a] in urban areas, 2014-15 *numbers in thousands*		
	Number not in labour force	Number in higher secondary/ college or university	Number of 'Idle' male youth
Punjab	1704	843	861
Sindh	1112	401	711
Khyber Pakhtunkhwa	253	196	57
Balochistan	143	36	107
Pakistan	3212	1476	1736

[a] Age 15-24 years

Sources: Pakistan Labour Force Survey (2014-15) | Pakistan Education Statistics (2015).

urban labour force participation rate, the highest gap still exists in Balochistan and Sindh while the lowest gap can be seen in Punjab.

A critical component of the population from the viewpoint of propensity to crime and militancy is the number of 'idle' male youth in urban areas. These are males aged 15 to 24 years who are neither in the labour force nor being educated. Exhibit 2.6 presents the number of 'idle' male youth in each province in 2014-15, from the latest Labour Force Survey of Pakistan Bureau of Statistics (PBS) and Pakistan Education Statistics from Academy of Educational Planning and Management (AEPAM). The total number of such youth is 1.7 million in Pakistan. Almost 50 percent of these youth are in Punjab, especially in South Punjab. And 41 percent are in Sindh and the remainder in the two smaller provinces.

One of the major macroeconomic challenges is to maintain a minimum level of unemployment to curb the inflation rate in the economy. In Pakistan, the decade of the 2000s was characterized by higher unemployment and higher inflation. The financial crisis of 2007-08, was instrumental in augmenting the widespread unemployment rate and higher inflation due to spiraling oil prices in the international market. The urban economy also shared the disproportionate burden of crisis that impacted the well-being of urban dwellers. Whereas, the energy crisis continues to have a multiplier effect on the growth of urban economy that has been suffering both from internal and external shocks. The twin factors have substantially contributed to the growth of unemployment in urban areas of Pakistan. However, in recent years the urban economy has shown some signs of revival but the overdue burden of crisis continues to loom. Exhibit 2.7 indicates that growth in urban unemployment rate is higher in all the provinces except in Balochistan where the average annual reduction in unemployment rate was 25.9 percent.

Exhibit 2.7 Trends in employment and unemployment (numbers in million)

	2001-02		2013-14		ACGR (%)	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
Overall						
Punjab	24.7	2.3	34.5	2.3	2.8	0.1
Sindh	9.0	0.5	13.4	0.6	3.4	1.6
Khyber Pakhtunkhwa	4.3	0.7	5.9	0.5	2.7	-1.5
Balochistan	1.6	0.1	2.7	0.1	4.5	-1.4
Pakistan	39.6	3.6	56.5	3.6	3.0	0.0
Urban						
Punjab	7.1	0.9	9.8	0.9	2.7	0.7
Sindh	4.4	0.3	5.9	0.4	2.5	1.8
Khyber Pakhtunkhwa	0.7	0.1	1.1	0.1	3.6	1.3
Balochistan	0.3	1.5	0.7	0.0	8.0	-25.9
Pakistan	12.5	1.4	17.4	1.5	2.9	1.0

Source: Pakistan Labour Force Survey, 2001-02 and 2013-14

Sindh experienced the highest unemployment rate of 1.8 percent per annum which is alarming because Sindh contributed substantially to the federal exchequer primarily from Karachi. Khyber Pakhtunkhwa is confronting security issues since the beginning of this millennium, an increase of 1.3 percent in urban unemployment rate signifies the contraction of urban economy. The urban economy of Punjab has shown resilience over the last decade mainly by diversifying the major urban centres such as Lahore, Faisalabad, Gujranwala and Sialkot from manufacturing to expansion of the services sector.

It has been argued that the benefits of population dividend in Pakistan has started to lose its reminiscence character as successive labour force policies have failed to outline the framework of youth engagement in the labour force. One of the significant findings of the employed labour force analysis over the period of 12 years is that Balochistan (which is considered as the poorest among all provinces) has 4.5 percent per annum which is the highest growth of employed labour force in all the four provinces. Surprisingly, it is a province that has shown a decreasing trend in the rate of unemployment with 1.4 percent per annum from 2001-02 to 2013-14. Khyber Pakhtunkhwa is the other province that also has a declining trend in the rate of unemployment.

The male-female ratio in the total labour force has changed from 84:16 to 76:24 during 2001-02 to 2013-14. The ratio of urban male-female however remained stagnant over the same period. Exhibit 2.8 presents unemployment rates by gender during the same period along with an average cumulative growth rate of unemployment. The statistics show an encouraging sign of low unemployment rates for females over the last 12 years both at aggregate and urban levels.

In 2001-02, the highest unemployment rate among females was in Balochistan with 39.4 percent, followed by Khyber Pakhtunkhwa (32.1

Exhibit 2.8 Gender-wise comparison of unemployment rates (%)

	2001-02		2013-14		Change	
	Male	Female	Male	Female	Male	Female
Overall						
Punjab	7.0	14.4	5.6	8.2	-1.4	-6.2
Sindh	4.0	19.8	3.6	7.4	-0.4	-12.3
Khyber Pakhtunkhwa	11.0	32.1	6.6	15.9	-4.5	-16.2
Balochistan	5.4	39.4	3.5	7.1	-1.9	-32.3
Pakistan	6.7	16.5	5.1	8.7	-1.6	-7.7
Urban						
Punjab	8.6	23.0	6.9	18.5	-1.7	-4.5
Sindh	5.9	22.8	5.3	20.0	-0.6	-2.8
Khyber Pakhtunkhwa	12.2	39.0	8.4	35.7	-3.7	-3.3
Balochistan	10.3	47.8	4.5	20.0	-5.8	-27.8
Pakistan	7.8	24.4	6.3	19.5	-1.5	-4.9

Source: Pakistan Labour Force Survey (2001-02 and 2013-14.).

percent). Punjab had the lowest female unemployment rate of 14.4 percent. Similar trends can be observed in urban areas where the unemployment rate was as high as 47.8 percent in Balochistan with Punjab and Sindh at 23.0 percent. In 2013-14, the female unemployment rates declined substantially both at aggregate and urban levels by 7.7 and 4.9 percentage points respectively. The urban female of Balochistan experienced a highest decline of 27.8 percent.

In urban male labour force, the rate of decline is low compared to urban females. The highest decline was seen in Balochistan (5.8 percent) followed by Khyber Pakhtunkhwa (3.7 percent) while Sindh experienced the lowest decline of 0.6 percent in male unemployment rates. At aggregate level, a maximum decline of 4.5 percent occurred in Khyber Pakhtunkhwa in male unemployment rates.

Distribution of employed labour force by industry category is presented in Exhibit 2.9. At aggregate level, agriculture employed over 40.0 percent of the total labour force except in Khyber Pakhtunkhwa where it is 37.2 percent. For the analysis of percentage distribution of employed labour force by industry, agriculture has not been included in urban areas where it is below 9.0 percent of total urban labour force. The pattern of employment at aggregate level is similar for Pakistan and all the four provinces in which manufacturing and wholesale and retail trade are the two leading employment sectors. In Balochistan, the manufacturing sector employed only 4.1 percent of labour force in comparison to above 10.0 percent employment in all the three provinces. The wholesale and retail trade has the highest share of 17.4 percent in Balochistan which is 2.7 percent above the national average. Construction is the second largest employer of labour force in Khyber Pakhtunkhwa with 11.8 percent which also has the highest share of 52.4 percent of sub-total of the six sectors.

Exhibit 2.9 Distribution of employed labour force by industry category in 2013-14 [%]

Industry Category	Pakistan	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Overall					
Manufacturing	14.1	15.7	13.8	10.2	4.1
Construction	7.5	6.7	7.4	11.8	8.2
Wholesale & Retail	14.7	14.0	15.9	14.9	17.4
Transport & Communication	5.1	4.4	5.7	7.4	5.6
Education & Health	5.1	4.6	5.0	8.1	6.2
Sub-total	**46.5**	**45.4**	**47.8**	**52.4**	**41.5**
Urban					
Manufacturing	24.3	26.8	23.7	15.1	8.9
Construction	7.8	6.5	9.6	9.3	9.2
Wholesale & Retail	27.7	27.4	28.0	26.9	31.2
Transport & Communication	7.0	6.2	8.0	9.5	7.4
Education & Health	8.0	8.2	6.8	11.8	10.2
Sub-total	**74.9**	**75.0**	**76.1**	**72.5**	**67.0**

Source: Pakistan Labour Force Survey (2013-14).

In urban areas, these sectors contributed more than 70.0 percent of employment except in Balochistan where the sub-total of these sectors is 67.0 percent. The pattern of employment is almost identical in all sectors particularly in urban manufacturing and wholesale and retail trade which accounted for more than 50.0 percent except in Balochistan and Khyber Pakhtunkhwa where it is 40.1 percent and 41.9 percent respectively. These two provinces have higher employment in education and health sectors when compared with the other two provinces. The construction sector has over 9.0 percent of employment in Balochistan, Khyber Pakhtunkhwa and Sindh. Unlike Balochistan where urban wholesale and retail trade has higher employment share and transport and communication share follows the national average, Khyber Pakhtunkhwa has the highest share of 9.5 percent in transport and communication sector which clearly compliments the 26.9 percent share of employment in urban wholesale and retail trade.

The analysis of percentage distribution of employed labour force has revealed that the structure of employment in urban areas is markedly different from national level because of low agriculture activities in peri-urban areas of Pakistan. The higher share in the urban construction sector signifies the conversion of large peri-urban agricultural land into private housing schemes all over the country. In urban Balochistan and Khyber Pakhtunkhwa, the employment in the manufacturing sector is not comparable either with national or Punjab or Sindh which currently highlights the need for the development of small and medium-sized enterprises (SMEs) and also a strong industrialization policy for both the provinces. Diversification of urban employment activities in the sectors such as finance and insurance, information and communication is required in all the provinces because of a temporal nature of the urban construction sector.

With the low female labour force participation rate, it is assumed that there will be higher gender disparity in all the major occupation groups. The analysis will also show the ranking of provinces in terms of gender gap in occupational categories. The ratio close to 1 means a narrow gender gap while a ratio close to zero means high gender gap. At an aggregate level, Punjab has the lowest gender gap followed by Khyber Pakhtunkhwa. Sindh with 15.0 percent share of females in the total labour force has a higher gender gap. In the managerial category, female employment is insignificant because of low education and training opportunities and also because of a bias in the labour market structure which favours males and has restricted females to lower cadres.

However, the gender gap has shown a promising scenario for females in Punjab in the professional category followed by Khyber Pakhtunkhwa and Sindh. Skilled agriculture, forestry and fishery workers is another occupation category where the gap is narrow in Punjab and Khyber Pakhtunkhwa while Sindh and Balochistan have over 60.0 and 70.0 percent gender gap respectively.

Exhibit 2.10 Gender gap in employment rates[a] by major occupation groups [%]

Occupation	Pakistan	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Overall					
Managers	0.05	0.05	0.04	0.04	0.01
Professionals	0.44	0.63	0.25	0.31	0.13
Technicians and associate professionals	0.11	0.13	0.06	0.15	0.03
Clerical support workers	0.03	0.05	0.03	0.01	0.01
Service and sales workers	0.03	0.05	0.02	0.01	0.01
Skilled agriculture, forestry and fishery workers	0.64	0.79	0.38	0.65	0.22
Craft & related traders workers	0.24	0.3	0.12	0.13	0.12
Plant & machine operators	0.01	0.02	0.01	0.01	0.01
Elementary occupation	0.30	0.49	0.13	0.02	0.02
Overall	**0.30**	**0.40**	**0.17**	**0.22**	**0.10**
Urban					
Managers	0.05	0.05	0.05	0.04	0.00
Professionals	0.55	0.73	0.34	0.53	0.23
Technicians and associate professionals	0.08	0.09	0.05	0.08	0.06
Clerical support workers	0.04	0.06	0.03	0.03	0.01
Service and sales workers	0.03	0.04	0.02	0.02	0.01
Skilled agriculture, forestry and fishery workers	0.32	0.36	0.19	0.25	0.25
Craft & related traders workers	0.16	0.22	0.08	0.07	0.04
Plant & machine operators	0.02	0.03	0.01	0.01	0.01
Elementary occupation	0.19	0.29	0.1	0.08	0.03
Overall	**0.13**	**0.05**	**0.09**	**0.17**	**0.07**

[a] Ratio of female employment rate to male employment rate.

Source: Pakistan Labour Force Survey 2013-14.

In urban areas, the gender gap is higher in all the occupational categories in all four provinces with an exception of professional and skilled agriculture, forestry and fishery workers. At urban aggregate level, the higher gender gap in all the four provinces shows the inability of the primary and secondary labour markets to reduce market segmentation by sex which restricted the entry of females in certain occupational categories. For instance, plant and machine operator and technicians and associated professional categories are considered as a male only job. Therefore, females are not encouraged to pursue their career despite having adequate education and training. The institutions of family and factory have shaped the "mindset" of female specific jobs in the labour market. The former by perpetuating the stereotype and the latter continues to focus on creating space for males 'predominantly.' The segmentation of labour market continues to flourish unabated.

It has been argued that there is a very weak relationship between education and employment because most of the workers who join the labour force are trained in the informal sector with no or low literacy. This argument is partly valid when analyzing the education levels of labour

force excluding agriculture labour. The analysis is conducted for 2001-02 and 2013-14 to examine the changes in educational attainments of urban labour force. Though the literacy levels have moderately improved in all the four province among both male and female labour force, however, during 2013-14, on average there are 25.0 percent illiterate males in the urban employed labour market (Exhibit 2.11). This ratio is 34.0 percent in urban employed females. Higher illiterate labour force has no employment prospects in the formal sector as the job specification and employment standards have become stringent during the last two decades. The percentage distribution of employed males and females with primary and middle education has not changed in any of the four provinces between 2001-02 and 2013-14 except in Khyber Pakhtunkhwa where a marginal increase can be seen in both males and females by 3.3 percent and 4.0 percent respectively.

In Sindh the urban female participation has also shown an increase of 4.2 percent in the labour force of those with primary and middle level education. The percentage share of labour force at matriculation level has also not changed over time except urban females in Khyber Pakhtunkhwa that was 16.7 percent in 2001-02 has declined to 10.0 percent in 2013-14. The degree and post-graduation category included labour force with graduation, post-graduation and professional educational levels. The male labour force with degree and post-graduation education level in Balochistan increased by 7.4 percent from 2001-02 to 2013-14, whereas within this category an additional 4.0 percent of graduates and 1.5 percent males with professional qualifications entered the labour force in 2013-14. In Khyber Pakhtunkhwa a substantive increase of 16.2 percent can be

Exhibit 2.11 Distribution of employed labour force by level of education

Level of Education	Punjab		Sindh		Khyber Pakhtunkhwa		Balochistan	
	Male	Female	Male	Female	Male	Female	Male	Female
2001-02								
Illiterate	30.8	46.9	26.5	30.7	38.1	39.7	37.8	30.3
Primary & Middle	36.6	20.2	31.6	14.6	28.3	6.4	29.9	16.0
Matriculation	18.8	11.9	16.6	11.1	14.8	16.7	16.1	16.0
Intermediate	6.5	9.1	9.4	12.1	6.6	9.3	7.5	16.8
Degree & Post Graduation	7.2	11.9	16.0	31.7	12.2	27.9	8.7	21.0
Overall	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2013-14								
Illiterate	24.5	38.8	19.4	30.7	26.1	29.4	28.2	35.7
Primary & Middle	36.9	22.8	32.4	18.8	31.6	10.4	28.9	16.4
Matriculation	19.9	10.9	19.0	12.9	17.7	10.0	17.9	15.4
Intermediate	8.3	6.6	11.4	11.4	9.4	6.1	9.0	10.2
Degree & Post Graduation	10.4	20.8	17.7	26.2	15.2	44.1	16.1	22.4
Overall	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Pakistan Labour Force Survey (2001-02 and 2013-14).

seen among the female labour force with degree and post-graduation education primarily because of 6.5 percent of post-graduate and 4.7 percent of professional female new entrants. In the same educational category, the percentage of females in Punjab increased by 8.9 percent while Sindh witnessed a decline of 5.5 percent among females with degree and post-graduation education.

The analysis of employed labour force with educational attainment revealed that the primary labour market (formal sector) has greater job prospects for qualified individuals particularly for females. On the contrary, the secondary labour market (informal sector) has skewed labour force entry points for both educated males and females.

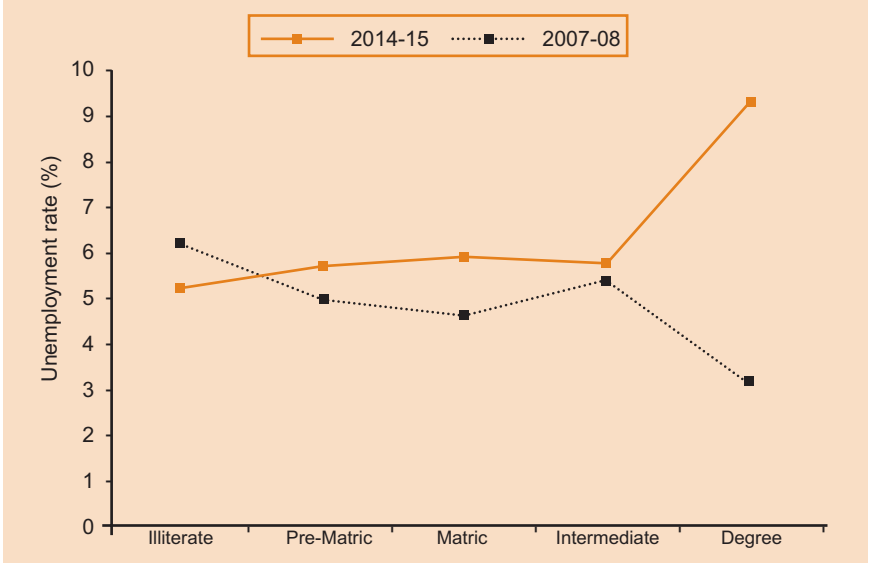
The unemployment rate by level of education is given respectively for males and females in the urban areas of Pakistan (Exhibit 2.12). The problem of absorption of highly educated workers has become very serious in recent years. Between 2007-08 and 2014-15, the unemployment rate of males and females with a graduate or post-graduate degree has virtually trebled. Overall, in 2014-15, the unemployment rate for literate workers is higher than for illiterate workers. Increasingly, there is a crisis in the absorption of educated workers, as shown in Exhibit 2.13.

Exhibit 2.12 Unemployment rate by level of education in urban areas of Pakistan (%)

	2014-15	2007-08
MALE		
Illiterate	***5.25***	***6.19***
Literate	***6.44***	***4.65***
Pre-Matric	5.72	5
Matric	5.9	4.64
Intermediate	5.78	5.42
Degree, Post Graduate	9.24	3.21
Total	**6.18**	**5.03**
FEMALE		
Illiterate	***9.63***	***19.88***
Literate	***26.08***	***16.52***
Pre-Matric	22.44	20
Matric	20	21.57
Intermediate	17.14	15.15
Degree, Post Graduate	33.57	10
Total	**20.49**	**17.66**

Source: Pakistan Labour Force Survey (2007-08 and 2014-15).

Exhibit 2.13 'Crisis' in absorption of educated workers



=> Big increase in Unemployment Rate of Educated Male Workers

Source: Pakistan Labour Force Survey 2007-08 and 2014-15.

MIGRATION PATTERNS AND URBAN LABOUR MARKET

Migration towards an urban centre is one of the major factors of unplanned growth of cities that complement the informal sector requirement of low wage labour. The decline in agricultural activities due to water scarcity, availability of cultivable land, continuous deterioration of soil quality and high cost of agriculture inputs has compelled the rural population to migrate towards urban centres. The other major factor of rural-urban migration is the ruthless feudal structure that governs the social and economic life of rural Pakistan. All this has contributed significantly in the transformation of urban labour market dynamics from low labour supply to highly inelastic supply of labour. With the low level of literacy, skills and training, the migrant labour has no other option except to work in the informal sector on a minimum wage.

The overall migration pattern in 2013-14 is presented in Exhibit 2.14. Balochistan experienced the highest migration of 44.9 percent with 22.0 percent migration from Sindh. The demand for labour in Gawadar port and construction industry in Balochistan is the main reason of high migration from Sindh. Migration to Sindh is also high as 28.3 percent out of total migration in the province is from Khyber Pakhtunkhwa and Punjab with 9.1 percent migration from abroad.

A large percentage of intra-province migration can be seen in Punjab where 78.5 percent of population migrated within the province. One important finding of the analysis is the high percentage of migration from abroad in all the four provinces. Despite having security issues in Khyber Pakhtunkhwa, it experienced 10.3 percent of migration from abroad which was the highest among four provinces. The second highest migration from abroad was seen in Sindh where 9.1 percent of total migration was from abroad. The total share of migration from abroad is 7.0 percent. Whereas, in terms of inter-provincial migration (excluding Gilgit Baltistan, Azad Jammu and Kashmir and abroad), Balochistan experienced the highest ratio of migration 38.9 percent followed by Sindh with 29.6 percent, whereas the inter-provincial migration ratio was lowest in Punjab with 13.9 percent.

Exhibit 2.14 Pattern of in-migration by province 2013-14 [%]

Migration From	Migration to				Total
	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	
Punjab	78.5	17.5	13.6	8.0	57.3
Sindh	6.1	60.1	11.0	22.0	18.4
Khyber Pakhtunkhwa	6.7	10.7	62.5	8.9	14.1
Balochistan	1.1	1.4	1.5	55.1	1.6
Gilgit Baltistan	0.2	0.5	0.3	0.0	0.3
Azad Jammu and Kashmir	1.7	0.7	0.9	0.0	1.3
Abroad	5.8	9.1	10.3	6.0	7.0
Overall	**66.0**	**21.6**	**11.7**	**0.7**	**100.0**

Source: Pakistan Labour Force Survey (2013-14).

Exhibit 2.15 Migration to urban centres as percentage of total migration, 2013-14

Migration from	Migration to				
	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Total
Punjab	37.6	15.9	2.7	6.9	28.6
Sindh	2.8	44.0	1.8	19.2	11.7
Khyber Pakhtunkhwa	4.5	10.1	27.7	8.9	8.5
Balochistan	0.5	0.4	0.0	51.7	0.8
Gilgit Baltistan	0.2	0.5	0.2	0.0	0.3
Azad Jammu and Kashmir	0.8	0.7	0.2	0.0	0.7
Abroad	2.3	8.9	1.7	5.3	3.7
Overall	**48.7**	**80.4**	**34.3**	**91.9**	**54.2**

Source: Pakistan Labour Force (Survey 2013-14).

The migration flows are an important consideration from an urban labour market perspective. Exhibit 2.15 shows the percent distribution of total migration towards urban centres. The statistics show that urban centres of Balochistan and Sindh are under excessive pressure of migration as 91.9 percent and 80.4 percent of total migration is towards urban centers. Interestingly, the Punjab and Khyber Pakhtunkhwa have reversed migration patterns as more of the population is migrating towards rural areas. In terms of inter-provincial migration patterns (excluding GB, AJK and abroad), Balochistan and Sindh have been experiencing 35.0 percent and 26.4 percent migration from other provinces while Khyber Pakhtunkhwa has the lowest migration of 4.6 percent. The highest migration from abroad is in Sindh with 97.6 percent followed by Balochistan with 88.5 percent of total migration from abroad. Only 16.7 percent of migrants from abroad preferred to relocate in urban centres of Khyber Pakhtunkhwa.

It has been generally argued that rural-urban migration in Pakistan is higher than urban-urban migration. Analyses of the migration patterns in both cases are presented in Exhibit 2.16 and Exhibit 2.17. Contrary to the prevailing assumption about high rural-urban migration, particularly that Karachi experiences high migration from rural Pakistan, the statistics indicate that the highest rural urban migration (37.2 percent) took place in the province of Punjab – consisting of 21.5 percent of migrant rural population from Khyber Pakhtunkhwa and 11.2 percent from the rural areas of Balochistan. The ratio of rural-urban migration in Sindh is 16.2 percent with 9.1 percent from rural Khyber Pakhtunkhwa and 4.9 percent from rural Balochistan. Contrary to this, the intra-provincial migration was highest in Sindh with 42.8 percent, a scale that contributed to the massive decline in agriculture and fishing activities in the rural areas. The ratio of intra-provincial migration in Punjab was 38.0 percent – which also shows the increasing pressure on urban centers besides the diminishing rural livelihood activities in rural Punjab. Sindh and Punjab represent over 75.0 percent of the total population and if rural-urban migration continues

Exhibit 2.16 Pattern of rural to urban migration, 2013-14

Migration from	Migration to: Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Total
Punjab	38.0	2.3	0.2	0.1	40.6
Sindh	4.5	42.8	0.3	0.8	48.4
Khyber Pakhtunkhwa	21.5	9.1	26.1	0.4	57.1
Balochistan	11.2	4.9	0.3	24.8	41.2
Overall	**39.7**	**55.4**	**44.3**	**87.0**	**44.6**

Source: Pakistan Labour Force Survey (2013-14).

to be more than 45.0 percent of total migration than urban labour markets will confront serious issues of absorption, wage discrimination, low productivity and excess labour supply.

In terms of total rural migration, Balochistan and Sindh have 87.0 percent and 55.4 percent of migration ratios from rural to urban centers while Punjab has the lowest ratio of 39.7 percent. The province-wise comparison of rural migration shows that Khyber Pakhtunkhwa has the highest ratio of 57.1 percent, which includes 31 percent inter-provincial migration. Sindh has the second highest rural-urban migration ratio but this is largely intra-provincial migration. Whereas, Balochistan has the second highest inter-provincial rural-urban migration ratio that shows the inability of the rural labour market of the province to provide wage earning opportunities.

The analysis of urban-urban migration is important from the viewpoint of expansion of urban labour markets and high mobility of labour with specialized education and training. The statistics show that Khyber Pakhtunkhwa has the highest inter-provincial urban-urban migration ratio of 50.5 percent with 29.3 percent migrating to urban Sindh and 20.7 percent to urban Punjab (Exhibit 2.17). The second highest urban-urban migration ratio is in Balochistan where 26.8 percent migration was toward urban Punjab and 5.1 percent to urban Sindh. In terms of total urban migration, a very high percentage opted to migrate towards urban Sindh and Balochistan provinces as opposed to rural areas. The lowest urban to urban migration was found in Khyber Pakhtunkhwa where 44.1 percent

Exhibit 2.17 Pattern of urban to urban migration, 2013-14

Migration From	Migration to: Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Total
Punjab	51.5	11.6	1.1	0.0	64.3
Sindh	12.7	55.5	1.6	0.7	70.5
Khyber Pakhtunkhwa	20.7	29.3	16.1	0.5	66.6
Balochistan	26.8	5.1	0.4	22.6	54.9
Overall	**62.2**	**82.7**	**44.1**	**99.2**	**66.3**

Source: Pakistan Labour Force Survey (2013-14).

Exhibit 2.18 Employed migrants as percentage of total employed labour force, 2013-14

Provinces	Overall			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Punjab	12.3	15.3	13.2	6.1	11.6	7.7	6.2	3.7	5.5
Sindh	10.3	10.6	10.3	1.8	6.3	2.4	8.5	4.2	7.9
Khyber Pakhtunkhwa	17.0	6.1	15.1	12.5	4.2	11.0	4.5	1.9	4.1
Balochistan	1.9	0.6	1.8	0.2	0.0	0.1	1.7	0.6	1.6
Overall	**11.7**	**13.6**	**12.2**	**5.3**	**10.0**	**6.4**	**6.4**	**3.6**	**5.7**

Source: Pakistan Labour Force Survey (2013-14).

of urban population migrated towards urban centres as opposed to 55.9 percent towards rural areas. At an aggregate level, the highest inter-provincial migration of urban population was found in Balochistan where 77.2 percent of population either migrated to urban or rural areas.

The impact of migration on the labour market is shown in Exhibit 2.18. Migrants are only 12.2 percent of total labour force in which 13.6 percent of female and 11.7 percent of male migrants were employed according to the 2013-14 labour force survey. The theory of labour force migration suggests that higher output growth is a condition of labour migration from agriculture to the industrial sector (Lewis, 1954). In the Lewis model, land and capital are perfectly immobile and the equilibrium is reached by the movement of the workers between two sectors. According to Lewis, urban labour market always moves toward equilibrium and the involuntarily unemployment is impossible that is contradictory to what developing and least developed countries (LDCs) are experiencing such as higher disguised unemployment and large informal sector employment. Harris and Todaro (1970) migration model explains that the decision of migration by an agriculture worker was based on the expected high wages in urban areas. The model predicts a high unemployment rate is compatible with the existence of a large informal sector with low level of remunerations. Both Lewis and Harris & Todaro migration models viewed dual urban labour markets where wages in the formal sector are higher than wages in the informal sector. Analyzing the migrant employment by region, higher employment of 6.4 percent in rural areas as opposed to 5.7 percent in urban areas was noticed. Similarly, higher employment prospects exist for rural female migrants as opposed to urban female migrants.

The migration models of Lewis and Harris Todaro suggest higher employment ratios in the informal sector in Khyber Pakhtunkhwa and Punjab among both males and females. In Khyber Pakhtunkhwa 79.4 percent male and 56.1 percent female migrants worked in the informal sector (Exhibit 2.19) whereas, in Punjab over 70 percent of the migrants are employed in the informal sector among both males and females. In Sindh, the distribution of formal and informal employment among migrants is 40 to 60 percent which is lower when compared with Khyber Pakhtunkhwa and Punjab. The higher prospects of formal employment for migrants in Sindh are primarily because of Karachi where labour

Exhibit 2.19 Employed migrants by formal and informal sectors, 2013-14

Provinces	Formal			Informal		
	Male	Female	Total	Male	Female	Total
Punjab	29.5	28.8	29.3	70.5	71.2	70.7
Sindh	39.8	39.9	39.8	60.2	60.1	60.2
Khyber Pakhtunkhwa	20.6	43.9	21.8	79.4	56.1	78.2
Balochistan	40.8	77.5	41.9	59.2	22.5	58.1

Source: Pakistan Labour Force Survey (2013-14).

market functions are historically based on formal business practices. Importantly, in Balochistan and Khyber Pakhtunkhwa, there is ample scope of female migrants in the formal sector as 77.5 percent and 43.9 percent of female migrants are currently employed in the formal sectors. The ratio of formal and informal employment in Balochistan for migrant workers is almost the same as in Sindh i.e. 41.9 percent to 58.1 percent.

The analysis of migrant employment by primary and secondary sectors suggests that Khyber Pakhtunkhwa and Punjab have less employment prospects in the formal sector for male migrants while Sindh and Balochistan have relatively easy entry in the formal sector. Khyber Pakhtunkhwa and Balochistan have exceptional prospects in the formal sector for female migrants.

The differential between earnings at the place of origin and expected earnings at the place of destination plays an important role in the prediction of migration flows (Sjaastad, 1962). However, it is very difficult for a migrant population to enter the labour force because of labour market rigidities. In Pakistan, the labour market is inflexible because of the differences in economic base, market structures and diversity in culture. Exhibit 2.20 looks into the employment prospects for migrant workers in all the four provinces of Pakistan. In Khyber Pakhtunkhwa, the male migrants have confronted exceptional difficulty in entering the labour force – 24.4 percent of total unemployed males are migrants. The highest unemployment in female migrants is found in Punjab (17.5 percent), followed by Sindh (15.4 percent). At aggregate level, the migrants of Khyber Pakhtunkhwa have highest ratio of unemployment (17.5 percent) followed by Punjab (15.5 percent). In Balochistan, the migrants have greater job prospects both for males and females as only 0.8 percent males and 3.5 percent females contributed to the unemployment rate.

The urban migrant population comprises 7.1 percent of the urban unemployment in which both male and female migrant unemployment ratios are approximately 7.0 percent. The comparison among four provinces brings Sindh forward with highest unemployment migrants 8.7 percent, followed by Punjab 7.4 percent. Among the male migrants, all

Exhibit 2.20 Un-employed migrants as percentage of total un-employed labour force, 2013-14

Provinces	Overall			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Punjab	14.1	17.5	15.5	6.9	9.8	8.1	7.3	7.6	7.4
Sindh	9.1	15.4	10.6	1.7	2.7	1.9	7.4	12.7	8.7
Khyber Pakhtunkhwa	24.4	4.6	17.5	17.1	1.3	11.6	7.2	3.3	5.9
Balochistan	0.8	3.5	1.4	0.0	0.0	0.0	0.8	3.5	1.4
Pakistan	**14.4**	**14.5**	**14.4**	**7.4**	**7.1**	**7.3**	**7.0**	**7.4**	**7.1**

Source: Pakistan Labour Force Survey (2013-14).

three provinces (Khyber Pakhtunkhwa, Punjab and Sindh) have on average 7.0 percent unemployment rate while, among female migrants Sindh has the highest ratio of 12.7 percent. Since, there is no unemployment ratio for rural areas in Balochistan, urban areas represent the aggregate level of unemployment of migrant labour force.

URBAN LABOUR FORCE IN THE INFORMAL SECTOR

The cities of developing countries are under excessive pressure of population and demand for basic social services which is a necessary condition for the growth of local economy and organization of the labour force. City authorities are often unable to understand the link between economic growth, quality of the provision of basic social services and organization of the urban labour market. In the absence of a city authority, the "power groups" gain control over local resources due to weak or dormant institutional authority and powered the urban growth through informal institutional structures. As a result, urban markets are dominated and regulated by those private businesses that use local resources as well as regulations to earn huge profits. The urban life in most of the developing and LDCs cities are shaped not by the city planners but by these 'power groups/lobbies' with the help of private businesses. This model of urban development has replaced the conventional model of city growth by local authorities. The eccentric expansion of an informal sector has virtually taken over all major formal sectors of the urban economy most notably the employment sector.

The configuration of the economy and an informal sector has paved the way of unprecedented growth of the urban labour market in Pakistan. In 2001-02, the total informal employment net of the agriculture sector was 37.4 percent of total labour force which increased to 41.59 percent in 2013-14. Similarly, the urban informal employment was 65.7 percent of total urban employment in 2001-02, which increased to 70.6 percent in 2013-14 – showing the increasing vulnerability of urban labour force seeking employment in the primary labour market.

The prospects of joining the formal sector in male urban labour have shrunk over the last 12 years. In 2001-02, male urban informal employment was 61.1 percent of total urban employed labour force,

which increased to 71.1 percent in 2013-14. During the same two time periods, the female urban informal employment was 60.7 percent which increased to 67.1 percent.

The expansion of informal urban labour employment compared with the urban formal sector is mainly because of the following three reasons: the overall macro economic conditions of the country where the "cost of doing business" has increased manifold – which has compelled the private businesses to operate below the bar of formal taxation structure. Secondly, Pakistan is on the lower side of "ease of doing business" in urban areas due to security challenges, cumbersome procedures of registration and rampant corruption in registration and monitoring authorities. Finally, there is high risk and uncertainty involved in the formal business enterprises where the entry and exit is extremely difficult which has a discouraging affect on the urban entrepreneur to take such high risk. All these resulted in the weak protection of urban labour; increase in informal employment; and a direct impact on urban poverty and the well-being of a household.

Exhibit 2.21 presents the urban informal employment patterns by gender in all four provinces of Pakistan. The analysis is conducted for 2013-14 only on two sectors i.e. industry and services primarily because the share of agriculture activities is marginal in urban areas. The high percentage of urban informal employment in both industry and services sectors at aggregate and provincial levels explain the size of the informal sector in urban areas. The thriving urban informal sector also absorbed female labour force particularly in industry where the formal sector seems to have restricted female employment. Sindh has the lowest 73.5 percent of urban female informal employment among all the provinces. All three have over 90.0 percent of female informal employment in the industry sector. On the contrary, urban female informal employment has lesser share in the services sector which is as low as 12.2 percent in

Exhibit 2.21 Urban informal employment as percentage of urban employment by sector, 2013-14

Sector	Male	Female	Total
Pakistan			
Industry	63.3	87.9	66.0
Services	75.5	55.7	73.5
Punjab			
Industry	65.9	91.0	69.5
Services	79.5	59.4	76.9
Sindh			
Industry	56.7	73.5	57.6
Services	71.4	53.3	70.2
Khyber Pakhtunkhwa			
Industry	78.2	96.5	79.3
Services	74.1	34.0	70.8
Balochistan			
Industry	74.2	93.0	74.7
Services	62.2	12.2	60.2

Source: Pakistan Labour Force Survey (2013-14).

Balochistan followed by 34.0 percent in Khyber Pakhtunkhwa – which means urban female population has greater prospects of employment in the formal services sector particularly in finance and insurance, wholesale and retail trade, education and health sectors.

The supply of urban labour force is the main driver for the expansion of the urban informal sector. It employed more than 70 percent of urban male labour force in the informal services sector except for Balochistan where it is 62.2 percent. The informal employment in industry is over 60 percent of the total urban employed male labour force except for Sindh where it is 56.7 percent. At aggregate level, the urban informal labour in the industry sector is 60 percent on average, while, for the services sector it is 70 of the total urban labour force. If a large percentage of urban employed labour force both male and female has greater access of work in the informal sector then the labour market segmentation between primary and secondary markets will intensify the labour segmentation on the basis of class hierarchy. Low wages, longer working hours, absence of employment insurance in the short and long-run, and hazardous working environment are a few characteristics of urban informal sector employment in Pakistan. The highlight of the analysis is the low urban female employment in services sector in all the provinces but lowest in Balochistan and Khyber Pakhtunkhwa. Total female urban employment has low job prospects for females of these two provinces mainly because of the cultural and traditional barriers – which prevented females from joining the informal sector. On the other hand, the urbanization and intense urban poverty in the lowest 40 percentile of the population of urban Punjab and Sindh has no other choice but to seek employment in the informal sector despite meager remuneration.

Exhibit 2.22 Urban informal employment as percentage of urban employment by industry category, 2013-14

Sectors	Male	Female	Total
Pakistan			
Manufacturing	55.3	88.3	59.9
Construction	92.6	85.0	92.5
Transport	82.4	49.3	82.2
Wholesale	97.3	95.9	97.3
Human Health	38.8	25.4	35.5
Punjab			
Manufacturing	59.8	91.8	65.6
Construction	95.6	56.2	95.2
Transport	83.7	50.0	83.3
Wholesale	97.0	98.2	97.0
Human Health	48.8	30.6	43.6
Sindh			
Manufacturing	44.8	71.1	46.7
Construction	89.7	100.0	89.9
Transport	79.5	na	79.5
Wholesale	97.4	90.2	97.3
Human Health	28.0	14.1	25.2
Khyber Pakhtunkhwa			
Manufacturing	77.0	96.3	78.8
Construction	92.7	100.0	92.8
Transport	94.4	100.0	94.4
Whole Sale	99.2	100.0	99.2
Human Health	38.4	31.7	36.7
Balochistan			
Manufacturing	70.1	93.0	71.4
Construction	88.0	n.a.	88.0
Transport	70.1	0.0	69.7
Whole Sale	97.7	100.0	97.7
Human Health	21.6	0.0	18.4

Source: Pakistan Labour Force Survey (2013-14).

The major employment sectors of urban informal labour force are presented in Exhibit 2.22. The five major sectors namely manufacturing, construction, transport and communication, wholesale and retail trade and human health that represents more than 80 percent of urban employment in the informal sector are included in this particular exhibit. The largest informal employment can be noticed in construction, transport and communication, and wholesale and retail trade in all the four provinces of urban male labour force. Whereas, amongst female labour

force, the provinces of Khyber Pakhtunkhwa, Sindh and Balochistan have almost 100 percent employment in these sectors. In Punjab it is 56.2 percent and 50 percent in construction, transport and communication sectors respectively. In the manufacturing sector, Sindh has the lowest urban informal employment in males while Khyber Pakhtunkhwa has highest employment of 77 percent. The human health sector has 35.5 percent of informal employment at aggregate level primarily because of proliferation of private hospitals and clinics in urban centres of Pakistan.

It is important to note that the five sectors of Exhibit 2.22 represent 69.4 percent of total urban employment in which 79.9 percent is employed in the urban informal sector at aggregate level. Urban female informal employment is 80.6 percent of the total female urban employment in these five sectors in which construction, transport and communication, and wholesale and retail trade has 100.0 percent informal employment in Khyber Pakhtunkhwa. At an aggregate level, Punjab has the highest urban informal employment of 69.9 percent followed by Khyber Pakhtunkhwa with 68.6 percent. Sindh and Balochistan have urban informal employment of 62.5 percent and 58.1 percent respectively. Gender comparison of urban informal employment has shown that Punjab has the highest male and female urban informal employment of 70.9 percent and 63.4 percent respectively. Sindh is the second largest province where gender ratios are 63.2 percent for male and 53.8 percent for female. In Khyber Pakhtunkhwa, 71.2 percent of males and 39.9 percent of urban females are employed in the informal sector while Balochistan has the lowest urban employment by gender in the informal sector where the ratios are 60.1 percent and 17.5 percent respectively.

With the growing secondary cities in urban Punjab, the highest ratios of urban informal employment among both males and females have had a profound impact on the organization of the urban labour force. The province not only constitutes half of the total population of the country but also the largest proportion (56.6 percent) of urban labour force.

The analysis of urban informal employment by major occupation helps in bringing forward some important findings. The concentration of informal employment is mainly in four job categories which account approximately for 90.0 percent at national as well as provincial level (Exhibit 2.23). Secondly, there is a higher incidence of labour market segmentation found among services and sales workers which are considered male occupations while craft and related traders workers and elementary occupations are for female informal labour force. Thirdly, female informal employment in plant and machine operator category is extremely low which brought forward intense gender inequality in the job categories. Finally, the share of elementary occupation of female informal employment is highest after craft and related traders workers in all provinces except in Balochistan where 26.4 percent of females employed are in services and sales workers category.

Exhibit 2.23 Urban informal employment by major occupation and by gender, 2013-14

Sectors	Male	Female	Total
Pakistan			
Service and sales workers	42.3	12.6	39.4
Craft & related traders workers	25.8	44.1	27.6
Plant & machine operators	10.2	1.5	9.4
Elementary occupation	12.3	26.4	13.6
Punjab			
Service and sales workers	42.0	12.2	38.2
Craft & related traders workers	27.3	46.6	29.8
Plant & machine operators	9.8	1.6	8.7
Elementary occupation	10.5	26.1	12.5
Sindh			
Service and sales workers	42.6	13.9	41.0
Craft & related traders workers	23.6	33.8	24.2
Plant & machine operators	11.0	0.7	10.4
Elementary occupation	15.2	28.9	16.0
Khyber Pakhtunkhwa			
Service and sales workers	38.1	13.7	37.0
Craft & related traders workers	27.7	40.7	28.3
Plant & machine operators	12.1	2.2	11.6
Elementary occupation	11.4	19.2	11.8
Balochistan			
Service and sales workers	50.7	26.4	50.4
Craft & related traders workers	19.0	58.0	19.6
Plant & machine operators	6.7	0.0	6.6
Elementary occupation	15.3	12.5	15.2

Source: Pakistan Labour Force Survey (2013-14).

At aggregate level, the trend in informal employment by major occupation is similar for national as well as for provinces where services and sales workers have the highest share and plant and machine operators have the lowest share of employment. Unlike aggregate level and male informal employment, female informal workers found jobs in craft and related workers and elementary occupation which require a low level of education and training. Unfortunately, the urbanization in Pakistan is not accompanied with high human development indicators in which the statistics of education and training among females has not improved over the last two decades. The quality of education and training has also declined significantly when we explore the linkages between education and employment. Females with a minimum level of education and training confronted difficulties to enter the formal employment sector and the secondary sector only provide jobs in some specific sectors with specialized occupations.

The link between education and employment is shown in Exhibit 2.24 where urban informal employment by level of education is presented. As

Exhibit 2.24 Urban informal employment by level of education and by gender, 2013-14

Sectors	Male	Female	Total
Pakistan			
Illiterate	28.7	45.6	30.3
Primary	36.9	25.0	35.7
Matriculation & Intermediate	27.8	19.7	27.0
Graduate and above	6.6	9.6	6.9
Punjab			
Illiterate	29.8	46.1	31.9
Primary	37.9	26.9	36.5
Matriculation & Intermediate	26.8	18.1	25.7
Graduate and above	5.5	9.0	6.0
Sindh			
Illiterate	25.3	43.7	26.4
Primary	35.8	18.2	34.8
Matriculation & Intermediate	30.4	26.5	30.2
Graduate and above	8.5	11.6	8.7
Khyber Pakhtunkhwa			
Illiterate	30.8	41.8	31.3
Primary	35.9	20.9	35.2
Matriculation & Intermediate	26.4	22.1	26.2
Graduate and above	6.9	15.3	7.3
Balochistan			
Illiterate	37.7	72.9	38.2
Primary	33.4	17.2	33.2
Matriculation & Intermediate	22.5	6.2	22.3
Graduate and above	6.4	3.6	6.3

Source: Pakistan Labour Force Survey (2013-14).

discussed in the earlier section, lack of education in female labour force compelled them to join the urban informal sector which accommodates them in occupations that required low education and training. Exhibit 2.24 presents the highest ratio of illiterate females in urban female informal employment followed by females with primary education in all the four provinces. In Balochistan, the highest illiteracy was seen in female informal employment (72.9 percent), followed by primary education with 17.2 percent. Surprisingly, Punjab has the highest illiterate female informal employment after Balochistan.

The educational level of urban male informal employment is relatively better compared to urban females. The ratio of illiterate male workers is as low as 25.3 percent in Sindh with the highest value of 37.7 percent in Balochistan. Ironically in Sindh , the level of education in urban male informal employment is better among all the four provinces where 35.8 percent have primary, 30.4 percent are matriculate/intermediate and 8.5 percent were graduate and above. The ratios of level of education for urban female in informal employment working in Sindh have a higher

Exhibit 2.25 T-test for equality of mean: informal employed urban by major occupation

Variables	Mean	T	Sig.
Managers			
Female	26,308	12.83	0.00
Male	20,665		
Professionals			
Female	6,340	-143.34	0.00
Male	12,948		
Technicians & associate professionals			
Female	8,887	-18.26	0.00
Male	10,583		
Clerical support workers			
Female	5,150	-44.66	0.00
Male	12,833		
Service and sales workers			
Female	8,078	-23.46	0.00
Male	8,735		
Craft & related traders workers			
Female	5,188	-83.42	0.00
Male	9,777		
Plant & machine operators			
Female	9,758	-7.36	0.00
Male	10,356		
Elementary occupation			
Female	3,882	-360.38	0.00
Male	7,964		
Overall			
Female	5,311	-366.25	0.00
Male	9,679		

percentage of matriculates and graduates that accounts for 38.1 percent – which was highest among all four provinces. This shows the inflexible urban labour market structure of Sindh where education played a key role even in the informal sector.

The analysis of urban informal labour market in the preceding sections has shown higher gender inequality where the male labour force in secondary markets have greater advantages and benefits in comparison to female labour force. Some indicators have clearly shown male labour force advantageous position particularly higher level of education and training, higher job prospects in all industries and high wage differentials in the same employment category.

Independent sample T-test (Exhibit 2.25) for equality of mean by major occupation is applied to analyze whether wage differentials between female and male workers is statistically significant or not. It is interesting to note that in the manager category, average mean wages of female workers are higher than male workers with statistically significant difference mean values. The mean values in professional, clerical support workers and elementary occupation from male workers is significantly higher than female workers which indicates a high level of wage discrimination since female workers with same qualifications and experience were paid substantially lower remunerations. The overall wage differential between female and male workers in the informal sector is 82.0 percent with a statistically significant difference in mean values. The higher t-values in professional, elementary occupation and aggregate level imply higher mean difference to standard error difference between female and male wages.

The trend in real wages from 2002 to 2014 is given for unskilled and skilled workers in the four provincial capitals in Exhibit 2.26. A clear pattern is visible. Given the low rate of investment and construction activity since 2008, real wages of skilled workers have fallen sharply. These had shown some increase in the earlier period, 2002 to 2008,

Exhibit 2.26 Trend in real wages

	(at 2002 prices, Rs)		(Daily wages, Rs)	Growth rate (%)		
	2002	2008	2014	2002 to 2008	2008 to 2014	2002 to 2014
Carpenter / Mason						
Karachi	298	375	273	3.9	-5.2	-0.7
Lahore	263	343	268	4.5	-4	0.1
Peshawar	225	318	255	5.9	-3.6	1
Quetta	250	391	310	7.7	-3.8	1.8
Unskilled Workers						
Karachi	182	228	182	3.8	-3.7	0
Lahore	145	196	206	5.2	0.8	3
Peshawar	90	152	166	9.1	1.5	5.2
Quetta	115	196	189	9.3	-0.6	4.2

Source: Pakistan Economic Survey (various issues).

when there was faster growth in the economy. The pattern is more mixed for unskilled workers. It is significant that even in the latter period these workers have seen increases in real wages in Lahore and Peshawar.

NOTES:

1. Labour Force Survey, 2001-02 & 2013-14, Pakistan Bureau of Statistics, Statistics Division, Government of Pakistan.
2. "Ellis, Peter; Roberts, Mark. 2016. Leveraging Urbanization in South Asia: Managing Spatial Transformation for Prosperity and Livability. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/22549 License: CC BY 3.0 IGO."

Access to and Utilization of Public Services in Urban Pakistan

3

CHAPTER 3

Over the last two decades, the educational landscape of Pakistan has been completely transformed. The private sector has emerged as a key provider of education services especially in urban areas.

3

Access to and Utilization of Public Services in Urban Pakistan

Demographic trends in Pakistan show rapid urbanization, with an average annual rate exceeding 4 per cent since 1951. It is estimated that by the year 2030, Pakistan will be predominantly urban with 48 to 50 per cent of its population living in urban areas.

The rapid growth of urbanization has resulted in a severe strain on the existing urban infrastructure which continues to be a serious problem in urban areas. It is generally believed that the available infrastructure in terms of education, health, drinking water, sewerage and solid waste management is of poor quality. Moreover the coverage is limited and inequitable, and thus inadequate to serve current and future demand. In addition, due to large-scale migration from villages to urban areas, the public service structures come under pressure which results in an increase in unplanned residential development.

The Task Force on urban development, constituted by the Planning Commission of Pakistan highlighted the following features regarding physical infrastructure in its report of 2011;

- Underground sources of water supply are depleting quickly due to heavy withdrawal and surface water is threatened with municipal sewage, waste water, and pollution. Cities are increasingly faced with scarcity of water and poor quality of supplies. Additionally, 35 to 40 per cent water is wasted through leakages and theft in the water distribution networks. Water treatment facilities are also limited.
- Sewage is collected through open drains in most cities and discharged into rivers, streams, lakes and canals without treatment. These channels often become sources of urban water supply schemes. The collection through piped networks is limited to very few large cities where the coverage is selective and sewage treatment rare. In addition, in small towns open defecation is common due to absence of a sanitation system.
- Only 5 per cent households have proper access to municipal garbage collection systems. Often there is no arrangement for its disposal at properly developed landfill sites. The uncollected garbage accumulates on streets and open spaces between houses from where scavengers extract the usable material for recycling and leave the rest to rot.
- Management of service delivery is also an institutional issue. This is mainly due to a lack of capacity of local governments. For major projects, local governments are dependent on the assistance of provincial and federal governments. Moreover, funds are often

mismanaged and costs of provision excessive. There is lack of accountability and transparency in service management and finance.

This chapter provides information on the access to and utilization of important public services. The recent household survey data of Pakistan Social and Living-Standard Measurement (PSLM) Survey of 2013-14 is used to develop a situation analysis regarding the sources and availability of drinking water, connection with public sewerage system, garbage collection, public schools and utilization of selective public health facilities. An attempt is also made to document trends in providing these services using PSLM data of 2007-08.

Besides providing a provincial picture of public services, the chapter also presents information in terms of the size of a city. According to the Pakistan Bureau of Statistics (PBS), the urban sample is stratified as follows: "Large sized cities[1] having population five lacs and above are treated as independent stratum……the remaining cities/towns are grouped together to constitute an independent stratum". Thus, the disaggregation of urban areas in terms of capital cities, other large cities and small cities is statistically feasible.

SOURCES AND AVAILABILITY OF WATER

The main sources of drinking water reported by households are tabulated in Exhibit 3.1. On average, about 52 percent urban households reported piped water connections with substantial provincial variations. However, motorized pumps and tube wells are important sources of drinking water in Punjab and Khyber Pakhtunkhwa. About 41 and 35 percent households of urban Punjab and urban Khyber Pakhtunkhwa respectively use this source for drinking water.

There is an inverse relationship between city size and the provision of drinking water through public piped systems. Almost 84 percent households in capital cities confirmed getting piped water, while the incidence of public provision of drinking water is only 25 in small cities.

Exhibit 3.1 Main Source of water in urban areas - [percentage of households]

	City size scenario				Provincial scenario			
	Pakistan	Capital cities	Other Large cities	Small cities	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Piped water	51.7	84.3	33.6	25.1	36.2	72.8	48.9	68.1
Motorized pump/tube well	27.8	4.8	42.4	45.3	41.0	9.6	34.9	8.6
Hand pump	8.0	0.7	5.7	18.3	8.5	7.5	8.2	3.6
Tanker/truck/water bearer	6.1	5.2	10.1	4.5	5.1	7.6	2.3	13.0
Filtration Plant	4.3	3.0	6.5	4.2	7.4	0.6	0.9	1.1
Mineral water	0.9	1.7	0.6	0.1	0.8	1.3		
Other – (Open Well, Spring, Pond)	1.2	0.3	1.2	2.4	1.0	0.5	4.9	5.7

Source: PSLM (2013-14).

Exhibit 3.2 Public piped water supply in urban areas - trends

Percentage of households which reported connection with public piped water

	2014	2008	Percent change
Pakistan			
Overall	51.7	60.8	-15.0
Capital cities	84.3	90.0	-6.3
Other large cities	33.6	51.5	-34.8
Small cities	25.1	37.2	-32.5
Punjab	36.2	51.0	-29.0
Sindh	72.8	73.1	-0.4
Khyber Pakhtunkhwa	48.9	69.9	-30.0
Balochistan	68.1	81.7	-16.6

Source: PSLM (2013-14 and 2007-08).

Trends in providing piped water to urban citizens are presented in Exhibit 3.2. It portrays a picture of deterioration in the level of public services. Overall, a decrease of almost 15 percent in the provision of piped water is noted during 2008 and 2014. However, excluding the capital cities, the percentages of decline are significantly higher. As compared to 2008, about 33 to 35 percent fewer households reported having piped water connections in the categories of small and 'other large cities'. The data (not tabulated here) reveals that during this period, the use of motorized pump/hand pumps has increased for obtaining water. In terms of provinces, the provision of piped water is almost stagnant in Sindh, while a significant decline is evident in other provinces, especially in Khyber Pakhtunkhwa.

The picture portrayed above only describes the incidence of households connected with a piped water system. The information regarding the availability of water in public taps, which is a proxy of quantity are presented in Exhibit 3.3.

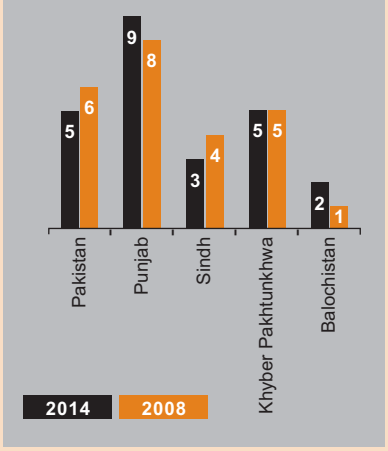
Exhibit 3.3 Availability of public tap water and Installation of water delivering system

Duration of water availability in 2014

Percentage of Households

	Less than 3 hours	4 to 6 hours	More than 6 hours
Pakistan	57.8	15.6	26.6
Punjab	22.5	19.6	57.9
Sindh	81.6	11.4	7.0
Khyber Pakhtunkhwa	50.2	28.4	21.4
Balochistan	82.3	15.2	2.5

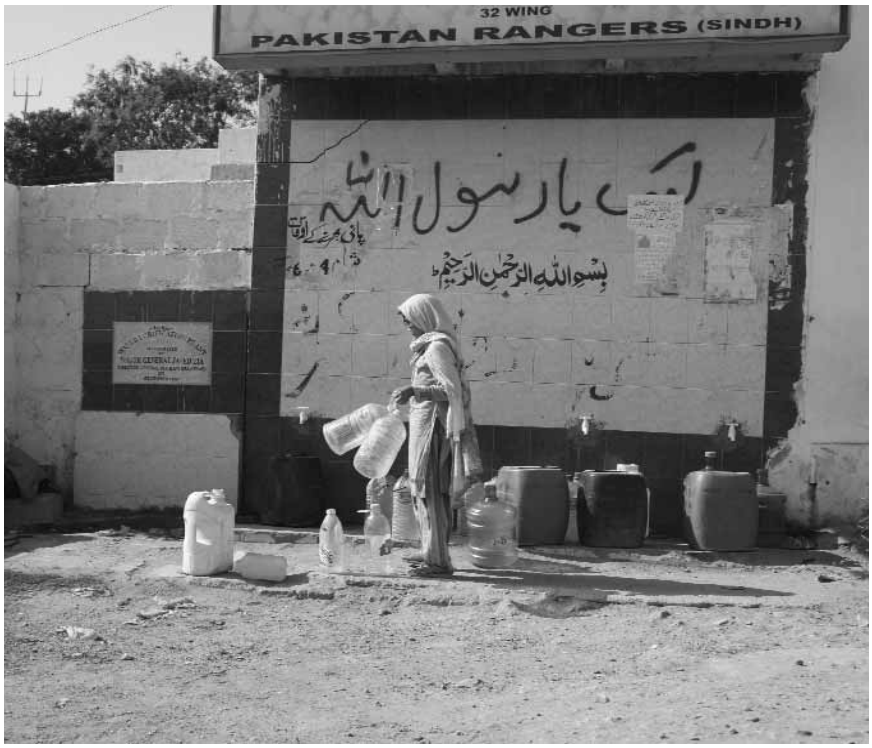
Average daily hours



Installation of water delivering system

Percentage of Households

	Publicly arranged	Privately managed	Not aware
Pakistan	55.7	36.9	7.4
Capital cities	87.5	5.4	7.1
Other large cities	40.2	48.9	0.9
Small cities	28.0	66.5	5.5



Excluding Punjab, the situation is deplorable. For instance, almost 82 percent urban households of Balochistan and Sindh reported the daily availability of water for less than 3 hours, while the pertinent percentage is 22 in Punjab. In contrast, about 60 percent households of urban Punjab confirmed the availability of water for more than 6 hours. In terms of city size, about 60, 51 and 55 percent households reported the availability for less than 3 hours in the capital, other large cities and small cities respectively (not shown in the exhibit). Unfortunately, the PSLM data does not provide information about the quality of piped water or the pressure of water coming from pipes.

The trends in average daily water availability for both years (2014 and 2008) are also documented in Exhibit 3.3. Here again, deterioration is observed. On average, 5 hours are reported in the survey of 2013-14 as compared to 6 hours daily in the year 2007-08. In terms of provinces, Punjab and Balochistan are slightly better off, while the situation in Sindh in terms of daily availability of water shows a decline.

Information regarding the role of public institutions in the installation of the water delivering system is also presented in Exhibit 3.3. Answering the question, “Who installed the water delivery system?” almost 88 percent households in capital cities indicated that the main system was installed by public authorities, Municipality and District or Union Councils etc. On the other hand about 50 and 67 households in other large cities and small cities respectively described that the system was installed privately by households, community or NGOs.

Exhibit 3.4 Type of toilet used in urban areas – [percentage of households]

	City-size scenario				Provincial scenario			
	Pakistan	Capital cities	Other large cities	Small cities	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Flush connected to public sewerage	58.6	92.2	48.9	25.0	56.2	72.7	7.2	33.6
Flush connected to pit	20.7	3.7	33.9	32.0	28.1	2.4	67.2	22.9
Flush connected to open drain	18.2	3.7	16.3	37.1	14.4	22.8	20.6	25.3
Dry pit latrine	0.9	0.2	0.3	2.3	1.2	0.5	1.4	1.1
Dry raised latrine	0.4	0.1		1.0	0.1	0.4	2.2	2.5
No toilet in the house	1.1	0.1	0.6	2.5	0.2	1.2	1.4	14.6

Source: PSLM (2013-14).

Public Sewerage System

The types of toilets used in urban areas of Pakistan are documented in Exhibit 3.4. It is evident that coverage in terms of providing public sewerage facilities to urban households is 59 percent; 92, 49 and 25 percent in the capital, other large and small cities respectively. The worst case is in Khyber Pakhtunkhwa where only 7 percent households are connected to public sewerage; even in urban Punjab almost 45 percent do not use the facility of public sewerage. The highest (74 percent) and the lowest (34 percent) incidences of using the facility are reported by households in urban Sindh and Balochistan respectively.

A comparative picture of utilization of public sewerage system for the years 2014 and 2008 is presented in Exhibit 3.5. In general, an improvement in this service is evident; especially in Khyber Pakhtunkhwa. And yet, despite a 66 percent improvement, only 7 percent households are still connected to public sewerage in Khyber Pakhtunkhwa.

Exhibit 3.5 Flush connected to public sewerage in urban areas - trends

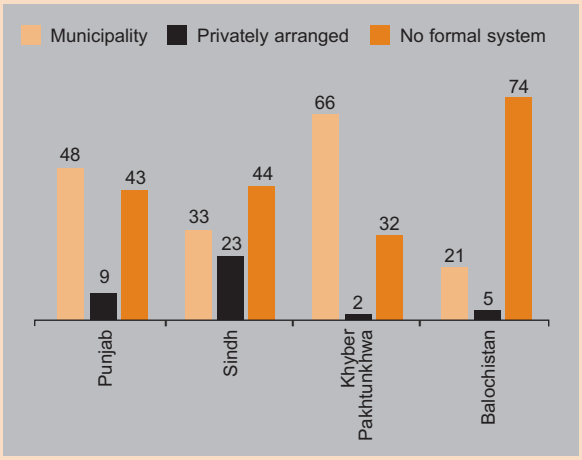
Percentage of households which reported connection with public piped water

	2014	2008	Percent Change
Pakistan			
Overall	58.6	54.9	6.7
Capital cities	92.2	88.6	4.0
Other large cities	48.9	57.2	-14.6
Small cities	25.0	21.5	16.4
Punjab	56.2	52.1	7.9
Sindh	72.7	70.6	2.9
Khyber Pakhtunkhwa	7.2	4.3	65.8
Balochistan	33.6	29.4	14.3

Source: PSLM (2013-14 and 2007-08).

Exhibit 3.6 Garbage Collection from neighbourhood – percentages

	Municipality	Privately arranged	No formal system
Pakistan	42.7	13.9	43.4
Capital cities	40.6	24.0	35.4
Other Large cities	47.2	9.2	43.6
Small cities	42.0	5.0	53.0



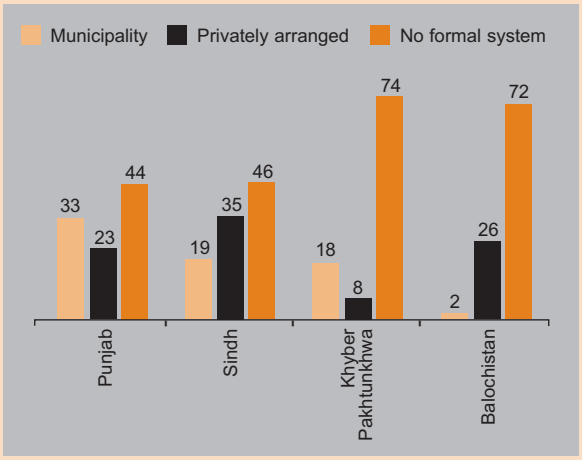
SOLID WASTE MANAGEMENT

According to the PSLM survey questionnaire, further information was gathered from respondents in the household by asking the question, "How is the garbage collected from your household and neighbourhood?" with three options; municipality, privately arranged and no formal system. Exhibit 3.6 and 3.7 collate answers of urban households related to garbage collection from neighbourhoods and households respectively.

It is evident from the Exhibit 3.6 that almost 43 percent urban households do not have a formal system of disposing solid waste from their neighbourhood or streets; this percentage is 53 in the case of small cities and 74 in case of Balochistan. Public provision of managing solid waste from neighbourhoods is confirmed by about 48, 33, 66 and 21 percent urban households in Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan respectively. The higher percentage in Khyber Pakhtunkhwa

Exhibit 3.7 Garbage collection from households – percentages

	Municipality	Privately arranged	No formal system
Pakistan	25.7	26.7	47.5
Capital cities	26.3	35.3	38.4
Other Large cities	33.1	22.3	44.6
Small cities	19.9	19.5	60.7



however is doubtful considering the level of socio-economic development and financial resources. Moreover, the pertinent percentage in case of solid waste disposal from households in Khyber Pakhtunkhwa is only 18 percent (Exhibit 3.7).

Exhibit 3.7 which reports the situation of solid waste management from households also portrays a bleak picture regarding this important public service. In small cities no formal system of disposing solid waste is reported by almost 61 percent households; even this percentage is 45 in large cities. Overall 26 percent households confirmed the provision of this service by the municipality. The provincial scenario indicates that about 44, 46, 74 and 72 percent urban households of Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan respectively do not have a formal system or mechanism of solid waste disposal from their households, while the public provision of this service is reported by 33, 35 18 and 2 percent urban households respectively.

Exhibit 3.8 Municipality services for garbage collection – trends

Percentage of households which reported

	2014	2008	Percent change
Garbage collection from neighbourhood by municipality			
Overall	42.7	39.1	9.2
Capital cities	40.6	31.6	28.5
Other large cities	47.2	51.7	-8.7
Small cities	42.0	40.3	4.2
Garbage collection from household by municipality			
Overall	25.7	21.9	17.4
Capital cities	26.3	15.6	68.6
Other large cities	33.1	36.9	-10.3
Small cities	19.9	20.8	-4.3

Source: PSLM (2013-14 and 2007-08).

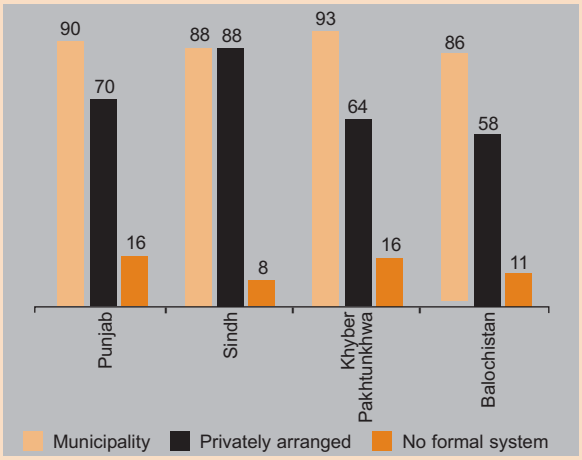
Since 2008, some improvements in the provision of municipality service for solid waste management are evident (Exhibit 3.8). The incidences of municipality service show an improvement to the extent of 9 and 17 percent in collecting garbage from neighbourhoods and households respectively. Interesting variations exist across city size. Capital cities are better off while the level of service shows a declining trend in other large and small cities.

PROVISION OF HOUSING UTILITIES

Access to three housing utilities were assessed in the PSLM survey; Electricity, cooking gas and land-line telephone connections. Although a majority of households reported having access to these utilities; problems of severe electricity outages and gas load-shedding makes this bright picture gloomy. Unfortunately, PSLM survey does not provide such information (Exhibit 3.9).

Exhibit 3.9 Percentage of households who reported utility connection

	Electricity	Cooking gas	Land-line telephone
2014			
Pakistan	89.4	76.2	12.7
Capital cities	94.8	93.8	12.7
Other large cities	89.7	77.9	15.3
Small cities	82.5	53.7	10.8
2008			
Pakistan	94.3	70.7	31.5
Capital cities	98.1	91.7	35.2
Other large cities	95.8	82.2	32.3
Small cities	89.9	45.1	27.5



The declining trend in land-line telephone connections can be understood during the period 2008 and 2014, because PTCL connections have been replaced by cellular phones. However, a declining trend in the electricity connections is deplorable, which is noted irrespective of city size. A small improvement with 6 percentage point is also observed in the case of cooking gas connections during this period.

Public Schools

Over the last two decades, the educational landscape of Pakistan has been completely transformed. The private sector has emerged as a key provider of education services in Pakistan especially in urban areas. According to the Pakistan Social and Living Standards Measurement Surveys, the share of primary enrollment in government schools has gradually decreased from 75 percent in 2001 to 60 percent in 2014, whereas it is 40 percent in case of primary enrollment in urban areas. While the role of the state as provider of education remains a matter of debate and controversy, the growth of private provision of education is mainly due to the lack of faith in the capacity of the public sector to deliver quality education. Exhibit 3.10 which is developed from the latest available PSLM data authenticates this phenomenon. Good quality of teaching was the stated reason for choosing private institutions by the majority (90 percent) of parents who send their children to private schools, while distance (near to home) was reported by only 8 percent households.

Exhibit 3.10 Stated reasons for enrollment in the type of school

Percentages of households

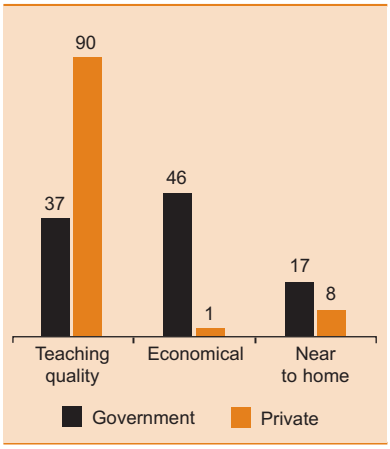


Exhibit 3.11 Enrollments in government schools of urban areas

Percentages of the relevant age group

	Overall	Boys	Girls	Overall	Boys	Girls
	Age cohort: 5-9 years			Age cohort: 10-14 years		
Pakistan	27.8	26.4	29.4	40.5	39.6	41.3
Capital cities	22.2	21.4	23.3	30.6	29.1	31.8
Other large cities	24.7	24.7	24.7	42.6	39.7	45.3
Small cities	34.8	32.3	37.5	48.7	48.9	48.4
Provinces:						
Punjab	29.0	25.8	32.3	44.2	42.5	45.8
Sindh	24.0	25.3	22.5	32.7	31.3	33.9
Khyber Pakhtunkhwa	37.6	33.3	41.9	50.9	51.3	50.6
Balochistan	29.5	29.5	29.5	42.0	48.0	36.7

Source: PSLM (2013-14).

This section simply presents the extent of utilization of public education service in urban areas of Pakistan. Exhibit 3.11 presents percentages of children in the age cohorts 5-9 and 10-14 which are enrolled in government schools as a proportion of total children in the respective age groups. These age cohorts represent primary and secondary education levels.

There appears an inverse relationship between public schooling and size of cities (proxy of level of development). Overall almost 35 percent children (5-9 age cohort) of small cities attend government schools, whereas this percentage is 22 in the case of capital cities. In terms of provinces, the highest (38 percent) and the lowest (24 percent) incidences are observed in Khyber Pakhtunkhwa and Sindh respectively.

It is worth reiterating that these figures represent enrollments as a percent of total children rather than the share of public school enrollment in total enrollment of children. The shares of public schools (not shown in

the exhibit) for children in the age cohort 5-9 years are 32.6, 32.9, 47.6 and 46.6 in urban Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan respectively.

More or less similar trends are observed for children in the age cohort 10-14 years. In small cities, almost 50 percent children are enrolled in public schools as compared to large cities where the incidence is 31. Here also the highest (51 percent) incidence is evident in case of Khyber Pakhtunkhwa followed by Punjab. The provincial shares (not shown in the exhibit) of public schools for children in the age cohort 10-14 years are 50.3, 41.0, 59.5 and 54.1 in urban Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan respectively.

Not surprisingly, a declining trend in the enrollment of public schools is evident in the Exhibit 3.12 which collates information with respect to city size for the survey periods of 2007-08 and 2013-14. As evident the declining percentages show an inverse relationship between a decrease in enrollments and city size during the period. Overall almost 11 and 14 percent decline is estimated in the age cohorts of 5-9 and 10-14 respectively from PSLM surveys. The shares (not tabulated here) of enrollment in government schools as a percent of total enrollment have declined from 38 to 34 and from 56 to 48 for the age cohorts 5-9 and 10-14 respectively during the period 2008 and 2014.

The provincial picture of the trend in public schools is also portrayed in the Exhibit 3.12. Interestingly, Punjab and Khyber Pakhtunkhwa appear, with a slight improvement for the age cohort 5-9 and 10-14 respectively, whereas lowest declining rates are also observed in these provinces. In contrast, about 30 to 40 percent decline is estimated for Sindh and Balochistan.

Exhibit 3.12 Enrollments in government schools in urban areas
Percentages of the relevant age group

	2014	2008	% change	2014	2008	% change
	Age cohort: 5-9 years			Age cohort: 10-14 years		
Trend by city size						
Overall	27.8	31.1	-10.6	40.5	47.1	-14.0
Capital cities	22.2	25.1	-11.6	30.6	42.3	-27.7
Other large cities	24.7	27.7	-10.8	42.6	48.5	-12.2
Small cities	34.8	36.5	-4.7	48.7	51.1	-4.6
Trend by province						
Punjab	29.0	27.4	5.8	44.2	45.5	-2.9
Sindh	24.0	32.9	-27.1	32.7	47.8	-31.6
Khyber Pakhtunkhwa	37.6	37.7	-0.3	50.9	46.7	9.0
Balochistan	29.5	48.5	-39.2	42.0	61.4	-31.6

Source: PSLM (2013-14).

Besides increasing the quality and quantity of public schooling, the state (not the private sector) is responsible to bring those children into schools which are currently not enrolled. Exhibit 3.13 is therefore developed to disseminate information regarding out of school urban children. Two important observations emerge. As expected, Punjab ranks first in terms of low incidence of out of school children followed by Khyber Pakhtunkhwa in both age cohorts; however the cities of Sindh especially small ones lag behind. Similarly in terms of out of school girls, the incidence is higher in urban Sindh as compared with urban Khyber Pakhtunkhwa.

Exhibit 3.13 Out of school children in urban areas

Percentages of the relevant age group

	Overall	Boys	Girls
	Age cohort: 5-9 years		
Punjab	11.1	10.7	11.5
Sindh	27.1	23.9	30.8
Khyber Pakhtunkhwa	20.9	18.9	22.9
Balochistan	36.7	33.8	40.1
	Age cohort: 10-14 years		
Punjab	12.2	10.4	13.9
Sindh	20.3	13.6	26.2
Khyber Pakhtunkhwa	14.5	5.1	24
Balochistan	22.3	6.5	36.6

Source: PSLM (2013-14).

Exhibit 3.14 displays information regarding enrollment in public schools and out of school children for the category of large cities including federal and provincial capitals. Relatively high incidence in terms of utilization of

Exhibit 3.14 Enrollments in government schools and extent of out-of-school children

Percentages of the relevant age group

	5-9 age cohort		10-14 age cohort	
Cities	Enrollment in public schools	Out of school children	Enrollment in public schools	Out of school children
Rawalpindi	29.9	9.0	43.1	7.2
Sargodha	28.7	8.9	43.6	12.9
Faisalabad	19.7	10.4	42.7	11.6
Gujranwala	13.0	14.8	38.7	9.7
Sialkot	31.2	0.8	46.0	0.3
Lahore	24.1	11.7	34.4	10.3
Multan	23.8	6.3	42.6	22.3
Bahawalpur	42.5	13.0	43.5	11.8
Islamabad	38.7	9.4	61.3	1.7
Sukkur	27.9	49.5	36.2	48.2
Hyderabad	21.4	29.8	38.4	18.8
Karachi	20.3	22.0	26.4	18.9
Peshawar	33.6	21.6	45.2	16.6
Quetta	19.7	27.6	37.5	20.2

Source: PSLM (2013-14).

public schools in the 5-9 age cohort are observed in Bahawalpur (43 percent), Islamabad (39 percent), Peshawar (34 percent) and Sialkot (31 percent), while low (13 to 20 percent) incidences are evident in Karachi, Faisalabad, Quetta and Gujranwala. With respect the 10-14 years age cohort, utilization rate of public schools ranges from 26 (Karachi) to 61 (Islamabad). However, It would be worth while to investigate the higher incidence of public schooling in the capital city of Islamabad.

In terms of 'out of schooling', Sukkur, Hyderabad, Quetta and Peshawar are prominent; even in Karachi almost 22 percent children are not attending school. In all the cities of Punjab (including Bahawalpur), out-of-school phenomenon is generally less severe.

Public Health Services

In Pakistan, especially in urban areas, the utilization rate of public health facilities is continuously declining due to difficult access and poor quality of public health care facilities for many decades. Consequently the private sector has succeeded to fill the gaps to address the weaknesses of public services delivery. Nonetheless, in the absence of any regulatory mechanism, policy or modus operandi, the private sector in health care systems has assumed a fairly exploitative role. The situation has worsened because of the extent and intensity of the prevailing rate of urban poverty.

This section documents the incidence of using selective public health services by urban citizens. PSLM data provides the incidence of using health facilities for children under five and for pregnant women in the 15-49 years age cohort. Exhibit 3.15 provides this information by province and by city size. Excluding immunization, which is provided by the public

Exhibit 3.15 Treatment/consultancy from public health facilities

Percentages of urban household which received treatment

	City size scenario 2014				Provincial scenario 2014				Trend - overall Pakistan		
	Pakistan	Capital cities	Other large cities	Small cities	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	2014	2008	% change
Child under 5 years:											
Diarrhoea	21.2	22.9	19.4	20.7	21.9	17.2	35.3	27.9	21.2	24.9	-14.9
Malaria	21.6	54.8		13.6	9.0	27.7		59.0	21.6	18.7	15.5
Immunization											
Door-to-door campaign	62.5	73.6	53.4	57.2	67.0	65.8	25.1	48.6	62.5	60.4	3.5
Hospitals/dispensaries	34.1	20.3	43.5	42.1	31.1	28.0	74.7	47.8	34.1	35	-2.6
Pregnant women: (15-49 years age)											
Pre-natal consultancy	28.3	32.7	27.3	24.8	26.1	28.1	33.6	43.3	28.3	25.9	9.3
Post-natal consultancy	15.1	18.2	13.7	13.1	13.4	17.6	15.1	16.7	15.1	12.4	21.8

Source: PSLM (2013-14).

Exhibit 3.16 Major reasons for opting for health facilities

Percentages of urban households which consulted

	Pakistan	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Reasons for not opting for public health facilities					
Unable to treat complications	18.9	29.8	9.7	-	59.2
Doctors not available	17.1	11.0	21.9	27.6	0.0
Not enough medicines	16.2	26.3	7.5	21.5	-
Ineffective medicines/cure	14.8	-	29.0	12.1	-
Timing not suitable	10.8	-	20.1	-	40.8
Staff not helpful	10.0	6.4	11.8	23.1	-
Too far away	9.5	20.1	-	15.7	-
No government facility	2.7	6.4	-	-	-
Reasons for opting for private health facilities					
Treatment of complications	34.1	45.5	29.0	-	30.6
Suitable timings	19.1	-	37.2	-	40.8
Doctor always available	14.8	6.4	21.9	22.4	-
Near to home	13.2	24.3	-	33.0	28.6
Cooperative staff	12.7	12.8	11.8	23.1	-

Source: PSLM (2013-14).

sector, very low incidences of utilization are evident. For the treatment of diarrhoea, no significant variations exist across various city sizes. About 23, 19 and 21 percent households in capital cities, other large cities and small cities respectively reported treatment of diarrhoea in public hospitals and dispensaries. However, the incidence is higher in Khyber Pakhtunkhwa and Balochistan. As far as the treatment for malaria is concerned, public hospitals are used by about 22 percent urban households mainly in capital cities. Utilisation of public facilities for pre and post natal consultancies is also low as 28 and 15 percent pertinent women, respectively, reported using these facilities. Here also, the magnitudes are relatively higher in Khyber Pakhtunkhwa and Balochistan. The trends in the utilization of selective public health facilities are also presented in the Exhibit 3.15. A mix trend is evident. The utilization rate has declined in case of diarrhoea, while slight improvements are observed in the utilization of pre and post natal public health facilities.

The PSLM survey also records the reasons for opting for private or public health care facilities. Exhibit 3.16 highlights the reasons for not opting for public health facilities from patients of malaria who received treatment

from private health care facilities. The main reason given by patients is 'un-ability to cure complicated cases'; which is an indication of poor quality of health care in public institutions. Availability of doctors and suitable timings are also reported by the patients.

NOTES:

1. According to PBS these cities are; Bahawalpur, Faisalabad, Gujranwala, Sialkot, Lahore, Multan, Rawalpindi, Sargodha, Hyderabad, Karachi, Sukkur, Peshawar, Quetta and Islamabad.


LINQ
1021
AM
34
TOLET
0300-3738481

Financing of Urban Social Service Delivery in Pakistan

4

CHAPTER 4

More than 39 percent of the country's population lives in urban areas. This requires provision of public services in urban areas for poor people as well as the wider population.

4 Financing of Urban Social Service Delivery in Pakistan

Pakistan is an increasingly urbanized country. It is crucial to ensure that public services such as education, health, water supply and sanitation are delivered effectively and efficiently in urban areas. The provincial governments have played an instrumental role in the financing and delivery of social services in Pakistan. A role that was further strengthened after the introduction of the 18th Constitutional Amendment in April 2010. The Amendment led to the devolution of powers to provincial governments – including the education and health sectors. Prior to this, both the federal and provincial governments had a role in the delivery and financing of these services. Thus, the provincial governments together with local governments are now largely responsible for the delivery and financing of educational, health, water supply and sanitation services.

In order to provide an equitable and efficient level of social services, both provincial and local governments require a well-functioning financing system. However, a closer look at the management of public finances in the past did not portray a reassuring picture. Pakistan, historically has allocated fewer and inconsistent financial resources for social sector expenditures, which led to the allocation of public expenditure on education, health and other social services dismally low when compared to other developing countries. For instance, Maldives, Nepal, Bhutan and India spend a greater share of their Gross Domestic Product (GDP) on education than Pakistan. Across South Asia spending in the education sector averaged 2.8 percent of GDP compared to only 2.4 percent in Pakistan. A similar situation exists in the financing of other social services.

This chapter systematically analyses the state of sub-national finances before and after the 7th National Finance Commission (NFC) Award, 2010. It also analyses the distribution of public expenditure in rural and urban areas both at national and provincial levels to help understand whether public expenditure on social sectors is responsible for the continuation of urban-rural disparity. It examines the changes in the level as well as the urban-rural distribution of public spending on education, health and water supply and sanitation before and after the 7th NFC Award. Finally, it attempts to analyse the efficiency and effectiveness of public spending in urban areas.

STATE OF SUB-NATIONAL FINANCES

The financial status of provincial governments in Pakistan depends largely on federal transfers to the provinces constituted through the NFC

Awards. These Awards designed the formula of distribution of resources between the federal and provincial governments, and among the provinces for five years. In this regard, a major recent development was 7th NFC Award (2010) which replaced the Distribution of Revenues and Grants-in-Aid Order (DRGO), 2006. The 7th NFC Award resulted in the changes in the divisible pool and straight transfers, and grants, which positively affected the financial status of the provinces.

The following changes were made in the divisible pool transfers, straight transfers and grants and Constitutional Subventions.

Divisible Pool

- The tax collection charges of the federal government decreased from 5 percent to 1 percent thereby enlarging the overall size of the divisible pool;
- The federal government alongwith all the four provincial governments recognised the role of Khyber Pakhtunkhwa as a frontline province against the war on terror. One percent of net proceeds of the divisible pool was therefore earmarked for Khyber Pakhtunkhwa for the entire Award period. In 2010-11 for example, Khyber Pakhtunkhwa received an additional Rs15 billion because of this provision;
- The provincial share in the remaining divisible pool increased from 46.25 percent to 56 percent in 2010-11 and then to 57.5 percent for the rest of the Award period. This meant that the share of the federal government in the net divisible pool was 44 percent in 2010-11 and 42.5 percent during the remaining period;

- This Award ensures that Balochistan gets at least Rs 83 billion under the divisible pool transfers. In case the estimated share of Balochistan is less than Rs 83 billion, the balance funds are to be contributed by the federal government;
- General Sales Tax (GST) on services collected in the Central Excise (CE) mode was accepted as a provincial tax and therefore its revenue proceeds are to be reverted to the provinces and not be part of the divisible pool.

Straight Transfers

- Along with provincial sales tax, GST on services collected on CE mode is accepted as a provincial tax. Provinces were given the choice to collect GST on services provincially or allow the Federal Board of Revenue (FBR) to collect it on their behalf with proceeds reverted back as a straight transfer;
- On demand of the Government of Balochistan, the formula for Gas Development Surcharge (GDS) computation was revised; and
- The rate of excise duty on gas was increased from Rs 5.09 to Rs 10 per MMBTU (one million British Thermal Units).

Grants and Constitutional Subventions

- Discretionary grants-in-aid to all provinces were abolished;
- Sindh was given a grant of 0.66 percent of the provincial divisible pool to partly offset losses due to the merger of one-sixth of GST in the divisible pool;
- Arrears on the payment of Rs 100 billion in hydel profits to Khyber Pakhtunkhwa were ensured in four instalments; and
- Arrears of Gas Development Surcharge (GDS) to be paid retroactively to Balochistan.

Aggregate Financial Implications of the 7th NFC Award on Provinces

In order to quantify the impact of the 7th NFC Award on divisible pool transfers, straight transfers and grants, the formula of DRGO 2006 has been applied on collection after the 7th NFC Award (Exhibit 4.1). The analysis indicates that as per the revised estimates from 2010-11 to 2014-15, in absolute terms the four provincial governments received more than Rs 6.7 trillion. In case the DRGO 2006 continued, then, the amout would have been Rs 5.5 trillion. In other words, the 7th NFC Award transferred an additional amount of Rs 1.2 trillion whereas, in relative terms, the 7th NFC Award transferred additional 22.3 percent revenue to the provinces.

Exhibit 4.1 Impact of the 7th NFC Award on transfers and grants to provinces

Rs in billions

	Transfers and grants		Impact of the 7th NFC Award	
	As per 7th NFC Award	As per distribution order 2006	Absolute	Relative
2010-11	1,052	835	217	26
2011-12	1,289	1015	274	27
2012-13	1,295	1055	240	22.8
2013-14	1,464	1219	245	20.1
2014-15	1,606	1,357	248	18.3
Aggregate	6,706	5,481	1,224	22.3

Note: The numbers are based on revised budget estimates.

Source: SPDC estimates based on Explanatory Memorandum on Federal Receipts and Province-wise Annual Budget Statement (various issues).

A look at yearly estimates indicates that in the initial years the financial impact was more than 25 percent, which gradually declined to 18.3 percent in 2014-15. The main reason for this decline is that until 2011-12, FBR collected the GST on services and transferred it to the provinces after deducting collection charges as a straight transfer. However, later the provincial governments exercised their right of collecting GST on services. Consequently, the amount of GST services is no longer the part of straight or divisible pool transfer instead it is now a part of provincial tax revenue. With the inclusion of the impact of devolution of GST on services, these estimates will further increase.

Exhibit 4.2 presents province-wise financial implications of the 7th NFC Award in comparison to DRGO 2006. It indicates that as per the revised estimates from 2010-11 to 2014-15, in absolute terms Punjab has been the biggest beneficiary of the 7th NFC Award, followed by Khyber Pakhtunkhwa, Sindh and Balochistan. However, in relative terms,

Exhibit 4.2 Province-wise implications of the 7th NFC Award cumulative from 2010-11 to 2014-15

Rs in billions

Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Total
NFC transfers and grants as per the 7th NFC Award				
3,053	1,776	1,185	692	6,706
NFC transfers and grants as per distribution order 2006				
2,661	1,535	871	416	5,480
Impact of 7th NFC Award on total transfers and grants				
392	241	314	276	1,226
Relative impact (%)				
14.7	15.7	36.1	66.3	22.4

Note: The numbers are based on revised budget estimates.

Source: SPDC estimates based on Explanatory Memorandum on Federal Receipts and Province-wise Annual Budget Statement (various issues).

Balochistan is the biggest beneficiary, with an increase of more than 60 percent throughout the tenure of the NFC Award, followed by Khyber Pakhtunkhwa. The relative picture substantiates the point made earlier that the 7th NFC Award has been fiscally equalizing as its provisions disproportionately benefit the (relatively) neglected provinces. Yearly estimates are provided in Appendix A.2.

Provincial Resource Level

The state of provincial resources substantially changed after the promulgation of the 7th NFC Award and devolution of sales tax on services. As expected, Exhibit 4.3 shows a large increase in the provincial resources during 2010-11 to 2014-15 as compared to pre-7th NFC Award period i.e. 2001-02 to 2009-10. This indicates higher resource availability at provincial level after the 7th NFC Award. As a consequence, provincial resources grew from Rs 876 billion in 2009-10 to Rs1.9 trillion in 2014-15 as per Fiscal Operations data released by the Ministry of Finance, Government of Pakistan. In relative terms, total provincial resources grew from 5.9 percent of GDP in 2009-10 to 6.9 percent of the GDP in 2014-15 – indicating an increase of one percentage points during these five years.

Punjab: The positive impact of the 7th NFC Award and devolution of sales tax on services is also visible in Punjab. In 2000-01, federal transfers to Punjab was only Rs 83 billion that gradually increased to Rs 191 billion in 2006-07 after the DRGO 2006 (see Appendix A.2 for details). However, the increase in federal transfers was much greater after the 7th NFC Award. For instance, in the base year of the 7th NFC Award the federal transfers to Punjab was Rs 325 billion in 2009-10, which increased to Rs 730 billion in 2014-15. In relative terms, the total provincial resources grew from 2.7 percent of GDP in 2009-10 to 3.3 percent of the GDP in 2014-15 – indicating an increase of 0.6 percentage points during five years.

Sindh: While, the 7th NFC Award also had a positive impact on the financial resources of Sindh, the impact of devolution specifically of sales tax on services has been far greater than those of the federal transfers. Federal transfers to Sindh increased from Rs188 billion in 2009-10 to Rs 406 billion in 2014-15, which are slightly more than double. On the other hand, provincial taxes grew from Rs 22 billion to Rs 94 billion during the same period, indicating a fourfold increase in the tax revenues. This increase in tax revenues can be attributed to the devolution of sales tax on services, which is the largest provincial tax. Consequently, the provincial resources grew from Rs 241 billion in 2009-10 to roughly Rs 534 billion in 2014-15. Whereas, in relative terms, total provincial resources grew from 1.6 percent of GDP in 2009-10 to 1.9 percent of the GDP in 2014-15 – indicating an increase of 0.3 percentage points during these five years.

Khyber Pakhtunkhwa: Similar to Sindh, the impact of increase in federal transfers on Khyber Pakhtunkhwa after the 7th NFC Award is less compared to the impact of devolution of sales tax on services. For instance, federal transfers to Khyber Pakhtunkhwa increased from Rs 80 billion in 2009-10 to Rs 251 billion in 2014-15, which are slightly more than triple. On the other hand, provincial taxes grew from Rs 2.3 billion in 2009-10 to Rs 11.4 billion during 2014-15, indicating more than a fourfold increase in tax revenues during the same period. This increase in tax revenues can be attributed to the devolution of sales tax on services, which is the largest provincial tax. As a consequence, provincial resources grew from Rs 152 billion in 2009-10 to roughly Rs 289 billion in 2014-15. In relative terms, total provincial resources grew from 1.0 percent of GDP in 2009-10 to 1.1 percent of the GDP in 2014-15, indicating an increase of 0.1 percentage points during five years.

Balochistan: Unlike Sindh, the impact of increased federal transfers to Balochistan after the 7th NFC Award is much greater when compared to the impact of devolution of sales tax on services. Federal transfers to Balochistan increased from Rs 40 billion in 2009-10 to Rs 155 billion in 2014-15, which are roughly four times the base value. On the other hand, provincial taxes grew from Rs 1 billion in 2009-10 to Rs 2.6 billion in 2014-15, indicating an increase of two and half times in tax revenues during the same period. As a consequence, provincial resources grew from Rs 81 billion in 2009-10 to roughly Rs 188 billion in 2014-15. In relative terms, total provincial resources grew from 0.5 percent of GDP in 2009-10 to 0.7 percent of the GDP in 2014-15, indicating an increase of 0.2 percentage points during five years.

Exhibit 4.3 Provincial resources before and after the 7th NFC Award

Rs in billions

	2000-01	2009-10	2014-15
Four provinces combined			
Federal transfers	163	634	1,539
Provincial taxes	19	55	206
Provincial non-tax	20	68	76
Grants & loans	27	120	82
Total	229	876	1,902
As % of GDP	5.4	5.9	6.9
GDP at Market Prices	4,210	14,867	27,384
Punjab			
Federal transfers	83	325	727
Provincial taxes	10	30	98
Provincial non-tax	8	28	45
Grants & loans	7	18	22
Total	108	402	892
As % of GDP	2.6	2.7	3.3
Sindh			
Federal transfers	46	188	406
Provincial taxes	7	22	94
Provincial non-tax	3	13	8
Grants & loans	4	18	25
Total	60	241	534
As % of GDP	1.4	1.6	1.9
Khyber Pakhtunkhwa			
Federal transfers	19	80	251
Provincial taxes	2	2	11
Provincial non-tax	7	24	18
Grants & loans	10	46	8
Total	37	152	289
As % of GDP	0.9	1.0	1.1
Balochistan			
Federal transfers	16	40	155
Provincial taxes	1	1	3
Provincial non-tax	2	2	4
Grants & loans	7	38	27
Total	25	81	188
As % of GDP	0.6	0.5	0.7

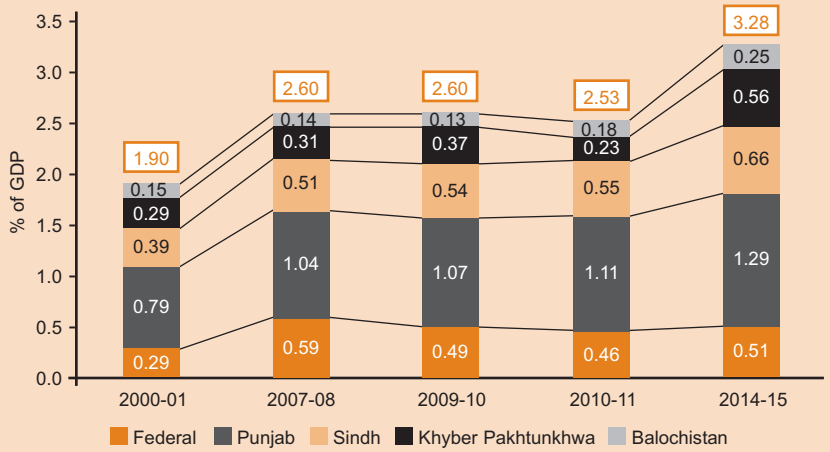
Source: SPDC's estimates based on Pakistan Fiscal Operations, Finance Division, Government of Pakistan (various years)

LINKING RESOURCES WITH SOCIAL SECTOR EXPENDITURE

Public expenditure on social services such as education, health, water supply and sanitation contributes to human capabilities and well-being of the people, is therefore considered a poverty reduction measure. Moreover, higher public spending on social services is likely to contribute to the achievement of the Sustainable Development Goals (SDGs) to which the Government of Pakistan is committed. As stated earlier, Pakistan spends a low share of its GDP on the social sector. Whereas, it is the provincial governments which are principally responsible for the provision of these services – reason attributed for the low level spending was a low share of provinces in divisible pool taxes. A situation that now stands corrected by the 7th NFC Award. It is therefore, imperative to look at the trends in social sector spending as a percentage of GDP at both the tiers of the governments.

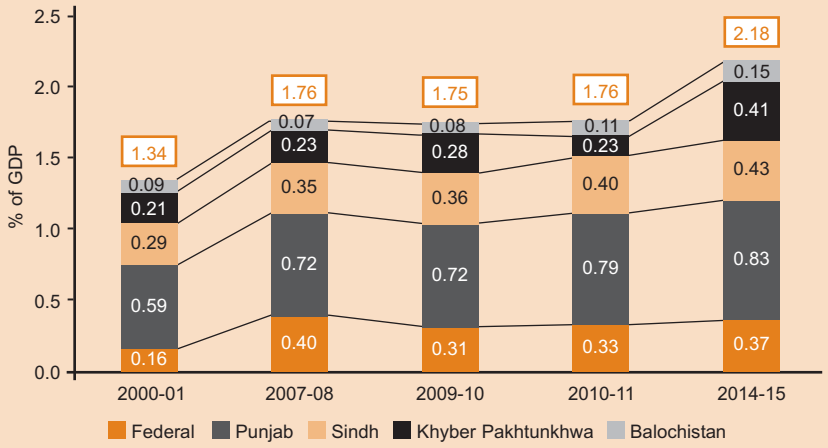
Exhibit 4.4 shows the public spending on basic social services i.e. education, health, water supply and sanitation and population planning as a percentage of GDP. It shows that the social sector spending was only 1.9 percent of the GDP in 2000-01, which increased to 2.6 percent of the GDP in 2007-08. There are two explanations for this increase: a) higher resource were available to local governments and b) higher education and vertical programmes in the health sector were mainly financed by the federal government. After 2007-08 the social sector spending remained stagnant till the promulgation of the 7th NFC Award in 2009. During the first year after the 7th NFC Award public spending on social services marginally declined from 2.6 percent of the GDP to 2.5 percent of GDP. However, it later increased to 3.28 percent of the GDP. The provincial governments played a pivotal role in this increase. While federal spending on social services remained around 0.5 percent of GDP, provincial spending increased from 2.1 percent to 2.8 percent of the GDP. All four provinces contributed to this growth.

Exhibit 4.4 Social sector expenditures as a percentage of GDP



Source: SPDC estimates based on Explanatory Memorandum on Federal Receipts and Province-wise Annual Budget Statement (various issues).

Exhibit 4.5 Education expenditures as a percentage of GDP



Source: SPDC estimates based on Explanatory Memorandum on Federal Receipts and Province-wise Annual Budget Statement (various issues).

Public Spending on Education

Exhibit 4.5 shows federal and provincial public spending on education as a percentage of GDP. It shows that public spending on education was only 1.3 percent of the GDP in 2000-01, which increased to 1.8 percent of the GDP in 2007-08. This increase was largely due to the change in focus of the government from primary to higher education. The federal government generously funded the Higher Education Commission (HEC) and provided scholarships for foreign education.

Consequently, public spending on professional and technical universities, colleges, and institutes increased from 0.07 percent to 0.1 percent of GDP. Similarly, public spending on general universities, colleges and institutes increased from 0.15 percent to 0.35 percent of GDP. However, later the public spending on general universities, colleges and institutes declined to 0.3 percent of GDP in 2009-10.

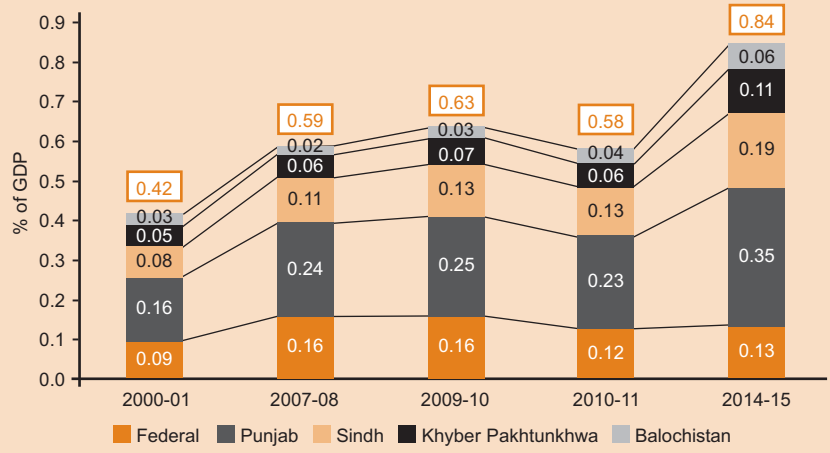
After the 7th NFC Award, public spending on education gradually increased to 2.2 percent of GDP in 2014-15. Provincial governments are the main contributors to this growth. Since, provincial governments largely focus on primary and secondary education the public spending on secondary and primary education increased sharply as opposed to tertiary education after the Award. During 2014-15, the public spending on primary, secondary and tertiary education was 0.8, 0.7 and 0.5 percent of the GDP respectively.

The province-wise trend shows that public spending on education increased greatly in Balochistan and Khyber Pakhtunkhwa after the 7th NFC Award. For instance, public spending on education increased from 0.08 percent to 0.15 percent of GDP from 2009-10 to 2014-15. A similar increase is also visible in Khyber Pakhtunkhwa where education spending reached to 0.41 percent of GDP in 2014-15. While public spending on education also rose in both Sindh and Punjab, the increase is relatively smaller than the other two provinces.

Public Spending on Health

Exhibit 4.6 shows federal and provincial public spending on health as a percentage of GDP. It shows that public spending on health remained only 0.4 percent of the GDP during 2000-01, which increased to 0.6 percent of the GDP in 2007-08. This increase was largely an outcome of the federal government's focus on health facilities and preventive measures while provincial governments allocated greater resources for general hospitals and clinics. Since, local governments were also partners in provision of health services, the increase in health spending at provincial level can be attributed to both provincial and local governments. Interestingly, the increase in public spending on health is more visible in Punjab and Sindh compared to Khyber Pakhtunkhwa and

Exhibit 4.6 Health expenditures as a percentage of GDP



Source: SPDC estimates based on Explanatory Memorandum on Federal Receipts and Province-wise Annual Budget Statement (various issues).

Balochistan. In fact, public spending on health as a percentage of the GDP marginally declined in Balochistan.

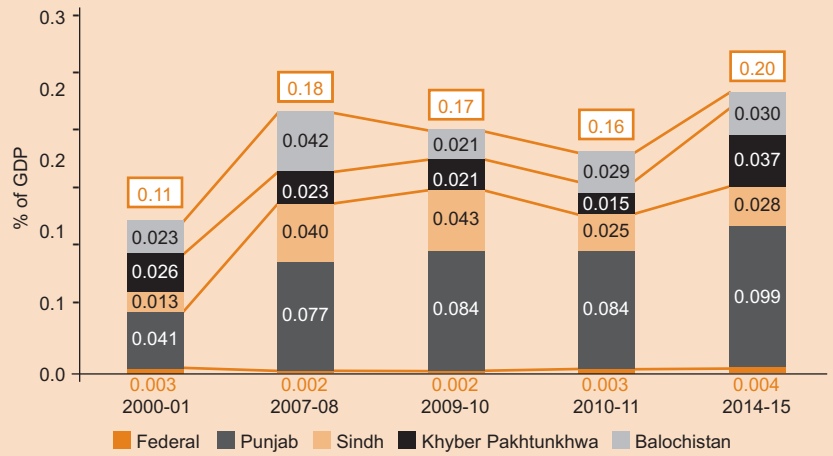
Similar to education, after the 7th NFC Award public spending on health gradually increased and reached 0.8 percent of GDP in 2014-15. Provincial governments again are the main contributor to this growth, which reflects the spirit of the 7th NFC Award and the 18th Constitutional Amendment. There is a sizeable increase in all the provinces in public spending on health. In contrast, there is a decline in public spending on health as a percentage of GDP at federal level. Given that the federal government is responsible for preventive measures including the Extended Program on Immunization (EPI), this decline is alarming. Pakistan has spent 0.07 percent of GDP on preventive health during 2014-15, which was 0.13 percent of GDP in 2009-10.

Public Spending on Water Supply and Sanitation

Exhibit 4.7 shows federal and provincial public spending on water supply and sanitation as a percentage of GDP. It shows that public spending on water supply and sanitation was only 0.11 percent of the GDP during 2000-01, which increased to 0.18 percent of the GDP in 2007-08. This increase was due to the presence of elected local governments at provincial levels. The growth was more pronounced in Sindh – indicating that the focus of local governments in Sindh remained on water and sanitation. There was also a sizeable increase in public spending in Balochistan and Punjab, which can be attributed to the urban municipal services of these two provinces. In contrast, public spending on water and sanitation declined in Khyber Pakhtunkhwa and also at federal level.

After the 7th NFC Award, public spending on water supply and sanitation increased to 0.2 percent of GDP during 2014-15. Surprisingly, there has

Exhibit 4.7 Water supply and sanitation expenditures as a percentage of GDP



Source: SPDC estimates based on Explanatory Memorandum on Federal Receipts and Province-wise Annual Budget Statement (various issues).

been a sharp decline in the public spending on water supply and sanitation in Sindh. Given the scarcity of water in Karachi and other urban areas, this decline is alarming. Compared to the increase in public spending on both education and health, public spending on water supply has not increased accordingly. One of the explanations attributed to this, is the absence of elected local governments.

RURAL URBAN DIVIDE IN EDUCATION FINANCING

Education is among the essential social services provided mainly by provincial governments in Pakistan. According to the Constitution of Pakistan, education was part of the Concurrent Legislative List – where both the federal and provincial governments had a role in its delivery. However, with the promulgation of the 18th Constitutional Amendment in 2010 the responsibility for educational services was devolved to the provincial level.

The education system in Pakistan consists of three major levels – primary, secondary and tertiary while pre-primary public schooling called *Katchi Pehli* is optional for children of age 3 to 5 years. Primary education spreads over a period of 5 years (grades 1-5), where the official age of entry is 5. The next is secondary level education spreading over a period of 5 years (grades 6-10), which starts from age 10 and ends ideally at 14 years.

At the tertiary level, two options are available to students. They may either choose polytechnic institutes/colleges for technical education or general colleges/schools for higher secondary education, which is also called intermediate level. After successful completion of a two-year intermediate programme, the education system encompasses three lines of study: technological/engineering colleges and universities; medical colleges and universities; and general colleges and universities.

Box 4.1 Methodology for education sector expenditure analysis

The methodology adopted for education sector analysis include the following steps:

1. Collection of data on enrollment, number of teachers and schools from published sources.
2. Computation of inverse of pupil-teacher ratio and pupil-school ratio for urban and rural areas.
3. Computation of relative urban and rural costs by giving 80 percent weight to the number of teachers and 20 percent weight to the number of schools. These weights are based on shares of salary and non-salary in total expenditure.
4. Computation of weighted cost shares by using relative cost and number of enrollment in public sectors.
5. Computation of urban public expenditure on education based on these shares.

Sources of data

The budget documents of provincial and federal governments generally report four broad categories of education: primary; secondary; general colleges and universities; and technical and professional institutes, colleges and universities. For the analysis of the incidence of public spending presented in this chapter, the four categories are grouped into three categories namely primary, secondary and tertiary (covering both general colleges/schools for higher secondary education and general universities). Since reliable data on enrollment at polytechnic institutes/colleges and professional technical universities are not available, the analysis does not cover public expenditure related to these institutions.

Data on enrollment in public institutions, number of teachers in public institutions and the number of public institutions at both national and provincial levels by urban-rural decomposition were obtained from Pakistan Education Statistics for 2004-05, 2008-09 and 2013-14 published by the National Education Management Information System (NEMIS), Academy of Educational Planning and Management, Government of Pakistan. Data related to public expenditure on various levels of education were collected from PRSP reports 2004-05, 2008-09 and 2013-14. Since, Pakistan Education Statistics 2004-05 was limited to data for higher secondary schools and did not cover other categories of tertiary education an analysis of public expenditure on tertiary education was not carried out for 2004-05.

Federal and provincial budget documents provides data on allocations and spending by level of education and by institutions, however, rural – urban disaggregated information is not available in budget documents. An attempt is made here to fill this gap by systematically computing urban unit cost of education provision for primary and secondary level. For this, a five-step methodology has been developed, which is described in Box 4.1 along with sources of data.

Trends in Public Expenditure and Unit Costs in Education

Pakistan

Exhibit 4.8 presents the nominal and real expenditure on education by level of education for the following three periods 2004-05, 2008-09 and 2013-14 at the aggregate national level. It reveals that public expenditure has grown tremendously since 2004-05 both at primary and secondary levels. As expected, the pace of growth in education expenditure is relatively higher after the 7th NFC Award. The fiscal space provided by the Award was used by the provincial governments to focus more on social

Exhibit 4.8 Public expenditure on education in Pakistan

	Nominal expenditures				At constant prices of 2005-06			
	Primary		Secondary		Primary		Secondary	
	Urban	Total	Urban	Total	Urban	Total	Urban	Total
Public expenditures on education (Rs in billions)								
2004-05	10.1	49.3	8.6	27.4	10.8	52.8	9.2	29.3
2008-09	15.4	77.9	18.2	59.3	10.9	55.0	12.9	41.9
2013-14	32.4	184.1	43.5	141.5	14.1	80.2	19.0	61.7
ACGR (%)								
2004-05 to 2008-09	11.0	12.1	20.8	21.3	0.0	1.1	8.9	9.3
2008-09 to 2013-14	16.1	18.8	19.0	19.0	5.4	7.8	8.0	8.0
Cost of public schooling per students (Rs in thousands)								
2004-05	4.4	4.6	4.4	6.0	4.8	4.9	4.7	6.4
2008-09	6.9	6.6	8.8	11.2	4.9	4.7	6.2	7.9
2013-14	14.2	16.8	21.9	26.7	6.2	7.3	9.6	11.6
ACGR (%)								
2004-05 to 2008-09	11.5	9.4	18.7	17.1	0.5	-1.4	7.0	5.6
2008-09 to 2013-14	15.6	20.5	20.0	18.9	5.0	9.4	9.0	7.9
Per capita public expenditure on education (Rs in thousands)								
2004-05	1.4	2.0	1.3	1.4	1.5	2.1	1.4	1.5
2008-09	2.1	3.0	2.5	2.6	1.5	2.2	1.8	1.9
2013-14	4.0	6.7	5.4	5.9	1.8	2.9	2.4	2.6
ACGR (%)								
2004-05 to 2008-09	10.5	11.4	18.1	17.9	-0.4	0.4	6.4	6.2
2008-09 to 2013-14	14.0	17.1	16.5	17.6	3.5	6.3	5.8	6.8

sectors, particularly education. Although, a substantial increase in nominal expenditures is observed at all levels, growth in secondary education is higher than that in primary education.

Exhibit 4.8 also reveals that the growth in aggregate level expenditure is higher than the expenditure on urban areas. This implies that both the federal and provincial governments spent a sizeable amount of the education budget on rural areas compared to urban areas. For instance, the share of urban areas in primary education expenditure was slightly over 20 percent in 2004-05, which first decreased to less than 20 percent in 2008-09 and further declined to less than 18 percent in 2013-14. However, public expenditure on secondary education did not decline sharply and it reduced marginally from 31 percent in 2004-05 to 30.7 in 2013-14. This shows that both the federal and provincial governments have been focusing less on primary and secondary education in urban areas.

Another set of interesting statistics related to the unit cost of public schooling observed, is that, the unit cost of public schooling increased sharply after 2008-09 (post-NFC period) particularly those of primary

education. Interestingly, during 2004-05 to 2008-09 (pre-NFC period) growth in the unit cost of primary education was high in urban areas as compared to the total while the trend was reversed during the post-NFC period. A look at enrollment data reveals that enrollment in public primary schools declined in absolute terms during pre-7th NFC Award period in urban areas very sharply, later it bounced back but did not reach the previous level. However, in rural areas, there was a sharp increase in enrollment during the pre-7th NFC Award period. This trend reverted later in 2008-09 and enrollment in rural areas declined by more than eight hundred thousand during five years i.e. 2008-09 to 2014-15. This huge decline in the enrollment combined with higher growth in public expenditure resulted in a sharp increase in the unit cost of primary education.

In contrast to primary level, enrollment at the secondary level increased in urban areas during the pre-NFC period which later experienced a downward trend. Consequently, growth in the unit cost of secondary education is less than the growth in public expenditure on secondary education and it is higher for urban areas compared to the total. Finally, the trend in per capita expenditure shows that public spending on primary and secondary education is lower for urban areas compared to the total.

Exhibit 4.8 also gives a similar set of statistics in real terms (at constant prices of 2005-06) for a meaningful comparison. The Index of General Government Services was used to convert nominal expenditure into real expenditure. It indicates that public expenditure on primary education in real terms was almost constant in urban areas during the pre-NFC period while the unit cost of public schooling increased marginally due to the decline in enrollment.

Punjab

Exhibit 4.9 presents a comparable set of statistics for Punjab. It reveals that while primary education is the top priority within the education budget, growth in nominal public expenditure on secondary education was remarkably higher than that in primary education during both periods. However, the pace of growth in expenditure on primary education increased substantially after the 7th NFC Award. The government of Punjab spent a minor proportion of the education budget in urban areas approximately around 15 percent and 30 percent in primary and secondary education respectively.

As shown in Exhibit 4.9 the unit cost of public schooling increased sharply after 2008-09 particularly in primary education. Interestingly, growth in the unit cost, largely, in the case of primary education, was less than that in public expenditure indicating efficiency gains in both total and urban areas during the pre-NFC period. Afterwards, the annual average cumulative growth in the unit cost is higher than that in expenditure indicating a decline in efficiency in primary education. This decline is more pronounced in total compared to urban areas. It is important to

Exhibit 4.9 Public expenditure on education in Punjab

	Nominal expenditures				At constant prices of 2005-06			
	Primary		*Secondary*		*Primary*		*Secondary*	
	Urban	Total	Urban	Total	Urban	Total	Urban	Total
Public expenditures on education (Rs in billions)								
2004-05	4.4	29.1	3.2	10.9	4.7	31.2	3.5	11.7
2008-09	6.1	39.1	7.6	25.2	4.3	27.7	5.4	17.8
2013-14	12.7	89.2	18.5	62.9	5.5	38.9	8.1	27.4
ACGR (%)								
2004-05 to 2008-09	8.3	7.7	24.0	23.3	-2.4	-3.0	11.8	11.1
2008-09 to 2013-14	15.9	17.9	19.4	20.1	5.2	7.1	8.4	9.0
Cost of public schooling per students (Rs in thousands)								
2004-05	4.3	5.5	2.9	4.2	4.6	5.9	3.1	4.5
2008-09	6.0	6.8	6.1	8.4	4.2	4.8	4.3	5.9
2013-14	13.2	17.6	18.8	23.8	5.7	7.7	8.2	10.4
ACGR (%)								
2004-05 to 2008-09	8.4	5.7	20.2	18.8	-2.3	-4.7	8.3	7.1
2008-09 to 2013-14	17.1	20.8	25.4	23.2	6.3	9.6	13.8	11.8
Per capita public expenditure on education (Rs in thousands)								
2004-05	1.2	2.2	0.9	1.0	1.3	2.4	1.0	1.1
2008-09	1.7	3.0	2.1	2.2	1.2	2.1	1.5	1.5
2013-14	3.2	6.4	4.6	5.1	1.4	2.8	2.0	2.2
ACGR (%)								
2004-05 to 2008-09	8.5	7.5	23.4	21.7	-2.2	-3.1	11.2	9.7
2008-09 to 2013-14	13.5	16.7	16.6	18.7	3.0	5.9	5.8	7.8

mention that enrollment in public primary schools declined in absolute terms during both the periods in urban areas where the decline was relatively greater in the second period.

In contrast to primary education, enrollment at the secondary level increased in urban areas during the pre-NFC period which later declined. Therefore, growth in the unit cost of secondary education is less than the growth in public expenditure on secondary education and higher for urban areas as compared to the total.

The trend in education expenditure in real terms in the province of Punjab is also presented in Exhibit 4.9. It indicates that the public expenditure on primary education declined in real terms in both urban and the total during the pre-NFC period. However, during the post-NFC period the real expenditure increased in both areas. The trend is more or less similar in the unit cost of primary education and per capita primary expenditure. For secondary education, there has been a double digit growth in expenditure during the pre-NFC period in real terms. During the post-NFC period,

Exhibit 4.10 Public expenditure on education in Sindh

	Nominal expenditures				At constant prices of 2005-06			
	Primary		*Secondary*		*Primary*		*Secondary*	
	Urban	Total	Urban	Total	Urban	Total	Urban	Total
Public expenditures on education (Rs in billions)								
2004-05	3.2	8.9	4.2	6.9	3.4	9.5	4.5	7.4
2008-09	6.4	19.9	8.1	14.3	4.5	14.1	5.7	10.1
2013-14	14.1	48.4	15.8	27.2	6.2	21.1	6.9	11.9
ACGR (%)								
2004-05 to 2008-09	19.0	22.4	17.6	20.0	7.2	10.3	6.0	8.1
2008-09 to 2013-14	17.0	19.4	14.3	13.8	6.3	8.4	3.8	3.3
Cost of public schooling per students (Rs in thousands)								
2004-05	3.9	3.5	8.8	9.1	4.1	3.7	9.4	9.8
2008-09	8.3	7.2	17.7	16.1	5.9	5.1	12.5	11.4
2013-14	21.8	19.8	31.8	27.2	9.5	8.6	13.9	11.9
ACGR (%)								
2004-05 to 2008-09	21.2	20.1	19.2	15.3	9.2	8.3	7.4	3.9
2008-09 to 2013-14	21.2	22.4	12.5	11.0	10.0	11.1	2.1	0.8
Per capita public expenditure on education (Rs in thousands)								
2004-05	1.3	1.5	1.9	1.5	1.4	1.6	2.0	1.6
2008-09	2.4	3.2	3.0	2.5	1.7	2.2	2.1	1.8
2013-14	5.2	7.0	5.5	4.5	2.3	3.1	2.4	2.0
ACGR (%)								
2004-05 to 2008-09	18.0	20.8	12.5	13.7	6.4	8.9	1.4	2.5
2008-09 to 2013-14	16.2	17.3	12.6	12.6	5.5	6.5	2.2	2.3

public expenditure, the unit cost of public schooling and per capita expenditure on both primary and secondary levels showed positive growth in real terms.

Sindh

In Sindh, public expenditure on education grew tremendously during 2004-05 to 2008-09 both at primary and secondary levels (Exhibit 4.10). Afterwards that pace of growth in expenditure declined both in primary and secondary education. Urban areas received more than 36 percent of the primary education budget in 2004-05, which gradually declined to slightly above 29 percent in 2013-14. It shows the provincial government's inclination towards spending a sizeable amount of its budget on rural areas.

Trends in unit cost of public schools indicate a mixed pattern. There was a sharp increase in unit cost during both the periods in the case of primary education in urban areas. However, the growth in unit cost of secondary education is higher during the pre-NFC period compared to

post-NFC period in urban areas. Finally, trends in per capita expenditure shows that the public spending at primary level was lower for urban areas compared to the total while in secondary education it is higher for urban areas. Real expenditures (at constant prices) on both primary and secondary education declined during the post-NFC period compared to the pre-NFC period. The trend in unit cost in real terms is also similar to that in nominal terms.

Khyber Pakhtunkhwa

There has been tremendous increase in nominal public expenditure at both primary and secondary levels of education in Khyber Pakhtunkhwa since 2004-05. However, growth in primary and secondary education is more prominent during the pre-NFC period except overall primary education which has higher growth during the post-NFC period. Growth in expenditure on secondary education is relatively higher than that in primary education (Exhibit 4.11). The share of urban areas remains around 11 to 12 percent in the case of primary education and around 16 percent in the case of secondary education.

Exhibit 4.11 Public expenditure on education in Khyber Pakhtunkhwa

	Nominal expenditures				At constant prices of 2005-06			
	Primary		*Secondary*		*Primary*		*Secondary*	
	Urban	Total	Urban	Total	Urban	Total	Urban	Total
Public expenditures on education (Rs in billions)								
2004-05	0.8	6.6	1.0	5.9	0.8	7.1	1.0	6.4
2008-09	1.5	12.8	2.2	13.1	1.1	9.0	1.5	9.2
2013-14	3.2	30.2	4.7	29.8	1.4	13.2	2.1	13.0
ACGR (%)								
2004-05 to 2008-09	18.4	18.0	22.2	21.8	6.7	6.3	10.1	9.8
2008-09 to 2013-14	15.8	18.7	17.0	17.9	5.2	7.8	6.3	7.0
Cost of public schooling per students (Rs in thousands)								
2004-05	3.7	3.8	5.1	7.5	3.9	4.1	5.5	8.0
2008-09	6.8	6.1	11.0	14.5	4.8	4.3	7.8	10.3
2013-14	13.3	13.8	21.8	26.9	5.8	6.0	9.5	11.7
ACGR (%)								
2004-05 to 2008-09	16.5	12.4	21.1	18.0	5.0	1.4	9.1	6.3
2008-09 to 2013-14	14.4	17.7	14.7	13.1	3.9	6.8	4.1	2.7
Per capita public expenditure on education (Rs in thousands)								
2004-05	1.6	1.8	2.3	2.1	1.8	1.9	2.5	2.3
2008-09	2.8	3.3	4.4	4.1	2.0	2.4	3.1	2.9
2013-14	5.2	7.6	8.7	8.7	2.3	3.3	3.8	3.8
ACGR (%)								
2004-05 to 2008-09	14.5	16.6	17.4	17.9	3.2	5.1	5.8	6.3
2008-09 to 2013-14	12.9	17.7	14.6	16.4	2.5	6.9	4.0	5.7

The unit cost of public schooling in urban areas increased substantially during the pre-NFC period particularly in secondary education. Interestingly, during the pre-NFC period growth in unit cost was high in urban areas compared to the total, whereas during the post-NFC period growth in the total was higher compared to urban areas. Trends in per capita expenditure shows that public spending at primary level was lower, while secondary level was higher for urban areas compared to the total. Expenditure on education also increased in real terms at both levels of education. The comparison of the two periods shows that growth in expenditures remained higher during the pre-NFC period except total primary education, which grew at a faster pace during the post-NFC period.

Balochistan

In Balochistan, there has been a phenomenal growth in public expenditure on education both at primary and secondary levels during the post-NFC period (Exhibit 4.12). However, within the various levels of education, higher annual growth is observed at secondary level compared to primary level. Growth rates of expenditure in urban and the

Exhibit 4.12 Public expenditure on education in Balochistan

	Nominal expenditures				At constant prices of 2005-06			
	Primary		*Secondary*		*Primary*		*Secondary*	
	Urban	Total	Urban	Total	Urban	Total	Urban	Total
Public expenditures on education (Rs in billions)								
2004-05	0.3	1.8	0.6	1.4	0.3	1.9	0.6	1.5
2008-09	0.6	3.3	1.2	3.0	0.4	2.3	0.8	2.1
2013-14	1.5	9.3	5.0	13.5	0.7	4.1	2.2	5.9
ACGR (%)								
2004-05 to 2008-09	15.0	16.6	18.7	20.4	3.7	5.1	7.0	8.5
2008-09 to 2013-14	21.7	23.0	33.3	35.1	10.5	11.7	21.1	22.7
Cost of public schooling per students (Rs in thousands)								
2004-05	2.2	4.1	6.9	10.1	2.4	4.4	7.4	10.8
2008-09	3.7	6.3	12.0	17.8	2.6	4.5	8.5	12.6
2013-14	9.5	16.0	44.9	66.3	4.1	7.0	19.6	28.9
ACGR (%)								
2004-05 to 2008-09	13.4	11.2	14.7	15.2	2.2	0.3	3.4	3.8
2008-09 to 2013-14	20.8	20.4	30.2	30.1	9.6	9.3	18.2	18.1
Per capita public expenditure on education (Rs in thousands)								
2004-05	0.9	1.1	2.2	1.3	1.0	1.2	2.4	1.4
2008-09	1.6	2.1	3.6	2.1	1.1	1.5	2.6	1.5
2013-14	3.5	5.1	15.2	10.2	1.5	2.2	6.6	4.5
ACGR (%)								
2004-05 to 2008-09	13.4	15.8	12.8	13.4	2.2	4.4	1.7	2.2
2008-09 to 2013-14	17.6	19.8	33.2	36.7	6.8	8.8	20.9	24.2

total are almost the same within the respective levels. Urban areas received almost 18 percent of the primary education budget in 2004-05, which declined to slightly more than 16 percent in 2013-14. Similarly, the share of urban areas in secondary education expenditure declined from 42 percent in 2004-05 to 37 percent in 2013-14.

There was a distinct increase in the unit cost of public schooling both at primary and secondary levels particularly after 2008-09. The growth in unit cost remained higher in urban areas compared to the total at primary and secondary levels during the post-NFC period. The trend in per capita expenditure shows that public spending at the primary level was lower for urban areas compared to the total. In contrast, per capita expenditure remained fairly high in urban areas at the secondary level of education. In real terms, public expenditure increased at a much higher rate during the post-NFC period when compared to the pre-NFC period at the two levels of education in urban areas as well as in the total.

Efficiency in the Delivery of Education Services in Urban Areas

It is evident that public spending on education increased substantially since 2004-05 and the 7th NFC Award played an instrumental role in this increase. The question arises whether this increase attracted more students in public education institutions and also whether, the efficiency of public institutions increased/decreased or remained constant.

However, prior to addressing this question, it is important to briefly discuss the estimation of efficiency. In general, measuring the efficiency of spending on education is a challenging task due to various technicalities [see Francesco Grigoli (2014)]. Complications arise due to two reasons (1) use of techniques and (2) definitions of input and output. There are a number of studies [Gupta and Verhoeven (2001), Herrera

Exhibit 4.13 Efficiency in public spending on education in urban Pakistan (%)

	2004-05 to 2008-09	2008-09 to 2013-14
Primary education		
Growth in real expenditure	0.0	5.4
Growth in enrollment	-2.1	2.1
Growth in unit cost	**2.1**	**3.3**
Secondary education		
Growth in real expenditure	8.9	8.0
Growth in enrollment	7.3	-4.3
Growth in unit cost	**1.6**	**12.3**

Source: SPDC estimates.

and Pang (2005)] which used public spending of education as an input and gross enrollment rates as output.

In order to avoid technical complexities, the analysis has been confined to a simple method of estimation of efficiency in the education sector – where the public spending in real terms is used as input and gross enrollment rates as output. Thereafter, the average cumulative growth rate of both input and output is calculated. Finally, the difference in growth is computed for both the periods 2004-05 to 2008-09 and 2008-09 to 2013-14. This difference (which is the growth in unit cost) is used to analyse the efficiency in the education sector. For instance, an increase in the unit cost would indicate a decline in efficiency and vice versa.

The results of efficiency analysis are presented in Exhibit 4.13. It shows that during the pre-NFC period public spending on primary education in urban areas remained unchanged in real terms and gross primary enrollment decreased by 2.1 percent. Consequently, the unit cost at the primary level increased by 2.1 percentage points during this period, indicating a decline in the efficiency of public institutions in urban Pakistan. Later, the public spending on primary education grew by 5.4 percent while enrollment declined by almost 2.1 percent. Thus, it translated into a relatively higher increase of 3.3 percent in the unit cost at the primary level, corresponding to a decline in efficiency.

Similarly, there has been a continuous decline in efficiency at the secondary level during the two periods – where the pace of decline is much higher during the post-NFC period. The growth in real expenditure on the secondary level has been almost the same during the two periods. Growth in enrollment declined during the second period. This indicates that a sizeable amount of public resources were diverted to primary and secondary education in urban areas particularly after the 7th NFC Award. However, this did not correspond to an increase in the enrollment rates. It is alarming to note that the enrollment in public institutions in urban areas declined in absolute numbers at the secondary level during the post-NFC period which resulted in a sharp increase in unit cost.

Local Government Finances and one-sixth of GST: The Way Forward

Local governments' finances have had a chequered history in Pakistan. A glance at the history reveals that local government had an unprecedented fiscal autonomy during 2001 to 2007-08. During, this period Provincial Finance Commissions (PFCs) were constituted for the first time in all of the provinces of Pakistan. These commissions formulated a transparent mechanism for both the vertical (distribution of resources from province to all districts) and horizontal distribution (among the districts) of resources. Having transparent and equitable resource distribution mechanisms, these PFCs have created many opportunities for inclusive development primarily by promoting gender equality, poverty reduction and other development objectives. Whereas, their grant systems were based on multiple criteria that varied among the provinces. In the case of Punjab, population and backwardness was used in the first PFC award for horizontal distribution of resources. Sindh's first PFC award had four criteria including population, backwardness, tax effort/collection and performance. Khyber Pakhtunkhwa had population and backwardness, development incentive/infrastructure deficiency as distribution criteria. Finally, Balochistan's first award used population and area as distribution criteria. While, these formulas were revised in the next PFC awards, they had elements of backwardness or deprivation, which made resource distribution more equitable. In this way, PFCs worked as a tool for inclusive development in Pakistan. However, this system was discontinued in 2007-08.

It was expected that after the 18th Constitutional Amendment local government would get a new lease of life mainly due to the addition of Article 140 A in the Constitution. This particular clause led to the devolution of political, administrative and financial responsibility and authority to the elected representatives of the local governments in each province. The Amendment, perhaps aimed to give due status to the local governments. However, the progress on this front has been rather slow. Even after a period of five years, devolution of political, administrative and financial responsibility and authority has not been fully realized.

Similarly, it was expected that the impact of a greater share of the divisible pool share constituted under the 7th NFC Award would also trickle down to local government finances. However, it had a negative impact on local government finances. Whereas provincial governments misinterpreted the spirit of the 7th NFC Award and discontinued Octroi and Zila Tax (OZT) grants. Historically, OZT were the main sources of revenue of local governments. However, the Inter Provincial Coordination Committee in its meeting held on 3rd May 1999 decided to abolish these taxes with effect from 1st July 1999.

To offset the loss of revenues of the local councils it was further decided to levy 2.5 percent additional sales tax (over and above the existing GST of 12.5 percent at that time) for payment to provincial governments as grant-in-aid on the basis of the authenticated audit statements of the OZT for the year 1998-99. Since, revenues from one-sixth of sales tax, an ad-hoc grant mechanism was developed to compensate local government financial losses. This issue was also discussed in the meeting of the Chief Executive Committee on 22nd January 2002 where the following decision was made:

> *"COS to the President should coordinate with the concerned authority to ensure that 2.5% GST imposed in lieu of octroi is transferred to TMAs to enable them to maintain service delivery"*.

Since 1999 the federal government has been providing a grant to local governments through provincial governments. Till 2006, OZT grants were transferred separately to provincial governments based on their base year amount. However, on the demand of the provinces, these grants were enhanced to the 1/6th of sales tax and added in divisible pool transfers. Consequently, the Distribution of Revenues and Grants-in-Aid Order (DRGA 2007) issued by the then President of Pakistan on 12th February 2007 who clearly mentioned the OZT grants in divisible pool as 1/6th of the GST. However, there was an anomaly in DRGA 2007. While, it shows the OZT grants separately as 1/6th of the sales tax in divisible pool transfers, it was deducted from the provincial share in divisible pool instead of combined divisible pool.

During the deliberations of the 7th NFC Award, it was decided that there was no need to create two divisible pools: one for OZT grants and other for horizontal distribution of revenues. Therefore, OZT grants were merged in the provincial divisible pool and their share appropriately adjusted. There was only one province namely Sindh, which has loss in revenues from divisible pool after including the OZT grants. Therefore, the 7th NFC Award gave an additional OZT grant to compensate OZT losses to Sindh. As per the spirit of the 7th NFC Award, it was expected that provincial governments will transfer one-sixth of the sales tax on goods to local governments. However, the provincial government slashed OZT grants by interpreting that the 7th NFC Award discontinued it. This is a false interpretation of the 7th NFC Award, which had a negative impact on the fiscal autonomy of local government. The one-sixth of sales tax on goods is the right of local government, which should be initiated again and distributed on the basis of OZT share to each local government even in the absence of PFCs.

The issue of financing of local government has become more complicated after the passage of the new Local Government Acts by the Provinces, for the following reasons:

(i) There has been a truncation of functions of local governments in all Provinces, excluding Khyber Pakhtunkhwa. In particular, social services like education and health are no longer in the domain of these governments. Therefore, transfers will need to cater for less expenditure requirements. As such, the PFC Awards, related to the Implementation of the Devolution Plan of 2001, can no longer guide the transfers.

(ii) There has been a bifurcation of local governments between urban and rural jurisdictions in three Provinces. This is in contrast to the earlier model of District Governments, covering both urban and rural areas. Therefore, the PFCs will now have to specify the formulae separately for urban and rural local governments respectively. This will add to the complexity of the distribution arrangements.

We have derived some initial orders of magnitude. At its peak, in the Musharraf era, the total combined expenditure by local governments (district + TMAs) was approximately 2.6 percent of the GDP, according to SPDC [2007]. Local expenditure on social services, which are now no longer the functional responsibility of post-2012 local governments was 1.2 percent of the GDP according to PRSP Secretariat of the Ministry of Finance. Therefore, expenditure on services which will continue to be performed by local governments is estimated at 1.4 percent of the GDP. With projected GDP of 30 trillion in 2015-16, this implies an expenditure of Rs 420 billion by all local governments combined of Pakistan.

As highlighted above, there is a need to ensure full financial autonomy to the local governments, consistent with the provisions of Article 140 A of the Constitution. This implies that the octroi/zila tax transfer from the General Sales tax, be restored at one-sixth of the net revenues in the 9th NFC Award, deliberations on which will start shortly.

Given the projected revenue of the GST in 2015-16 of approximately Rs 1200 billion, the magnitude of this transfer is close to Rs 200 billion. As such, Rs 220 billion will be required to be transferred from the combined Provincial allocable pool of revenues in 2015-16. This will represent a share of about 15 percent, which will vary from province to province.

The share will be substantially higher in Khyber Pakhtunkhwa, because of the wider range of local function. The provincial government has already committed to a share of 35 percent out of the development funds to the local governments located within the province. Given that the per capita share of Sindh in the octroi/zila tax transfer was higher, the residual requirement for local governments in this province may be smaller.

We recommend that the horizontal bases for distribution to urban and rural governments respectively may be done at the district level. For the urban jurisdictions within a district, the same per capita transfer may be made. The sharing formula at the district level may include the following criteria – share in collection of octroi historically, share in urban population of the province and fiscal equalization through large transfers to the more backward districts. A similar formula could be evolved for horizontal transfers to district councils in the three provinces.

Since local government elections have now been held in all the provinces, there is a need that local governments begin to function according to the spirit of the devolution process. PFCs must be constituted quickly and be urged to finalize their awards as a priority.


New Style
Docker

Citizens' Perceptions on Urban Public Services

5

CHAPTER 5

Provision of solid waste management services was indicated as the first priority by a majority of urban citizens.

5

Citizens' Perceptions on Urban Public Services

People's participation on development issues is crucial for effective and efficient planning and policy formulation. Whereas, citizens' feedback on the performance of public services can be helpful in improving the quality of public service delivery. This chapter is based on the information provided by the citizens on the basis of their experience which may be useful for the service providers; the urban planners; sectoral policy makers; regulatory bodies; and for civil society.

About 4000 households across Pakistan participated in an opinion survey, conducted by the Social Policy and Development Centre (SPDC) in 2015. The purpose was to collect perceptions of public service users, about access, quality and reliability of service provision; problems encountered by users; and responsiveness of service providers in addressing these problems. Two public services, water and sewerage were thoroughly explored while solid waste management, public hospitals, public transport and law and order sectors were investigated only in terms of access and quality of services. The participants were randomly selected from three tiers of local government: Municipal or Metropolitan Corporations, Municipal Committees and Town Committees.

At the time of the household survey unelected local authorities were providing public services in all the provinces. New ordinances for local governments had been formulated by all provincial governments and local bodies polls were held in Balochistan and Khyber Pakhtunkhwa in 2013 and in May 2015 respectively under the new ordinances. However, elected councillors of Balochistan were still struggling for their financial powers despite one-and-a-half years having elapsed since they won the elections. Similarly, elected local bodies were not functional in Khyber Pakhtunkhwa at the time of the SPDC household survey. In two other provinces, the electoral process had been initiated and polls were scheduled by the end of 2015. Thus, fortunately due to the timing of the SPDC survey, benchmark information of the performance of essential public services will be available to the new elected local bodies.

While opinion surveys are effective social accountability tools, it is important to be aware of their methodological limitations. These surveys typically focus on capturing the 'demand' perspectives of users rather than the 'supply' characteristics or perspectives of non-users. Further, although these surveys provide insights about what respondents think

about service delivery performance, they do not identify causal relationships; in other words, they do not explain the reasons for people's opinions.

This chapter summarizes citizens' perceptions related to six public services included in the SPDC opinion survey. A brief review of the sampling framework and methodology for selecting households is presented first to inform readers about the scientific approach adopted for this study. Detail sectoral reviews follow after a section on general perceptions regarding local development, priorities for public services and experience with the elected local government. Methodology of the survey is described in Box 5.1.

GENERAL PERCEPTIONS OF URBAN CITIZENS

The sample of urban citizens selected for the survey is well represented in terms of socio-economic characteristics. Among the total of 4,282 respondents which were enumerated across four provinces of Pakistan to obtain perceptions and opinions on various dimensions of essential public services, around 19 percent were female. About 35 percent of the respondents reported studying up to secondary level (middle or matric). The number of illiterate constituted around 18 percent, primary level 11 percent, intermediate 12 percent and graduate and post graduate 17 percent. Around 24 percent of the respondents were working as employees, 36 percent were self-employed, 21 percent were skilled own-account workers, and 12 percent unskilled labourers. About 32 percent of the households in the sample reported expenditure below the poverty line (Rs 3,100 per capita per month)[2].

Before presenting the opinions on the specific public services included in the household survey, it would be useful to briefly discuss the understanding of the urban residents on and about national and local development; their priorities about the provision of public services; and how they would like to see the governance of public service delivery.

The responses to an open-ended question: "what is the most serious problem related to development and progress facing Pakistan today?" are collated in Exhibit 5.1. Not surprisingly, across all provinces, corruption is viewed as the biggest challenge for development by the urban residents. However, the phenomenon is more evident in Balochistan where about 39 percent respondents highlighted this concern.

The situation of law and order is also a significant impediment, especially in Karachi (Sindh) and Quetta (Balochistan). It is surprising that less than 10 percent households narrated shortage of utilities as a major problem, except in Punjab. This is despite the enumerator's introduction at the start of the survey, where it was categorically stated that "this survey is

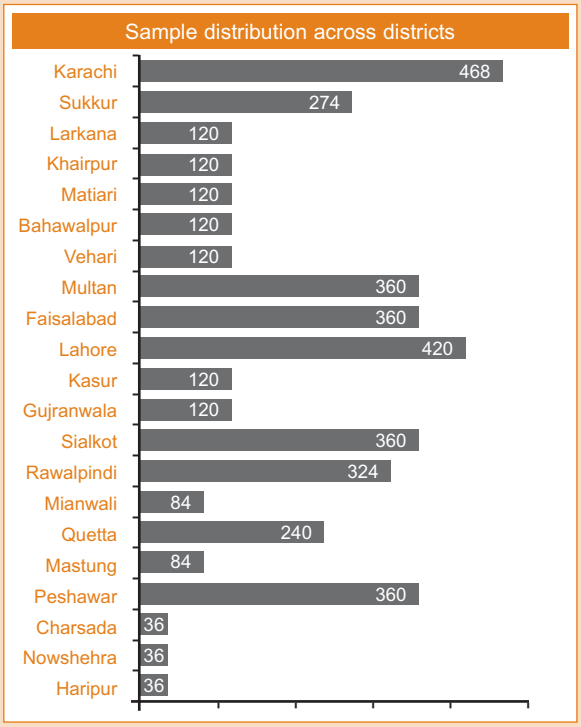
Box 5.1 Selection process of sample households

A representative survey of urban households was carried out to obtain experience, perceptions and views of citizens regarding public services. Due to financial and time constraints, it was decided to survey 4000 households across four provinces for this study. This sample gives a tolerated sampling error of 1.5 percent[1] with 95 percent confidence level according to the formulae of statistically desirable and optimal sample size. Moreover, 120 households of slums (katchi abadis) were also enumerated in the municipal areas of Karachi and Lahore.

The sample was allocated among provinces on the basis of provincial urban population proportions. A schematic view of the realized sample distribution across provinces and tiers of local government is presented in the table below, while district-wise sample is presented in the chart. Overall two metropolitan corporations, seven municipal corporations, sixteen municipal committees and thirteen town committees were covered across the provinces of Pakistan.

Sample distribution across provinces	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Overall
Metropolitan/Municipal corporations	1320	598	324	240	2482
Municipal committee	756	252	108	84	1200
Town committee	252	192	36		480
Slums	60	60	-	-	120
Total	**2388**	**1102**	**468**	**324**	**4282**

Three-stage stratified random sample selection process is adopted to enumerate households. Sample districts were selected with the consideration of geographical coverage in Punjab and Sindh. However this method was not feasible in Khyber Pakhtunkhwa and Balochistan due to security issues. Thus, the capital cities and logistically feasible districts were considered for the survey in these provinces. Altogether 21 districts were earmarked for the urban citizen's perception survey; ten from Punjab, five from Sindh, four from Khyber Pakhtunkhwa and two from Balochistan.



Urban localities were randomly selected at the second stage from three tiers of local government; Municipal or Metropolitan Corporations, Municipal Committees and Town Committees. An appropriate numbers of urban circles [primary sampling units (PSU)] listed under each tier in the District Population Census Report, 1998 were chosen randomly with the help of statistical software. Following the criteria of Pakistan Bureau of Statistics, sample PSUs were selected with a probability-proportional-to-size (PPS) method of sampling technique. The population of enumeration block according to the 1998 census was treated as a measure of size for selection of sample PSUs.

At the third stage, twelve households (secondary sampling units) were targeted from each urban circle. Households were selected by systematic sampling procedure with a random start. For the selection of starting points, a list of important landmarks (schools, mosque etc.) was developed for the selected urban circle (PSU). Depending on the locality, three or four starting points were preferred for each randomly selected location. After one successful interview ten to fifteen households were skipped for selection of the next household for interview. It was preferred to contact the head or spouse of the household for obtaining perceptions and views regarding public services. However, in case of non-availability of the head of household, an adult older than 25 years was chosen as the respondent. Female enumerators were also included in the survey teams wherever possible. The survey was conducted in the months of February to September 2015.

Exhibit 5.1 Most serious problem to Pakistan's development
Percentage of households

	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Overall
Corruption	25	21	25	39	25
Law and order	13	31	19	34	20
Poverty	13	16	12	4	13
Unemployment	13	9	10	4	11
Shortage of utilities	14	5	8	3	10
Inflation	8	5	6	1	7
Bad governance	6	7	8	8	6
Illiteracy	4	4	7	3	5

Source: SPDC Household Survey (2015).

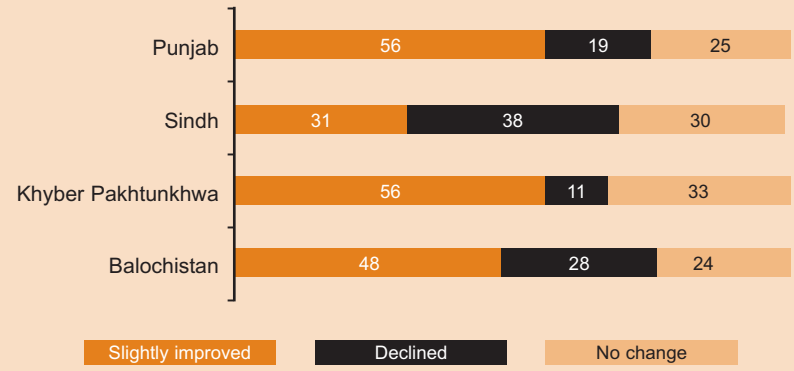
being conducted to find out how people feel and think about several important issues related to drinking water, sanitation, health facilities, public transport etc." Illiteracy is also ranked at the bottom of the list; only 5 percent respondents believe this to be a major hurdle in the development of Pakistan.

For recording the perceptions about the current local or municipal conditions, a specific question was framed as: "do you think that the level of development where you live has over the past five years somewhat improved, declined, or has not changed?" Exhibit 5.2 is developed to summarize the responses to this question.

Around half of the respondents in Punjab, Khyber Pakhtunkhwa and Balochistan believed that the local or municipal services have improved to a certain extent, during the last five years. However, the corresponding percentage is only 31 in urban Sindh. Further, the percentage of respondents who indicated a deteriorating situation is the highest in Sindh followed by Balochistan.

Exhibit 5.2 Development in the locality during last five years

Percentage of households



Source: SPDC Household Survey (2015).

Exhibit 5.3 First priority for the provision of public services

Percentage of households

	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Improving garbage collection and disposal	25	25	30	5
Increasing the amount and quality of drinking water	22	24	15	8
Improving street roads	12	12	10	14
Improving public transport	5	4	6	2
Improving education	10	13	12	29
Improving health care	4	3	6	10
Improving sewerage lines	12	9	13	2
Improving law and order situation	6	8	4	30

Source: SPDC Household Survey (2015).

Priorities for the provision of public services were determined by applying the probe, "what would be your highest priority for public service for the `government to address?" Excluding Balochistan, garbage collection and disposal was identified by a majority of urban citizens, while improvement in quality and quantity of drinking water ranked second. The responses of urban citizens of Balochistan are quite dissimilar from other provinces where improvement in education and law and order are prioritized by 60 percent of the citizens (30 percent each). Due to insignificant or lack of provision of private education in the province, the demand for schools by the majority is quite obvious (Exhibit 5.3).

The responses regarding the voting behaviour of respondents are summarized in Exhibit 5.4. An increasing trend is observed for the last three (local government 2005, general elections of 2008 and 2013) elections, especially in Khyber Pakhtunkhwa. Apart from Balochistan, more than 80 percent respondents confirmed participation in the 2013 election; the turnout was even higher in metropolitan/municipal

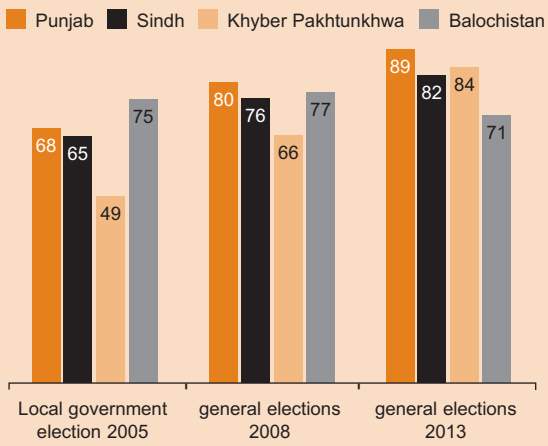
Exhibit 5.4 Voting behaviour of survey respondents

Percentage of respondents who voted in local government or general elections

Metropolitan/municipal corporation

	Voted in		
	Local government elections 2005	General elections 2008	General elections 2013
Karachi	61	74	81
Sukkur	64	77	82
Multan	69	85	93
Faisalabad	63	75	89
Lahore	65	72	83
Sialkot	63	82	90
Rawalpindi	65	83	88
Quetta	79	73	93
Peshawar	44	62	80

Provinces



Source: SPDC Household Survey (2015).

corporations. However, the phenomena does not reflect the behaviour of urban citizens in general as the survey reports voting practice of respondents only (mostly head of household) and thus excludes the behaviour of his/her adult family members.

Perceptions regarding the role of elected councillors in providing public services were investigated with the help of a statement and four choices or options; fully agree, mostly agree, to some extent agree and fully disagree. The following five statements (3 positive and 2 negative) were put to vote[3]:

1. Elected councillors can effectively communicate my priorities to higher levels of government.
2. Access to elected councillors is easy in case of any problem/complaint related to public services.
3. Better provision of public services is only possible with the help of elected councillors.
4. Present system of local governance is better in providing public services due to non-political environment.
5. Local governance with the help of elected councillors, *nazims* increases the level of corruption.

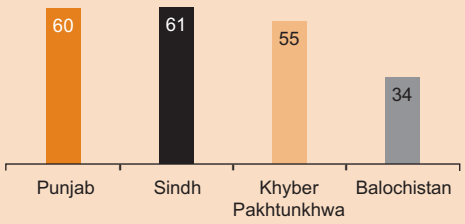
Respondents were requested to rate these statements from the given four options. However, for the purpose of summarizing opinions, two categories (‘fully agree’ and ‘mostly agree’) are merged and the corresponding perceptions are given in Exhibit 5.5.

There exists a general perception, that an overwhelming majority of citizens are in favour of elected councillors for the provision of essential

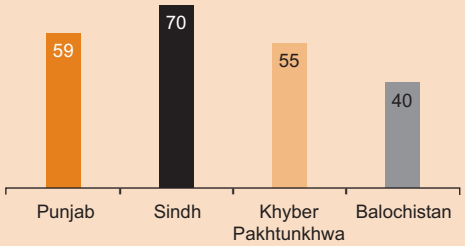
Exhibit 5.5 Opinions regarding the role of elected councillors

Percentage of respondents who 'fully mostly agree

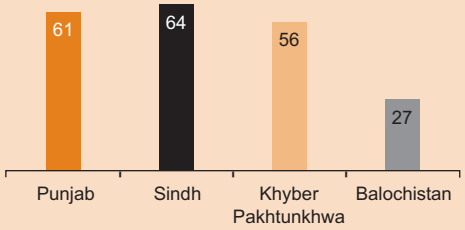
Statement: Elected councillors can effectively communicate my priorities to higher levels of government



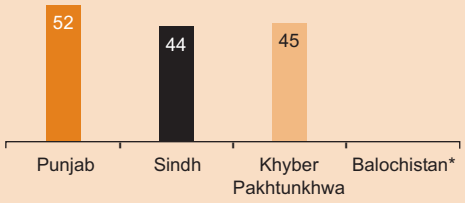
Statement: Access to elected councillors is easy in case of any problem /complaint related to public services



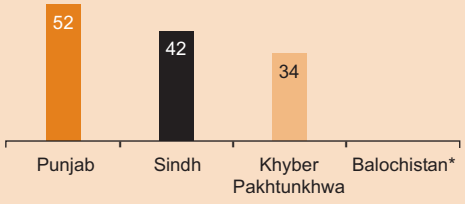
Statement: Better provision of public services is only possible with the help of elected councillors



Statement: Present system of local governance is better in providing public services due to non-political environment



Statement: Local governance with the help of elected councillors and nazims increase the level of corruption



*These aspects were not enquired from respondents of Balochistan.

Source: SPDC Household Survey (2015)

public services across Pakistan; however the Exhibit 5.5 does not substantiate this perception. Around 40 percent of the urban citizens of Punjab and Khyber Pakhtunkhwa do not agree with the role of elected councillors, in terms of effective communication to higher authorities, access, and better provision of services. In Sindh, the percentage of dissenting citizens varies from 27 to 34. Interestingly a significant majority of citizens of Balochistan (Quetta and Mastung) who are currently experiencing elected local governance do not endorse the role of *nazims*/councillors in communicating their priorities, ensuring free access and in providing better public services. Around 66 percent respondents of Balochistan disagree with the statement that the elected councillors can effectively communicate citizens' priorities to higher levels of government, while around 60 percent were not convinced regarding the access to elected councillors in case of any problem related to public services.

The negative aspects of elected governance were further investigated in terms of political partiality and corruption in three provinces where an unelected governance system was operational. Around half of the urban citizens believe that unelected governance is better in providing public services mainly due to a non-political environment. However, slight variations in opinion across provinces do exist. In terms of corruption about 48, 58 and 66 percent urban citizens of Punjab, Sindh and Khyber Pakhtunkhwa respectively do not agree with the perception that 'councillors/*nazims* increase the level of corruption'.

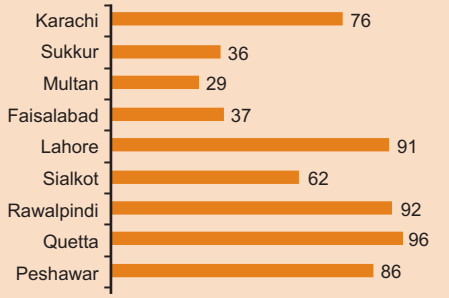
It is clear that about half the urban citizens do not support the elected governance system by disagreeing with positive characteristics and agreeing with negative features. However, their perceptions are based on the Pervez Musharraf's Devolution Plan of 2000, while unelected local authorities were providing public services at the time of the household survey.

Exhibit 5.6 Access to piped water (Percentage of households)

Provinces/tiers of local government

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	62	59	45	60
Sindh	58	39	43	53
Khyber Pakhtunkhwa	39	53	22	40
Balochistan	72	79		74

Metropolitan/municipal corporation



Source: Estimated from PSLM (2011-12).

WATER SERVICES

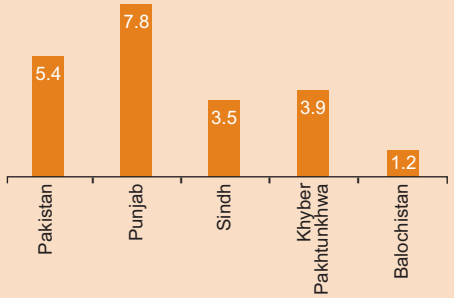
Information regarding access to drinking water was obtained by asking "what is your main source of drinking water"? Responses in terms of access to piped (own dwelling, neighbour's dwelling and public tap) water by provinces and tiers of local governments are arranged in Exhibit 5.6. As expected, significant variations in terms of access to piped water are observed across provinces as well as across the tiers of local government. Low incidences of households which are getting water from the public system in Multan, Faisalabad and Sukkur Municipal Corporations are quite similar with the estimates of district representative Pakistan Social and Living-Standard Measurement (PSLM) Survey. According to PSLM (2012-13), 25, 29 and 50 percent urban households in Multan, Faisalabad and Sukkur districts respectively were getting water from the public system in 2013, while corresponding estimates of respective municipal corporations[4] are 29, 37 and 36. Similarly, high incidences of Balochistan and Khyber Pakhtunkhwa are also in line with PSLM estimates.

Exhibit 5.7 Water availability by public tap

Percentage of households

	Less than 3 hours	4 to 6 hours	More than 6 hours
Pakistan	50	23	27
Punjab	29	21	50
Sindh	67	24	9
Khyber Pakhtunkhwa	56	33	93
Balochistan	93	6	1

Average daily hours



Source: Estimated from PSLM (2011-12).

Besides the coverage in terms of connection with a public water system, an important aspect of water service is the quantity or period of water availability in a public tap. Unfortunately, this aspect was not covered in the SPDC household survey; however information regarding the duration of water availability is accessible from the PSLM dataset and is displayed in the Exhibit 5.7. It is not surprising that in urban Balochistan (Quetta and Mastung) where more than 90 percent households are connected with a public piped system, water is available for only one hour a day. The highest (8 hours) duration of water availability is observed in urban Punjab, while according to PSLM data water is available on average 3 to 4 hours a day in urban Sindh and Khyber Pakhtunkhwa.

Usually the performance of government regarding drinking water availability is evaluated with the access to piped water statistics. However, access should be linked with the sufficiency, therefore the incidence of purchasing or getting water from private sources was investigated in the household survey. The Exhibit 5.8 disseminates this information by provinces and tiers of local governments. High incidences of purchasing water by households which have access to tap water are evident in the Exhibit. Overall, about 60, 53, 40 and 74 percent

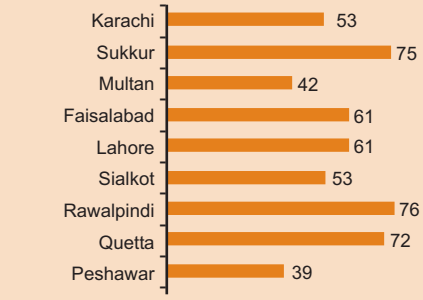
Exhibit 5.8 Purchasing water from private sources

Percentage of households having access to tap water

Provinces/tiers of local government

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	62	59	45	60
Sindh	58	39	43	53
Khyber Pakhtunkhwa	39	53	22	40
Balochistan	72	79		74

Metropolitan/municipal corporation



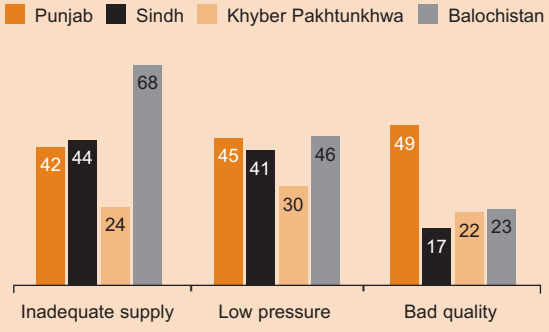
Source: SPDC Household Survey (2015).

Exhibit 5.9 Reasons for purchasing or getting water from private sources

Households having piped water connection

Metropolitan/municipal Corporation	Inadequate supply	Inadequate pressure	Bad quality
Karachi	41	44	14
Sukkur	66	66	56
Multan	18	25	24
Faisalabad	45	45	46
Lahore	42	45	53
Sialkot	37	36	50
Rawalpindi	46	56	60
Quetta	65	39	22
Peshawar	22	30	20

Provinces



Source: SPDC Household Survey (2015).

households asserted the purchase of water in Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan respectively. Variations in the incidences however exist among different tiers of local government. More than 70 percent households which have access to tap water in Sukkur, Rawalpindi and Quetta Municipal Corporations and about 53 and 61 percent households of Karachi and Lahore Metropolitan Corporations respectively confirmed purchasing water from private sources.

Reasons for purchasing or getting water from private sources were evaluated in terms of three parameters; inadequate supply (duration of water availability in tap), low pressure and bad quality of water. Exhibit 5.9 presents the relevant percentages of households for each reason. This was a multiple response question and respondents could provide more than one reason. Surprisingly, the concern about water quality is more apparent in urban Punjab where about 50 percent households purchase water due to bad quality, whereas a majority of urban households in Balochistan purchase water due to inadequate supply and low pressure. In terms of metropolitan and municipal corporations, a majority of households of Rawalpindi, Sialkot and Sukkur municipal corporations and Lahore Metropolitan Corporation reported bad quality as a major reason for purchasing water. Whereas, excluding Multan and Peshawar municipal corporations, around 40 percent households purchase water due to inadequate supply.

The quality of the public water supply system was evaluated with respect to the following parameters; clarity, colour, smell, taste, "healthiness"[5] and stability of services. Respondents were requested to rate these statements from the given four options (very good, good, bad and very bad). The question was: 'how would you rate the quality of the drinking water coming from the public water supply system?" For the purpose of summarizing opinions, responses against 'bad' and 'very bad' categories combined are shown in Exhibit 5.10. It appears that major concern, especially in Sindh and Balochistan regarding public water supply is the

Exhibit 5.10 Percentage of households which described quality as 'bad' or 'very bad'

Question: "How would you rate the quality of water provided by public system?"

	Quality parameters of publicly provided water					
	Clarity	Colour	Smell	Taste	Healthiness	Stability of service
Provinces						
Punjab	34	35	39	39	44	39
Sindh	16	17	21	18	22	46
Khyber Pakhtunkhwa	14	10	15	16	24	16
Balochistan	14	5	13	15	32	59
Metropolitan/municipal corporations						
Karachi	12	11	18	12	18	44
Sukkur	61	68	70	69	69	70
Multan	22	22	27	24	30	28
Faisalabad	16	13	49	42	42	51
Lahore	35	38	38	35	46	36
Sialkot	56	61	54	54	61	39
Rawalpindi	31	24	33	47	44	36
Quetta	16	3	11	18	32	57
Peshawar	16	11	14	16	25	16

Source: SPDC Household Survey (2015).

stability of services. In contrast, majority of the residents from Punjab were not satisfied with the quality of water. For instance, about 54 to 61 percent respondents of Sialkot Municipal Committee categorized water services as bad or very bad regarding its clarity, colour, smell, taste and healthiness, whereas the percentage for the stability of services is only 39. Similar trends are observed in case of other corporations of Punjab. Relatively, higher percentage of residents of Sukkur Municipal Corporation rated water service as bad or very bad. As evident in Exhibit 5.10 some 61 to 70 percent of respondents from Sukkur were critical about the quality of water provided.

Besides asking the perceptions of public water users in terms of various parameters separately, an exercise for overall rating was also carried out. Exhibit 5.11 presents the percentages of users who rated the service as bad or very bad. With slight variations among tiers of local government about 40 percent of respondents of Punjab rated the service as bad or very bad, while the relevant percentage for Sindh is 23. Substantially high percentages of unsatisfied users in municipal corporations of Sukkur, Sialkot and Rawalpindi can also be observed.

An important component of the household survey was to enquire about users' behaviour in case of problems encountered in the services and the responsiveness of service providers. For the public water supply the specific question was framed as: "within the past 6 months have you made a specific complaint to the government regarding drinking water

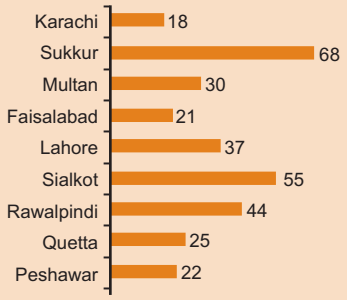
Exhibit 5.11 Percentage of households which described overall quality as 'bad' or 'very bad'

Question: "Overall how would you rate the quality of the publicly provided water?"

Provinces/tiers of local government

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	40	40	25	40
Sindh	28	-	15	23
Khyber Pakhtunkhwa	22	33	4	22
Balochistan	25	62	-	32

Metropolitan/municipal corporation



Source: SPDC Household Survey (2015).

problems?" Exhibit 5.12 summarizes responses of users of water from public sources. Surprisingly irrespective of provinces, a very low percentage of users made a complaint in case of problems, while except Balochistan about 50 percent users of water services declared "no need was felt". Nonetheless, a significant percentage (about 30 percent) of users do not believe in making complaints due to the 'uselessness' i.e. there is no point in making a complaint. More local users (who described 'uselessness') reside in the areas of municipal corporations of Sukkur, Rawalpindi, Quetta and Peshawar. Concerns about the process and awareness were also mentioned by few users of public water services.

Exhibit 5.12 Users' behaviour in case of problems encountered regarding water services

Percentage of households having access to piped water

	Made a Complaint	No need was felt	Useless, they do not care	Difficult process to make a complaint	Not aware to whom complaints should be made
Provinces					
Punjab	12	55	23	7	3
Sindh	14	53	27	3	2
Khyber Pakhtunkhwa	12	47	28	7	4
Balochistan	16	31	43	8	1
Metropolitan/municipal corporation					
Karachi	16	58	22	2	2
Sukkur	17	21	52	7	
Multan	10	60	22	7	
Faisalabad	13	62	18	4	1
Lahore	9	58	20	7	6
Sialkot	3	56	22	17	1
Rawalpindi	22	36	31	3	6
Quetta	17	33	39	8	1
Peshawar	11	46	30	7	4

Source: SPDC Household Survey (2015).

Exhibit 5.13 Question: "How would you describe the response to your complaint?"

Percentage of those households which made complaints regarding piped water

	Completely Resolved the Issue	Resolved some of the issues	Did not Address the issue	Completely ignored my complaint
Provinces				
Punjab	2	11	10	77
Sindh	3	13	10	74
Khyber Pakhtunkhwa	7	23		70
Balochistan	2	7	11	80
Metropolitan/municipal corporation				
Karachi	5	15	8	72
Sukkur		17	17	67
Multan		29		71
Faisalabad		20	10	70
Lahore		4	4	93
Sialkot				100
Rawalpindi	7	20	22	52
Quetta	3	8	10	79
Peshawar	11	18		71

Source: SPDC Household Survey (2015).

Exhibit 5.13 summarizes the experience of users regarding the responses of water authorities in case of complaints. The overwhelming majority irrespective of province categorically stated that their complaints were ignored completely. This is despite the very low incidence of making complaints by users. An interesting finding is that the city size (or number of users) does not affect the quality of governance. For instance, about 72 percent of users who made complaints in Karachi Metropolitan Corporation said their complaints were completely ignored, while the corresponding percentage for Sukkur Municipal Committee is 67.

PUBLIC SERVICES FOR GARBAGE COLLECTION AND DISPOSAL

An open ended question: "how often is your street cleaned?" was put to respondents to get an idea about the cleanliness of a locality. Responses in terms of two extreme scenarios (every day and never/no fixed period) are given in Exhibit 5.14. There is clearly an edge of Punjab and Khyber Pakhtunkhwa over Sindh and Balochistan urban residents. Overall, about 30 and 24 percent of respondents in Punjab and Khyber Pakhtunkhwa respectively confirmed that their streets are cleaned daily; whereas the corresponding percentages are only 11 and one in Sindh and Balochistan respectively. Significant variations however exist among metropolitan/municipal corporations in terms of daily sweeping of streets. For instance, about 20 and 27 percent households in Sialkot and Faisalabad municipal corporations indicated daily sweeping against 45

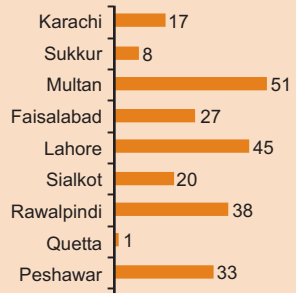
Exhibit 5.14 Respondents' experience regarding cleanliness of street

Percentage

Every day

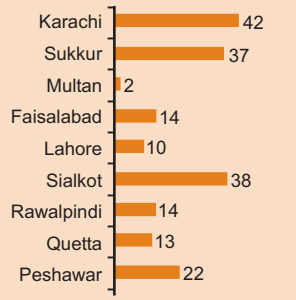
Provinces/ Tiers of Local Government	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	37	21	22	30
Sindh	13	15	2	11
Khyber Pakhtunkhwa	33	2	11	24
Balochistan	1	0	-	1

Metropolitan/municipal corporation



Never | No fixed period

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	15	31	23	21
Sindh	40	49	54	46
Khyber Pakhtunkhwa	22	88	31	38
Balochistan	13	48	-	22



Source: SPDC Household Survey (2015).

and 51 percent residence of Lahore and Multan. At the other extreme, about 42 percent residence of Karachi Metropolitan Corporation asserted that their streets are never cleaned. Further, the metropolitan/municipal corporations where incidences of 'never cleaned' are significantly higher include; Sukkur (37 percent), Sialkot (38 percent) and Peshawar (22 percent).

Respondents' experiences regarding the services of disposal of household garbage are summarized in terms of disposal to fixed places for garbage (metal dustbin/bordered area) and with respect to private garbage collectors (Exhibit 5.15). About 40 to 50 percent urban residence of Punjab, Khyber Pakhtunkhwa and Balochistan dispose garbage to fixed places; whereas the relevant percentage in urban Sindh is 32. With regard to metropolitan/municipal corporations, a significantly low (15 to 20) percent of households in Karachi and Faisalabad use public facilities of disposing garbage and prefer the private facility of garbage collection. About 70 percent households of these cities prefer garbage disposal through a private system (mostly informal sector) of garbage collection. This incidence is even higher as compared to Lahore Metropolitan Corporation where a formal system of garbage collection exists in the private sector. In the provinces, about 30 percent households use a private facility of garbage collection except Khyber Pakhtunkhwa where the relevant percentage is only 9.

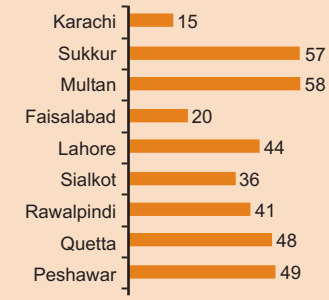
Exhibit 5.15 Disposal of household garbage [percentage of households]

Question: Where do you dispose of your household garbage?

Fixed place for garbage (Metal dustbin/bordered area)

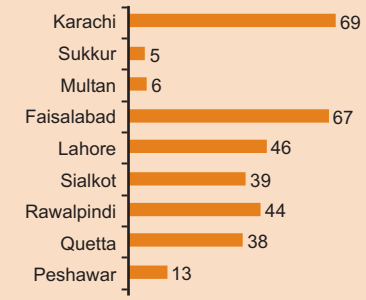
Provinces/tiers of local government	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	40	37	43	39
Sindh	32	52	12	32
Khyber Pakhtunkhwa	49	49	81	51
Balochistan	48	52	-	49

Metropolitan/municipal corporation



Private garbage collectors

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	41	22	14	32
Sindh	43	2	23	30
Khyber Pakhtunkhwa	13	1	-	9
Balochistan	38	0	-	28



Source: SPDC Household Survey (2015).

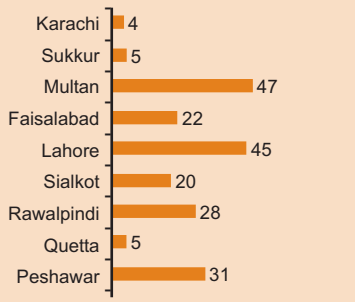
The evidence of garbage collection from the designated collection area by civic authorities was explored through an open ended question: "how often is garbage collected from the collection area?" Responses in terms of two extreme scenarios (every day and never/no fixed period) are presented in Exhibit 5.16. Again, a pathetic situation is evident with respect to Sindh and Balochistan. Only 3 to 6 percent households confirmed daily collection of household garbage in these provinces; whereas the corresponding percentage is about 25 in Punjab and Khyber Pakhtunkhwa. In terms of metropolitan/municipal corporations,

Exhibit 5.16 Garbage collection from the collection area by local authorities

Percentage of households which dispose garbage to fixed place for garbage

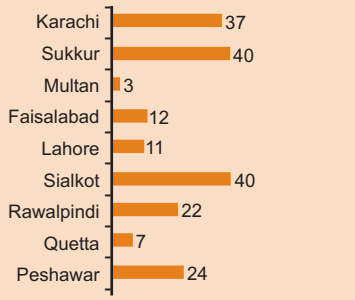
Every day

Provinces/tiers of local government	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	33	19	16	27
Sindh	5	12	2	6
Khyber Pakhtunkhwa	31	11	11	25
Balochistan	5	0	-	3



No fixed period | never

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	17	30	32	23
Sindh	38	49	52	44
Khyber Pakhtunkhwa	25	57	28	32
Balochistan	11	48	-	21



Source: SPDC Household Survey (2015).

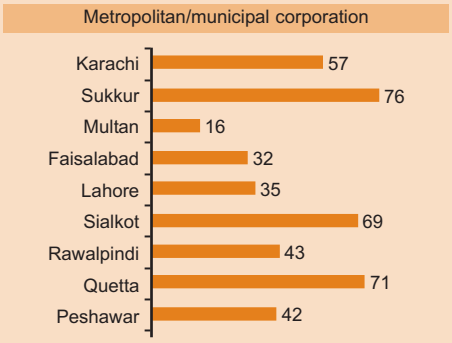
significantly low (4 to 5) percent residence of Karachi, Sukkur and Quetta confirmed a daily collection of garbage. In contrast, Multan and Lahore are on the higher side where daily collection of garbage is reported by about 45 to 47 percent households. A similar trend is evident with respect to the other end; 'Never/No Fix period' response. About 40 percent residents of Karachi, Sukkur and Sialkot metropolitan/municipal corporations are experiencing the situation where garbage is either never collected or collected at irregular periods; whereas the comparative percentages are just 3 to 12 in Multan, Faisalabad and Lahore.

The comparison of metropolitan/municipal corporations to the public services of garbage disposal and collection clearly places Multan Municipal Corporation at the top followed by Lahore Metropolitan.

The quality of neighbourhood cleanliness was evaluated in terms of four options; very good, good, bad of very bad. The question was asked: "overall how would you rate the quality of the cleanliness of your neighbourhood?" The Exhibit 5.17 gives percentages of those respondents who declared the quality of cleanliness of their neighbourhood as bad or very bad. The provincial scenario clearly indicates that about 68 and 77 percent of urban residents of Sindh and Balochistan respectively are not satisfied with the quality of cleanliness of streets and neighbourhoods, while interestingly the corresponding

Exhibit 5.17 Percentage of households which described quality of neighbourhood cleanliness as 'bad' or 'very bad'

Provinces/tiers of local government	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	39	59	56	47
Sindh	65	67	83	68
Khyber Pakhtunkhwa	42	71	47	49
Balochistan	71	95	-	77



Source: SPDC Household Survey (2015)

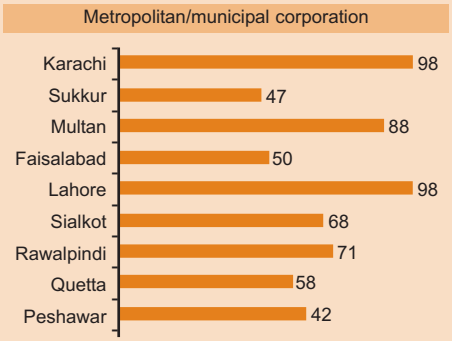
percentage is 47 to 49 in Punjab and Khyber Pakhtunkhwa. In terms of metropolitan/municipal corporations, more than 50 percent households of Sukkur, Quetta, Sialkot, and Karachi were critical about the public services for garbage collection and disposal and rate the services as bad or very bad.

PUBLIC SEWERAGE SERVICES

Information regarding access to the public sewerage system is collated in Exhibit 5.18 which reports the percentage of households which are connected[6] to an underground drainage channel. There is significant variation among the provinces in term of access, especially among the tiers of local government. About 66-67 percent households in urban Punjab and Khyber Pakhtunkhwa are connected with the public drainage, however the percentage of connected households is relatively low in Sindh and Balochistan. Further, very low percentages of households are connected in municipal and town committees of Sindh; whereas the incidence is quite high in Khyber Pakhtunkhwa and Punjab. In terms of metropolitan/municipal corporations, low incidences of household access to public drains are observed in Sukkur, Faisalabad and Quetta.

Exhibit 5.18 Percentage of households which are connected to underground public sewerage system

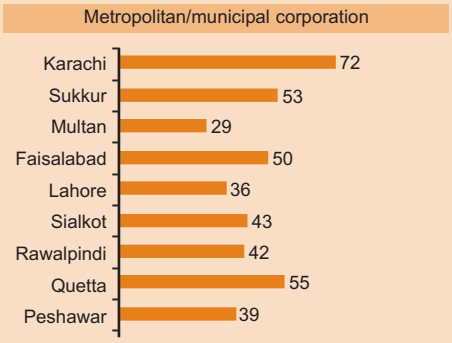
Provinces/tiers of local government	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	77	53	40	67
Sindh	78	11	31	54
Khyber Pakhtunkhwa	62	65	60	66
Balochistan	58	52	-	56



Source: SPDC Household Survey (2015)

Exhibit 5.19 Percentage of households facing overflow from and blockage in public sewerage system

Provinces/tiers of local government	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	40	39	44	40
Sindh	64	35	66	58
Khyber Pakhtunkhwa	39	58	42	43
Balochistan	55	65	-	57

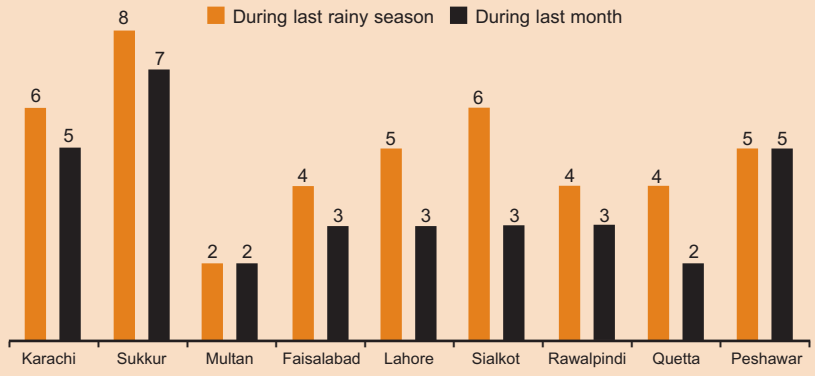


Source: SPDC Household Survey (2015)

The survey data reveals that a flush is connected to a pit in significant percentages of households of Sukkur and Faisalabad cities, whereas a flush is connected to an open drain in about 34 percent households of Quetta Municipal Corporation.

Overflows from and blockage in public sewerage is the most serious problem facing households in cities. Exhibit 5.19 summarizes the experience of households which highlighted this concern in terms of percentages. Here also relatively more urban households of Sindh and Balochistan complained about the overflow and blockages as compared to Punjab and Khyber Pakhtunkhwa provinces. About 72 percent residents of Karachi Metropolitan Corporation drew attention towards this issue, whereas the corresponding percentages are 29, 39 and 36 in Multan, Lahore and Peshawar respectively. Further, more than 50 percent households in Sukkur, Faisalabad and Quetta were also dismayed about the overflow from public sewerage system.

Exhibit 5.20 Incidence of overflow from public sewerage system of metropolitan/municipal corporations
average frequency when streets are flooded



Source: SPDC Household Survey (2015)

To capture the intensity of overflow of public drainage channels, an attempt was also made to determine the frequency of street and neighbourhood flooding with sewerage water in a normal month as well as in a rainy season. Exhibit 5.20 presents these statistics for metropolitan/municipal corporations. According to residents, during regular times, the streets are flooded on average 2 to 7 times with sewerage water every month. The frequency is relatively high in Karachi, Sukkur and Peshawar whereas, during a rainy season more incidences of street flooding are reported by households except residents of Multan Municipal Corporation.

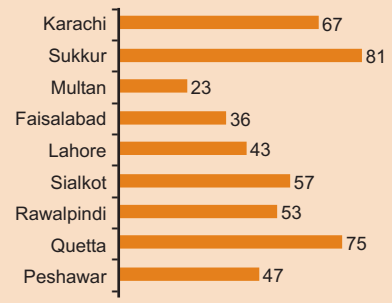
The satisfaction of households with the quality of maintenance of drains was evaluated with the help of four options; very good, good, bad or very bad. The question was asked: "overall how would you rate the maintenance and cleanliness of drains in your locality?" Exhibit 5.21 is developed to show percentages of those respondents who indicated the quality as bad or very bad. The provincial scenario highlights that more than 70 percent of urban residents of Sindh and Balochistan are highly

Exhibit 5.21 Percentage of households which described quality of maintenance of drains as 'bad' or 'very bad'

Provinces/tiers of local government

	Metropolitan/ municipal corporations	Municipal committees	Town committees	Overall
Punjab	42	56	60	49
Sindh	73	62	89	73
Khyber Pakhtunkhwa	47	65	42	51
Balochistan	75	95	-	80

Metropolitan/municipal corporation



Source: SPDC Household Survey (2015).

dissatisfied with the quality of maintenance of drains by selecting bad or very bad options. In contrast, the corresponding percentage ranges between 49 and 51 in Punjab and Khyber Pakhtunkhwa. Metropolitan/municipal corporations which are more apparent in terms of high percentages of bad and very bad options include; Karachi (67 percent), Sukkur (81 percent) and Quetta (75 percent).

Exhibits 5.22 and 5.23 illustrate the users' behaviour in case of problems encountered in sewerage services and the responsiveness of service providers. The question for the public sewerage was framed as "within the past 6 months have you made any specific complaint to the government regarding drainage channels/sewerage lines problems?" As observed in the section of water services, very low percentages of households asserted that they have made a complaint during the last six months. A significant percentage of urban residents, especially in Sindh and Balochistan do not believe in making complaints due to its 'uselessness' i.e. there is no point in making a complaint; about 47 and 68 percent residents of Sindh and Balochistan respectively believe that making a complaint is futile. Similarly, more than 70 percent households in Sukkur and Quetta municipal corporations were not in favour of making complaints regarding the civic problems to authorities. Lack of awareness regarding the concerned authorities and complicated process were also mentioned as reasons for not making complaints.

Exhibit 5.22 Users' behaviour in case of problems encountered regarding sewerage services [Percentage of households]

	Made a Complaint	No need was felt	Useless, they do not care	Difficult process to make a complaint	Not aware to whom complaints should be made
Provinces					
Punjab	12	49	25	8	5
Sindh	25	19	47	4	4
Khyber Pakhtunkhwa	21	28	37	7	6
Balochistan	16	7	68	4	5
Metropolitan/municipal corporation					
Karachi	35	26	31	3	3
Sukkur	12	9	70	4	1
Multan	12	69	15	3	
Faisalabad	14	50	15	15	5
Lahore	12	56	20	7	5
Sialkot	11	39	31	13	6
Rawalpindi	16	36	34	3	8
Quetta	8	9	72	6	6
Peshawar	21	31	36	5	6

Source: SPDC Household Survey (2015).

Exhibit 5.23 Percentage of those households which made complaints regarding sewerage services

Question: "How would you describe the response to your complaint?"

	Completely Resolved the Issue	Resolved some of the issues	Did not Address the issue	Completely ignored my complaint
Provinces				
Punjab	2	16	11	72
Sindh	4	14	7	74
Khyber Pakhtunkhwa	1	8	1	90
Balochistan	0	27	4	69
Metropolitan/municipal corporation				
Karachi	9	20	6	65
Sukkur		17	14	69
Multan		61		39
Faisalabad	3	32	13	52
Lahore		10	24	66
Sialkot		14	19	67
Rawalpindi	3	9	12	76
Quetta			6	94
Peshawar	2	6		92

Source: SPDC Household Survey (2015).

In terms of the experience of households who have made complaints, a significant majority irrespective of province categorically stated that their complaints were ignored completely. However, the percentage is relatively low in Balochistan where about 27 percent of those who complained and claimed that some of their issues have been resolved. The percentage of satisfied individuals is also high in Multan Municipal Corporation where about 61 percent of those who complained confirmed action taken.

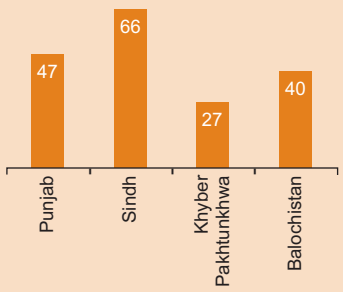
PUBLIC HOSPITALS

Public hospitals were investigated regarding access and various quality aspects of services. Access was determined by asking the respondents: "during the last 6 months have you (yourself or with family member) visited government hospitals for treatment?" Exhibit 5.24 provides information regarding non-users with reasons for not visiting public hospitals. Not surprisingly the highest percentage of non-users belongs to Sindh (mostly Karachi) where private health facilities are abundant. In contrast, the highest (73 percent) incidence of using public health services is estimated for Khyber Pakhtunkhwa. Reasons for not visiting government hospitals vary among provinces. However in general two important reasons which were mentioned are: "prefer private medical facilities" and "not satisfied with the doctors' expertise". Comparatively few households described distance to public hospitals as an obstacle for not preferring to use these services.

Exhibit 5.24 Incidence of not using service of public hospital

Percentage of household

Reasons for not visiting public hospital	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
There was no need to go	50	40	38	21
Due to Crowd – Too many people	23	38	26	39
Usually the medical staff are not present	17	14	11	38
The facility is too far away from my home	9	27	22	6
Prefer private medical facilities	38	46	57	74
Prefer Home/Self Treatment	2	4	2	5
Not satisfied with the doctors' expertise	25	40	39	75



Source: SPDC Household Survey (2015).

Perceptions regarding the quality of services of public hospitals were evaluated with the help of a few statements. The services were rated by those respondents who visited public hospitals during the last six months by asking "rate the following statements from fully agree, mostly agree, mostly disagree and fully disagree options based on your most recent visit to hospital". The following nine statements (6 positive and 3 negative) were offered for rating:

i) Satisfied with the length of waiting time;
ii) Hospital was at a convenient distance;
iii) Had all required medicines and supplies;
iv) Medical staff was courteous and helpful;
v) Building was well-maintained;
vi) I received good medical attention by qualified staff;
vii) I would get better service if I went to a private medical facility;
viii) If I had the money I would go to a private medical facility; and
ix) I would get better service if I paid an informal payment.

For the purpose of summarizing opinions, percentages of those respondents who do not fully agree with the statement are given in Exhibit 5.25. The rating exercise was carried out separately for district and tehsil hospitals to cover three tiers of local governments. Results in general are in accordance with a priori expectation and perceptions of masses regarding public hospitals. However, provincial variations exist in evaluating statements by respondents. For instance, about 21 and 30 percent respondents of Punjab and Khyber Pakhtunkhwa respectively did not agree with the statement "if I had the money I would go to a private medical facility" for district hospitals, while the corresponding percentages are 9 and 2 in Sindh and Balochistan. A similar tendency is observed in rating the statement "I would get better service if I went to a private medical facility".

Exhibit 5.25 Perceptions regarding the services of public hospital

*Percentage of households who visited hospital for treatment and **'not agree'** with the statement*

	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
District hospital				
Satisfied with the length of waiting time	79	85	89	98
Hospital is at a convenient distance	78	73	79	92
Had all required medicines and supplies	83	87	89	100
Medical staff were courteous and helpful	80	89	83	100
Building is well-maintained	65	84	82	100
I received good medical attention by qualified staff	72	88	85	100
I would get better service if I went to a private medical facility	19	7	25	3
If I had the money I would go to a private medical facility	21	9	30	2
I would get better service if I paid an informal payment	35	28	52	33
Tehsil hospital				
Satisfied with the length of waiting time	75	76	91	97
Hospital is at a convenient distance	79	69	72	90
Had all required medicines and supplies	75	81	94	100
Medical staff were courteous and helpful	69	78	83	100
Building is well-maintained	62	64	90	100
I received good medical attention by qualified staff	68	81	85	100
I would get better service if I went to a private medical facility	13	12	6	0
If I had the money I would go to a private medical facility	16	10	6	0
I would get better service if I paid an informal payment	28	26	25	21

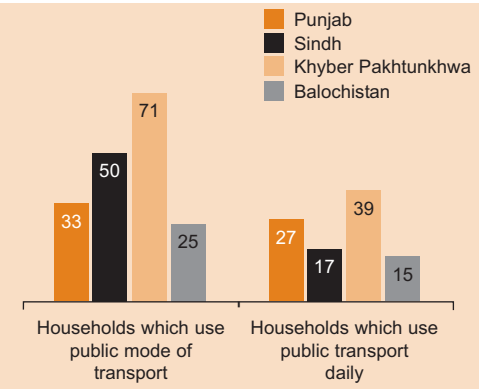
Source: SPDC Household Survey (2015).

PUBLIC TRANSPORT

For the SPDC household survey, buses, the metro, taxis and rickshaws are considered as the mode of public transport. However, access is determined through an open ended question; "which methods of travel do you and your family use most often in the city?" the highest incidence of using public transport is observed in Khyber Pakhtunkhwa as evident in Exhibit 5.26. About 71 percent urban households of Khyber Pakhtunkhwa use this mode for travelling in the city. The corresponding percentages for Punjab, Sindh and Balochistan are 33, 50 and 25 respectively. The exhibit also provides percentages of households who use public transport daily. Here also the highest (39 percent) and lowest (15 percent) incidence is observed in Khyber Pakhtunkhwa and Balochistan respectively.

Exhibit 5.26 Usage of public transport

Percentage of households



Source: SPDC Household Survey (2015).

Exhibit 5.27 Percentage of households which described quality of public transport as 'bad' or 'very bad'

	Quality parameters of Public Transport					
	Vehicle Condition	Reliability (Time to destination)	Uncertainty (Arriving time)	Fare	Road Conditions	Operators' Behaviour
Provinces						
Punjab	30	38	38	39	28	38
Sindh	57	63	65	68	70	65
Khyber Pakhtunkhwa	49	61	43	34	33	51
Balochistan	64	75	25	77	70	54
Metropolitan/municipal corporation						
Karachi	53	61	61	65	51	76
Sukkur	66	72	71	74	88	64
Multan	15	25	34	39	11	26
Faisalabad	36	45	47	40	22	37
Lahore	22	35	33	29	25	33
Sialkot	37	40	35	43	26	36
Rawalpindi	41	43	36	38	43	55
Quetta	67	74	28	71	77	62
Peshawar	46	59	44	30	32	48

Source: SPDC Household Survey (2015).

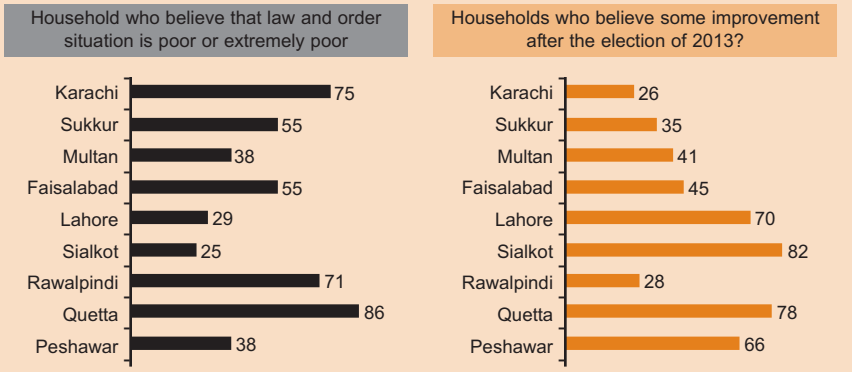
The quality of public transport was evaluated with respect to the following parameters; Vehicle condition, reliability in terms of time to destination, uncertainty in terms of arriving time, fare, road conditions and operators' behaviour. Respondents were requested to rate these statements from the given four options (very good, good, bad and very bad). Enumerators were directed to show option cards as well as to read these options after asking the question: "how would you rate public transport in terms of:" For the purpose of summarizing opinions however, responses against 'bad' and 'very bad' categories combined are provided in Exhibit 5.27. Surprisingly, comparatively very low percentages in Multan and Lahore declared the services of public transport as bad or very bad. Another important finding is that percentages of disappointed citizens with respect to public transport are significantly higher in Karachi, Sukkur and Quetta.

LAW AND ORDER

The perceptions regarding law and order situation were investigated by asking "how would you describe the law and order situation in your area/locality?" Percentages of citizens in metropolitan/municipal corporations who described the law and order condition as poor or extremely poor are given in Exhibit 5.28. It is not surprising that the majority of citizens of Karachi and Quetta indicated the deteriorating law and order due to obvious reasons. However it is shocking that about 71 percent citizens of Rawalpindi Municipal Corporation were also critical regarding law and order. It is surprising to observe that the percentage of respondents in Peshawar who believe that the law and order situation is poor/extremely poor is relatively low as compared to some other cities like Faisalabad and Rawalpindi.

Exhibit 5.28 Law and order situation in metropolitan/municipal corporations

Percentage of households



Source: SPDC Household Survey (2015).

The exhibit also provides other important information by stating the responses to the question: "have you noticed any improvement in law and order after the election of May 2013?" Interestingly, a significant majority of respondents of Lahore, Sialkot, Peshawar, and Quetta were of the view that the situation has improved since the general election of 2013. This is an important finding with respect to Peshawar and Quetta where the new ruling parties have emerged.

Exhibit 5.29 quantifies the perceptions regarding the incidences of 'snatching' i.e. robbed, '*bhatta*' (extortion) and dacoity/ theft in metropolitan/municipal corporations. Respondents were asked "during the last six months have you, your family member or your relatives encountered any unfortunate event regarding?" Robbery (cash, jewellery, mobile, car, bike etc.) incidences are reported in Karachi, Faisalabad, Rawalpindi and Quetta by about 34, 39, 40 and 37 percent households. Karachi and Quetta cities are also significant for the '*bhatta*' system, while incidences of theft are reported relatively more by the households of Faisalabad and Rawalpindi. In general, the worst condition of law and order in Karachi, Faisalabad, Rawalpindi and Quetta is reported as compared with other sample cities.

The role of the police is evaluated with the help of the following four statements: police fail to serve and respect the interests of all citizens;

Exhibit 5.29 Incidence of snatching, threat or dacoity/robbery during last six months

Percentage of households

	Karachi	Sukkur	Multan	Faisalabad	Lahore	Sialkot	Rawalpindi	Quetta	Peshawar
Snatching of cash, mobile, car or bike	34	11	13	39	13	9	40	37	13
Threat from political, religious party or other armed group for extortion ("Bhatta")?	7	3	3	5	4	1	2	8	2
Dacoity at home or shop?	12	4	10	26	13	15	19	28	4

Source: SPDC Household Survey (2015).

Exhibit 5.30 Perceptions regarding the role of police in metropolitan/municipal corporations

Percentage of respondents who disagree with the statement

	Karachi	Sukkur	Multan	Faisalabad	Lahore	Sialkot	Rawalpindi	Quetta	Peshawar
Police fail to serve and respect the interests of all citizens	2	8	4	2	15	7	4	2	11
Police serve the interests of selected pressure groups /Influential groups	1	7	5	2	7	15	0	1	5
Police serve the interests of political leaders	1	11	5	2	10	7	2	3	6
Police fail to protect the poor and common people	1	6	7	2	6	10	1	5	17

Source: SPDC Household Survey (2015).

police serve the interests of selected pressure groups/influential groups; police serve the interests of political leaders; and police fail to protect the poor and common people.

Respondents' perceptions or opinion about the police behaviour in general were gathered after asking: "rate these statements from fully agree, mostly agree, mostly disagree and fully disagree options based on your experience or belief". However, for the purpose of summarizing opinions, percentages of those respondents who disagree with the statement are presented in Exhibit 5.30. No wonder, results are according to a priori expectation and general perceptions about the police. Almost all citizens agree with these negative features about the police, however comparatively higher percentages (in double digits) in Peshawar, Sialkot and Lahore indicate relatively better governance with respect to the police.

NOTES:

1. The sampling error however varies across province due to provincial sample allocation. The estimated errors are 2, 2.95, 4.53 and 5.44 for Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan provinces respectively. It is worth mentioning that 5 percent sampling error is generally accepted for this type of household survey.
2. This is the inflation adjusted poverty line for the year 2015. SPDC Research Report number 84 provides the urban poverty line for 2011. (http://www.spdc.org.pk/Data/Publication/PDF/RR84.pdf)
3. Enumerators were directed to show option card as well as to read each option after reading the statement or asking question.
4. It is worth mentioning here that the urban area of a district also includes municipal and town committees and thus the survey estimates of metropolitan/municipal corporations are not strictly comparable with the PSLM urban data.
5. Healthiness refers to the perception of respondents about the general effect of water on health.
6. Almost all household (98 percent) in urban area use a flush system in toilets. The flush system may be connected to an underground public drainage, privately constructed open (covered or uncovered) drains and pits.


پریذائیڈنگ آفیسر
اسسٹنٹ پریذائیڈنگ آفیسر

Local Governments and Urban Service Delivery

6

The current round of local government reform initiated by the provinces can be termed as 'devolution without delegation', with the exception of Khyber Pakhtunkhwa.

6 Local Governments and Urban Service Delivery

The previous chapters have shown that infrastructure deficit is the most obvious sign of urban decay in Pakistan. The pace of increase in urban population has not been matched with an adequate increase in municipal infrastructure and services. The gap between supply and demand of municipal services has resulted in the overall deterioration of the quality of life. For an increasingly urbanised population, it is crucial to ensure that public services in urban areas are effectively delivered.

Following the 18th Constitutional Amendment, the responsibility of all social services have been transferred to the provinces, which further share their functions and fiscal powers with local governments on the basis of respective legislation. The notion of subsidiarity suggests that a function should be handled by the lowest competent authority. A central authority should have a subsidiary function, performing only those tasks which cannot be performed effectively at a more immediate or local level (SPDC, 2007). This principle forms the basis of allocation of functions among the various tiers of government.

Currently, most of the basic social services in urban areas are being delivered by the provincial governments or specialized agencies. However, this is with the exception of Khyber Pakhtunkhwa where several offices of several departments including education and health have been devolved to local governments. Exhibit 6.1 sketches the primary responsibility of the provision of urban social services by service providers.

Primary education in both urban and rural areas is largely provided by provincial education departments with the exception of the Karachi Metropolitan Corporation which also runs a number of primary schools. Similarly, secondary and higher education is also provided by the provincial government. Curative health is again a function primarily of the provincial government while preventive health is generally a shared responsibility between provincial health departments and local councils.
Water Supply and Sanitation (WSS) services in large and intermediate cities are provided by specialized agencies such as water and sanitation agencies (WASAs), which are established by the Development Authorities (DAs) and are mainly controlled by provincial governments. Such agencies are present in all the provinces. In the case of Karachi, these services are provided by Karachi Water and Sewerage Board (KWSB). Similarly, Sindh Urban Service Corporation is mandated for WSS services in several intermediate cities of the province. In small cities and towns, the responsibility of these services is shared between

Exhibit 6.1 Functional responsibilities of urban social services

	Large cities	Intermediate cities	Small cities
Primary Education	Provincial Education Department	Provincial Education Department	Provincial Education Department
Secondary Education	Provincial Education Department	Provincial Education Department	Provincial Education Department
Higher Education	Provincial Education Department	Provincial Education Department	Provincial Education Department
Curative Health	Provincial Health Department	Provincial Health Department	Provincial Health Department
Preventive Health	Provincial Health Department/ Local Councils	Provincial Health Department/ Local Councils	Provincial Health Department/ Local Councils
Water Supply & Sanitation	Specialized Agencies	Specialized Agencies	Public Health Engineering Department/ Local Councils
Environment Protection	Environmental Protection Agencies	Environmental Protection Agencies	Environmental Protection Agencies
Housing	Provincial Physical Planning & Housing Department	Provincial Physical Planning & Housing Department	Provincial Physical Planning & Housing Department
Garbage Collection	Local Councils	Local Councils	Local Councils
Emergency Services	Local Councils	Local Councils	Local Councils
Public Transport	Local Councils	Local Councils	Local Councils
Traffic Planning	Local Councils	Local Councils	Local Councils
Roads and Streets	Local Councils	Local Councils	Local Councils
Street Lighting	Local Councils	Local Councils	Local Councils
Firefighting	Local Councils	Local Councils	Local Councils
Parks and Playgrounds	Local Councils	Local Councils	Local Councils

provincial departments of Public Health Engineering and local councils. Environmental protection and housing are also under the domain of provincial governments. Traditional municipal functions are carried out by local councils which include garbage collection, emergency services, public transport, traffic planning, roads and streets, street lighting, firefighting and parks and playgrounds.

THE ROLE OF LOCAL GOVERNMENTS

An empowered, accountable and efficient local government that is capable of addressing the needs of the people and promoting democratic participation is imperative for appropriate allocation of resources and improved delivery of services. Local governments have been a somewhat neglected tier of government in Pakistan barring the experiment of the Devolution Plan 2001. Pakistan's history in decentralized governance had a unique feature till 2010 as all the local government reforms were initiated by non-representative military regimes. The democratic regimes undermined those reforms and they largely unwelcomed autonomous local governments, but this is not the case anymore.

The Eighteenth Constitutional Amendment passed in 2010 by a democratic regime can thus be considered as an achievement towards devolution as it empowered the provinces, and also gave constitutional protection to the local governments by making it obligatory for the provinces to devolve power to the local government institutions. The provinces now have greater legislative and functional responsibilities to promote decentralized governance. The Article 140 A of the Amendment declares:

(i) *Each Province shall, by law, establish a local government system and devolve political, administrative and financial responsibility and authority to the elected representatives of the local governments.*

(ii) *Elections to the local governments shall be held by the Election Commission of Pakistan.*

This was emphasized earlier in the constitution under the Article 32 – Promotion of Local Government Institutions:

> *The State shall encourage local Government institutions composed of elected representatives of the areas concerned and in such institutions special representation will be given to peasants, workers and women.*

Each province now has the discretion to devise its own local government system and the responsibility of holding local government elections. Following the constitutional amendment, the legislation regarding local governments suffered considerable delay in all provinces. The erstwhile Local Government Ordinance-2001 was abandoned in 2010 and the powers to run local government were transferred from elected representatives to bureaucrats. Balochistan was the first province to devise its Local Government Act (LGA) which was passed in May 2010. The other three provincial assemblies gave the approval to their respective Local Government Acts in 2013. Balochistan held local government elections in December 2013, while elections in the other three provinces have recently been held during 2015.

This is the first time in history that a local government system has not been devised from the centre or by a military regime. Provincial assemblies have adopted legislation according to their vision and with a sense of ownership. The system, therefore, is not uniform across the country. The extent of authority, allocation of functions, and fiscal discretions conferred to the local government varies in each province. It must be remembered that good local governance is not just about providing a range of local services, but also about achieving true participatory, liberal democracy that encourages civic dialogue, supports sustainable local development and facilitates outcomes that enrich the

quality of lives of the people (Anwar Shah, 2006). Since the current local governments are at a nascent stage of implementation, whether or not the enacted systems are capable of achieving these notions of good local governance is yet to be seen.

This chapter begins with a brief review of the previously enacted local government systems in Pakistan. It then analyses the structure, composition, authority and fiscal powers of the four Local Government Acts in a comparative perspective. A structural breakdown of all the tiers is followed by an analysis of the powers and authorities vested, and the range of functions and responsibilities given to the local government. The last section presents some potential implications of the current local government system for urban service delivery.

HISTORICAL EXPERIENCE OF LOCAL GOVERNMENTS IN PAKISTAN

The Indian sub- continent has had a local government system since the time of Kings and Monarchs. The British Government formally introduced local governments in the mid nineteenth century. Through the system the British attempted to co-opt the local elite, however these institutions were never truly empowered as the Deputy Commissioner; a district level agent of the non-representative central bureaucracy was the principle actor at the local level. An important feature of the British system of administration and local government was the creation of a rural-urban divide. Urban local councils were established by the British to provide essential municipal services in urban areas. In contrast, rural councils were explicitly used to homologize the local elite through a selective but extensive system of patronage (Siddiqui, 1992).

After independence, Pakistan inherited local body institutions from the British which were autonomous in certain respects but substantially under the control of the provincial governments through district officers. The status of the system remained elusive for a long period of 11 years due to lack of political consensus on the constitution. The priorities of the governments during that period remained divergent and the provincial governments had complete control over matters of municipal government. The budgets of the municipal committees were required to be approved by the Divisional Commissioners, and the local authorities were left entirely at the whims of district administration, thus rendering unprecedented control to the bureaucracy. This state of affairs continued to prevail and no remarkable progress was made until the military government led by General Ayub Khan experimented with the local government with the introduction of Basic Democracies Order in 1959.

Basic Democracies Order 1959

In 1958, General Ayub Khan imposed Marshall Law and installed The Basic Democracies Order which was the only representative tier of the government. The system comprised a hierarchical system of four linked tiers. The lowest tier was the union councils in the rural area and union committees in urban areas which consisted of directly elected members who in turn elected a chairman amongst themselves. The higher tiers of municipal government had some members elected indirectly by these directly elected members and some official members nominated by the government including the Chairman. Although the system assigned several functions ranging from social welfare to health and infrastructure, few functions could be performed due to a severely curtailed fiscal capacity. The controlling authority had vast powers to quash the proceedings, suspend resolutions passed or orders made by any local body. The bureaucracy was given extraordinary powers to determine the policy direction of the local bodies. The Basic Demands system was used as a contrivance to legitimize the rule of the military and the President's office (Gauhar, 1996).

Local Government Ordinance 1979

The 1970's witnessed a return to democracy and a unanimous approval of the Constitution in 1973. Despite the fact that the Constitution established promotion of Local Institutions as 'principles of policy' envisioned under Article 32, the two local government legislations – People's Local Government Ordinance 1972 and The People's Local Government Act 1975 were never implemented.

Under the military regime of General Zia-ul-Haq, the Local Government Ordinance (LGO) 1979 was promulgated. The Ordinance resembled Ayub's legislation in some aspects as it continued with the rural-urban divide and the local bodies continued to lack constitutional protection. This particular Ordinance created four levels of municipal government in the urban areas and a three tier system in rural areas. Under the LGO

1979, chairman/heads of the local councils were elected by the members. However, the provincial administration retained the suspension powers and the powers to quash resolutions. Basic municipal functions were transferred to local governments; for instance, solid waste management, street lighting, firefighting, etc. Allocation of some major social services – such as education, health and water supply – was made under the law (LGO 1979) but actually these functions were fully transferred. For revenue generation the local councils mainly depended upon government grants although some revenues were mobilized through local taxes. Revenues of certain taxes collected by the provincial governments were shared with the local councils such as property tax.

Local Government Ordinance 2001

Democracy returned in the country after the party-based General Elections of 1988 but the local governments were almost redundant as no election of local councils was held during the democratic regime – the local bodies remained suspended between 1993 and 1998. In 1999 General Pervez Musharraf took control of the government under Marshal Law; and promulgated the Local Government Ordinance in 2001 – popularly known as the 'Devolution Plan 2001'. This plan was significantly different from the earlier systems. The LGO 2001 abolished the urban-rural divide and established a three-tier system of district government. It devolved political, administrative and fiscal powers to the elected officials of local councils and brought all major social service departments, including education and health, under the control of the district government. The post of Deputy Commissioner was renamed as District Coordinating Officer (DCO), which was subordinate to the elected head of the district council – District *Nazim*. Similarly, district police chiefs became directly accountable to the District *Nazims*.

The lowest tier was the Union Council (UC) which consisted of directly elected members. The middle tier Tehsil Council comprised directly elected *Naib* (deputy) *Nazims* of each Union Council in the Tehsil. Whereas, the topmost tier was the District Council which had all the *Nazims* of Union Councils in the district as members. The LGO 2001 changed the political and social landscape of the country by bringing more than 150,000 people into the political arena and creating more than 6,000 councils (Shafqat, 2014). Another unprecedented step was the allocation of 33 percent of the seats for women's representation. Women were elected by a direct joint electorate at the UC level and indirectly at tehsil and district levels. This enabled more than 36,000 women to enter formal politics at the local government level in the first round (SPDC, 2007).

A Provincial Finance Commission (PFC) was established for formula-based transfer of funds to the local governments. The *Nazim* had the power to devise the budget of the districts however they had no influence on the allocation of PFC awards. The districts could also raise their own revenues through certain taxes; however these were meager; making them excessively reliant on provincial and ultimately federal funds.

The Provincial Local Government Commissions were constituted to resolve disputes between the provincial and district governments. The LGO 2001 provided for several conflict resolution mechanisms such as the Zila Mohtasib, Zila Mushavirat committee and Musalihat Anjumans. Finally grass root community participation for small-scale development projects was encouraged through Citizen Community Boards.

The 2001 LG system did succeed in expanding outlays on many social services, resulting in faster improvement in some social indicators. However, some problems also emerged such as coordination between provincial and local governments and among different tiers of local government, along with tension in the relationship between elected representatives and the local bureaucracy (SPDC, 2007). The staff of the district including the DCO continued to remain provincial government employees which limited the district council's authority to appoint, promote, transfer or discipline these employees. Postings/transfers of members of district cadres are an important source of mustering and exercising political influence (Marco Mezerra, 2010). In addition, there were serious limitations of capacity in lower levels of local government.

Since the system had limited constitutional support it was largely abandoned by the political governments in 2010 and the administrative authority was transferred to provincial bureaucracy. Finally, the 18th Amendment empowered the provinces to devise their own local government. However the system remained in a quandary until the LG Acts were passed in all the four provinces only after overcoming several political hurdles.

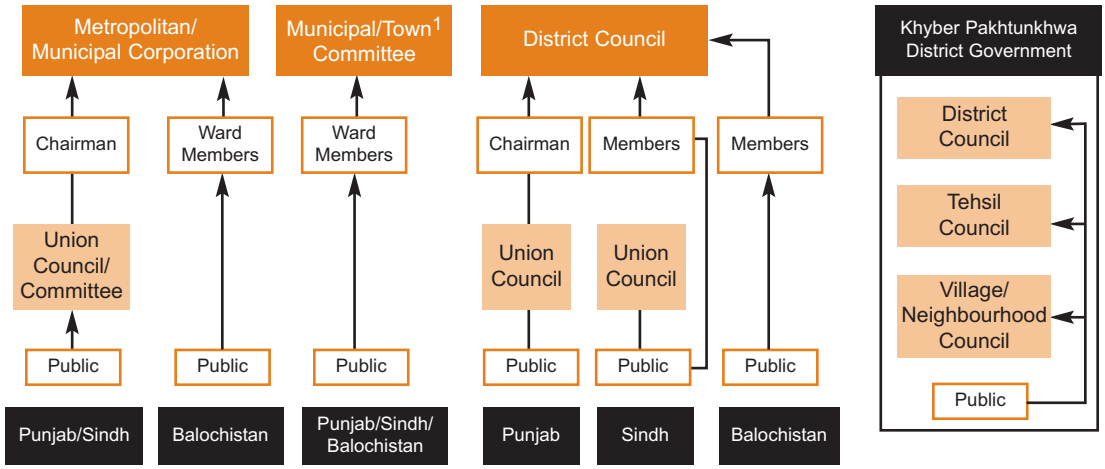
LOCAL GOVERNMENT SYSTEM AFTER THE 18th AMENDMENT

As mentioned earlier, all the provincial assemblies have passed local government acts for the establishment of a local government system and elections have been held. This section presents a comparative analysis of the Local Government Acts of the four provinces in terms of devolving political, administrative and fiscal responsibility and authority to the elected representatives of the local governments.

Structure of Local Governments

The system of local governments established in the province of Khyber Pakhtunkhwa is heavily inspired by the LGO 2001, where a District Government as a separate tier of the government has been developed with greater authority and responsibility as compared to other provinces. It consists of a District Council and District Administration. The districts are further divided in Tehsils where Tehsil Councils are elected. The lowest tier is Village Councils and Neighborhood Councils depending upon the areas with urban and rural characteristics respectively while there is no distinction in their functions and authorities.

Exhibit 6.2 Structure of local government in the provinces



1 Only Sindh

Source: Local Government Ordinances of provincial governments.

On the contrary, the Local Government Acts promulgated by Sindh, Balochistan and Punjab closely resemble LGO 1979 in their structural composition. The urban-rural divide has been brought back with the Union Council and District Council forming the two tiers in rural areas while urban areas have been largely divided into various levels of local councils depending upon the population size (with some variations among the three provinces). In Punjab and Sindh, these include Union Councils/Committees, Town/Municipal Committees, Municipal Corporations and Metropolitan Corporations[1]. There are no UCs in urban areas of Balochistan (Exhibit 6.2). In Punjab, Education and Health Authorities have also been created under LGO 2013, which is a parallel structure to the local bodies.

Composition and Extent of Representation

All the local councils in four provinces consist of heads, deputy heads, general members, and members representing specific segments/groups such as women, workers, peasants, youth and minorities. The composition, election method (direct/indirect) and extent of representation varies among the provinces.

In Khyber Pakhtunkhwa, all the members (including members on reserved seats) of a village/neighborhood council are directly elected (Exhibit 6.3). All the general members of district and tehsil councils are also elected directly by the same Electoral College. In this way, every voter has a direct role in selecting representatives at all levels of government. However, heads, deputy heads and members on reserved seats of district and tehsil councils are elected indirectly by the general members.

Exhibit 6.3 Method of election of local councils

	Punjab	Sindh	Balochistan	Khyber Pakhtunkhwa
Union Council/ Committee				**Village/ Neighbourhood Council**
Chairman/Vice Chairman	Direct	Direct	Indirect	Direct
General Members	Direct	Direct	Direct	Direct
Reserved Seats	Direct	Indirect	Indirect	Direct
District Council				**District Council**
General Members	Indirect	Direct	Direct	Direct
Chairman/Vice Chairman/Reserved	Indirect	Indirect	Indirect	Indirect
Metropolitan/Municipal Corporation				**Tehsil Council**
General Members	Indirect	Indirect	Direct	Direct
Chairman/Vice Chairman/Reserved	Indirect	Indirect	Indirect	Indirect
Municipal Committees				
General Members	Direct	Direct	Direct	
Chairman/Vice Chairman/Reserved	Indirect	Indirect	Indirect	

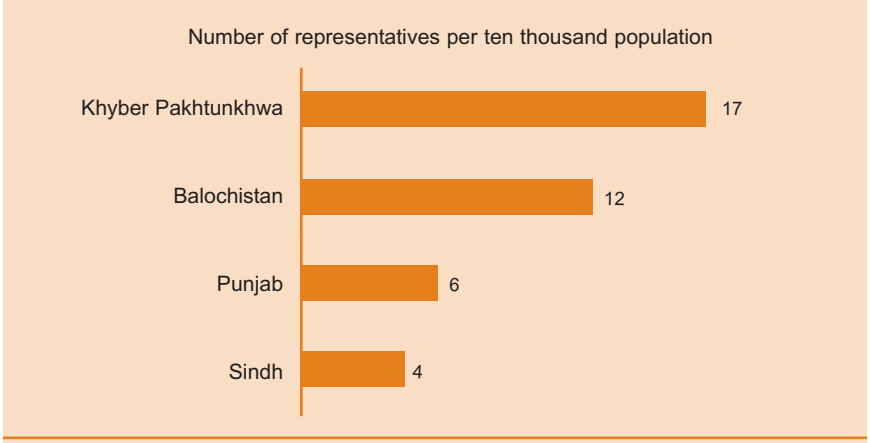
Source: LGAs of Provincial Governments

The election methods of both urban and rural councils in the other three provinces vary to a certain extent. In the case of Balochistan, direct elections are held only for general members of all councils while the remaining seats are filled by indirect elections.

The method of electing urban councils in Punjab and Sindh is almost the same. In metropolitan and municipal corporations, members of the lowest tier (UC) are directly elected and chairmen of these UCs constitute the upper level council. Members of councils in small cities/towns (municipal committees/town committees) are elected directly by public votes. As far as rural councils are concerned, all members of UCs (including on reserve seats) are directly elected, and chairmen of the UCs become members of a district council. In Sindh, however, in addition to general members of UCs, members of district councils (one per UC) are also elected directly.

Thus, a comparison of election methods of provinces reveals that the extent of citizens' participation for electing representatives of local government is relatively higher in Khyber Pakhtunkhwa since a voter has a direct role in electing members at all levels of government. This is followed by Balochistan where at least general members of all councils are directly elected. Khyber Pakhtunkhwa also has a greater number of elected representatives in proportion to population. As shown in Exhibit 6.4 on average there are 14 elected persons for a population of ten thousand in Khyber Pakhtunkhwa, which is substantially higher than the

Exhibit 6.4 Extent of public representation



Source: Election Commission of Pakistan, Pakistan Economic Survey 2014-15, GoP.

average in other provinces. This ratio is 12 in Balochistan followed by 6 and 4 in Punjab and Sindh. This is mainly because the population covered by the lowest tier of local government is considerably different in each province.

All the provinces, however, have considered the issue of equity in political participation by reservation of quotas for relatively marginalized segments of communities like women, minorities, peasants and workers. There are also reserved seats for youth in all provinces except Balochistan. The provinces of Sindh and Balochistan have kept a quota for 33 percent for women while Punjab and Khyber Pakhtunkhwa have reserved certain number of seats (instead of assigning percent quota) in every council which is equivalent to 28-30 percent at an aggregate level.

Devolution of Functions

The Khyber Pakhtunkhwa LGA 2013 fully devolves a group of 24 offices of the provincial government to the district government giving it financial and administrative authority[2]. These include major social and economic service departments such as primary and secondary education, health, social welfare, water supply and sanitation, agriculture (extension), livestock, communication and works, etc. The arrangement is fairly similar to that of LGO 2001. The elected District Council is responsible for the control, operation and management of the devolved offices. The Act stipulates that the coordination, human resource management, planning, development, finance and budgeting functions of all the devolved offices are the responsibility of the local government.

On the other hand, functional allocation in Sindh, Punjab and Balochistan is similar to that of LGO 1979 where basic municipal functions have been delegated to local governments such as water supply and sanitation, solid waste collection, roads and streets, street lighting, firefighting, parks and playgrounds, etc. The local bodies are responsible for provision,

maintenance, management and improvement of the services assigned to them. The offices of the government have been retained under the purview of the provincial governments. However, in some cases, local elected bodies have the responsibility to improve and supervise the functions of the line departments. A major difference among the three provinces is that the LGA of Sindh and Balochistan retain the divide of optional and compulsory list of functions as in the LGO 1979, whereas LGA Punjab separates the functions of health and education from the main local councils by establishing Education and Health Authorities.

These authorities will be set up by the provincial government to control, operate and manage education and health service delivery in the district. The authorities will have a majority of representation from local governments but will remain primarily under the control of the provincial bureaucracy since the chairman, vice chairman and chief executive officers of these authorities will be appointed by the provincial government.

Administrative Authority

The devolution of administrative authority, which is an integral prerequisite of Article 140-A of the Constitution, has been restrained in most cases with varying degrees of power delegated. Khyber Pakhtunkhwa LGA gives complete discretionary power to the elected *Nazims* to undertake administrative decisions concerning devolved offices and to initiate inspections of the tehsil municipal administration, village/neighborhood councils in the district through standing committees[3]. The village/neighbourhood councils have been authorized to supervise and monitor the performance of functionaries of the government offices.[4]

The LGAs of Punjab and Balochistan introduced certain provisions that the business of a district council is to be conducted in such manner as may be prescribed by the provincial government (i.e. it is not specified in the Act), leaving room open for conjecture that the bureaucracy will end up running the district affairs. The business of a district council is not specified in the Sindh LGA. Nevertheless, all the three Acts have rendered the executive authority to local governments for performing all the functions allocated under the respective LGAs. But how this authority will be exercised is yet to be seen since the chief executives or principal accounting officers of local governments will be from the provincial bureaucracy.

Local Government Boards: The Khyber Pakhtunkhwa Act specifies the powers and conduct of district councils, such as electing a Standing Committee for each office to oversee service delivery. Regarding the service matters of the employees it continues with the Local Councils Boards initially established under the 2012 Act, but ensures that service structures of Local Council services will be devised by the government within a year.[5]

Sindh LGA constitutes the Local Government Board, however the functions and membership of the board has not been specified. The Act also provides for Divisional and District Local Boards if required however their role also seems unclear[6]. In Karachi, the situation is slightly different as the Service Board constituted by the provincial government will have representation of the District Municipal Corporation. The Balochistan Local Government Board retains the power to deal with service matters of employees of Local Government.[7] In Punjab the power to make appointments, order transfers, take disciplinary action and deal with other service matters has been fully retained by the Punjab Local Government Board[8]. The members of this board shall be appointed by the Provincial government. This leaves little room for elected members to exercise supervisory control.

Inter-Governmental Relations

With regard to accountability and dispute resolution, LGAs of Sindh, Punjab and Khyber Pakhtunkhwa provide for the establishment of a Local Government Commission (LGC) while the same function is allocated to a Divisional Coordination Committee in Balochistan. It is also interesting to note that all the provinces have retained varying degrees of authority to oversee the conduct of local governments through LGCs, which are authorized to conduct inspections and audits of the local governments. They are responsible to the provincial government and recommend necessary actions to be taken[9]. The decisions of the Commission are binding to the local councils. A similar function is carried out by the inspecting officer in Balochistan. The LGCs will consist of the provincial minister of local government (as chair), two members of provincial assemblies, two technocrats and secretaries of various provincial departments. There is no representation of elected local government representatives LGCs.

In Balochistan every division has a Divisional Coordination Committee, to coordinate the matters of the local councils. It is headed by the Commissioner and the members of this committee are the elected Mayors and Chairmen of all local bodies in the district; heads of departments of both provincial and federal government and the collector of the district. It has representation from the reserved seats. This Committee has the power to scrutinize and sanction the budget of the local bodies, and make decisions regarding the taxation authority of the local councils. This Committee is also authorized to resolve any conflicts among the departments and councils[10].

The Chief Ministers in all the provinces have the power to dismiss a local government or head of council and appoint officeholders after the dismissal of council heads. In Punjab, the government can suspend local government officials for 90 days, in Sindh for 6 months, and in Khyber Pakhtunkhwa and Balochistan for 30 days. During and after this period the dismissed officials can file review petitions to the provincial governments.

Fiscal Devolution

The revenue sources of the local governments are the amounts raised through taxes, fines, tolls, etc. and its share in the Provincial Consolidated Fund which is disbursed as grants from the provinces including the grants in lieu of Octroi and Zila Tax. Provincial grants constitute the major source of revenue of the local governments. Provincial Finance Commissions (PFCs) in Punjab, Sindh and Khyber Pakhtunkhwa have been established to disburse funds to the local governments through a formula-based transfer mechanism. In Balochistan a similar function is performed by the Local Councils Grants Committee. The taxes levied by the local governments are almost the same in all provinces. Some major taxes and fees include urban immoveable property tax, tax on transfer of immoveable property, conservancy charges, parking fees, license, permits etc.

Punjab and Sindh consider principles of population, backwardness, need and performance of a council while Balochistan emphasizes need, capacity, effort and performance of local councils while making recommendations for fiscal transfers. In Khyber Pakhtunkhwa, resource distribution formula includes population, poverty, lack of infrastructure and revenue. As far as the composition of PFCs is concerned, these are predominantly represented by provincial government, though there is some representation of local councils as well. The PFCs are chaired by the provincial finance minister with the minister of local government as co-chair. Other members include secretaries of various departments, members of provincial assemblies and professionals from private sector (in Punjab and Sindh). In the case of Punjab and Sindh, one head from each level of local council will be nominated by provincial government as member of PFC. In Khyber Pakhtunkhwa, two district *Nazims* and two tehsil *Nazims* will be elected by the district and tehsil councils. Given the limited powers and scope of local taxation, composition of PFCs, and the fact that all members of PFC are nominated by provincial government (with the exception of representation of local councils in Khyber Pakhtunkhwa), it appears that local governments will be excessively reliant on provincial government for their fiscal needs.

POTENTIAL IMPLICATIONS FOR SOCIAL SERVICE DELIVERY

As mentioned earlier, local government elections in three provinces have been held very recently and the implementation mechanism of the system are yet to be rolled out, therefore, it would be too early to judge whether the new local governments would be able to play an effective role in improving the delivery of social services. Nonetheless, some expectations can be laid out by considering the extent of devolution that has been provided through provincial LGAs, particularly with reference to the experience of the Devolution Plan 2001.

Exhibit 6.5 presents a comparison of some social sector indicators during the indicated three periods – pre 2001, during 2001 and 2008, and post

2008. For the sake of analysis, the period of 2001 to 2008 is termed as Devolution Plan 2001. Although the system was largely abandoned in 2010, it worked in full swing till 2008. It is important to note that the comparison does not aim to evaluate the performance of the Devolution Plan 2001 yet it does help in bringing clarity to the trend particularly during the three periods. The indicators are selected on the basis of availability of consistent data.

The first indication that we have from these numbers is that the rate of enhancement in literacy of the population has increased perceptibly during the Devolution Plan 2001. During the six years prior to this period, the annual increase in the literacy rate was 2.4 percentage points which increased to 3.7 during 2002-08 and then declined to merely 0.7 percentage points. A similar trend is observed in net primary enrolment rates, child immunization rates and percentage of population with access to tap water. Earlier, a study conducted by SPDC (2007) has also shown that social indicators, particularly related to literacy, enrolment, and water supply improved substantially during the Devolution Plan. Similarly, a social audit was conducted by Community Information Empowerment & Training International (CIET) in 2004-05 following a baseline audit of 2001-02 for comparison over time of citizens' views, on the use and experience of public services under devolved local government. The results of the survey indicated that people perceive some improvement in delivery of public services.

Keeping in view the trend during the Devolution Plan 2001, it can be expected that the new local governments will be able to play a significant role in improving the deteriorating condition of social services if they are provided with sufficient authority and resources. However, the progress in social indicators may vary according to the degree of decentralization that exists among the provinces.

In this regard, prospects of improvement in social service delivery appear to be higher in Khyber Pakhtunkhwa as all the related offices have been devolved to the local governments with sufficient authority and responsibility. On the contrary, limited functions have been devolved in

Exhibit 6.5 Selected indicators of social development in Pakistan

Indicators	1996	2002	2008	2014	Annual growth rate (%)		
					1996-2002	2002-2008	2008-2014
Literacy rate	39	45	56	58	2.4	3.7	0.7
Net enrolment rate (primary)	44	42	55	57	-0.8	4.6	0.7
Child immunization (12-23 month)	-	53	73	76	-	5.5	0.8
Access to tap water	25	25	36	26	0	6.3	-6.3

Sources: Pakistan Integrated Household Survey 1995-96 Pakistan Living Standards Measurement Survey (2004-05, 2007-08 and 2013-14) | Pakistan Economic Survey (2014-15)

other provinces. For example, as discussed earlier, education and health have been retained with the provincial governments in Sindh and Balochistan. However, Sindh LGA makes a provision for urban councils to monitor the facilities related to primary education and primary health and report any violations, failures, omissions in service provision to the provincial government. But the monitoring function without any powers to take action is more likely to be less effective. In the case of Punjab, Education and Health Authorities have been awarded the responsibility and authority to establish, manage and supervise school education and primary/secondary healthcare facilities and institutions. As mentioned earlier, these authorities will have majority of representatives from local councils but will be controlled by the provincial government. Effectiveness of the local councils will become clear once the authorities are in place.

As far as the function of water supply and sanitation (WSS) is concerned, it is generally allocated to local governments in Punjab, Sindh, and Balochistan. However, in urban centres, local governments have little or no role in the delivery of these services. The LGAs treat metropolitan cities of Karachi and Lahore as typical local governments with limited authority. For instance, Karachi Water and Sewerage Board (KWSB) and the Sindh Building Authority (SBA) remain subject to the authority of the provincial minister for Local Government. In Punjab, Lahore Development Authority (LDA), Parks and Horticulture Authority and Solid Waste Management remain beyond the control of local government. This can restrain metropolitan growth and deprive the residents from gaining a share in economic development. Literature on fiscal federalism suggests that large metropolitan areas should have autonomous two-tier regional governments with powers equivalent to that of a province and direct interface with the center (Shah, 2012). Similarly, in the other large cities of Punjab and Sindh such as Rawalpindi, Faisalabad, Multan, Gujranwala, and Hyderabad, the function of WSS is delegated to Water and Sanitation Agencies (WASAs), which are subsidiaries of Development Authorities (DAs) of respective cities. The Mayor of municipal corporation serves on the board of DAs as a member but primarily the WASAs remain out of bound for local governments. In this way, local governments in a large urban centre, which cover more than 50 percent of the urban population, do not have a meaningful role to play in the delivery of water supply and sanitation services.

In general the current episode of local government reform initiated by the provinces can be termed as ‘devolution without delegation’, with the exception of Khyber Pakhtunkhwa. Thus, it would be rather simplistic to assume that local governments will be able to contribute in a big way to enhancing the level of social development in the country unless the existing approach towards devolution is revisited and local governments are given sufficient authority and resources to address the challenges of social services delivery at local level.

NOTES:

1. In the city of Karachi, there are District Municipal Corporations (DMCs). Karachi has six districts and each DMC will consist of a vice chairman of all UCs of the respective district.
2. Khyber Pakhtunkhwa LGA 2013, Sec 12
3. Khyber Pakhtunkhwa LGA 2013, Section 14, h,i
4. Khyber Pakhtunkhwa LGA 2013, Section 29
5. Khyber Pakhtunkhwa LGA 2013, Section 118
6. Sindh LGA 2013, Section 130, 131
7. Balochistan LGA 2010, Section 70
8. Punjab LGA 2013, Section125
9. Punjab LGA 2013, Section 123, Sindh LGA 2013, Section 120, Khyber Pakhtunkhwa LGA 2013
10. Balochistan LGA 2010, Section 131

Geographical Unevenness in Urban Human Development

7

CHAPTER 7

There are large spatial disparities in the level of human development across cities of diverse size.

7 Geographical Unevenness in Urban Human Development

The Human Development Index (HDI) of the United Nations Development Programme (UNDP) was created to re-emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country or a region, and not economic growth alone. Thus, the HDI draws the attention of policy makers away from the usual economic statistics. This summary measure also highlights differences within countries, between provinces or states, as well as other socio-economic groups. Highlighting internal or regional disparities with the help of HDIs has raised the national discourse in many countries. It opens the debate on how countries/regions with the same level of income per person can end up with different human development outcomes.

The UNDP-HDI is a composite index that measures the average achievements in a country/region in three basic dimensions: a long and healthy life, knowledge, and a decent standard of living. Since 1990 UNDP develops Human Development Indices annually for all economies of the world. According to the latest Human Development Report (2015), Pakistan ranks 147th out of 188 countries of the world with the HDI magnitude of 0.538 which categorizes Pakistan in the group of 'Low Human Development' countries.

In relation to sub-national HDIs in the context of Pakistan, the first attempt was made by UNDP-Pakistan in its National Human Development Reports 2003 (UNDP, 2003) for the year 1998. Due to data constraints at regional level, Pakistan NHDR used some crude proxies for income and health components. Jamal and Khan (2007) updated sub-national HDIs for the year 2005 by using standard UNDP-HDI indicators for the health and education components. However, they were also not able to use a better proxy for regional income. Both studies used agriculture and manufacturing value-added as a measure of the income of regions/districts. Thus, the income component was underestimated due to non-representation of the service sector which is a major source of income in various parts of the country. Further, information on sectoral (agriculture and manufacturing) value added were based on various unauthentic supply-side sources.

In this context, this study for the first time develops sub-national HDIs for urban Pakistan from the demand-side information with provides better proxies of HDI dimensions. Large household survey data of Pakistan Social and Living Standard Measurement (PSLM) survey for the year 2012-13 is used for developing regional HDIs. PSLM is a district-level

Exhibit 7.1	Dimensions of human development used in this study
Access to knowledge	
Education	Adult literacy rate
	Enrollments in 5-24 years age cohort
Long and healthy life	
Child health	Immunization – Polio
	Child delivery at hospitals/nursing homes
Maternal health	Prenatal care
	Postnatal care
	Had Tetanus injection
Living standard	
Income	Household income per capita

representative survey, and covers more than 75,000 households across four provinces of Pakistan and is statistically comparable with the data of Pakistan's Population Census, with some margin of sampling error.

COMPONENTS OF URBAN HDIs

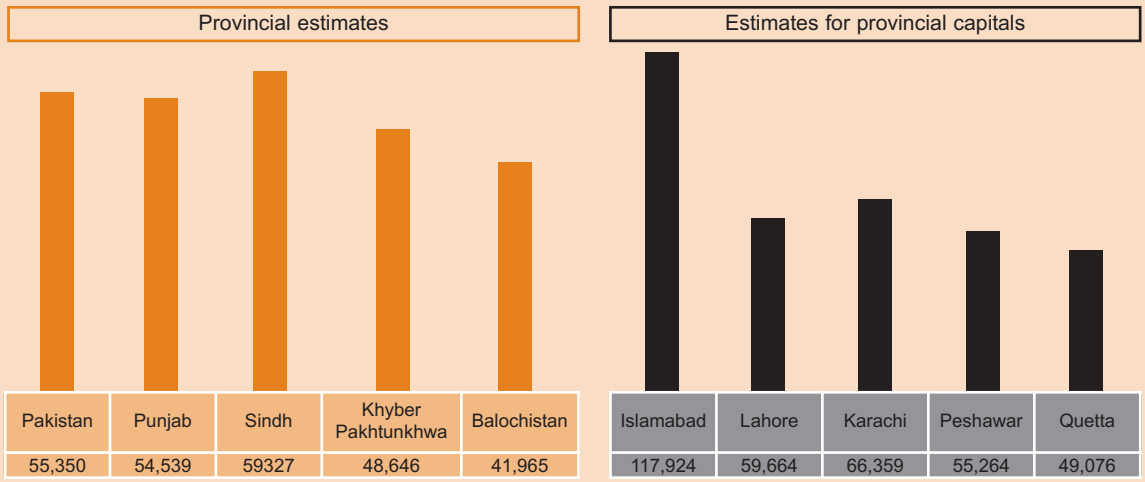
The use of standard UNDP-HDI indicators is not feasible due to non-availability of relevant data at sub-national or city level. Thus, an attempt has been made to construct the best proxies for education, health and standard of living components of HDI. The selected proxies are highlighted in the Exhibit 7.1 while brief description of these components and adopted methodology for combing HDI ingredients is provided in the Appendix A.3. The standard UNDP-HDI components and methodology is also furnished in the appendix for information and comparison.

ESTIMATES OF AGGREGATED HOUSEHOLD INCOME

Average annual per capita income of provinces and across capital cities are presented in Exhibit 7.2. The observed provincial differences are in accordance to a priori expectations. In terms of ranking for urban areas, highest average income is observed in Sindh (Karachi factor), while the lowest is estimated for Balochistan. On the average, the study estimates annual per capita income around Rupees 56,000 for urban Pakistan. In terms of per capita income of capital cities, the federal capital is ranked first with an average annual income of Rupees 0.12 million, followed by Karachi. Subsequently, Lahore, Peshawar and Quetta stand at 3rd, 4th and the 5th position in descending order.

The information regarding provincial per capita income disaggregated by city size is provided in Exhibit 7.3. According to the Pakistan Bureau of Statistics (PBS), the urban sample is stratified as follows: "Large sized cities[1] having population five lacs and above are treated as independent stratum……the remaining cities/towns are grouped together to constitute an independent stratum". Thus, the disaggregation of urban areas in terms of large and small cities is statistically feasible.

Exhibit 7.2 Estimates of per capita income for urban areas
Average annual rupees



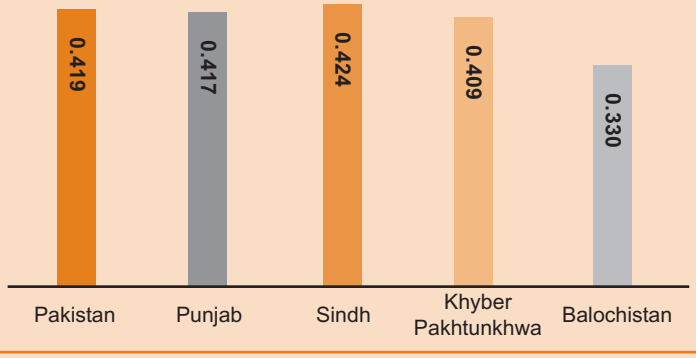
Source: SPDC Estimates based on data of PSLM, 2012-13.

Exhibit 7.3 Per capita income – City size scenario
[Average annual rupees]

	Small cities	Large cities
Pakistan	46,381	61,461
Punjab	48,481	59,901
Sindh	42,413	64,054
Khyber Pakhtunkhwa	44,851	55,264
Balochistan	37,602	49,076

Source: SPDC Estimates based on data of PSLM (2012-13).

Exhibit 7.4 Inequality in per capita income – urban Pakistan
Estimated Gini Coefficients



Source: SPDC Estimates based on data of PSLM (2012-13).

Exhibit 7.3 reveals that on average per capita income in large cities is 33 percent higher than small cities. This proportion is highest (51 percent) in Sindh, while in Punjab and Khyber Pakhtunkhwa average per capita income is about 23 percent higher in large cities than in small cities.

The inequalities in district per capita income as represented by *Gini* coefficients are presented in the Exhibit 7.4. Inequality magnitudes are low for Khyber Pakhtunkhwa and Balochistan as compared to the other provinces. The highest (0.424) magnitude of *Gini* is observed for urban Sindh, while the income inequality is significantly low for Balochistan according to the estimated *Gini* coefficient of 0.33. Overall, the magnitude of *Gini* for urban Pakistan is estimated at 0.419.

ESTIMATES OF HUMAN DEVELOPMENT INDICES

The estimated HDIs for the urban population of Pakistan by province and by large cities for the year 2012-13 are presented in Exhibit 7.5 while district-wise estimates are given in Exhibit 7.6. Provincial estimates are derived by taking the population weighted averages of HDIs for the respective districts[2].

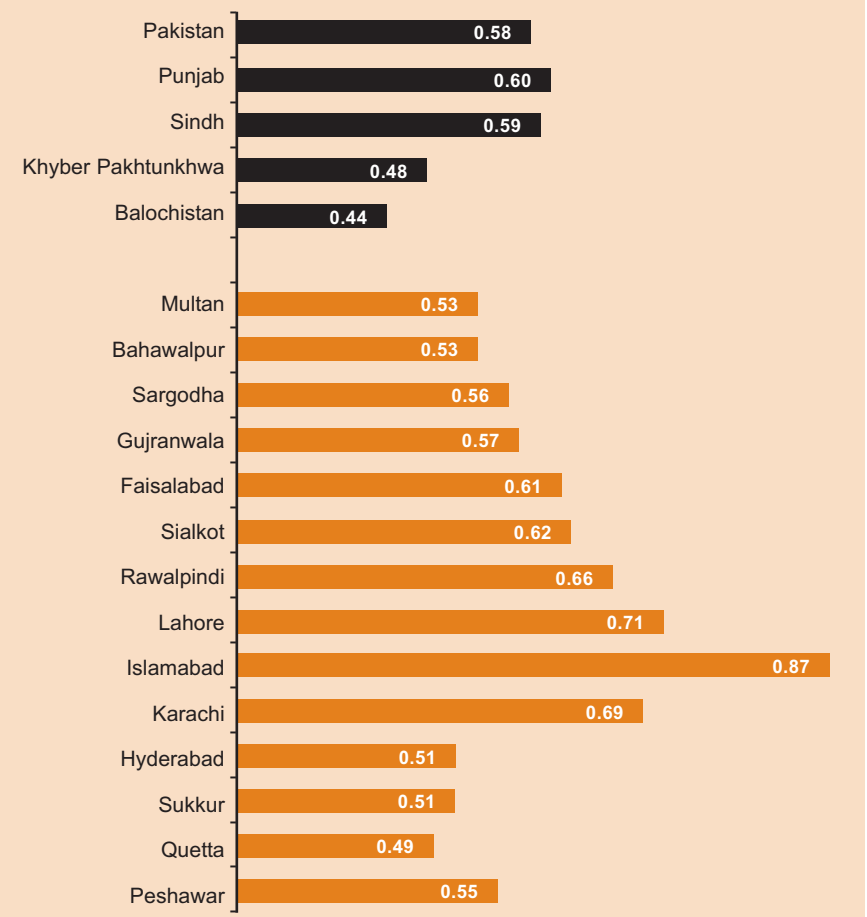
According to UNDP Human Development Report 2015, Pakistan ranks 147 out of 188 countries with the HDI magnitude of 0.538 for the year 2014. Besides the differences in the methodology and component indicators, this study estimates the level of development in urban Pakistan only and therefore the comparison of the estimated HDI with the UNDP figure is not justified. However, upward estimate (0.58) of urban HDI is expected due to the exclusion of the rural population where human development is considered to be low.

The provincial ranking in terms of level of human development is also unsurprising and it is according to a priori expectation. Highest level of urban human development is estimated for Punjab cities followed by Sindh, Khyber Pakhtunkhwa and Balochistan. However, according to the UNDP categories[3], cities of Khyber Pakhtunkhwa and Balochistan are placed in the 'Low Human Development' category, while Punjab and Sindh lie in the category of 'Medium Level of Human Development'.

Following the UNDP classification of level of human development, large cities Multan and Bahawalpur from Punjab, Hyderabad and Sukkur from Sindh and the provincial capital Quetta lie in the category of 'Low Human Development' (Exhibit 7.5). Excluding Lahore, other large cities of Punjab (Faisalabad, Gujranwala, Sialkot, Rawalpindi and Sargodha) take the position of medium level of human development. In terms of estimated level of human development, Karachi is behind Lahore which is placed in the high level of human development category. As expected, the highest HDI is estimated for the federal capital Islamabad.

Exhibit 7.6 portrays spatial disparities in the level of human development across cities of diverse size. The exhibit clearly reveals that with the exception of Karachi, all cities of Sindh province and all cities of Balochistan including the capital city Quetta are gathered in the category of low level of human development. In contrast, the federal capital and the provincial capital of Punjab lie in the very high and high category of level of human development respectively, while about 50 percent cities of Punjab are classified in the category of medium level of human

Exhibit 7.5 Estimated Human Development Indices – urban Pakistan



Source: SPDC Estimates based on data of PSLM (2012-13).

development. The distribution of cities in Khyber Pakhtunkhwa province is also not lopsided and the magnitudes of HDIs in three cities (Peshawar, Manshera and Haripur confirm their position in the category of medium level of development. The estimated HDI for Abbottabad city of Khyber Pakhtunkhwa province is 0.7 which classified it in the category of high level of human development.

NOTES:

1. According to PBS these cities are; Bahawalpur, Faisalabad, Gujranwala, Sialkot, Lahore, Multan, Rawalpindi, Sargodha, Hyderabad, Karachi, Sukkur, Peshawar, Quetta and Islamabad.
2. To avoid aggregation bias, it was preferred to show provincial HDIs by taking population weighted averages of districts' magnitude of HDIs. Nonetheless, no considerable differences are observed in both estimations methods. The direct estimates of provincial HDIs are 0.60, 0.61, 0.50 and 0.45 for Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan provinces respectively.
3. UNDP classifies countries into low, medium, high and very high level of development according to HDI magnitudes of <0.55, >=0.55, >=0.7 and >=0.8 respectively.

Exhibit 7.6 Estimated Human Development Indices for urban Pakistan

Punjab				Sindh		Khyber Pakhtunkhwa		Balochistan	
Low level HD		**Medium level HD**		**Low level HD**		**Low level HD**		**Low level HD**	
Rahim Yar Khan	0.37	Chiniot	0.56	Badin	0.30	Charsada	0.27	Qilla Abdullah	0.13
Lodhran	0.41	Sarghodha	0.56	Shahdadkot	0.35	Karak	0.28	Musa Khel	0.23
Hafaizabad	0.45	Jhang	0.57	Kashmore	0.36	Mardan	0.38	Jaffarabad	0.29
Khanewal	0.47	Gujranwala	0.57	Ghotki	0.38	Swabi	0.39	Harnai	0.29
Kasur	0.48	Narowal	0.57	Tharparkar	0.39	Upper Dir	0.4	Kharan	0.30
Bhakar	0.48	Sheikhupura	0.57	Jaccobabad	0.40	Nowsehra	0.4	Dera Bugti	0.30
Rajanpur	0.51	Jehlum	0.59	Larkana	0.40	Lakki Marwat	0.42	Nasirabad	0.33
Ättock	0.51	Nankana Sahib	0.6	Thatta	0.41	Hangu	0.42	Nauski	0.34
Mianwali	0.51	Faisalabad	0.61	UmerKot	0.41	Tank	0.43	Sibbi	0.35
D.G Khan	0.52	Sialkot	0.62	Tando Mohd Khan	0.42	D.I.Khan	0.44	Bolan/Kachhi	0.36
Khushab	0.52	Layyah	0.63	Shikarpur	0.42	bannu	0.49	Chaghi	0.37
Bhawanagar	0.53	Okara	0.63	Khairpur	0.42	Kohat	0.49	Loralai	0.37
Bahawalpur	0.53	Gujrat	0.64	Mirpur Khas	0.43	Swat	0.49	Pashin	0.38
Muzaffar Garh	0.53	Mandi Bahauddin	0.64	Dadu	0.45	Malakand	0.5	Kohlu	0.39
Multan	0.53	Pakpatan	0.65	Mitiari	0.46	Lower Dir	0.53	Lasbella	0.40
T.T Singh	0.54	Rawalpindi	0.66	Tando Allah Yar	0.46	Chitral	0.54	Zhob	0.42
Vehari	0.54	Sahiwal	0.66	Nowshero Feroze	0.48			Jhal Magsi	0.43
		Chakwal	0.67	Nawabsha	0.49			Kalat	0.44
				Hyderabad	0.51			Barkhan	0.45
				Sanghar	0.51			Keych/Turbat	0.48
				Sukkur	0.51	**Medium level HD**		Ziarat	0.48
				Jamshoro	0.54	Peshawar	0.55	Quetta	0.49
		High level HD				Manshera	0.6	Qilla Saifullah	0.51
		Lahore	0.71			Haripur	0.63	Mastung	0.52
Very High level HD				**Medium level HD**		**High level HD**		Gawadar	0.52
Islamabad	0.87			Karachi	0.69	Abbottabad	0.70	Khuzdar	0.53

Source: SPDC Estimates based on data of PSLM (2012-13).


FATIMA TRADERS
SAZGAR
FIREBRIGADE
LEADER
LEADER

Counting the Poor in the Urban Context

8

The urban poor faces employment and health issues rather than development issues.

8 Counting the Poor in the Urban Context

From the Government's policy perspective, poverty in Pakistan is considered to be a rural phenomenon and has received attention accordingly. Majority of the poverty alleviation programmes consist of development of rural infrastructure and safety nets for the rural population. In contrast, the urban poor faces employment and health issues rather than development issues. The international literature on urban poverty suggests that issues like low economic growth, food inflation, lack of employment opportunities and poor health infrastructure are the main determinants for the rise in urban poverty in the developing world.

With the rapid growth of the urban population, it is imperative that the government develops specific interventions as a priority, to address urban poverty. To facilitate the process of formulating an urban poverty alleviation strategy, this chapter presents a situation analysis and an appraisal of urban poverty in Pakistan. A brief description of social protection instruments has been added to understand the government response to poverty in urban areas.

POVERTY ESTIMATES

Traditionally, Household Integrated Economic Surveys (HIES) are used to estimate poverty in Pakistan. These national representative surveys are carried out by the Pakistan Bureau of Statistics (PBS) with a sample of around 17,000 households across the country. Individual household level (unit record) data of HIES are used to estimate poverty from the consumption data.

Estimation of Consumption Poverty Line

Among the various approaches of defining traditional or consumption poverty, 'calorific approach' is the most popular in developing countries due to its practicality. In almost all studies of poverty in LDCs including Pakistan, poverty level is defined in terms of food inadequacy which is typically measured by the lack of nutritional (calorie) requirements. The Government of Pakistan also adopted this approach for estimating the official poverty line. According to the Poverty Reduction Strategy Paper (PRSP-I, GoP, 2003), the Planning Commission identified the following definition for estimating the poverty line.

"Calorific requirement approach wherein all those households (or individuals) are classified as poor who do not have income sufficient to allow a consumption pattern consistent with minimum calorie

requirements (2350 calories per adult equivalent per day). It is also assumed that the households earning incomes equivalent to poverty line not only have sufficient food to meet the minimum nutrition requirements but also the non-food requirements".

However, Government of Pakistan does not estimate separate urban and rural poverty lines. As the rural lifestyle in general requires a greater consumption on calories than the urban lifestyle, then for any given level of income, rural households are likely to consume more calories, on average, than their urban counterparts. Thus, poverty estimates derived from official methodology using unique poverty line for both urban and rural households underestimate rural poverty and overestimate the urban poverty. To redress this deficiency, the Poverty Research Unit of the Social Policy and Development Centre (SPDC) estimates separate urban and rural poverty lines using 2,230 and 2,550 calories per day per adult as the minimum calorie requirement[1] for urban and rural areas respectively.

To estimate household expenditures which are required for obtaining the minimum required calories, Calorie-Consumption Function (CCF) is estimated. The poverty line is computed by combining calorie norms (minimum calorie requirements) and estimated coefficients of the CCF. Poverty can then be used to define the poor by total expenditure falling short of the poverty line by the average dietary pattern the expenditure would translate into fewer calories than required.

Once a poverty line is defined, and the household poverty status determined through relating poverty line and household expenditure, the question arises; how can this information be aggregated into a single index to proxy the status of a group of individuals/households? The most popular measure, namely the Headcount Index (incidence) assigns equal weights to all poor regardless of the extent of poverty. However, there are other measures which are sensitive to distribution among the poor and

Box 8.1 FGT poverty aggregates

Various poverty aggregates (indices) are used to proxy the status of a group of individuals. A class of functional forms, which has been suggested by Foster, Greer, and Thorbeke (FGT, 1984), uses various powers of the proportional gap between the observed and the required expenditure as the weights to indicate the extent of and level of intensity of poverty. The higher the power the greater the weight assigned to a given level of poverty. Therefore, it combines both incidence and intensity. The following formula is used for measuring various poverty aggregates.

$$P^{\alpha} = (1 / N) \sum [(Z - EXP) / Z]^{\alpha}$$

Where; P^{α} = Aggregation measure
N = Total number of households
EXP = Observed household total expenditure
Z = Poverty Line
$\sum$ = Summation for all individuals who are below the poverty line

Putting $\alpha = 0$, the formula shows the proportion of households whose consumption falls below the poverty line. This poverty incidence or headcount is the most popularly used in poverty empirics. The formula assigns equal weights to all of the poor regardless of the extent of poverty.

Putting $\alpha = 1$, the Proportionate Gap Index or Poverty Gap (PG) is calculated. The PG measures the average distance from the poverty line. Although the PG shows the depth of poverty, it is insensitive to distribution among the poor.

Putting $\alpha = 2$, FGT2 index is calculated. This index takes into account inequality amongst the poor and shows the poverty severity by assigning greater weights to those households who are far below the poverty line.

Thus, these three aggregate indices (Headcount, Poverty Gap, and Poverty Severity) are computed to give a picture of the extent and severity of poverty.

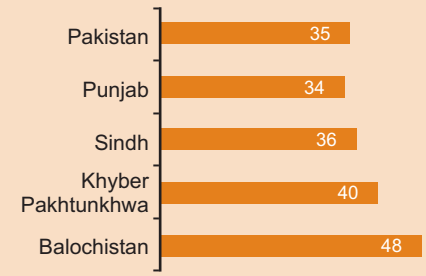
combine both the incidence and intensity of poverty. Three aggregate measures/indices are estimated: headcount, poverty gap and poverty severity. The formulae and the weights assigned to these indices are described in Box 8.1.

Recent Estimates of Urban Poverty

The estimated urban poverty line (Rs 3,054 per adult equivalent or Rs 2,606 per capita per month) from the latest available HIES data for the year 2011-12[2] is mapped on household per capita total expenditure for computing various poverty measures or aggregates. Exhibit 8.1 displays the estimated statistics of poverty incidence (headcounts).

Exhibit 8.1 Estimates of poverty incidence: 2011-12

Percentage of urban population below poverty line



Source: Estimated from household level data of HIES, (2011-12).

Exhibit 8.2 Estimated urban poverty measures - 2011-12

	Headcount Index [Incidence]	Poverty Gap Index [Depth]	FGT2 Index [Severity]
Pakistan	35.46	7.75	2.45
Punjab	33.97	7.73	2.52
Sindh	35.86	7.41	2.24
Khyber Pakhtunkhwa	39.54	8.39	2.54
Balochistan	47.79	10.5	3.13

Source: Estimated from household level data of HIES (2011-12).

It is estimated that about 35 percent of the urban population of Pakistan was poor during 2012. As expected, urban poverty is the lowest in Punjab and highest in Balochistan. The magnitude of urban poverty in Sindh is around 36 percent which is close to the national average. In contrast, the poor population in the urban domain of Khyber Pakhtunkhwa and Balochistan is estimated at 40 and 48 percent respectively.

Exhibit 8.2 summarizes the famous FGT[3] aggregate measures of poverty. Besides incidence or headcount, no significant differences are observed in the Poverty Gap Index (PGI) or poverty depth across Punjab and Sindh. Nonetheless, the PGI which informs the required per capita contribution to lift poor people out of poverty (as a proportion of the poverty line) is significantly higher in Khyber Pakhtunkhwa and Balochistan in comparison to the other two provinces. Moreover, the magnitude of poverty severity is also high for Balochistan. It is however important to note that poverty depth and severity indices are notional and are generally used to rank regions or territories or to track changes over time.

Trends in Urban Poverty

The poverty incidence trends since 1987-88 are portrayed in Exhibit 8.3. All these poverty numbers are estimated using unit record household level data of HIES and by applying a consistent and identical methodology throughout for estimating the poverty line and poverty indices. The analysis indicates a rising trend in the urban poverty numbers upto 2001-02. Subsequently poverty declined with an annual growth rate of 2.2 percent during 2002-2005. However, in the later years, a rising trend can be observed after 2004-05.

Exhibit 8.3 Inter-temporal incidence of urban poverty

Percentage of poor population in urban areas

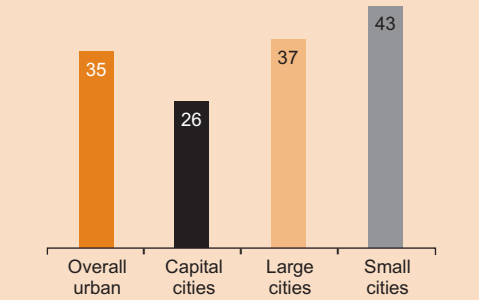
	Urban poverty incidence	Annual cumulative growth rate
1987-88	19	-
1996-97	25	3.5
1998-99	25	0.0
2001-02	30	6.7
2004-05	28	-2.2
2010-11	34	3.6
2011-12	35	2.9

Source: Estimated from household level data of HIES (various issues).

Disaggregated Incidence of Urban Poverty

According to the Pakistan Bureau of Statistics, the HIES urban sample is stratified as follows: "Large sized cities having population five lacs and above are treated as independent stratum. Each of these cities is further sub-stratified into low, middle and high income groups, while the remaining cities/towns are grouped together to constitute an independent stratum". Thus, the disaggregation of urban areas in terms of large and small cities for the purpose of poverty estimation is statistically feasible. This particular research provides estimates of poverty incidence at the levels of capital cities, other large cities (excluding capital cities) and small cities/towns.

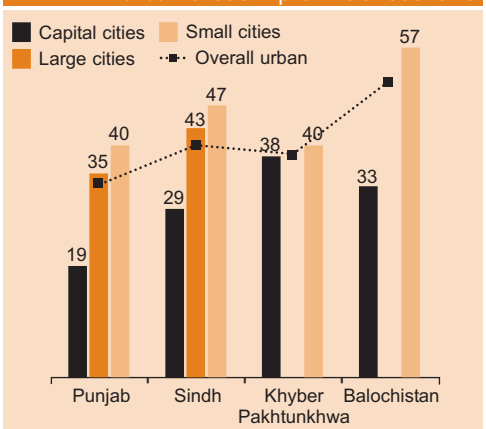
Exhibit 8.4 Percentage of poor population in urban Pakistan, 2011-12



Source: Estimated from household level data of HIES (2011-12).

According to Exhibit 8.4 which portrays the disaggregated poverty incidences, the highest incidence is estimated for small cities and towns. On average, 43 percent residents of towns are categorized as poor. This finding however is consistent with the earlier studies undertaken by Ercelawn, (1992) and Jamal (2005 and 2007). The percentage of poor population living in large cities other than capital cities is estimated at 37, while about 26 percent of the population is deprived in provincial and federal capitals.

Exhibit 8.5 Percentage of poor population in urban areas – provincial scenario

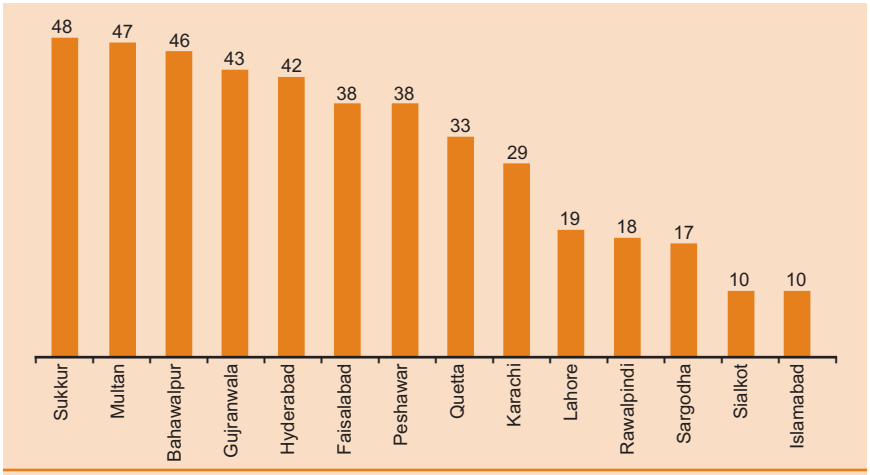


Source: Estimated from household level data of HIES (2011-12).

The provincial scenario is presented[4] in Exhibit 8.5. With the exception of Khyber Pakhtunkhwa, significant differences are observed regarding poverty incidence in capital and small cities of all the four provinces. Particularly in Punjab, the incidence in bigger cities is almost double compared to the provincial capital Lahore.

The estimated poverty headcount at the city level are given in Exhibit 8.6. High incidences of poor population in Hyderabad, Sukkur and Multan are expected due to prevailing socio-economic conditions in these cities. However, high poverty estimates for

Exhibit 8.6 Percentage of poor population in large cities, 2011-12



Source: Estimated from household level data of HIES (2011-12).

Gujranwala and Faisalabad cities are surprising. The lowest incidence (10 percent) is observed in Sialkot and Islamabad, whereas the incidence is also comparatively low in the city of Lahore.

Socio-Economic Correlates of Consumption Poverty

Understanding the key demographic and socio-economic characteristics of the poor is an essential prerequisite for the formulation of an effective and meaningful poverty alleviation strategy. An attempt is made to establish links between consumption poverty and social, demographic and economic attributes of households. The demographic characteristics include household size, dependency ratio, age and gender of the head of the household. Access to asset endowments is assessed based on ownership of household assets, as well as the educational attainment of the head and spouse of the household. Impact of remittances on poverty is evaluated by estimating separate poverty incidence for households which are receiving domestic or foreign remittances and those that are not recipients of remittances.

The analysis is carried out by applying two different methods. First, poverty incidences are estimated for various categories of household characteristics. For instance, what would the poverty level be of households with less than five family members as compared with households with family size of more than nine? Although this bi-variate analysis provides useful insights in terms of poverty determinants, it fails to provide the net impact of an attribute on poverty status after controlling the other characteristics. Thus, a multivariate analysis is supplemented by estimating logistic regression function. The summary statistics of the logistic regression indicate a good-fit of the model with a high percentage of correct predictions and expected signs of all coefficients. The findings of these exercises are collated in Exhibit 8.7 and 8.8.

Exhibit 8.7 Poverty incidence by household characteristics

Percentage of poor households in urban areas, 2011-12

		Pakistan	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Overall	Urban poor households	35.46	33.97	35.86	39.54	47.79
Family size	< 5	14.94	17.1	10.77	17.05	19.27
	6 - 9	39.38	38.6	40.64	38.94	40.66
	> 9 members	53.27	48.29	57.14	56.73	63.13
Dependency ratio	<50%	16.5	13.56	22.33	18.79	9.51
	50%-100%	36.16	34.56	37.05	39.06	48.37
	More than 100%	51.67	52.08	49.53	54.88	55.93
Head of household	Male head of household	35.87	34.3	36.16	40.82	47.74
	Female headed household	38.74	42.97	32.92	32.84	43.57
	- No remittance					
	- Domestic remittance	36.06	38.89	25.62	23.38	---
	- Overseas remittance	10.7	7.08	9.86	27.6	---
Age of head of household	< 25	36.99	35.49	41.33	26.67	33.58
	25-45	34.00	34.03	32.22	38.33	44.63
	46-65	36.85	33.94	39.25	41.11	51.27
	Above 65 years	32.93	33.36	29.59	36.55	50.84
Education of head of household	Illiterate	55.39	53.26	58.62	53.89	65.34
	1 - 5	47.54	46.97	47.56	53.03	53.69
	6 - 10	30.71	27.28	35.04	33.33	47.68
	11 - 12	16.47	10.32	23.2	15.98	29.39
	>12 years	6.08	0.55	9.2	13.35	9.98
Education of spouse	Illiterate	51.79	51.24	52.24	51.34	54.74
	1 - 5	34.98	36.3	33.57	20.78	46.37
	6 - 10	21.09	17.13	28.2	12.69	6.84
	>10 years	2.76	1.76	3.87	3.64	3.77
Remittances	No remittances	37.15	36.54	36.11	42.47	47.91
	Domestic remittances	30.35	29.92	36.09	27.48	25.8
	Overseas remittances	11.06	8.12	7.59	25.98	47.32

Source: Estimated from household level data of HIES (2011-12).

Family size and dependency ratio are important determinants of poverty. The incidence is significantly increasing with the increase in family size. About 15 percent households with a family size of less than five are designated poor, while the incidence is 53 percent of those households which have a family of more than 9 members. Similar differences are observed in the categories of dependency ratio. Very low magnitude of poverty incidence (17 percent) is evident for households which have less than 50 percent dependency ratio (Exhibit 8.7). Highly statistically significant coefficients of these two characteristics in the logistic

regression (Exhibit 8.8) corroborate the importance of population welfare programmes in alleviating poverty.

Female headed households are considered a positive correlate of poverty. The experience of developing countries shows that, as head of households, women face all kinds of cultural, social, legal and economic obstacles that men, even poor men, do not face. However to understand the true impact of female headed households on poverty, it is essential to integrate the role of transfers and remittances into the analysis. By and large, women in Pakistan acquire the status of head of a household in two eventualities. First, when men migrate in search of better economic prospects and women temporarily take charge of the household. Such instances are particularly common in northern areas of Pakistan where the phenomenon of out-migration is prevalent. Second, when the male head of household dies or departs from the household and the woman provides for her family. The results of poverty incidence (Exhibit 8.7) show that in the latter case, the probability of the household being poor is high.

In the urban context, education of head or spouse of household plays a comparatively important role in income generating activities as compared to the rural counterpart. The results clearly demonstrate that education of the head of household directly or indirectly influences the poverty level. The poverty incidence of households with an illiterate head of household is 55, while it is as low as 6 in cases of households where the head of household has a higher (intermediate or above) level of education (Exhibit 8.7). The findings of multivariate analysis also confirm the role of education of head of households as the coefficient associated with schooling is negative and statistically significant.

Similar conclusions may be deduced regarding the education level of the spouse. The multivariate analysis clearly asserts the phenomenon as the magnitudes of coefficients (impact on poverty) of various levels of education are showing increasing inverse (with the minus sign) trend (Exhibit 8.8).

Exhibit 8.7 also reveals that the remittances, especially overseas are instrumental in improving the standard of living of recipient households. It is evident that the poverty incidence is only 11 for those households which are receiving overseas remittances compared to 37 percent households which are not receiving remittances. The remittance variables (domestic and overseas) are also statistically significant with the inverse relationship with poverty in the logit analysis. Here also the magnitude associated with overseas remittance is quite large as compared to the domestic remittance (Exhibit 8.8).

To capture the impact of household wealth, ownership of household assets and non-residential buildings are included in the logistic regression. An important determinant of poverty status is the stock of

Exhibit 8.8 Results of logistic regression – urban Pakistan

[Dependent Variable Poor=1, Non-Poor=0]

	Estimated coefficients	Level of significance
Family size	0.341	0.00
Dependency ratio	0.01	0.00
Head of household – unemployed	0.813	0.00
Head of household – wage employed	0.501	0.00
Age of head of household	0.001	0.00
Education level of head of household		
– Primary	0.222	0.00
– Middle	-0.034	0.00
– Matriculation	-0.407	0.00
– High	-1.005	0.00
Education level of spouse		
– Primary	-0.278	0.00
– Middle	-0.386	0.00
– Matriculation	-0.711	0.00
– High	-2.065	0.00
Household asset score	-0.493	0.00
Ownership of non-agricultural land	-0.416	0.00
Ownership of non-residential building	-0.603	0.00
Landline phone [PTCL]	-0.091	0.00
Household receiving domestic remittance	-0.807	0.00
Household receiving overseas remittance	-1.036	0.00
Sindh	0.446	0.00
Khyber Pakhtunkhwa	0.466	0.00
Balochistan	0.632	0.00
Residence of small cities/towns	0.181	0.00
Intercept [constant]	-2.179	0
Model summary:		
-2 Log likelihood		3904714
Cox & Snell R-Square		0. 352
Nagelkerke R-Square		0. 492
Percentage of correct prediction:		
Non-poor		88.1
Poor		63.6
Overall		80.2

Note: All coefficients are highly significant statistically with a priori expected signs.

Source: Estimated from household level data of HIES, 2011-12

household assets. This variable is constructed by assigning equal weight[5] to each of the twenty-two assets listed in HIES questionnaire[6]. As expected, the coefficients associated with these variables are negative as well as statistically significant.

Poverty and Micronutrient Deprivation

The consumption poverty is based on the premise of food inadequacy in terms of minimum calorie (energy) requirements. To estimate the consumption poverty line or poverty cut off point, the average dietary pattern is translated into calories and statistically correlated with household consumption. Nonetheless, the impact of other micronutrient deprivations on health and especially on labour productivity cannot be overlooked. Moreover, micronutrient deficiency is an important factor which contributes to the poverty trap, besides other factors such as no access to credit, environmental degradation, bad governance, poor education system, inadequate infrastructure and lack of public health care. Below an average picture of malnourishment in urban households is portrayed by highlighting the extent of deficiency with respect to protein, vitamin A, iron, iodine and zinc. The intakes of these micronutrients are derived from the dietary pattern of urban households as they appeared in HIES 2011-12 data on food consumption.

A comparison of average nutrient intake with the recommended daily allowance is given in Exhibit 8.9. The calorie intake in urban Pakistan is higher than the recommended (2,308 Kcl versus 2,230 Kcl) in all provinces except in Sindh. Due to the differences in climatic conditions, work and living environment, it is not surprising that average calorie intake is the highest in Khyber Pakhtunkhwa. On average, no significant protein intake deficiency is observed in the urban population. However, an unpleasant picture emerged in relation to other micronutrient intakes. The average daily intakes of vitamin A, iron, iodine and zinc are far below the recommended daily allowance.

Exhibit 8.9 Average nutrient intake in urban Pakistan, 2012

Per adult nutrient equivalent unit

	Calorie [Kcal]	Protein [g]	Vitamin-A [RE]	Iron [mg]	Iodine [ppm]	Zinc [mg]
Punjab	2379	52	509	14	59	9
Sindh	2159	48	345	13	55	8
Khyber Pakhtunkhwa	2471	50	432	16	55	10
Balochistan	2460	49	343	16	67	10
Overall	2308	50	440	14	58	9
Recommended daily allowance	2230	57	750	20	150	15

Note: Nutrient values of various food items and Recommended Daily Allowance are taken from "Food Consumption Tables for Pakistan" (GoP, 2001).

Sources: Estimated from household level data of HIES (2011-12).

Exhibit 8.10 Extent of nutrient intake deficiency in urban households, 2012

Percentage of household reported nutrient consumption below the recommended allowance

	Calorie	Protein	Vitamin-A	Iron	Iodine	Zinc
All households						
Punjab	44.65	58.26	81.64	93.36	96.27	97.56
Sindh	62.13	70.27	95.56	96.26	98.91	99.23
Khyber Pakhtunkhwa	33.48	61.24	88.76	87.21	97.3	97.6
Balochistan	42.42	63.78	92.93	81.34	96.26	93.2
Overall	50.17	62.93	87.42	93.66	97.28	98.03
Poor households						
Punjab	80.77	90.38	91.49	99.04	99.56	99.76
Sindh	88.75	97.1	99.9	100	100	100
Khyber Pakhtunkhwa	63.15	92.48	94.48	98.91	99.87	99.75
Balochistan	77.24	90.59	97.18	97.92	99.74	99.08
Overall	82.03	92.85	94.83	99.31	99.74	99.81
Non-poor households						
Punjab	30.95	46.08	77.91	91.21	95.02	96.73
Sindh	52.5	60.56	93.99	94.9	98.52	98.95
Khyber Pakhtunkhwa	18.18	45.14	85.81	81.18	95.97	96.49
Balochistan	20.22	46.69	90.22	70.77	94.04	89.45
Overall	37.83	51.34	84.55	91.47	96.33	97.34

Note: Nutrient values of various food items and Recommended Daily Allowance are taken from "Food Consumption Tables for Pakistan" (GoP, 2001).

Sources: Estimated from household level data of HIES (2011-12).

The phenomenon of severe deprivations of micronutrient intakes is further elaborated in Exhibit 8.10 which reports the extent of nutrient intake deficiency with respect to recommended daily allowance in urban households. It is evident that in more than 80 percent households, daily consumptions of vitamin A, iron, iodine and zinc are below the recommended daily allowance. According to the disaggregated information with respect to poverty status, almost more than 95 percent poor households are deprived in terms of the above micronutrients. The intensity of the issue clearly requires direct nutritional intervention schemes for the poor to escape from this poverty trap. On the other hand, the trend in non-poor households calls for enhancing the level of awareness regarding the sources of micronutrients.

Although the above exercise of determining household status in terms of deprivation in micronutrient intake is useful[7], the formulation of a policy for nutritional interventions requires estimates of anthropometric measurement, and clinical and core biochemical assessment of micronutrients, especially for specific target groups (children and women). Specialized nutrition surveys are useful tools that provide estimates of severity and geographical extent of malnutrition in terms of all important nutritional status indicators. These surveys assess the nutritional status of the individual or a representative sample of

individuals within a population by measuring anthropometric, biochemical or physiological (functional) characteristics to determine the individual status in terms of nourishment.

The last National Nutrition Survey (NNS) was conducted in 2011 by the Aga Khan University in association with Pakistan Medical Research Council, Nutrition Wing-Cabinet Division (Government of Pakistan) and UNICEF (Pakistan). Exhibit 8.11 provides the prevalence of malnutrition among children and women from the findings of 2011-NNS[8]. To compare the inter-temporal changes, the incidences of malnutrition are also collated from the previous National Nutrition survey of 2001-2002 (GoP, 2004).

In 2011, in urban Pakistan 27 percent of children under five were underweight, 37 percent stunted, 13 percent wasted, 35 percent had iron deficiency anaemia and 37 percent had zinc deficiency. About 2 percent of the mothers had iodine deficiency with visible signs of goitre, while almost 20 percent mothers had iron deficiency i.e. anaemia. Moreover, about 38 percent school-going children also had iodine deficiency albeit there has been a significant improvement since 2002.

The NNS 2011 concludes that "very little has changed over the last decade in terms of core maternal and childhood nutrition indicators. The survey does point towards gains in iodine status nationally following the implementation of a universal salt iodization and promotion strategy, but is counterbalanced by substantial deterioration in vitamin A status and little to no gains in other areas of micronutrient deficiencies".

Exhibit 8.11 Incidence of malnutrition – urban Pakistan

		2011	2001
Protein/energy malnutrition: [anthropometric measurement]			
Children under five	Underweight [weight-for-age]	26.5	38.7
	Stunted [height-for-age]	36.9	24.5
	Wasted [weight-for-height]	12.7	12.1
Women	Normal BMI	46	47.1
Nutritional deficiencies: [clinical and bio-chemical assessment of micronutrients]			
Mothers	Iron deficiency	27	54.1
	Iron deficiency anaemia	19.5	21
	Zinc deficiency	38.2	36.2
	Iodine deficiency (goitre visible)	1.9	5.8
Children under five	Iron deficiency anaemia	34.5	33.5
	Zinc deficiency	36.6	32.2
Children - school age	Iodine deficiency	38.2	60.1

Source: National Nutrient Surveys (2002 and 2011).

SOCIAL PROTECTION FOR THE POOR

Social protection initiatives, which generally transfer income or assets to the poor, are designed to protect vulnerable people against livelihood risks, and seek to enhance the social status and rights of the marginalized. Effectively administered and carefully targeted social protection policies and measures increase employment, reduce loss of human capital, and prevent people from falling into poverty as a result of financial or economic shocks. Proficient protection measures form a key component of social policy and promote social cohesion. According to Barrientos (2010), the broader developmental role of social protection in developing countries involves three main functions: (i) to help protect basic levels of consumption among those in poverty or in danger of falling into poverty; (ii) to facilitate investment in human and other productive assets which alone can provide escape routes from persistent and intergenerational poverty; and (iii) to strengthen the agency of those in poverty so that they can overcome their predicament.

Unfortunately, in the context of Pakistan there is no clearly articulated government social protection framework. Various social security schemes and cash assistance programmes have been developed largely as a series of ad-hoc responses to problems raised by particular circumstances or recommended by international donor agencies (Jamal, 2010). The Poverty Reduction Strategy Paper (PRSP) also highlights the fact that the "social protection framework contains duplication and overlapping programmes and recommends working towards an overall integrated and efficient social protection strategy".

An effort was made to draft a comprehensive social protection strategy by the Planning Commission of Pakistan. Consequently, the National Social Protection Strategy was made public in 2008 (Government of Pakistan, 2008). It was the first comprehensive official statement at national level with respect to social protection and was based on a detailed review of

existing programmes and Government interventions. Although it was formally adopted by the Government; no progress was made towards its implementation. At present, provincial governments are developing their own social protection strategies due to the devolution of social protection delivery from the federal to provincial governments after the 18th Constitutional Amendment.

Unfortunately the disaggregated data of beneficiaries of various social protection instruments at urban and rural levels is not available; it is not feasible to estimate the exposure of these programmes to urban poor. However, the salient features of broad categories of social protection are described in the following sub-sections to understand the tools or instruments which are available to urban poor.

Social Security Instruments

All existing social security schemes are in the formal sector of the economy and designed for employed labour force and retirees. These schemes usually focus on the urban sector and provide benefits regarding contingencies for sickness, invalidity, maternity, old age, and work related injury. The programmes in this category include; Government Servants Pension Fund, Provincial Employees Social Security Scheme or Employees Social Security Institutions (ESSI), Public Sector Benevolent Funds, Workers Welfare Funds (WWF), Workers' Children Education Ordinance and Employees Old Age Benefits Institutions (EOBI). Besides ESSIs which operate at the provincial government level, other schemes are currently under the Federal Ministry of Human Resource Development.

The major shortcoming of all these social security schemes is that workers in the formal sector who are either employed temporarily through contractors or in establishments with less than ten workers are not covered through these programmes. Similarly, other sectors which are predominantly informal in character such as construction, transport, wholesale and retail trade have no coverage in the social security schemes. According to Bari et al (2005), it is estimated that less than 4 percent of the urban labour force actually benefits from the entitlement built into these programmes.

Programmes of Social Assistance

Social assistance schemes of cash or in-kind transfers are especially aimed at those who are outside the ambit of the formal labour market and are considered poor or destitute. The Benazir Income Support Programme (BISP), *Zakat* and Pakistan Bait-ul-Mal (PBM) are three institutions which provide unconditional cash or in-kind assistance to the poor and also assist in rehabilitation of needy and destitute individuals. Although the *Zakat*, PBM and BISP share a similar objective of providing basic support to the poorest households, they have different histories, targeting and financing mechanisms. A brief introduction of these programmes is given below.

The Benazir Income Support Programme

The BISP was launched in late 2008 as the flagship social safety net programme introduced by the Federal Government. The immediate objective of the programme was to address the negative effects of the food, fuel and financial crises on the poor, but its longer term objectives are to provide a minimum income package to the poor and to protect the vulnerable population against chronic and transient poverty.

Unconditional cash grants of Rs 4,500 every quarter are distributed under this largest and most systematic social protection initiative. About 5 million beneficiary families had received cash grants by the end of 2014-15. The BISP involves targeting through a Poverty Scorecard, and payments are made in the form of Smart or Debit cards, money orders and mobile banking.

Two other initiatives of BISP; Waseela-e-Sehet and Waseela-e-Taleem provide additional cash grant to BISP beneficiary families. In the Waseela-e-Taleem programme, BISP beneficiaries receive Rs. 200 for sending and retaining their children in schools. BISP has launched "Waseela-e-Taleem" as co-responsibility or joint responsibility cash transfer (CCT) programme for the primary education of children aged 5-12 years of its beneficiary families. Similarly, Waseela-e-Sehet comprises a Health Insurance and Group Life Insurance Programme providing extreme and chronic underprivileged individuals with basic income support measures, to access health care and to cope with a variety of illnesses. It also insures the breadwinner of a family to compensate the dependents (widows/mothers/children) of the deceased with Rs 100,000 in case of his/her natural or accidental death.

Pakistan Bait-ul-Mal (PBM)

PBM was established in February 1992 under the provisions laid down in the Pakistan Bait-ul-Mal Act of 1991. It was created to support the welfare of widows, orphans, disabled, and the poor irrespective of sex, caste, creed or religion. The primary purpose for establishment of the PBM was to provide assistance to vulnerable segments of society not covered by *Zakat*. PBM comes under an autonomous board of management consisting of a chairman, five non-official members and three official members. The programme categories are, Child Protection, Women's Empowerment, Institutional Rehabilitation, Financial Assistance (IFA), Old Age and Disabled Friends. The amount is disbursed to the poor under a wide variety of programmes that encompass Pakistan Sweet Homes, National Center for Rehabilitation of Child Labour (NCsRCL), Child Conditional Cash Transfer (CCT), Institutional Rehabilitation for community based Developments Civil Society Wing (CSW), Direct Relief Services in Emergencies/Natural Calamities, Great Home and Special Friends Programme. There is no specific criterion with regard to targeting beneficiaries for the programmes of the Bait-ul-Mal.

Zakat

The *Zakat* and *Ushr* Ordinance was initiated in 1980 under the regime of President Zia-ul-Haq. After the 18th Amendment, the subject of *Zakat* was removed from the concurrent legislative list and devolved to the provinces. It is collected and allocated by the Federal Ministry of Religious Affairs and Inter-Faith Harmony but the execution is through the Provincial Governments. As a result of the 18th Amendment to the Constitution of Pakistan, the Ministry of *Zakat* and *Ushr* has been disbanded, therefore, the Ministry of Religious Affairs administers collection of *Zakat* funds and maintains relevant accounts. The government, through the Federal Ministry of Religious Affairs and the Provincial *Zakat* and Social Welfare Departments, supervises and regulates the programme subject to guidance by the *Zakat* Council, headed by a Supreme Court Judge. At the community level, there are local, district, and provincial functionaries that implement the programme and disburse the *Zakat* funds among the beneficiaries. According to the Ministry of Religious Affairs Pakistan, an amount of Rs 4,778 million was collected and disbursed in bulk amongst the Provinces and Federal areas in 2014-15. *Zakat* is disbursed under different programmes, such as: financial assistance (*Guzara* Allowance), educational stipends, healthcare, *Eid* grants, assistance to leprosy patients, national level health institutions, and marriage assistance.

Unlike the BISP initiative, *Zakat* distribution does not have any transparent and accountable method of targeting individuals. It is aimed to target the 'deserving needy', but no objective tool (e.g. proxy means testing) is used. According to World Bank (2007), "around 27 percent of monthly cash (*Guzara*) allowance beneficiaries and 37 percent of those receiving rehabilitation grants are not poor, accounting for 32 and 45 percent of the resources distributed under each modality". The document also reports evidence of both corruption and patronage in the *Zakat* distribution system. Eligibility criteria or the process of selecting beneficiaries is not transparent and often, provision seems to be based on access to influential patrons or willingness to pay a bribe. Decisions regarding who receives the benefits are mostly guided by local power relationships. Sayeed (2004) also emphasized that there is no documented, institutionalized mechanism for the distribution of *Zakat* funds. To identify the beneficiaries in villages and neighbourhoods, the Local Zakat Councils rely on individuals known to them, who are better off, more articulate members of the community. Usually the beneficiaries are those who are already involved in patronage relationships with the committee members.

Besides inefficient identification of beneficiaries other major issues of social assistance through *Zakat* are the inadequacy of payment and low coverage. The adequacy of support can be further affected by administrative problems resulting in delay in release of funds. Bari et al (2005) argue that the programme currently in operation has had only a

marginal impact in alleviating the poverty of households living below subsistence level. The coverage and size of grants disbursed as individual transfers inadequately addresses the needs of the poorest households.

Other Social Protection Initiatives

Besides the core instruments of social protection which have been very briefly described above, it is worth indicating three important initiatives which are relatively more relevant in the urban context; namely food subsidy, microfinance and nutritional intervention. It is however beyond the scope of this chapter to provide detailed analysis of these programmes; thus these are mentioned briefly.

Food Subsidy

Presently the federal government provides food subsidy through the Utility Stores Corporation network which was established in 1971; by taking over 20 retail outlets from the Staff Welfare Organization. Passing through various stages of expansion and reorganization, the Corporation at present operates 5,954 stores throughout the country. It is now one of the biggest Corporation of Ministry for Industries and Production having its network spread all over the country. The basic objectives for which the Corporation was established include; to protect the real income of the people by selling essential consumer items at prices lower than those prevailing in the open market, to act as a price moderator in the market and deterrent to profiteering, hoarding and black marketing by the private sector, to provide the Government's relief packages in the month of Ramadan and to provide food security during a crisis. The regional breakdown of its network is close to 34 and 66 percent in the urban and rural areas respectively.

According to the Ministry's Annual Report of 2014, the Corporation is not a burden on the Government exchequer. It does not receive any grant or subsidy for its operational expenses. All kinds of operational expenses are being met by the Corporation itself from the gross profit margin of the sale proceeds. Despite selling the essential consumers items on the prices lower than the market, the Corporation during the last six years has paid various taxes amounting to Rs.34 billion to the Government exchequer.

It is however impossible to determine the number of beneficiaries and their socio-economic characteristics as the Utility Stores do not have a system of targeting beneficiaries. Without such a system, eventually the non-poor also become beneficiaries of this scheme. In fact, the more entrepreneurial of them have the incentive to arbitrage the subsidized goods being sold with the higher prices prevailing in the market. Protecting the poor and the vulnerable will however require a specific food subsidy. The network of Utility Stores is an asset and can be used with an efficient targeting mechanism; potentially through the poverty score card or BISP card. Substantial subsidy may be provided to poor on designated essential food items.

Microfinance

Although microcredit or microfinance provides financial services to the poor to allow them to become economically active, it is often criticized that it has investment and income enhancing impacts but it is not a good mechanism for ensuring insurance against adverse shocks; and also a viable microcredit programme cannot give guaranteed access to poor and vulnerable clients (Barrientos, 2006). Further, credit is not advanced at concessionary rates of interest in general and there is no element of explicit or implicit subsidy. Nonetheless, the Government of Pakistan in its PRSP-II document considers it an important intervention for poverty reduction.

Currently, microfinance services in Pakistan are being provided by Microfinance Banks (MFBs); Commercial Banks; Rural Support Programs (RSPs) and Non-Governmental Organizations (NGOs) with the Pakistan Poverty Alleviation Fund (PPAF) being a wholesale provider of credit to NGOs. The finance is provided for microenterprises in urban areas and for agricultural inputs and livestock in the rural context.

The Pakistan Microfinance Network (PMN) is a network for organizations engaged in microfinance and is dedicated to improving the outreach and sustainability of microfinance in the country. The PMN is well positioned with 95 percent of the total microfinance coverage and with the 20 leading microfinance institutions and banks as its members. According to the PMN website, the sector has 3.7 million borrowers with a gross loan portfolio of Rs 92 billion as of December 2015.

The share of rural borrowers dominates the sector; out of the total borrowers, 57 percent belong to rural areas while 43 percent belong to urban areas. A majority of the borrowers of the two dominant players (National Rural Support Programme and Khushhali Bank) in the sector belong to the rural segment of the population. However, the share of urban borrowers is increasing due to growth by FINCA Microfinance Bank, Tameer Microfinance Bank and ASA Pakistan, as more than 50 percent borrowers of these institutes belong to urban regions.

Nutritional Intervention

An unpleasant picture regarding severe deprivations of micronutrient intakes at household level has been portrayed in the previous section with the help of household consumption data. Further, high and persistence prevalence of malnutrition among women and children is also highlighted citing findings of two previous national nutrition surveys (2002, 2011). Although malnutrition is an established impediment to human development and economic growth, unfortunately Pakistan lacks an effective national nutrition policy. According to Zaidi et al (2013), "to date, nutrition interventions have been dealt with through a project approach by both the state and donors. As a government official put it, in Pakistan we have a project approach and not a policy approach. We are a graveyard of failed projects"[9]. In the absence of cohesive planning, governments (federal as well as provincial) followed tailored nutritional initiatives shaped by development partners.

The 2011 Pakistan Integrated Nutrition Strategy (PINS) sets out an incremental plan for the implementation of a host of nutrition-related interventions, but it is still in its preliminary stages of adoption. In the post devolution context, each of the four provinces and three regions of Pakistan have begun drafting inter-sectoral nutrition strategies.

As suggested by Zaidi (2003), to move towards a common development vision around nutrition, a number of simultaneous steps are required towards a cross-cutting nutrition policy including; sustained funding, central convening structures, joint initiatives, maximizing technical opportunities, multi-sectoral coordination, participation of district and local governments, and, above all, political support.

NOTES:

1. The justifications of taking these minimum requirements are described in Jamal (2002). The paper also provides other technical details in term of methodological choices and options available to estimate consumption poverty line.
2. Although the HIES data is available for the year 2013-14, poverty estimates were not updated due to the unidentified and unresolved problems in the consumption data. It is worth mentioning that annual inflation rate has declined from 11 to 9 percent during the period 2011-12

and 2013-14. A slightly higher (4.1 v/s 3.8) growth rate is also observed in the financial year 2013-14. Thus, a lower poverty incidence is expected assuming no change in income distribution (inequality).

3. Foster, Greer, and Thorbeke (FGT, 1984): "A Class of Decomposable Poverty Measures", *Econometrica*, 52, 761-765.
4. Only provincial capitals are included in the category of large cities in Khyber Pakhtunkhwa and Balochistan.
5. A constant 1 is assigned to each of the assets owned by the household, and the assets score is obtained by summing up across all assets at the household level. Of course uniform allocation of score irrespective of the asset characteristics tends to smooth out the distribution of assets across households. To the extent that these assets have different values and all exhibit different rates of depreciation, uniform allocation might even increase the distortion in the distribution of household assets. But, what actually matters in this construction is the ownership of assets by a household and not so much the values of the asset which are difficult to estimate accurately from surveys. The maximum asset score is 22 and the minimum is 0; for poorest households which possess none of the assets listed.
6. These assets are Refrigerator, Freezer, Air conditioner, Air cooler, Fan, Geyser, Washing Machine, Still Camera, Movie Camera, Cooking Stove, Cooking Range, Heater, Bicycle, Car, Motorcycle, TV, VCR, Radio, Disk Player, Vacuum Cleaner, Sewing Machine and Computer.
7. According to UNICEF (1998), "there are two possible ways to assess the adequacy of food and nutrition and to detect the presence of inadequacy in food intake among individuals or population groups: the first measures nutritional intake and the second assess nutritional status"
8. The report is available at http://www.pakresponse.info, Humanitarian Response, Pakistan http://pakresponse.info/LinkClick.aspx?fileticket=scqw_AUZ5Dw%3D&tabid=117&mid=752
9. The school nutrition programme for rural girls "Tawana Pakistan Programme" which was implemented from 2002–2005 across all four provinces is an example of failure due to design issues, governance and corruption.


TRADEKEY
Your Key To Global Trade

Sustainable Urban Development

9

Urban development in Pakistan has been severely impacted by a deterioration in the law and order situation compounded by under-investment in infrastructure.

9 Sustainable Urban Development

The objective of this final Chapter is to identify the factors which determine the sustainability of the process of urban development. As development proceeds, the share of labour force in agriculture decreases while that of industry and services increases. The latter economic activities are located mostly in cities and towns. This process implies large-scale migration of population from rural to urban areas.

The basic issue is whether this development transition remains an orderly process or not. At one extreme is the inability of cities to cope with the population pressure. Consequently, there is overcrowding, breakdown in the delivery of basic services and rise in crime and violence. However, if the process of urban development is well planned, managed and regulated, population density remains relatively low especially in the central business district. Provisions are made for simultaneous expansion in the coverage of basic services like water supply, sewerage, garbage disposal, road networks and electricity as the population expands. Levels of unemployment of the urban labour force stay relatively low and with rising incomes, the propensity towards crime also remains low. Cities which exhibit these characteristics are said to be experiencing sustainable development.

The basic question is whether the cities and towns of Pakistan are generally demonstrating the characteristics of sustainable urban development. Section 2 of the Chapter quantifies the extent of population pressure on urban areas of Pakistan. Section 3 assesses the level of human security especially in the major cities of the country. Section 4 then proceeds to determine if there are significant diseconomies associated with agglomeration like traffic congestion and accidents, decline in air quality due to pollution leading to health-related problems. Section 5 identifies if marginal cost of services like water, transport, etc., is rising sharply in a metropolitan city like Karachi. Finally, in Section 6 an assessment is made of the quality of life in megacities of Pakistan as compared to large cities in other Asian countries, especially in South Asia.

Exhibit 9.1 highlights the rate of growth of the urban population of Pakistan since 1961. A clear pattern is visible. The inter-census growth rates have shown a systematic pattern of decline. In earlier years, there was massive migration from India, following the creation of Pakistan, into the large cities of the country like Karachi and Lahore.

The urban population growth rate remained high in the decade of the 1960s. This was a period of very rapid industrialization, especially in labour intensive sectors like textiles. Consequently, there was rapid rural to urban migration. Thereafter, the growth rate remained moderate, falling to just over 3 percent during the previous decade, according to estimates by the Planning Commission. This can be partially attributed to the issues of security and the slowing down of economic growth. As such, in terms of incremental population pressure the urbanization process has become potentially more manageable.

How does the resulting population density in megacities of Pakistan compare with that in major Asian cities, especially in South Asia? Exhibit 9.2 gives latest estimates of population density in twelve Asian cities. The highest population density per square km is observed in Mumbai of almost 30,000 persons per square km. On the other extreme is Kuala Lumpur, with a density of less than 3,000.

The two megacities of Pakistan, Karachi and Lahore, have intermediate levels of population density. It is approximately 17,400 in Karachi and 14,500 per square km in Lahore. Karachi, with almost twice the population, is characterized by greater urban sprawl. It has a land area second only to Delhi. The Indian city has an effective mass transit system. The move towards mass transit in Karachi has taken place only recently with the inauguration of construction of the Green Line Project. Lahore is also expected to have the same facility as the Orange Line Project.

Exhibit 9.1 Growth of population in urban areas

	1972	1981	1998	2014 (P)
	(Population in thousands)			
Punjab	9,183	13,052	23,019	36,955
Sindh	5,726	8,243	14,840	25,750
Khyber Pakhtunkhwa	1,196	1,665	2,994	5,256
Balochistan	399	677	1,569	2,939
Pakistan[a]	**106,594**	**23,841**	**43,036**	**72,050**
	(Annual growth rate)			
Punjab		-4	-3.4	(3.6)[b]
Sindh		-4.1	-3.5	(3.5)[c]
Khyber Pakhtunkhwa		-3.7	-3.5	(3.6)[c]
Balochistan		(6.0)[d]	(5.1)[d]	-4
Pakistan		**-4.1**	**-3.5**	**-3.3**

a. Including Islamabad and FATA
b. The growth rate projected by the Government of Punjab is only 2.0 percent.
c. The growth rate projected by provincial governments.
d. Due to under-enumeration in the previous Census

Source: Pakistan Economic Survey

Exhibit 9.2 Land area, population and population density of major South and East Asian cities

	Population (000)	Land areas (in sq km)	Density (people per sq km)
South Asian Cities			
Delhi, India	14300	1295	11050
Lahore, Pakistan	9000	622	14470
Hyderabad, India	5300	583	9100
Bangalore, India	5400	534	10100
Kolkata, India	12700	531	23900
Karachi, Pakistan	18000	1086	17370
Mumbai, India	14350	484	29650
Chennai, India	5950	414	14350
East Asian Cities			
Kuala Lumpur, Malaysia	4400	1606	2750
Manila Philippines	14750	1399	10550
Jakarta Indonesia	14250	1360	10500
Bangkok Thailand	6500	1010	6450

Source: City Mayors Statistics

HUMAN SECURITY

The city of Karachi has been plagued by acts of terror, rising violence and crime. This breakdown of human security has fundamentally affected the lives of the people. It has imposed heavy costs in terms of disruption of economic activity and of diversion of investment to other locations, both inside and outside the country.

Following the implementation of the National Action Plan there has been a visible decline in acts of terror. The authorization given to the Rangers to take strong action against terrorists, 'target-killers' and criminals has substantially improved the level of human security of the people.

Exhibit 9.3 cites the incidence of acts of terror in the four provincial capital cities of Pakistan in 2010 and 2014 respectively. Fortunately, there has been a cumulative decline of 82 percent in acts of terror in the four cities. However, while the frequency has decreased, the damage per attack has increased. The most gruesome act of terror was the killing of 132 students of the Army Public School in Peshawar on the 16th of December, 2014. Peshawar continues to be most vulnerable to terrorism, followed by Karachi.

Exhibit 9.3 Incidence of acts of terror in major cities

	Attacks		ACGR*	Number of persons killed		ACGR[a]
Cities	2010	2014	(%)	2010	2014	(%)
Karachi	93	40	-19	233	191	-4.9
Lahore	10	2	-33.1	263	62	-30.3
Peshawar	111	18	-36.5	122	237	18
Quetta	189	11	-50.9	241	51	-32.2
Total of above	**403**	**71**	**-35.2**	**859**	**541**	**-11**

[a] Annual Compound Growth Rate

Source: South Asia Terrorism Portal.

Exhibit 9.4 Incidence of acts of terror in major cities

Cities	Karachi 2001	Karachi 2011	ACGR* (%)	Lahore 2001	Lahore 2011	ACGR[a] (%)
Murder	541	1789	12.7	484	683	3.5
Attempted murder	547	1229	8.4	820	889	0.8
Kidnapping	522	1431	10.6	575	2492	15.8
Dacoity	229	342	4.1	83	273	12.6
Robbery	1658	3258	7	1219	4988	15.1
Theft	7237	11110	4.4	4940	14026	11
Rape						

[a] Annual Compound Growth Rate
Source: South Asia Terrorism Portal.

Unfortunately, the incidence of crime in major cities of Karachi and Lahore continues to increase, as shown in Exhibit 9.4 Acts of murder (including 'target killing') are very high in Karachi. Over a ten year period, they have more than trebled. The incidence of robbery and theft tends to be high in Lahore as well. The growth of crime is, in fact, higher in the latter city. Fortunately, there have been few acts of terror, only two in 2014, in Lahore.

The sustainability of urban development of Karachi has fundamentally been affected by terrorism and crime. In fact, Karachi has been declared as the most violent city in the world. Consequently, there is evidence that the rate of migration from the rest of Pakistan has declined sharply in the last five to six years. According to the National Electric Power Regulatory Authority (NEPRA), the slowest growth in the number of domestic and industrial consumers of electricity is observed in Karachi. The growth rates, particularly in cities of Punjab, are generally much higher as shown in Exhibit 9.5.

Exhibit 9.5 Growth rate of electricity consumers (%)

	2010 to 2014	
	Domestic	Industrial
K-Electric	**1.05**	**-0.29**
PEPCO system	**3.76**	**3.75**
PESCO	3.19	6.52
TESCO	1.98	-0.21
IESCO	3.72	4.06
GEPCO	3.61	3.88
LESCO	4.22	3.36
FESCO	3.46	3.37
MEPCO	4.74	3.63
HESCO + SPECO	2.62	3.08
QESCO	1.9	2.8

Source: NEPRA

DISECONOMIES OF AGGLOMERATION

The size and population density of cities implies high levels of traffic flows, both public and private. There are substantial peak loads of transport volumes during, for example, the morning rush hour to work or following the closure of schools every day. The transport system and infrastructure need to be of a second generation character with wide roads, over/under passes and a comprehensive mass transit system.

These investments are all capital-intensive and mega cities in low to middle income countries may not be able to mobilize the necessary resources for such investments.

Therefore, one of the major diseconomies of agglomeration is traffic congestion at particular times of the day on the main arterial routes. For example, the main highway (Drigh Road) linking Jinnah Airport with the central city of Karachi can experience delays in movement of traffic of up to three hours.

The stock of vehicles on road in megacities like Karachi and Lahore is given in Exhibit 9.6. The number of cars expanded rapidly during the Musharraf era, because of high growth in income, especially in the upper income category and low interest rates, leading to a peak in consumer financing. More recently, there has been an explosion in the number of motor cycles, especially relatively cheap Chinese models.

Substantial investments have been made on transport infrastructure between 2001 and 2008 when funds were available to the City District Government in Karachi. Lahore has enjoyed high priority in development allocations and already has a Metro Bus system. Fortunately, the incidence of traffic incidents both in intra-city and inter-city transport is falling, as shown in Exhibit 9.7.

Exhibit 9.6 Number of vehicles in major cities

Type of vehicles	1996	2006	2012	% change 1996-2006	% change 2006-2012
KARACHI					
Motor cars	282,748	394,507	632,546	39.5	60.3
Motor cycles	250,708	328,692	664,320	31.1	102.1
Taxis	11,202	24,649	31,310	120.0	27.0
Rickshaws	12,730	23,072	57,789	81.2	150.5
Buses	6,483	11,494	14,712	77.3	28.0
Pickup/delivery vans	41,969	44,358	68,676	5.7	54.8
Others	10,682	12,391	22,842	16.0	84.3
Total	**616,522**	**839,163**	**1,492,195**	**36.1**	**77.8**
LAHORE					
Motor cars	189,967	473,311	871,244	149.2	84.1
Motor cycles	263,013	822,264	2,172,760	212.6	164.2
Taxis	1,861	10,586	15,146	468.8	43.1
Rickshaws	8,000	85,024	122,517	625.3	111.1
Buses	2,310	27,792	40,485	1103.1	45.7
Pickup/delivery vans	8,391	33,243	81,922	296.2	146.4
Others	198,279	39,124	87,194	-80.3	122.9
Total	**671,821**	**1,464,344**	**3,391,268**	**118.0**	**131.6**

Source: Provincial Development Statistics

Exhibit 9.7 Number of accidents in major cities

Type of vehicles	1996	2006	2012	% change 1996-2006	% change 2006-2012
KARACHI					
Fatal accidents	654	623	472	-4.7	-24.2
Non-fatal accidents	621	606	249	-2.4	-58.9
Total	**1,275**	**1,229**	**721**	**-3.6**	**-41.3**
LAHORE					
Fatal accidents	231	394	369	70.6	-6.3
Non-fatal accidents	333	412	240	23.7	-41.7
Total	**564**	**806**	**609**	**42.9**	**-24.4**

Source: Provincial Development Statistics

Exhibit 9.8 Ownership of vehicles in major cities, 2012-13

Number per 1000 persons

	Motor cars	Motor cycles	Vehicles	Total vehicles
Karachi	32	40	19	91
Lahore	94	235	38	367
Faisalabad	11	99	9	119
Gujranwala	5	100	10	115
Rawalpindi	24	87	15	127
Peshawar	28	52	71	151

Source: Provincial Development Statistics

The level of ownership of vehicles, in terms of number per 1000 persons, is given in Exhibit 9.8. The unexpected fact is the highest rate of ownership in Lahore, almost four times that of Karachi. This is partly a reflection of problems in the motor vehicle registration system. Other cities, like Peshawar and Rawalpindi, also have relatively high levels of vehicle ownership. Thus, major transport infrastructure investments are also required in the secondary cities of Pakistan.

One of the externalities associated with high traffic volumes, using liquid fuel, is high and rising air pollution. This is further magnified by emissions from polluting industries, either within city limits or at the urban periphery. Beyond a point, this may begin to constitute a health hazard.

The trend over time in levels of air pollution is given in Exhibit 9.9 for selected Asian countries. The exhibit reveals that $PM_{2.5}$ air pollution has been rising at many locations, affecting the entire population, with pollution exceeding World Health Organization (WHO) guidelines. The highest pollution is observed in mega capital cities such as , Dhaka, in Bangladesh, and Beijing and Shanghai in China. Other cities of South Asia, including Pakistan, also have high levels of air pollution. It is

Exhibit 9.9 Levels of air pollution in Asian cities

Countries	($PM_{2.5}$ air pollution)					Annual growth rate			
	1999	2000	2005	2010	2013	2000	2005	2010	2013
Bangladesh[a]	29.90	34.67	40.18	45.60	48.36	1.5	3.0	2.6	2.0
India[a]	30.25	33.66	38.71	43.40	46.68	1.1	2.8	2.3	2.5
Pakistan[a]	36.55	39.73	41.73	43.20	46.17	0.8	1.0	0.7	2.2
China[a]	39.30	44.15	51.02	54.15	54.36	1.2	2.9	1.2	0.1
Indonesia	21.02	15.87	11.95	12.15	14.77	-2.8	-5.5	3.3	6.7
Nepal[a]	29.68	33.31	37.00	41.48	46.08	1.2	2.1	2.3	3.6
Philippines	9.09	9.30	9.49	8.73	8.60	0.2	0.4	-1.6	-0.5
Sri Lanka	11.45	12.07	12.82	14.60	17.15	0.5	1.2	2.6	5.5
Thailand	17.23	16.88	16.93	17.80	17.21	-0.2	0.1	1.0	-1.1
Turkey	19.88	17.36	17.80	18.20	17.22	-1.3	0.5	0.4	-2.0

[a] Country where the entire population is exposed to levels exceeding WHO guidelines.
Note: PM = particulate matter | Source: WDI, World Bank.

interesting that some East Asian countries, like Indonesia and Philippines, have substantially lower levels of air pollution. There is a need to investigate how air pollution has been controlled in these countries.

RISING COST OF SERVICES

Previous chapters have emphasized the severe water constraint in Karachi and issues of quality of drinking water in a large number of cities. Access to adequate quantity and quality of water is emerging as potentially one of the biggest constraints to urban growth. The basic problem is that the marginal cost of incremental water supply is rising very rapidly and given limited levels of affordability requires large subsidies beyond the financial capacity of local water agencies.

The history of the development of the water supply system of Karachi is given in Exhibit 9.10. There have been five phases in the development of Greater Karachi Bulk Water Supply System. The latest phase, K-IV, is under implementation. Currently, only about half the water demand is being met. By 2019, it is planned that there will be virtually no water scarcity in Karachi.

However, the capital and O&M (Operations & Maintenance) costs are rising sharply. The cost per 1000 gallons of the K-IV project is five times higher than the scheme of the 4th Phase, involving supply of water from a proximate source, the Hub River. In K-IV almost 520 million gallons of water will have to be piped / pumped from Keenjhar Lake, over a distance of 124 kms. Fortunately, there is equal funding from the Federal and Provincial Governments for this phase of expansion.

The exponential increase in costs of development of the sophisticated transport infrastructure in a large city has already been highlighted. The recently completed Metro Transit scheme for the twin cities of Rawalpindi

Exhibit 9.10 History of water supply in Karachi

	Supply source	Period	Additional capacity	Cost (Rs in million)
	Dumlottee Wells	19th century	15	
	Hilaya water supply system	1940s	20	
Greater Karachi bulk water supply system				
Hub 25 kms from Karachi and Keenjhar Lake 124	1st Phase: Keenjhar Lake pumping at Dhabeji	Ear 1960s	70	185
	2nd Phase: Keenjhar Lake	Early 70s	70	200
	3rd Phase: Keenjhar Lake	Late 70s	70	750
	4th Phase: Hub River	Early 80s	90	266
	5th Phase: K-IV	end 2017	260	2550
Current supply 550 MGD				
	(Equal funding of federal and provincial grants			
Demand 1100 MGD				
	Next Phase	2019	260	n.a

Source: KWSB

and Islamabad cost the government Rs 50 billion (over $ 500 million). Similarly, the Orange Line Project in Karachi will require a massive investment of $ 1.6 billion, with Chinese financing. The amortization and O&M costs will necessitate an on-going large subsidy from the Government of Punjab, if transport volumes are to be large enough to utilize the available capacity.

There are also many other rising costs. As the metropolitan boundary spreads out, there is a disproportionate increase in costs. This includes the extension of electricity and gas, sewerage lines, security arrangements, etc. Therefore, the metropolitan cities of Pakistan are approaching the stage where the costs of urban development are becoming very high. This clearly has implications on the sustainability of the process of urban development and the need for a change in the strategy for urban growth, with the emphasis shifting towards the development of secondary cities.

Exhibit 9.11 The bottom ten cities

The EIU, Liveability Index, identifies as follows:

The Bottom Ten Cities
These are: Cote d'Ivoire (Abidjan)*, Libya (Tripoli), Cameroon (Douala), Zimbabwe (Harare), Algeria (Algiers), Pakistan (Karachi), Nigeria (Lagos), PNG (Port Moresby), Bangladesh (Dhaka), Syria (Damascus)

	Out of 140 cities	
	Karachi	Dhaka
Ranking	136	139
Overall rating	40.9	38.7
Stability	20.0	50.0
Health care	45.8	29.2
Culture & environment	38.7	43.3
Education	66.7	41.7
Infrastructure	51.8	26.8

Source: EIU

QUALITY OF LIFE

Finally the quality of life of those living in the metropolitan cities of Karachi and Lahore has been compared with other regional megacities, especially those in South Asia.

The Economist Intelligence Unit (EIU) of the London Economist has constructed a Liveability Index for cities. This index includes indicators of security, health care, culture and environment, education and infrastructure. In the latest ranking for 2015, 140 cities have been included.

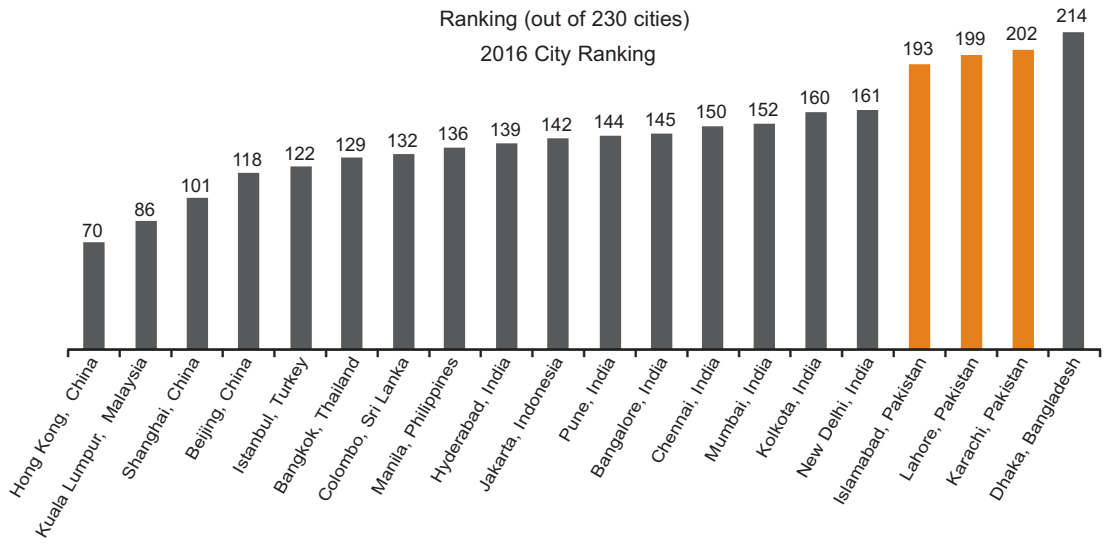
The depressing finding is that out of the bottom 10 (ten) countries, two are from South Asia, namely Karachi, ranked 136th, and Dhaka, ranked 139th. Karachi does poorly particularly in terms of security and Dhaka in infrastructure, as shown in Exhibit 9.11.

There is also a Mercer Quality of Living Ranking of 230 cities. According to this ranking for 2016, shown in Exhibit 9.12 the three cities of Pakistan have very low positions. Islamabad is ranked 193rd, Lahore at 199th and Karachi at 202nd. All major Indian cities are ranked above Pakistani cities. The Indian city, Pune, has a ranking of 144th. The cities of Pakistan do poorly primarily because of severe concerns regarding security, arising from exposure especially to acts of terror. The implication is that foreign investment and tourism to Pakistan have fallen to critically low levels.

The perception of households in urban areas of Pakistan regarding their economic situation has also been examined, and a comparison is made of perceptions in 2012-13, with those in 2008-09 in Exhibit 9.13. During this period the growth rate of the urban economy plummeted, as highlighted in Chapter 1.

The results are not surprising. Urban households have generally revealed a deterioration of their economic situation across Pakistan. As expected, the lowest percentage of households in the cities of Sindh, primarily Karachi, has indicated that their economic situation is better or much better.

Exhibit 9.12 Ranking of cities in Asian developing countries



Source: Mercer Quality of Living Rankings, 2016

The overall finding is that the sustainability of urban development in Pakistan has been negatively impacted by a severe deterioration in the law and order situation, arising from terrorism and rising incidence of crime. This has been compounded by under-investment in infrastructure. Both the quantity per capita and quality of water have declined in most cities, especially Karachi. The transport infrastructure is under stress and there is load shedding in power and gas. As economic growth has decreased, unemployment in urban areas has increased, especially among the graduate youth. What we have today in Pakistan is almost a crisis of urban development.

Exhibit 9.13 Perception of households about economic situation* in urban areas of Pakistan (%)

		Much worse or worse	Same	Much better	Total
Pakistan	2012-13	35	44	21	100
	2008-09	33	43	24	100
Punjab	2012-13	38	40	22	100
	2008-09	30	42	28	100
Sindh	2012-13	32	52	16	100
	2008-09	38	46	16	100
Khyber Pakhtunkhwa	2012-13	36	38	26	100
	2008-09	24	37	39	100
Balochistan	2012-13	37	47	16	100
	2008-09	25	49	26	100

Source: PSLMS, PBS

APPENDICES

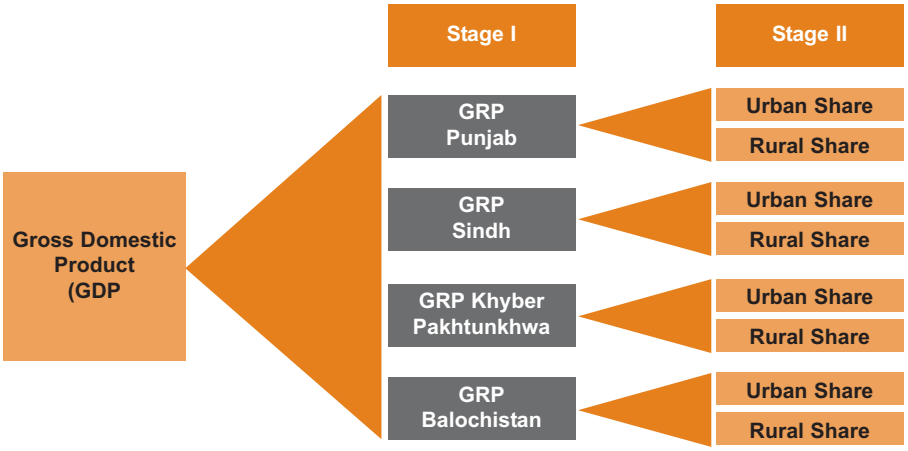
A.1

RESEARCH METHODOLOGY FOR ESTIMATING THE URBAN ECONOMY

The study estimates the share of Urban and Rural economy in each province of Pakistan. The methodology is divided into two parts Figure A1.1 shows the Research Design.

At first stage, I decompose the National GDP into Provincial GRP and estimate the share of each province in national GDP, at second stage we decompose the GRP of each province in Urban and Rural.

Figure A1.1 Research Design of the Study



Source: SPDC

In the study, we follow the methodology used by Pakistan Bureau of Statistics (PBS) where data is available in disaggregated form. In some sectors where same information is not available at provincial level, we use different "allocators" to decompose National Value Added. Different approaches are used based on the nature of sectors.Production approach used in sectors like Major Crops, Minor Crops, Fishing, Mining and Quarrying, Manufacturing Large Scale, Electricity, Gas Distribution and Water. Expenditure approach was used in Livestock, Forestry, Slaughtering and Ownership of Dwellings. Factor Income Approach was used in Small Scale Manufacturing, Construction, Public Administration & Defence, Community Services, Whole Sale & Retail Trade and Finance & Insurance.

Section I explains the methodology of decomposing National GDP into Provincial GRP and Section II presents the methodology used at provincial level to decompose provincial GRP into Urban and Rural.

DECOMPOSITION OF NATIONAL GDP INTO PROVINCIAL GRP

A number of regional allocators have been used to distribute the value added between Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan (Table A1.1). Most of the reliance has been placed on official data sources like Provincial Development Statistics and Pakistan Economic Survey. Fortunately, results of Household Income and Expenditure Survey 2010-11 and Labor Force Survey 2010-11have been released by the Pakistan Bureau of Statistics. These surveys facilitate us to determine the latest trends in income, consumption and employment at the national and provincial levels.

Table A1.1 Regional Allocations for Different Sectors / Sub-Sectors

Section / Sub-Sector	Allocator	Data Sources*
AGRICULTURE		
Major Crops	Share in Output of – crops	ASYB
Minor Crops	Share in Output of – crops	ASYB
Livestock	Share in Consumption Expenditure	HIES
Forestry	Share in Expenditure on Forest Products	HIES
Fishing	Share in Output	AYSB
INDUSTRY		
Mining and Quarrying	Share in Output of Crude Oil, Natural Gas Coal and other minerals	SYB
Large-Scale Manufacturing	Share in Output of – industries	PDS, PES[a]
Small-Scale Manufacturing	Share in Informal Sector Employment in Manufacturing	LFS
Slaughtering	Share in Consumption Expenditure on Livestock Products (excluding milk)	HIES
Electricity, Gas and Water	Shares in electricity generation, electricity consumption, gas consumption and canal water withdrawals	PDS, EYB, ASYB
Construction	Income-Adjusted Share in Employment	HIES, LFS
SERVICES		
Transport, Storage and Communications	Income-Adjusted Share in Employment	HIES, LFS
Wholesale and Retail Trade, Hotels and Restaurants	Income-Adjusted Share in Employment	HIES, LFS
Finance and Insurance	Income-Adjusted Share in Employment	HIES, LFS
Ownership of Dwellings	Share in actual and imputed rents	HIES
Public Administration and Defence	Income-adjusted share in employment	HIES, LFS
Community, Social and Personal Services	Income-adjusted share in employment	HIES, LFS

[a] data was only available for selected industries, for other industries data was obtained directly from the Provincial Bureaus of Statistics and Pakistan Bureau of Statistics

*PDS = Provincial Development Statistics, ASYB Agricultural Statistics Year Book,
HIES = Household Integrated Economic Survey, LFS = Labour Force Survey
SYB = Statistical Year Book

The methodology, we apply on each sector and sub sectors are described below.

Agriculture

Agriculture includes activities like Cropping (Major Crops and Minor Crops), Livestock, Fishery and Forestry. The methodology for each sector and sub sector Is given below.

Major Crops

There are twelve crops (Wheat, Rice, Cotton, Bajra, Gram, Barley, Maize, Tobacco, Sugarcane, Jawar, Rapeseed& Mustard, and Sesame) in the basket of major crops nationally. We also include these crops in the basket of major crops at regional level. Value added of major crops is estimated through production approach.

$$Q.I._{P.M} = \frac{\sum_{t=1}^{12} w_{i^*} \left(\frac{X_{i.P.T}}{X_{i.P.O}} \right)}{\sum_{t=1}^{12} w_{i^*}} * 100$$

$Q.I._{P.M}$ = *Quantum Index of Major Crops for a province*

$X_{i.P.T}$ = *Production of i^{th} crop in a province in a given year*

$X_{i.P.0.}$ = *Production of i^{th} crop in a province in a base year*

W_i = *Weights of i^{th} crop in major crops in a province*

Where i = 1,2,3,4,5,…,12. t = 0,1,2,….,11.

Weights of each crop for each province are taken from Rebasing Book[1]. We estimate the growth rates for each province and Pakistan separately and apply those growth rates on benchmark values[2], then we find the share of a province for every year and apply that share on National value added as reported in various Economic Surveys of Pakistan.

Minor Crop

The same methodology is applied on major crops. An index is constructed for minor crops for each province and Pakistan separately. Minor Crops include pulses, vegetables, fruits, condiments, fodder, oilseed, other crops, and flower and foliage. Since output of flower and foliage is not available at regional level and it is less than one percent to overall gross value of minor crops. So we drop that group and include rest of all groups in our index.

$$Q.I._{P.M} = \frac{\sum_{t=1}^{7} w_{i^*} \left(\frac{X_{i.P.T}}{X_{i.P.O}} \right)}{\sum_{t=1}^{7} w_{i^*}} * 100$$

$Q.I._{P.M}$ = *Quantum Index of Major Crops for a province*

$X_{i.P.T}$ = *Production of i^{th} crop in a province in a given year*

$X_{i.P.0.}$ = *Production of i^{th} crop in a province in a base year*

W_i = *Weights of i^{th} crop in major crops in a province*

Where i = 1,2,3,4,5,…,7. t = 0,1,2,….,11.

Weights for each category for each province and Pakistan are taken from Rebasing Book[3].

We estimate the growth rates for each province and Pakistan separately and apply those growth rates on benchmark values[4], and then we find the share of each province for every year and apply that share to National value added as reported in various Economic Surveys of Pakistan.

Livestock

Value added of each province in Livestock sector is estimated through consumption approach. Per capita consumption expenditure on Milk and Milk products, Meat (Mutton and Beef) and Poultry (Chicken meat and Eggs) is taken from Household Integrated Economic Survey (HIES) for each province separately. Since HIES is not published annually so we find missing values through standard interpolation techniques.

We then convert per capita monthly consumption into per capita annual consumption by multiplying it with corresponding year's population of each province. We then estimate the share of each province.

$$VA_{L.P.t} = VA_{L.N.t} * \left(\frac{MI_{C.P.t} + ME_{C.P.t} + CM_{C.P.t}}{MI_{C.N.t} + ME_{C.N.t} + CM_{C.N.t}} \right)$$

$$MI_{C.P.t} = (MI_{C.U.P.t} * N_{U.P.t}) + (MI_{C.R.P.t} * N_{U.P.t})$$

$$MI_{C.N.t} = (MI_{C.U.N.t} * N_{U.N.t}) + (MI_{C.R.N.t} * N_{U.N.t})$$

$$ME_{C.P.t} = (ME_{C.U.P.t} * N_{U.P.t}) + (ME_{C.R.P.t} * N_{U.P.t})$$

$$ME_{C.N.t} = (ME_{C.U.N.t} * N_{U.N.t}) + (ME_{C.R.N.t} * N_{U.N.t})$$

$$CM_{C.P.t} = (CM_{C.U.P.t} * N_{U.P.t}) + (CM_{C.R.P.t} * N_{U.P.t})$$

$$CM_{C.N.t} = (CM_{C.U.N.t} * N_{U.N.t}) + (CM_{C.R.N.t} * N_{U.N.t})$$

$VA_{L.N.t}$ = Value added in livestock nationally in a t year.
$VA_{L.P.t}$ = Value added in livestock in a province in a t year.
$MI_{C.P.t}$ = Consumption Expenditures on Milk in a province in year t.
$MI_{C.U.P.t}$ = Consumption Expenditures on Milk in Urban Areas of a province in year t.
$MI_{C.R.P.t}$ = Consumption Expenditures on Milk in Rural Areas of a province in year t
$MI_{C.N.t}$ = Consumption Expenditures on Milk in Pakistan in year t.
$MI_{C.U.N.t}$ = Consumption Expenditures on Milk in Urban Areas of Pakistan in year t.
$MI_{C.R.N.t}$ = Consumption Expenditures on Milk in Rural Areas of Pakistan in year t.
$ME_{C.P.t}$ = Consumption Expenditures on Meat in a province in year t.
$ME_{C.U.P.t}$ = Consumption Expenditures on Meat in Urban Areas of a province in year t.
$ME_{C.R.P.t}$ = Consumption Expenditures on Meat in Rural Areas of a province in year t.
$ME_{C.N.t}$ = Consumption Expenditures on Meat in Pakistan in year t.
$ME_{C.U.N.t}$ = Consumption Expenditures on Meat in Urban Areas of Pakistan in year t.
$ME_{C.R.N.t}$ = Consumption Expenditures on Meat in Rural Areas of Pakistan in year t.
$CM_{C.P.t}$ = Consumption Expenditures on Poultry in a province in year t.
$CM_{C.U.P.t}$ = Consumption Expenditures on Poultry in Urban Areas of a province in year t.
$CM_{C.R.P.t}$ = Consumption Expenditures on Poultry in Rural Areas of a province in year t.
$CM_{C.N.t}$ = Consumption Expenditures on Poultry in Pakistan in year t.
$CM_{C.U.N.t}$ = Consumption Expenditures on Poultry in Urban Areas of Pakistan in year t.
$CM_{C.R.N.t}$ = Consumption Expenditure on Poultry in Rural Areas of Pakistan in year t.
$N_{U.N.t}$ = Urban population of Pakistan in year t.
$N_{R.N.t}$ = Rural Population of Pakistan in Year t.
$N_{U.N.t}$ = Urban population of a province in year t.
$N_{R.N.t}$ = Rural Population of a province in Year t.

Fisheries

Fishing Activities include catching of fish from rivers, canals, farms, and oceans. Contribution of Fisheries in GRP is estimated through production approach by same methodology that is used at National level. Amount of Fish caught under inland and marine fishing is taken from various Agricultural Statistics of Pakistan.

$$GV_t = [\{34.75^* (2Q_{IL})\}^*0.84] + [\{16.43^*(2Q_M)^*0.935\} ^*0.64]$$

Q_{IL} = Quantity of inland fish caught in a t year

Q_M = Quantity of Marine fish caught in a t year

34.75 = Average Price of fish in a Base Year (1999-00)

16.43 = Average Price of Marine fish in a Base Year (1999-00)

2 = Double the amount of inland fishing due to under reporting.

To get the value added at constant factor cost of fisheries at provincial level, gross value of each year is reduced for input costs[5].

Forestry

At National Level Forestry's contribution in GDP at constant factor cost is estimated through consumption approach. We use consumption expenditure approach to estimate the share of each province in national value added.

Per capita consumption expenditure on Fire Wood for Pakistan and each province is taken separately from HIES, we then convert per capita monthly consumption expenditures into annually provincial and national consumption expenditures by the same methodology as used for livestock. Values for missing years are estimated through standard interpolation techniques.

$$VA_{P.t} = VA_{N.t} * \left(\frac{FW_{EX.P.t}}{MI_{EX.N.t}}\right)$$

$$FW_{EX.P.t} = (FW_{EX.U.P.t} * N_{U.P.t}) + (FW_{EX.R.P.t} * N_{R.P.t})$$

$$FW_{EX.N.t} = (FW_{EX.U.N.t} * N_{U.N.t}) + (FW_{EX.R.N.t} * N_{R.N.t})$$

$VA_{P.t}$ = Value Added of forestry in a province in year t.

$VA_{N.t}$ = Value Added of forestry in Pakistan in year t.

$FW_{EX.P.t}$ = Firewood Expenditures in a province in year t.

$FW_{EX.N.t}$ = Fire Wood Expenditures in Pakistan in Year t.

$FW_{EX.U.P.t}$ = Fire Wood Expenditures in Urban Areas of a province in Year t.

$FW_{EX.R.P.t}$ = Fire Wood Expenditures in Rural Areas of a province in Year t.

$FW_{EX.U.N.t}$ = Fire Wood Expenditures in Urban Areas of Pakistan in Year t.

$FW_{EX.R.N.t}$ = Fire Wood Expenditures in Rural Areas of Pakistan in Year t.

$N_{U.N.t}$ = Urban population of Pakistan in year t.

$N_{R.N.t}$ = Rural Population of Pakistan in Year t.

$N_{U.P.t}$ = Urban population of a province in year t.

$N_{R.P.t}$ = Rural Population of a province in Year t.

Industrial Sector

Industrial sector includes mining and Quarrying, Manufacturing (Large scale Manufacturing, Small Scale Manufacturing and Slaughtering), Construction and Electricity and Gas Distribution and Water. A detailed methodology for each sector and sub sectors are given bellow.

Mining and Quarrying

The share of a province in Mining and Quarrying is derived by using production approach. A quantum index for Mining and Quarrying is constructed for each province and Pakistan on the bases of 9 minerals (Coal, Natural gas, Crude oil, and 8 other Minerals). Benchmark values are taken from Census of Mining and Quarrying Industry 1999-00 by PBS.

$$Q.I._{P.M} = \frac{\sum_{i=1}^{11} w_{i^*}\left(\frac{X_{i.P.T}}{X_{i.P.O}}\right)}{\sum_{i=1}^{11} w_{i^*}} * 100$$

$Q.I._{P.M}$ = Quantum Index of Mining and Quarrying for a Province

$X_{i.P.T}$ = Production of i^{th} Mineral in a Province in a given year

$X_{i.P.0.}$ = Production of i^{th} Mineral in a Province in a base year

W_i = Weights of i^{th} mineral in Mining in a Province

where i = 1,2,3,4,5,…,11. t = 0,1,2,….,11.

Large Scale Manufacturing

Provincial share in Large-Scale Manufacturing (LSM) is estimated through production approach as we did in mining and quarrying. The data on 99 industrial items is taken from a publication, Monthly Performance of Industrial Production by Provincial Bureaus of Statistics. The data on same industrial products for Pakistan is taken from the publication of Quantum index for manufacturing by industry section of PBS. Quantum Index for each province and Pakistan LSM is constructed. Weights for each item are taken from census of manufacturing industries (CMI) 2000-01. Weights have been allocated at industry level on the basis of contribution to GDP as reported in CMI 2000-01. The percentage contribution of each industry has been considered as the weight of that industry. The weights for products in an industry on the bases of relative production value of the selected items.

$$Q.I._{pm} = \frac{\sum_{i=1}^{14} w_{i^*}\left(\frac{X_{i.P.T}}{X_{i.P.0}}\right)}{\sum_{i=1}^{14} w_{i^*}} * 100$$

$Q.I._{pm}$ = *uantum Index of LSM for a province*

$X_{i.P.T}$ = *Production of ith Industry item in a province in a given year*

$X_{i.P.0.}$ = *Production of ith Industry item in a province in a base year*

W_i = *Weights of ith Industrial item in LSM in a province.*

where i = 1,2,3,4,5,…,14. t=0,1,2,….,11.

Small Scale Manufacturing

The share of each province in Small-Scale Manufacturing (SSM) is derived on the basis of the share of a province in employment in informal sector manufacturing. The data on percentage distribution of employed labour force in informal sector manufacturing of each province and Pakistan is taken from labor force survey (LFS) published by PBS. Since LFS is not published regularly so the values for missing years are estimated through standard interpolation.

$$VA_{Sm.P.T} = VA_{S.N.t} * \left(\frac{ISM_{E.P.T}}{ISM_{E.N.T}}\right)$$

$VA_{Sm.P.T}$ = Value added in small scale manufacturing in a province for a year t.

$VA_{Sm.N.T}$ = Value added in small scale manufacturing in Pakistan for a year t.

$ISM_{E.P.T}$ = Employment in informal sector manufacturing in a province for a year t.

$ISM_{E.N.T}$ = Employment in informal sector manufacturing in Pakistan for a year t.

Slaughtering

According to SNA 1993 slaughtering is part of manufacturing. Share of each province in slaughtering is derived by same methodology which is used in livestock. Per capita consumption expenditure on Mutton, Beef and Chicken Meat is taken from HIES. Then we convert this per capita consumption into annual provincial and national consumption. The series is extended to non HIES years by using standard interpolation techniques. The share of a province is applied to national value added in slaughtering.

$$VA_{Sl.P.t} = VA_{Sl.N.t} * \left(\frac{BE_{C.P.t} + MU_{C.P.t} + CM_{C.P.t}}{BE_{C.N.t} + MU_{C.N.t} + CM_{C.N.t}}\right)$$

$$BE_{C.P.t} = (BE_{C.U.P.t} * N_{U.P.t}) + (BE_{C.R.P.t} * N_{U.P.t})$$
$$BE_{C.N.t} = (BE_{C.U.N.t} * N_{U.N.t}) + (BE_{C.R.N.t} * N_{U.N.t})$$
$$MU_{C.P.t} = (MU_{C.U.P.t} * N_{U.P.t}) + (MU_{C.R.P.t} * N_{U.P.t})$$
$$MU_{C.N.t} = (MU_{C.U.N.t} * N_{U.N.t}) + (MU_{C.R.N.t} * N_{U.N.t})$$
$$CM_{C.P.t} = (CM_{C.U.P.t} * N_{U.P.t}) + (CM_{C.R.P.t} * N_{U.P.t})$$
$$CM_{C.N.t} = (CM_{C.U.N.t} * N_{U.N.t}) + (CM_{C.R.N.t} * N_{U.N.t})$$

$VA_{Sl.P.t}$ = Value Added in Slaughtering of a province in Year t.

$VA_{Sl.N.t}$ = Value Added in Slaughtering of Pakistan in Year t.

$BE_{C.P.t}$ = Consumption Expenditures on Beef in a province in year t.

$BE_{C.U.P.t}$ = Consumption Expenditures on Beef in Urban Areas of a province in year t.

$BE_{C.R.P.t}$ = Consumption Expenditures on Beef in Rural Areas of a province in year t

$BE_{C.N.t}$ = Consumption Expenditures on Beef in Pakistan in year t.

$BE_{C.U.N.t}$ = Consumption Expenditures on Beef in Urban Areas of Pakistan in year t.

$BE_{C.R.N.t}$ = Consumption Expenditures on Beef in Rural Areas of Pakistan in year t.

$MU_{C.P.t}$ = Consumption Expenditures on Mutton in a province in year t.

$MU_{C.U.P.t}$ = Consumption Expenditures on Mutton in Urban Areas of a province in year t.

$MU_{C.R.P.t}$ = Consumption Expenditures on Mutton in Rural Areas of a province in year t.

$MU_{C.N.t}$ = Consumption Expenditures on Mutton in Pakistan in year t.

$MU_{C.U.N.t}$ = Consumption Expenditures on Mutton in Urban Areas of Pakistan in year t.

$ME_{C.R.N.t}$ = Consumption Expenditures on Mutton in Rural Areas of Pakistan in year t.

$CM_{C.P.t}$ = Consumption Expenditures on Chicken in a province in year t.

$CM_{C.U.P.t}$ = Consumption Expenditures on Chicken in Urban Areas of a province in year t.

$CM_{C.R.P.t}$ = Consumption Expenditures on Chicken in Rural Areas of a province in year t.

$CM_{C.N.t}$ = Consumption Expenditures on Chicken in Pakistan in year t.

$CM_{C.U.N.t}$ = Consumption Expenditures on Chicken in Urban Areas of Pakistan in year t.

$CM_{C.R.N.t}$ = Consumption Expenditure on Chicken in Rural Areas of Pakistan in year t.

$N_{U.N.t}$ = Urban population of Pakistan in year t.

$N_{R.N.t}$ = Rural Population of Pakistan in Year t.

$N_{U.P.t}$ = Urban population of a province in year t.

$N_{R.P.t}$ = Rural Population of a province in Year t.

Construction

At national level value added in construction is estimated through expenditure approach. But such data is not available at provincial level. So the share of each province is estimated through income approach. As construction is a labour intensive sector, the income earned by each employed person in construction is estimated for each province and Pakistan separately. The share of a province in construction is derived on the bases of income earned by employed people in construction. The data on employment in construction at provincial and Pakistan level is taken from LFS and Income earned by each employed person in construction is taken from HIES. Values for missing years are estimated through standard interpolation techniques.

$$VA_{C.P.T} = VA_{C.N.T} * \left(\frac{I.C._{.P.T}}{I.C._{.N.T}}\right)$$

$VA_{C.P.T}$ = Value Added in Construction in a province for a year t.

$VA_{C.N.T}$ = Value Added in Construction in Pakistan for a year t.

$I.C._{.P.T}$ = Income earned by employed persons in Construction in a Province for a year t.

$I.C._{.N.T}$ = Income earned by employed persons in Construction in Pakistan for a year t.

Electricity and Gas Distribution

Value Added in Electricity and Gas Distribution is estimated through production approach at national level. It includes electricity generation and transmission distribution, gas distribution and transmission and water supply. Since data was not available in the above mentioned format at provincial level we derive the share of a province in each category by using relevant allocators. Weights for each category are taken from Rebasing[6] publication of Pakistan.

$$VA_{E.G.P.T} = VA_{E.G.N.T} * \left\{\left(\frac{E_{G.P.T}}{E_{G.N.T}} * W_{E.G}\right) + \left(\frac{E_{CP.T}}{E_{C.N.T}} * W_{E.C}\right) + \left(\frac{G_{CP.T}}{G_{C.N.T}} * W_G\right) + \left(\frac{C.W_{W.P.T}}{C.W_{W.N.T}} * W_W\right)\right\}$$

$V.A_{E.G.P.T}$ = Value Added in electricity and gas distribution in a province for a year t.

$V.A_{E.G.N.T}$ = Value Added in electricity and gas distribution in a province for a year t.

$E_{G.P.T}$ = Electricity Generated by a province in year t.

$E_{C.P.T}$ = Electricity Consume by a province in year t.

$G_{C.P.T}$ = Gas Consumed by a province in year t.

$C.W_{W.P.T}$ = Canal water withdrawal by a province in a year t.

$E_{G.N.T}$ = Electricity generated by Pakistan in year t.

$E_{C.N.T}$ = Electricity consume by Pakistan in year t.

$G_{C.N.T}$ = Gas consumed by Pakistan in year t.

$C.W_{W.N.T}$ = Canal water withdrawal by Pakistan in a year t.

$W_{E.G}$ = Share of electricity generation in total value added at national level.

$W_{E.C}$ = Share of electricity distribution in total value added at national level.

W_G = Share of Gas distribution and transmission in total value added at national level.

W_W = Share of water and supply in total value added at national level.

Services Sector

The Sector covers the services like wholesale and retail trade, Transport, Storage and Communication, Finance and Insurance, Ownership of Dewellings, Public Administration and Defence and Community, Social and Personal Services. The methodology to derive the share of each province in these sectors is given bellow.

Wholesale and Retail Trade

The share of each province in wholesale and retail trade is estimated through income approach. The share of a province in wholesale and retail trade is derived on the bases of income earned by employed people in wholesale and retail trade. The data on employment in wholesale and retail trade at provincial and Pakistan level is taken from LFS and Income earned by each employed person in wholesale and retail trade is taken from HIES. Values for missing years are estimated through standard interpolation techniques.

$$VA_{W.R.T.P.T} = VA_{W.R.T.N.T} * \left(\frac{I.W.R.T_{P.T}}{I.W.R.T._{N.T}}\right)$$

$VA_{W.R.T.P.T}$ = *Value Added in wholesale and retail trade in a province for a year t.*

$VA_{W.R.T.N.T}$ = *Value Added in wholesale and retail trade in Pakistan for a year t.*

$I.W.R.T._{P.T}$ = *Income earned by employed persons in wholesale and retail trade in a Province for a year t.*

$I.W.R.T._{N.T}$ = *Income earned by employed persons in wholesale and retail trade in Pakistan for a year t.*

Finance and Insurance

The share of each province in this sector is estimated through income approach. The share of a province in finance and insurance is derived on the bases of income earned by employed people in this sector. The data on employment in finance and insurance at provincial and Pakistan level is taken from LFS and Income earned by each employed person in this sector is taken from HIES. Values for missing years are estimated through standard interpolation techniques.

$$VA_{F.I.P.T} = VA_{F.I.N.T} * \left(\frac{I.F.I._{P.T}}{I.F.I_{N.T}}\right)$$

$VA_{F.I.P.T}$ = *Value Added in finance and insurance in a province for a year t.*

$VA_{F.I.N.T}$ = *Value Added in finance and insurance in Pakistan for a year t.*

$I.F.I_{P.T}$ = *Income earned by employed persons in finance and insurance in a Province for a year t.*

$I.F.I_{N.T}$ = *Income earned by employed persons in finance and insurance in Pakistan for a year t.*

Transport and Communication

The share of each province in this sector is also estimated through income approach. The share of a province in this sector is derived on the bases of income earned by employed people in Transport and Communication. The data on employment in this sector at provincial and Pakistan level is taken from LFS and Income earned by each employed person in Transport and Communication is taken from HIES. Values for missing years are estimated through standard interpolation techniques.

$$VA_{T.C.P.T} = VA_{T.C.N.T} * \left(\frac{I.T.C._{P.T}}{I.T.C._{N.T}}\right)$$

$VA_{T.C.P.T}$ = *Value Added in Transport and Communication in a province for a year t.*

$VA_{T.C.N.T}$ = *Value Added in Transport and Communication in Pakistan for a year t.*

$I.T.C._{P.T}$ = *Income earned by employed persons in Transport and Communication in a Province for a year t.*

$I.T.C._{N.T}$ = *Income earned by employed persons in Transport and Communication in Pakistan for a year t.*

Ownership of Dwellings

For the present report, the provincial value-added of ownership and dwellings is derived from the provincial share of rental expenditures obtained from different published issues of the HIES. The value-added for non-survey years was interpolated. The house rent expenditures were estimated from the monthly expenditure per household, house rent shares in total expenditures, and total number of houses as per the HIES data.

$$VADWP = VADWN * (RP * HP)/ (RN * HN)$$

VADWP = *Value Added in ownership of dwellings sector DW in a Province P*

VADWN = *value added in ownership of dwellings sector DW nationally N*

RP = *average rent in a Province P*

HP = *number of household in province P*

RN = *average rent nationally N*

HN = *number of household nationally N*

Public Adminstration and Defence

For this sector employment is used to find the share of a province in Pakistan. The labour force estimates are used in order to find the final estimates for this sector. All the missing years in the LFS are interpolated/extrapolated as mentioned before. The formal representation of his sector in order to estimate the value added is given below;

$$VA_{AP} = VA_{AN} * (N_{AP} / N_{AN})$$

VA_{AP} = *value added in administration and defence sector* $_A$ *in a province* $_P$

VA_{AN} = *value added in administration and defence sector* $_A$ *nationally* $_N$

N_{AP} = *employment in administration and defence* $_A$ *in a province* $_P$

N_{AN} = *employment in administration and defence* $_A$ *nationally* $_N$

Community, Social and Personal Services

This sector comprises incomes of the private sector persons who are engaged in private education, medical & health professions, and other household and community services.

Provincial data for the above mentioned categories are not available; the value-added of a province in this sector is therefore estimated on the basis of the share of the province's labor force in the overall national labor force. The Labor Force data points are taken from various LFS publications, while the data for the missing years are interpolated to obtain a continuous series of allocators, which are then applied to the national data series.

Data on output and value added in services is not available by province. Moreover given that the sector comprises of a large variety of services, no one appropriate proxy variable or indirect allocator can be used in order to estimate the provincial output in the services sector. That is why provincial value added in services is estimated on the basis of provincial shares of employment in services. The formal representation of value added estimation for this sector is given as follows;

Formally:

VA_{SVP} = $VA_{SVN} * (N_{SVP}/N_{SVN})$

VA_{SVP} = value added in services sector $_{SV}$ in a province $_P$

VA_{SVN} = value added in services sector $_{SV}$ in nationally $_N$

N_{SVP} = employment in services sector $_{SV}$ in province $_P$

N_{SVN} = employment in services sector $_{SV}$ nationally $_N$

DECOMPOSE PROVINCIAL GRP INTO URBAN AND RURAL SECTOR

A number of provincial allocators have been used to distribute the provincial value added between Urban and Rural sectors. These are listed in Table A1.2 along with the data sources.

After a detailed methodology for decomposition of National GDP into Provincial GRP this section will present the methodology to divide the provincial GRP's into two parts, Urban and Rural. This section presents a detail methodology for decomposition at sectoral and sub-sectoral level.

Agriculture

Agriculture is primarily a rural activity. In order to find the share of rural and urban economy in agriculture sector we used income approach. The data on employment and income is taken from LFS and HIES. We applied this methodology on overall agriculture sector.

Table A1.2 Provincial Allocations for Different Sectors / Sub-Sectors

Section / Sub-Sector	Allocator	Data Sources*
AGRICULTURE		
Agriculture	Income-Adjusted Share in Employment	HIES, LFS
Mining and Quarrying	Income-Adjusted Share in Employment	HIES, LFS
Large-Scale Manufacturing	Income-Adjusted Share in Employment	HIES, LFS
Small-Scale Manufacturing	Share in Informal Sector Employment in Manufacturing	LFS
Slaughtering	Share in Consumption Expenditure on Livestock Products (excl. milk)	HIES
Electricity, Gas and Water	Income-Adjusted Share in Employment	HIES, LFS
Construction	Income-Adjusted Share in Employment	HIES, LFS
SERVICES		
Transport, Storage and Communications	Income-Adjusted Share in Employment	HIES, LFS
Wholesale and Retail Trade, Hotels and Restaurants	Income-Adjusted Share in Employment	HIES, LFS
Finance and Insurance	Income-Adjusted Share in Employment	HIES, LFS
Ownership of Dwellings	Share in actual and imputed rents	HIES
Public Admin and Defence	Income-adjusted share in employment	HIES, LFS
Community, Social and Personal Services	Income-adjusted share in employment	HIES, LFS

*HIES = Household Integrated Economic Survey, LFS = Labour Force Survey
SYB = Statistical Year Book

$$VA_{ARp} = VA_{App} * (I_{ARP}/I_{AP})$$

VA_{ARP} = *value added in agricultural sector* A *in rural sector* R *of a Province* P

VA_{APP} = *value added in agricultural sector* A *of a Province* P

I_{ARP} = *Income per worker employed in agricultural sector* A *in rural sector* R *in a Province* P

I_{AP} = *Income per worker employed in Agriculture sector* A *in a Province* P.

Industrial Sector

Mining and Quarrying

The share of a rural and urban sector in mining and quarrying of province is estimated through income approach. The data on employment and income is taken from LFS and HIES. We applied this methodology on overall agriculture sector.

$$VA_{MRp} = VA_{Mpp} * (I_{MRP}/I_{MP})$$

VA_{MRP} = *value added in mining and quarrying sector* M *in rural sector* R *of a Province* P

VA_{MPP} = *value added in mining and quarrying sector* M *of a Province* P

I_{MRP} = *Income per worker employed in mining and quarrying sector* M *in rural sector* R *in a Province* P

I_{MP} = *Income per worker employed in mining and quarrying sector* M *in a Province* P.

Large Scale Manufacturing

The share of a rural and urban sector in Large Scale Manufacturing of province is estimated through income approach. The data on employment and income is taken from LFS and HIES.

$$VA_{LSM.R.p} = VA_{LSM.p} * (I_{LSM.R.P}/I_{LSM.P})$$

$VA_{LSM.R.P}$ = *value added in Large Scale Manufacturing in rural sector* $_R$ *of a Province* $_P$

$VA_{LSM.P}$ = *value added in Large Scale Manufacturing of a Province* $_P$

$I_{LSM.R.P}$ = *Income per worker employed in Large Scale Manufacturing in rural sector* $_R$ *in a Province* $_P$

$I_{LSM.P}$ = *Income per worker employed in Large Scale Manufacturing in a Province* $_P$.

Small Scale Manufacturing

The share of urban and rural sectors in each province in Small-Scale Manufacturing (SSM) is derived by using same approach used at provincial level. The data on urban and rural percentage distribution of employed labour force in informal sector manufacturing of each province is taken from labor force survey (LFS) published by PBS.

$$VA_{SmR.P.T} = VA_{Sm.P.T} * \left(\frac{ISM_{E.R.P.T}}{ISM_{E.P.T}}\right)$$

$VA_{Sm.P.T}$ = *Value added in small scale manufacturing in a province.*

$VA_{SmR.P.T}$ = *Value added in small scale manufacturing in rural sector of a province.*

$ISM_{E.P.T}$ = *Employment in informal sector manufacturing in a province.*

$ISM_{E.R.P.T}$ = *Employment in informal sector manufacturing in rural sector of a province.*

Slaughtering

Share of Rural-Urban economy of each province in slaughtering is derived by same methodology which is used in slaughtering at provincial level. Per capita urban- rural consumption expenditures on Mutton, Beef and Chicken Meat are taken from HIES. The share of rural and urban sector of each province is applied to the corresponding province's value added in slaughtering.

$$VA_{Sl.R.P.t} = VA_{Sl.P.t} * \left(\frac{BE_{C.R.P.t} + MU_{C.R.P.t} + CM_{C.R.P.t}}{BE_{C.P.t} + MU_{C.P.t} + CM_{C.P.t}}\right)$$

$VA_{Sl.P.t}$ = *Value Added in Slaughtering of a province in Year t.*

$VA_{Sl.R.P.t}$ = *Value Added in rural sector of a province in Slaughtering in Year t.*

$BE_{C.P.t}$ = *Consumption Expenditures on Beef in a province in year t.*

$BE_{C.R.P.t}$ = *Consumption Expenditures on Beef in Rural Areas of a province in year t*

$MU_{C.P.t}$ = *Consumption Expenditures on Mutton in a province in year t.*

$MU_{C.R.P.t}$ = *Consumption Expenditures on Mutton in Rural Areas of a province in year t.*

$CM_{C.P.t}$ = *Consumption Expenditures on Chicken in a province in year t.*

$CM_{C.R.P.t}$ = *Consumption Expenditures on Chicken in Rural Areas of a province in year t.*

Construction

The share of rural sector in each province is estimated through income approach. The share of rural sector of a province in construction is derived on the bases of income earned by employed people in construction. The data on employment in construction at urban-rural and provincial is taken from LFS and Income earned by each employed person in construction is taken from HIES. Values for missing years are estimated through standard interpolation techniques.

$$VA_{C.R.P.T} = VA_{C.P.T} * \left(\frac{I.C._{.R.P.T}}{I.C._{.P.T}}\right)$$

$VA_{C.P.T}$ = Value Added in Construction in a province for a year t.

$VA_{C.N.T}$ = Value Added in rural sector of a province in Construction for a year t.

$I.C._{.P.T}$ = Income earned by employed persons in Construction in a Province for a year t.

$I.C._{.R.P.T}$ = Income earned by employed persons in Construction in rural sector of a province for a year t.

Electricity and Gas Distribution

The share of a rural sector in electricity and gas distribution in a province is estimated through income approach. The data on employment and income is taken from LFS and HIES.

$$VA_{E.G.R.P} = VA_{EG.P} * (I_{EG.R.P}/I_{EG.P})$$

$VA_{EG.R.P}$ = *value added in electricity and gas distribution sector in rural sector* $_R$ *of a Province* $_P$

$VA_{EG.P}$ = *value added in electricity and gas distribution sector of a Province* P

$I_{EG\cdot R.P}$ = *Income per worker employed in electricity and gas distribution in rural sector* $_R$ *in a Province* $_P$

$I_{EG.R.P}$ = *Income per worker employed in electricity and gas distribution in a Province* $_P$.

Services Sector

Wholesale and Retail Trade

The share of rural sector in each province in wholesale and retail trade is estimated through income approach. The share of rural sector of a province in wholesale and retail trade is derived on the bases of income earned by employed people in wholesale and retail trade. The data on employment in wholesale and retail trade at urban-rural and provincial is taken from LFS and Income earned by each employed person in wholesale and retail trade is taken from HIES. Values for missing years are estimated through standard interpolation techniques.

$$VA_{WR.R.P} = VA_{WR.P} * (I_{WR.R.P}/I_{WR.P})$$

$VA_{WR.R.P}$ = *value added in wholesale and retail trade sector in rural sector* $_R$ *of a Province* $_P$

$VA_{WR.P}$ = *value added in wholesale and retail trade sector of a Province* $_P$

$I_{WR\cdot R.P}$ = *Income per worker employed in wholesale and retail trade in rural sector* $_R$ *in a Province* $_P$

$I_{WR.R.P}$ = *Income per worker employed in wholesale and retail trade in a Province* $_P$.

Transport, Storage and Communication

The share of a rural sector in *Transport, Storage and Communication* in a province is estimated through income approach. The data on employment and income is taken from LFS and HIES.

$$VA_{TSC.R.P} = VA_{TSC.P} * (I_{TSC.R.P}/I_{TSC.P})$$

$VA_{TSC.R.P}$ = *value added in Transport, Storage and Communication sector in rural sector* $_R$ *of a Province* $_P$

$VA_{TSC.P}$ = *value added in Transport, Storage and Communication sector of a Province* $_P$

$I_{TSC\cdot R.P}$ = *Income per worker employed in Transport, Storage and Communication in rural sector* $_R$ *in a Province* $_P$

$I_{TSC.R.P}$ = *Income per worker employed in Transport, Storage and Communication in a Province* $_P$.

Finance and Insurance

The share of a rural sector in Finance and Insurance in a province is estimated through income approach. The data on employment and income is taken from LFS and HIES.

$$VA_{FI.R.P} = VA_{FI.P} * (I_{FI.R.P}/I_{FI.P})$$

$VA_{FI.R.P}$ = *value added in Finance and Insurance in rural sector* $_R$ *of a Province* $_P$

$VA_{FI.P}$ = *value added in Finance and Insurance sector of a Province* $_P$

$I_{FI\cdot R.P}$ = *Income per worker employed in Finance and Insurance in rural sector* $_R$ *in a Province* $_P$

$I_{FI.R.P}$ = *Income per worker employed in Finance and Insurance in a Province* $_P$.

Public Administration and Defence

The share of rural sector in each province in Public Administration and Defence is derived by using same approach used at provincial level. The data on rural percentage distribution of employed labour force in Public Adminstration and Defence of each province is taken from labor force survey (LFS) published by PBS.

$$VA_{AD.R.P.T} = VA_{AD.P.T} * \left(\frac{PAD_{E.R.P.T}}{PAD_{E.P.T}}\right)$$

$VA_{AD.PT.}$ = *Value added in Public Adminstration and Defence in a province.*

$VA_{AD.R.PT.}$ = *Value added in Public Adminstration and Defence in rural sector of a province.*

$PAD_{E.PT.}$ = *Employment in Public Adminstration and Defence in a province.*

$PAD_{E.R.PT.}$ = *Employment in Public Adminstration and Defence in rural sector of a province.*

Ownership of Dwellings

The share of Rural section in provincial value-added of ownership and dwellings is derived from rural share of housing rental expenditures obtained from different published issues of the HIES. The house rent expenditures were estimated from the monthly expenditure per household, house rent shares in total expenditures, and total number of houses as per the HIES data.

$$VA_{DW.R.P} = VA_{DWN} * (RP * HP)/ (RN * HN)$$

VA_{DWP} = *Value Added in ownership of dwellings sector DW in a Province P*

VA_{DWN} = *value added in ownership of dwellings sector DW nationally N*

RP = *average rent in a Province P*

HP = *number of household in province P*

RRP = *average rent in a rural sector of a province P*

HRP = *number of household in a rural sector of a province N*

Community, Social and Personal Services

The share of a rural sector in Community, Social and Personal Services of province is estimated through income approach. The data on employment and income is taken from LFS and HIES.

$$VA_{CSP.R.p} = VA_{CSP.P} * (I_{CSP.R.P}/I_{CSP.P})$$

$VA_{CSP.R.P}$ = *value added in Community, Social and Personal Services in rural sector* $_R$ *of a Province* $_P$

$VA_{CSP.P}$ = *value added in Community, Social and Personal Services sector* $_M$ *of a Province* $_P$

$I_{CSP.R.P}$ = *Income per worker employed in Community, Social and Personal Services in rural sector* $_R$ *in a Province* $_P$

$I_{CSP.P}$ = *Income per worker employed in Community, Social and Personal Services in a Province* $_P$.

NOTES:

1. National Accounts of Pakistan Rebasing From 1980-81 to 1999-2000, Federal Bureau of Staistics, Annexure-1
2. National Accounts of Pakistan Rebasing From 1980-81 to 1999-2000, Federal Bureau of Staistics, Annexure-1
3. National Accounts of Pakistan Rebasing From 1980-81 to 1999-2000, Pakistan Bureau of Staistics, Annexure-4
4. National Accounts of Pakistan Rebasing From 1980-81 to 1999-2000, Pakistan Bureau of Staistics, Annexure-4
5. National Accounts of Pakistan Rebasing From 1980-81 to 1999-2000, Federal Bureau of Statistics, Annexure-26
6. National Accounts of Pakistan Rebasing From 1980-81 to 1999-2000, Federal Bureau of Statistics, Chapter 3.

A.2

FINANCIAL IMPLICATIONS OF THE 7th NFC AWARD ON PROVINCES

Table A2.1 Province-wise implications of the 7th NFC Award

Rs. in Billion

Years	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	Total
NFC Transfers and Grants as per the 7th NFC Award					
2010-11	469	284	188	111	1,052
2011-12	591	346	229	124	1,289
2012-13	583	335	235	142	1,295
2013-14	659	389	266	150	1,464
2014-15	751	422	267	165	1,606
NFC Transfers and Grants as per Distribution Order 2006					
2010-11	397	244	130	64	835
2011-12	495	282	160	78	1,015
2012-13	515	294	168	78	1,054
2013-14	586	342	198	94	1,219
2014-15	668	373	215	102	1,357
Impact of 7th NFC Award on Total Transfers and Grants					
2010-11	72	40	58	47	217
2011-12	96	64	68	46	274
2012-13	68	41	68	64	240
2013-14	73	47	68	56	245
2014-15	84	50	52	63	248
Relative impact (%)					
2010-11	18.1	16.4	44.8	73.1	26
2011-12	17.4	28.4	38.9	59.4	27
2012-13	11.4	19.2	36.6	81.9	22.8
2013-14	10.6	19.2	31	60.3	20.1
2014-15	10.7	18.5	21.1	61.6	18.3

Note: The numbers are based on revised budget estimates.

Source: Author's estimates based on Federal Details of Demands for Grants and Appropriations (various issues)

Table A2.2 Provincial Resources Before and After the 7th NFC Award: Four Provinces Combined

Rs. in Billion

	2000-01	2006-07	2009-10	Post 7th NFC Award				
				2010-11	2011-12	2012-13	2013-14	2014-15
Provincial Resources								
Federal Transfers	163.1	400.1	633.5	999.3	1,089.9	1,215.0	1,406.3	1,538.7
Provincial Taxes	19.0	36.8	54.8	64.6	107.2	150.7	190.0	205.8
Provincial Non-Tax	19.8	45.4	67.9	62.3	48.0	71.3	49.4	75.6
Grants & Loans	26.6	1.1	119.9	85.1	88.9	107.4	121.8	82.3
Total	**228.6**	**483.4**	**876**	**1,211.3**	**1,334.0**	**1,544.4**	**1,767.4**	**1,902.4**
% of GDP	**5.4**	**5.2**	**5.9**	**6.6**	**6.7**	**6.9**	**7.1**	**6.9**
GDP at Market Prices	**4,210**	**9,240**	**14,867**	**18,276**	**20,047**	**22,379**	**25,068**	**27,384**

Source: SPDC's estimates based on Pakistan Fiscal Operations, Finance Division, Government of Pakistan (various years).

Table A2.3 Provincial Resources Before and After the 7th NFC Award: Punjab

Rs. in Billion

	2000-01	2006-07	2009-10	Post 7th NFC Award				
				2010-11	2011-12	2012-13	2013-14	2014-15
Provincial Resources								
Federal Transfers	82.8	191.5	325.1	460.8	518.3	569.3	646.3	726.9
Provincial Taxes	9.6	19.6	29.9	32.6	42.1	77.4	96.5	98.1
Provincial Non-Tax	8.2	27.0	28.3	24.0	25.8	28.1	23.0	45.3
Grants & Loans	6.9	-3.2	18.4	13.6	7.6	27.0	37.8	21.9
Total	**107.5**	**235**	**401.7**	**531**	**593.9**	**701.8**	**803.6**	**892.1**
% of GDP	**2.6**	**2.5**	**2.7**	**2.9**	**3.0**	**3.1**	**3.2**	**3.3**

Source: SPDC's estimates based on Pakistan Fiscal Operations, Finance Division, Government of Pakistan (various years).

Table A2..4 Provincial Resources Before and After the 7th NFC Award: Sindh

Rs. in Billion

	2000-01	2006-07	2009-10	Post 7th NFC Award				
				2010-11	2011-12	2012-13	2013-14	2014-15
Provincial Resources								
Federal Transfers	45.8	131.3	188.4	279.9	285.2	320.7	383.7	406.2
Provincial Taxes	7.4	14.0	21.6	27.5	60.4	68.1	79.1	93.8
Provincial Non-Tax	3.1	5.1	13.2	11.5	12.2	24.7	5.4	8.4
Grants & Loans	3.7	-3.6	17.8	11.9	26	32.1	22.4	25.3
Total	**59.9**	**146.8**	**241**	**330.7**	**383.8**	**445.7**	**490.6**	**533.7**
% of GDP	**1.4**	**1.6**	**1.6**	**1.8**	**1.9**	**2.0**	**2.0**	**1.9**

Source: SPDC's estimates based on Pakistan Fiscal Operations, Finance Division, Government of Pakistan (various years).

Table A2.5 Provincial Resources Before and After the 7th NFC Award: Khyber-Pakhtunkhwa

Rs. in Billion

	2000-01	2006-07	2009-10	Post 7th NFC Award				
				2010-11	2011-12	2012-13	2013-14	2014-15
Provincial Resources								
Federal Transfers	18.7	46	80.1	157.9	178.9	199.6	234.4	250.7
Provincial Taxes	1.5	2.4	2.3	3.5	3.7	4.1	11.7	11.4
Provincial Non-Tax	6.9	11.2	24.1	25.1	5.0	10.1	16.8	18.4
Grants & Loans	9.5	4.3	45.8	37.2	34.5	30.1	39.8	8.2
Total	**36.6**	**63.9**	**152.3**	**223.8**	**222.1**	**243.9**	**302.8**	**288.7**
% of GDP	**0.9**	**0.7**	**1.0**	**1.2**	**1.1**	**1.1**	**1.2**	**1.1**

Source: SPDC's estimates based on Pakistan Fiscal Operations, Finance Division, Government of Pakistan (various years).

Table A2.6 Provincial Resources Before and After the 7th NFC Award: Balochistan

Rs. in Billion

	2000-01	2006-07	2009-10	Post 7th NFC Award				
				2010-11	2011-12	2012-13	2013-14	2014-15
Provincial Resources								
Federal Transfers	15.9	31.3	40.0	100.7	107.4	125.3	141.9	154.9
Provincial Taxes	0.5	0.8	1.0	1.0	1.0	1.1	2.8	2.6
Provincial Non-Tax	1.5	2.1	2.3	1.7	5.0	8.4	4.2	3.5
Grants & Loans	6.6	3.5	37.8	22.5	20.8	18.3	21.7	26.9
Total	**24.6**	**37.7**	**81**	**125.9**	**134.2**	**153.1**	**170.6**	**187.9**
% of GDP	**0.6**	**0.4**	**0.5**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**

Source: SPDC's estimates based on Pakistan Fiscal Operations, Finance Division, Government of Pakistan (various years).

A.3
METHODOLOGY FOR ESTIMATING SUB-NATIONAL URBAN HDIS

DIMENSIONS OF HUMAN DEVELOPMENT USED IN THIS STUDY

Knowledge (Education) Index

Both stock and flow measures are included in the study to represent the educational status of a population. The stock measure is the adult literacy rate, whereas enrollment rates with respect to a population of age cohort 5-24 years represent a flow in the educational attainment. Data of both of these measures are available in the PSLM district representative survey. The pertinent question regarding literacy in the PSLM questionnaire is, "can this person read and write in any language with understanding? Thus, adult literacy is defined for this study as the "proportion of population aged 15 years and older who is able with understanding to both read and write in any language". The enrollment component is estimated as the proportion of children in the age cohort 5-24 years who are currently attending any formal educational institutions out of all children in this age cohort.

Before combining, these indicators are transformed by using 100 percent as a maximum and 0 percent as a minimum for school enrollment and literacy rate. As described in the UNDP-HDR technical notes, these natural goalposts act as the 'aspirational goal' and 'natural zones' respectively. The index gives two-third weight to adult literacy rate and one-third weight to combined enrollment rate for the 5-24 years age cohort[1].

Health Index

A long and healthy life may best be evaluated with the help of ultimate output indicators such as life expectancy at birth, infant and maternal mortality rates etc. However, non-availability of data has restricted the choice of indicators. Thus, the dimension of health is represented by some proxies of the health status of a mother and children. Polio vaccination of children under the age of five according to a vaccination card or through a polio campaign and the child delivery at hospitals are used to represent child health status, while three indicators are developed to assess the maternal health status; prenatal and postnatal care and the proportion of mothers who had tetanus toxoid injections during a previous pregnancy.

Again, all chosen indicators for the health component are relative proportions or percentages and

Box A3.1 UNDP-HDI components and methodology

Till 2009, the dimensions of human development were estimated by UNDP as follows: long and healthy life has been measured by life expectancy at birth; knowledge has been measured by the adult literacy rate and combined primary, secondary and tertiary gross enrollment ratios; while decent standard of living has been measured by GDP per capita in terms of PPP US dollars. The knowledge or education index has been developed by giving two-third weight to adult literacy and one-third to combined enrollment rates. To arrive at HDI value, the arithmetic mean of the above three indices has been calculated.

The components and calculation method of two (Education and Income) of the three dimensions were changed by UNDP in 2010. The literacy rate of the population has been replaced by an indicator of expected years of schooling and the combined gross enrollment by the average number of years of education (knowledge dimension) and dimensions of living standards is now measured by Gross National Income (GNI) per capita in purchasing power parity to the US$.

The overall UNDP-HDI index was previously calculated as the arithmetic average of all indices. This method allowed for there to be substitution between different dimensions, i.e. low values in one dimension can be compensated by high values of another dimension. However, the substitutability issue may be resolved by taking geometric mean instead of combining indicators using a simple average. Starting from 2010 the UNDP Human Development Index did switch to this mode of calculation for combining component indicators of HDI. UNDP argues that the geometric mean better reflects the non-substitutable nature of the statistics being compiled and compared.

thus have natural goalposts (minimum and maximum) in order to transform the indicators expressed in different units into indices between 0 and 1. An arithmetic average is applied to form a composite index for health.

Standard of Living (Income) Index

Income is the appropriate indicator to evaluate the standard of living of person, family or region. Fortunately, PSLM reports monthly or annual income of each family member of a household aged 10 years and above. However, it is worth mentioning that the reported income might be biased downward due to the fact that the majority of the economically active population is not in a salaried remuneration, but is either self-employed or works in farms or in other family business. Thus, non-salaried respondents provide guesses regarding annual income[2].

Nonetheless due to the non-availability of other appropriate data on household economic status[3] at sub-national level, household income is used in this study despite the problems of non-response rate as well as under reporting typically found in household surveys in developing countries on standard of living.

The income index is developed by adjusting city per capita income with the observed minimum and maximum values of per capita income across all cities.

COMBINING HDI COMPONENTS

One of the issues in the context of composite indexing like HDI is the substitutability among component indicators. This situation is not suitable in most cases where a minimum of all components are required for a combined index. The issue of substitutability may be resolved to some extent by taking the geometric mean of the components indicators instead of using simple average. Although use of the geometric mean has been relatively rare in computing social statistics, starting from 2010 the UNDP Human Development Index did switch to this mode of calculation for combining component indicators of HDI. UNDP argues that it reflects well the non-substitutable nature of the statistics being compiled and compared. According to UNDP (2010)[4]:

> "The geometric mean reduces the level of substitutability between dimensions [being compared] and at the same time ensures that a 1 percent decline in say life expectancy at birth has the same impact on the HDI as a 1 percent decline in education or income. Thus, as a basis for comparisons of achievements, this method is also more respectful of the intrinsic differences across the dimensions than a simple average".

Thus, after developing component indices, the HDI is estimated by taking the geometric mean of education, health and income components at the second stage.

NOTES:

1. Till 2009, UNDP used these two indicators for the education component of HDI. The same methodology was also used for combining indicators for the education index.
2. In addition, about 16 percent sample households refused to give a response regarding employment activities and household income.
3. One of the non-monetary indicators of household welfare is the asset-based index which has been introduced and developed as an alternative tool for classifying household socio-economic status. This method employs data of household's assets such as durable and semi-durable goods to describe household welfare instead of using household's income or expenditure data. However, this approach is not applicable for this research as welfare indicators are aggregated here at regional level instead of classifying household economic status. For detail methodology of developing asset-based index, see Filmer and Prichett (2001).
4. Visit UNDP site: http://hdr.undp.org/en/statistics/faq/

A.4
SPDC PUBLICATIONS

RESEARCH REPORTS

State of the Economy: An Evaluation of the Federal Budget 2015-16
Naveed Aamir, Nadeem Ahmed, Iffat Ara, M. Sabir, M. Asif Iqbal
RR 95, July 2015.

Growth and Income Inequality Effects on Poverty: The Case of Pakistan (1988-2011)
Haroon Jamal
RR 94, December 2014.

Determinants of Child Schooling, Work and Idleness: The Case of the Punjab Province
Haroon Jamal
RR 93, December 2014.

Health and Educational Status of Children: An Exploration through a Gender Lens
Haroon Jamal
RR 92, December 2014.

Profiling Rural Pakistan for Poverty, Inequality and Social Exclusion
Haroon Jamal
RR 91, December 2014.

School Participation in Rural Pakistan: A Situation Analysis
Haroon Jamal
RR 90, June 2014.

Incidence of General Sales Tax in Pakistan: Latest Estimates
Haroon Jamal and Sohail Javed
RR 89, June 2014.

An Evaluation of the Federal Budget 2014-15
Hafiz A. Pasha, Muhammad Sabir, and Iffat Ara
RR 88, July 2014.

An Ambitious Budget 2013-14
Hafiz A. Pasha, Muhammad Sabir, Muhammad Asif Iqbal and Iffat Ara
RR 87, July 2013.

Imperatives for Fiscal Policy in the Federal Budget of 2013-14
Hafiz A. Pasha
RR 86, June 2013.

Predicting Sub-National Poverty Incidence for Pakistan
Haroon Jamal
RR 85, May 2013.

Pakistan Poverty Statistics: Estimates for 2011
Haroon Jamal
RR 84, October 2012.

An Exploratory Analysis of Inter-Temporal Multidimensional Poverty
Haroon Jamal
RR 83, June 2012.

Districts Indices of Multiple Deprivations for Pakistan, 2011
Haroon Jamal
RR 82, June 2012.

A Profile of Social Protection in Pakistan: An Appraisal of Empirical Literature
Haroon Jamal
RR 81, May 2010.

Assessing Vulnerability to Poverty: Evidence from Pakistan
Haroon Jamal
RR 80, April 2009.

Estimation of Multidimensional Poverty in Pakistan
Haroon Jamal
RR 79, January 2009.

Understanding Rural Poverty Dynamics: The Case of the Poorest District of Sindh, Pakistan
Haroon Jamal and Hari Ram Lohano
RR 78, June 2008.

Exploring the impact of Microfinance in Pakistan
Haroon Jamal
RR 77, June 2008.

Fiscal Policy Choices in Budget 2008-09
SPDC Research Team
RR 76, May 2008.

Pay Offs to Schooling and Returns to Credentials
Amir Jahan Khan
RR 75, January 2008.

Satisfaction or Frustration: A Survey of Selected District Governments
Haroon Jamal, Muhammad Asif Iqbal et al
RR 74, January 2008.

Trends in Regional Human Development Indices
Haroon Jamal and Amir Jahan Khan
RR 73, July 2007.

Indices of Multiple Deprivations 2005
Haroon Jamal and Amir Jahan Khan
RR 72, July 2007.

Education Status of Districts: An Exploration of Inter-Temporal Changes
Haroon Jamal and Amir Jahan Khan
RR 71, July 2007.

Income Poverty at District Level: An Application of Small Area Estimation Technique
Haroon Jamal
RR 70, July 2007.

Updating Poverty and Inequality Estimates: 2005 Panorama
Haroon Jamal
RR 69, June 2007.

Determinants of Total Factor Productivity in Pakistan
Qazi Masood Ahmed and Kalim Hyder
RR 68, June 2007.

Gender Inequality and Trade Liberalization: A Case Study of Pakistan
Naeem Ahmed and Kalim Hyder
RR 67, March 2007.

Determinants of Recent Inflation in Pakistan
Abdul Aleem Khan, Kalim Hyder and Qazi Masood Ahmed
RR 66, March 2007.

Estimating the Black Economy through Monetary Approach: A Case Study of Pakistan
Qazi Masood Ahmed and Haider Hussain
RR 65, October 2006.

State of the Economy: Growing Macroeconomic Imbalances
Shaghil Ahmed, Haroon Jamal, Qazi Masood et al
RR 64, July 2006.

Special Report: The Economy in The Aftermath of the Earthquake
Shaghil Ahmed, Kalim Hyder and Tabinda Areeb
RR 63, December 2005.

State Of The Economy: An Overheating Economy?
Shaghil Ahmed, Haroon Jamal, Qazi Masood et al
RR 62, June 2005.

Cancer: Social Implications Of Treatment And Financial Burden
Hina Shahid and Mahpara Sadaqat
RR 61, May 2005.

Province-wise Growth Patterns in Human Capital Accumulation
Muhammad Sabir and Zehra Aftab
RR 60, May 2005.

In Search of Poverty Predictors: The Case of Urban and Rural Pakistan
Haroon Jamal
RR 59, December 2004.

Does Inequality Matter for Poverty Reduction? Evidence from Pakistan's Poverty Trends
Haroon Jamal
RR 58, December 2004.

State of the Economy: A Shift towards Growth
Kaiser Bengali, Qazi Masood Ahmed, Haroon Jamal et al.
RR 57, June 2004.

State of the Economy: Behind the Aggregates
Kaiser Bengali, Qazi Masood Ahmed, Zehra Aftab et al.
RR 56, June 2003.

Poverty and Inequality During the Adjustment Decade: Empirical Findings from Household Surveys
Haroon Jamal
RR 55, April 2003.

Impact of Ownership and Concentration of Land on Schooling: The Case of Rural Punjab
Haroon Jamal and Amir Jahan Khan
RR 54, April 2003.

Zakat as a Social Safety Net: Exploring the Impact
Imran Ashraf Toor and Abu Nasar
RR 53, April 2003.

Mapping the Spatial Deprivation of Pakistan
Haroon Jamal, Amir Jahan Khan, Imran Ashraf Toor and Naveed Aamir
RR 52, April 2003.

Price and Income Effects on Urban Undernutrition
Haroon Jamal
RR 51, April 2003.

Private Returns to Education: Evidence for Pakistan
Haroon Jamal, Imran Ashraf Toor and Farhan Sami Khan
RR 50, April 2003.

Returns to Education: The Case of Fertility
Haroon Jamal and Imran Ashraf Toor
RR 49, April 2003.

Microfinancing: Fighting Against Poverty
Hari Ram Lohano and Haroon Jamal
RR 48, April 2003.

The Changing Profile of Regional Inequality
Haroon Jamal and Amir Jahan Khan
RR 47, April 2003.

The Knowledge Divide: Education Inequality in Pakistan
Haroon Jamal and Amir Jahan Khan
RR 46, April 2003.

Pakistan's External Debt Burden: Causes, Complexities and Remedies
Asad Sayeed and Ejaz Rashid
RR 45, September 2003.

The Slowing Down of the Growth of Total Factor Productivity in Pakistan
Hafiz A. Pasha, Aisha Ghaus-Pasha and Kalim Hyder
RR 44, December 2002.

Cost of Living Index by City of Pakistan
Hafiz A. Pasha and Aisha Ghaus-Pasha
RR 43, November 2002.

Recasting Sindh Budget (Expenditures) from Head of Account to Department Basis
Kaiser Bengali and Fauzia Mukarram
RR 42, January 2002.

Impact of the Afghan War on the Economy: Options for Pakistan
Kaiser Bengali, Qazi Masood Ahmed and Kalim Hyder
RR 41, December 2001.

Stabilization vs Growth: Federal Budget 2001-02
Kaiser Bengali, Qazi Masood Ahmed, Hari Ram Lohano et al.
RR 40, June 2001.

Incidence of Income Poverty in Pakistan
Aisha Ghaus-Pasha and Haroon Jamal
RR 39, March 2001.

Credit to the Poor: Consultations with Borrowers
Hari Ram Lohano, Fauzia Mukarram and Haroon Jamal
RR 38, February 2001.

Social Development and Economic Growth: A Statistical Exploration
Haroon Jamal
RR 37, February 2001.

The 1998 Population Census
Aisha Ghaus-Pasha, Zafar H. Ismail, Abu Nasar and Naveed Hanif
RR 25, June 1999.

Gender Inequality in Developing Countries: A Case Study of Pakistan
Hafiz A. Pasha, Aisha Ghaus-Pasha and Abu Nasar
RR 24, June 1999.

Evaluation of the Federal Budget, 1999-2000
Hafiz A. Pasha, Aisha Ghaus-Pasha, Zafar H. Ismail et al.
RR 23, June 1999.

Essays on the Federal Budget, 1998-99
Aisha Ghaus-Pasha, Zafar H. Ismail, Sajjad Akhtar, Ajaz Rasheed et al.
RR 22, July 1998.

Decentralized Governance of Sindh Katchi Abadis Authority
Hafiz A. Pasha, Aisha Ghaus-Pasha, Zafar H. Ismail et al.
RR 21, May 1998.

Fiscal Decentralization: Lesson From the Asian Experience
Hafiz A. Pasha
RR 19, January 1997.

Social and Economic Ranking of Districts of Pakistan
Aisha Ghaus-Pasha, Hafiz A. Pasha, Rafia Ghaus et al.
RR 18, January 1998.

Growth of Public Debt and Debt Servicing in Pakistan
Hafiz A. Pasha and Aisha Ghaus-Pasha
RR 17, April 1996.

Review of the Social Action Programme
Aisha Ghaus-Pasha, Michael G. McGarry, Asad Sayeed et al.
RR 16, August 1997.

The Provincial Budgets, 1997-98
Zafar H. Ismail, Ajaz Rasheed, M. Asif Iqbal et al.
RR 15, July 1997.

An Evaluation of the Federal Budget, 1997-98
Zafar H. Ismail, Sajjad Akhtar, Asad U. Sayeed et al.
RR 14, July 1997

An Evaluation of the Budget, 1996-97
Hafiz A. Pasha, Aisha Ghaus-Pasha, Zafar H. Ismail et al.
RR 13, July 1996.

Resource Mobilization and Expenditure Planning for Social Sectors in Pakistan
Aisha Ghaus-Pasha, M. Asif Iqbal, Rafia Ghaus & N. Ahmed
RR 12, June 1996.

The World Summit for Social Development: Its Implications for Social Sector Development in Pakistan
Asad U. Sayeed and Zafar H. Ismail
RR 11, June 1996.

Social Development Ranking of Districts of Pakistan
Aisha Ghaus-Pasha, Hafiz A. Pasha, Rafia Ghaus et al.
RR 10, June 1996.

Continuation Rates in Primary Education: A Study of Pakistan
Hafiz A. Pasha, Zafar H. Ismail and M. Asif Iqbal
RR 9, May 1996.

National Finance Commission: 1995 - Intergovernmental Revenue Sharing in Pakistan
Aisha Ghaus-Pasha, Rafia Ghaus, A. Rauf Khan & Asif Iqbal
RR 8, January 1996.

Integrated Social Policy and Macroeconomic Planning Model for Pakistan
Hafiz A. Pasha, M. Aynul Hasan, Aisha Ghaus-Pasha et al.
RR 7, June 1995.

Optimal Enrolment and Cost-Effective Expenditures for Public School System
Hafiz A. Pasha, M. Aynul Hasan, Ajaz Rasheed et al.
RR 6, October 1994.

Optimal Mix of Health Sector Expenditure
Hafiz A. Pasha, M. Aynul Hasan, Ajaz Rasheed et al.
RR 5, September 1994.

Database Development for Integrated Social Sector Revenue and Expenditure Model
Aisha Ghaus-Pasha, Zafar H. Ismail, M. Asif Iqbal et al.
RR 4, February 1994.

Specification of Integrated Social Sector Revenue and Expenditure Planning Model
Hafiz A. Pasha, Aisha Ghaus-Pasha, M. Aynul Hasan, et al.
RR 3, August 1993.

A Study on Improving the Efficiency and Effectiveness of Spending in the Social Sectors and Increasing Resource Mobilization in the Provinces
Hafiz A. Pasha, Aisha Ghaus-Pasha,
M. Aynul Hasan et al.
RR 2, September 1992.

Fiscal Policy in Pakistan
Hafiz A. Pasha, Aisha Ghaus-Pasha
and Rafia Ghaus
RR 1, October 1991.

Gender Research Programme

The Socio-Economic Impact of Floods in District Thatta: A Gendered Analysis
Khalida Ghaus, Muhammad Sabir, Tabinda Areeb and Omair Saeed
GRP-RR8, 2012

Gender Dimensions of Rural Non-Farm Employment in Pakistan
Haroon Jamal
GRP-RR7, 2012

Gender Dimensions of Development Induced Development and Resettlement: A Case of Lyari Expressway in Karachi
Khalida Ghaus, Nadeem Ahmed, Rabia Sidat & Tabinda Areeb
GRP-RR 6, 2012

The Socio-Economic Cost of Violence against Women: A Case Study of Karachi
Khalida Ghaus, Iffat Ara, Rafea Anis and Aasiya Kazi
GRP-RR 5, 2012

Gender Dynamics of Social Safety Nets: The Case of Zakat Recipients in Pakistan
Haroon Jamal
GRP-RR 4, November 2010.

Socio-economic Characteristics of Female-headed Households in Pakistan: Baseline Survey, 2009-10
Nadeem Ahmed
GRP-RR 3, November 2010.

Trade Liberalisation and Gender Dynamics of Employment in Pakistan
Iffat Ara
GRP-RR 2, May 2010.

Public Spending on Education and Health in Pakistan: A Dynamic Investigation through Gender Lens
Muhammad Sabir
GRP-RR 1, May 2010.

POLICY PAPERS

Agenda for the 8th NFC: Lessons from the 7th NFC Award, Post-7th NFC Developments & Emerging Issues
Muhammad Sabir
PP 25, December 2014

The Privatization Program
Hafiz A. Pasha
PP 24, September 2014

On the Estimation of An Absolute Poverty Line: An Empirical Appraisal
Haroon Jamal
PP 23, April 2003.

Hidden Subsidies
Hafiz A. Pasha, Aisha Ghaus-Pasha and Naveed Hanif
PP 22, April 2002.

Why has the Tax-to-GDP Ratio Fallen?
Hafiz A. Pasha, Aisha Ghaus-Pasha and Muhammad Sabir
PP 21, February 2002.

A National Poverty Reduction Strategy and the Role of Donors
Hafiz A. Pasha, Aisha Ghaus-Pasha, Zafar H. Ismail et al.
PP 20, October 2000.

Macroeconomic Framework for Debt Management
Aisha Ghaus-Pasha and Hafiz A. Pasha
PP 19, May 2000.

Revamping the SAP
Hafiz A. Pasha, Aisha Ghaus-Pasha, Zafar H. Ismail and Sehar Rizvi
PP 18, May 2000.

Statement to the Commonwealth Delegation
Hafiz A. Pasha
PP 17, October 1999.

Unsustainability of the Balance of Payments
Hafiz A. Pasha and Zafar H. Ismail
PP 16, September 1999.

Broad-Basing of the GST: The Strategy for Transition
Hafiz A. Pasha
PP 15, July 1999.

Provincial Resource Mobilization
Aisha Ghaus-Pasha, A. Rauf Khan and Rafia Ghaus
PP 14, June 1998.

Financial Sustainability of NGOs: Proposal for 1998-99 Federal Budget
Aisha Ghaus-Pasha, Zafar H. Ismail et al.
PP 13, May 1998.

Political Economy of Tax Reforms: The Pakistan Experience
Hafiz A. Pasha
PP 12, February 1997.

Ninth Five-Year Plan (1998-2003): Issues Paper
Hafiz A. Pasha, Aisha Ghaus-Pasha, Zafar H. Ismail et al.
PP 11, April 1996.

Fiscal Effort by Provincial Governments in Pakistan
Rafia Ghaus and A. Rauf Khan
PP 10, November 1995.

Implications of the TOR of the New NFC
Aisha Ghaus-Pasha
PP 9, June 1995.

Provincial Budgets of 1995-96
Aisha Ghaus-Pasha, Rafia Ghaus and A. Rauf Khan
PP 8, July 1995.

Switch Over to Ad Valorem Octroi Rates at Dry Ports
Aisha Ghaus-Pasha, M. Asif Iqbal and Naveed Hanif
PP 7, October 1994.

Rationalization of Octroi Rates
Aisha Ghaus-Pasha, A. Rauf Khan and Naveed Hanif
PP 6, October 1994.

User Charges in Health
Zafar H. Ismail and M. Asif Iqbal
PP 5, August 1994.

Sindh Government Budget of 1993-94
Aisha Ghaus-Pasha, Rafia Ghaus, Asif Iqbal & Rauf Khan
PP 4, July 1994.

User Charges in Education
Zafar H. Ismail and M. Asif Iqbal
PP 3, June 1994.

Sales Taxation of Services by Provincial Governments
Hafiz A. Pasha and Rafia Ghaus
PP 2, June 1994.

Rationalization of Stamp Duties on Financial Assets and Transactions
Aisha Ghaus-Pasha and A. Rauf Khan
PP 1, June 1994.

POLICY BRIEFS

Social Impact of the Security Crisis
Rabia Sidat
Policy Brief, December 2011

Women at Work
Samar Zuberi
Policy Brief, July 2011

The Elimination of Textile Quotas and Pakistan-EU Trade
Iffat Ara
Policy Brief, April 2007

CONFERENCE PAPERS

Challenges and Responses for Democracy and Security: Pakistan's Perspective
Khalida Ghaus
CP 63, December 2009.

Neo-Liberal Governance and Poverty in Pakistan
Nadeem Ahmed and Ayesha Khan
CP 62, November 2009.

How External Shocks And Exchange Rate Depreciations Affect Pakistan? Implications for choice of an Exchange Rate Regime
Shaghil Ahmed, Iffat Ara and Kalim Hyder
CP 61, December 2005.

Agricultural Terms of Trade in Pakistan: Issues of Profitability and Standard of Living of the Farmers
Abdul Aleem Khan and Qazi Masood Ahmed
CP 60, May 2005.

Is Pakistan's Manufacturing Sector Competitive?
Iffat Ara
CP 59, May 2005.

The Plight of Working Mothers in Pakistan: Advantages and Disadvantages of A Joint Family System
Naveed Aamir
CP 58, May 2004.

Macroeconomic Reforms And Return to Human Capital in Pakistan
Mohammad Sabir
CP 57, January 2004.

Burden of Stabilization on Provinces and its Implication On Social Sectors
Qazi Masood Ahmed and Mohammad Sabir
CP 56, January 2004.

Macroeconomic Reforms and Total Factor Productivity Growth in Pakistan: An Empirical Analysis
Mohammad Sabir and Qazi Masood Ahmed
CP 55, October 2003.

Budgets and Fiscal Decentralization: A Case Study of Sindh
Qazi Masood Ahmed and Mohammad Sabir
CP 54, October 2003.

Districts level of Development as Push and Pull factors in Inter-district Migration in Pakistan
Abu Nasar, Mehtab S. Karim
CP 53, December 2002.

Is Female Illiteracy a Determinant for Child Malnutrition: An Analysis of Developing Countries
Naveed Aamir and Abu Nasar
CP 52, December, 2003.

Tax Holidays, Cost of Capital and Investment Behaviour: Jorgenson Approach
Qazi Masood Ahmed
CP 51, October 2003.

Why Private Investment in Pakistan has Collapsed and How can it be Restored?
Kalim Hyder and Qazi Masood Ahmed
CP 50, June 2003.

Hidden Subsidies
Hafiz A. Pasha, Aisha Ghaus-Pasha and Naveed Aamir
CP 49, January 2003.

Gender and Public Spending on Education in Pakistan: A Case Study of Disaggregated Benefit Incidence
Muhammad Sabir
CP 48, January 2003.

Non-Profit Sector in Pakistan: Government Policy and Future Issues
Aisha Ghaus-Pasha and Muhammad Asif Iqbal
CP 47, January 2003.

The Income Tax Regime and the Non-Profit Sector: The Case of Pakistan
Zafar H. Ismail
CP 46, January 2003.

The Long-Run and Short-Run Impact of Exchange Rate Devaluation on Pakistan's Trade Performance
Zehra Aftab and Aurangzeb
CP 45, December 2002.

Crowding Out Hypothesis in a Vector Error Correction Framework: A Case Study of Pakistan
Kalim Hyder
CP 44, January 2002.

Dynamic Consequences of the 1997 National Finance Commission Award: Provincial Social Sector Expenditures
Muhammad Sabir
CP 43, January 2002.

Political Economy of Fiscal Reforms in the 1990s
Qazi Masood Ahmed and Mahnaz Fatima
CP 42, January 2002.

Stabilization Policy vs Growth Oriented Policy: Implications for the Pakistan Economy
Kaiser Bengali and Qazi Masood Ahmed
CP 41, January 2002.

Internal Migration: The Case of Sindh Province
Abu Nasar and Naveed Aamir
CP 40, October 2001.

Some Issues of Governance in Pakistan
Zafar H. Ismail and Sehar Rizvi
CP 39, May 2000.

Governance, Decentralization and Poverty: The Case of Pakistan
Zafar H. Ismail and Sehar Rizvi
CP 38, January 2001.

Devolution and Fiscal Decentralization
Hafiz A. Pasha and Aisha Ghaus-Pasha
CP 37, January 2001.

Brief on Annual Review of Social Policy and Development Centre for 2000: Towards Poverty Reduction
Hafiz A. Pasha
CP 36, December 2000.

Policy Research and Its Implementation: Pakistan and Canada
Zafar H. Ismail and Richard Shillington
CP 35, September 2000.

Issues in Institutional Reform for Devolution
Kaiser Bengali
CP 34, August 2000.

Issues in Fiscal Decentralization
Aisha Ghaus Pasha and Hafiz A. Pasha
CP 33, August 2000.

Public Expenditure Reform
Hafiz A. Pasha
CP 32, July 2000.

Social Sector Policies Under SAP
Zafar H. Ismail
CP 31, October 1999.

Impediments to Social Development in Pakistan
Zafar H. Ismail
CP 30, November 1999.

Pakistan's Ranking in Social Development: Have We Always Been Backward?
Aisha Ghaus-Pasha and Naeem Ahmed
CP 29, November 1999.

An Econometric Evaluation of Pakistan's National Education Policy, 1998-2010
Sajjad Akhtar and M. Ajaz Rasheed
CP 28, July 1999.

Impediments to Improvement of Social Sectors in Pakistan
Zafar H. Ismail
CP 27, March 1998.

Gender Differentials in the Cost of Primary Education: A Study of Pakistan
Zafar H. Ismail
CP 26, December 1996.

Integrated Social Sector Macroeconomic Model for Pakistan
Hafiz A. Pasha, M. Aynul Hasan, Aisha Ghaus-Pasha and Ajaz Rasheed
CP 25, December 1996.

Determinants of Rates of Octroi Tax in Pakistan
Aisha Ghaus-Pasha, A. Rauf Khan and Rafia Ghaus
CP 24, April 1995.

Social Development Ranking of Districts of Pakistan
Aisha Ghaus-Pasha, Hafiz A. Pasha & Rafia Ghaus
CP 23, December 1996.

The City of Karachi: Planning and Managing for Urban Development
Zafar H. Ismail
CP 22, August 1996.

Sustainability of Public Debt in Pakistan
Hafiz A. Pasha and Aisha Ghaus-Pasha
CP 21, July 1996.

Has Poverty Returned to Pakistan?
Aisha Ghaus-Pasha and Asad U. Sayeed
CP 20, July 1996.

Improved Health Status and Economic Growth: Some Co-Integration Results from Developing Economies
M. Aynul Hasan, M. Rashid Ahmed and Aisha Bano
CP 19, July 1996.

Is There a Long-Run Relationship Between Economic Growth and Human Development? Some Cross-Country Evidence from Developing Countries
M. Aynul Hasan, Nadeem Ahmed and Nazia Bano
CP 18, June 1996.

Municipal Finance in Small Cities
Hafiz A. Pasha and Aisha Ghaus-Pasha
CP 17, December 1995.

Financial Development of Megacities
Hafiz A. Pasha and Aisha Ghaus-Pasha
CP 16, October 1995.

Is Public Sector Investment Productive? Some Evidence from Pakistan
Hafiz A. Pasha, M. Aynul Hasan, Aisha Ghaus-Pasha and Ajaz Rasheed
CP 15, September 1995.

Is the Social Action Programme (SAP) in Pakistan Financially Sustainable?
Hafiz A. Pasha, M. Aynul Hasan, Aisha Ghaus-Pasha and M. Ajaz Rasheed
CP 14, April 1995.

Results of Policy Simulations
Aisha Ghaus-Pasha
CP 13, March 1995.

Software Development and Use of the Model
Ajaz Rasheed
CP 12, March 1995

Specification of the Integrated Social Policy Macroeconomic Model
M. Aynul Hasan
CP 11, March 1995.

Overview of Integrated Revenue and Expenditure Planning Model for Social Sectors
Hafiz A. Pasha
CP 10, March 1995.

Development of Property Taxation
Abdul Waheed Khan
CP 9, March 1995.

Prospects of Resource Mobilization by the Provincial Governments
Imtiaz Ahmed Cheema
CP 8, March 1995.

Expenditure Planning Issues
Tariq Sultan
CP 7, April 1993.

Local Government Resource Mobilization
Kashif Murtaza
CP 6, April 1993.

Local Government Resource Mobilization
Hafiz A. Pasha and Aisha Ghaus-Pasha
CP 5, April 1993.

Problems in Resource Mobilization in Punjab
Imtiaz A. Cheema
CP 4, April 1993.

Provincial Government Resource Mobilization in Punjab
Hafiz A. Pasha
CP 3, April 1993.

Investment Strategy and Expenditure Requirements for Social Development
M. Aynul Hasan
CP 2, April 1993.

The Implementation Environment of the Social Action Programme
Javed Sadiq Malik
CP 1, April 1993.

WORKING PAPERS

Agenda for Sustained Economics Revival
Kaiser Bengali
WP7, 2013

Has Civil Society Failed in Pakistan
Nikhat Sattar
WP 6, 2011

Provincial Accounts of Pakistan: Methodology and Estimates (1973-2000)
Kaiser Bengali and Mahpara Sadaqat
WP 5, 2005.

Non-Profit Sector in Pakistan: Historical Background
M. Asif Iqbal, Hina Khan and Surkhab Javed
WP 4, 2004.

Law and the Non-Profit Sector in Pakistan
Zafar H. Ismail
WP 3, 2002.

Non-Profit Sector in Pakistan: Government Policy and Future Issues
Aisha Ghaus-Pasha, Hafiz A. Pasha and
M. Asif Iqbal
WP 2, 2002.

Dimensions of the Non-Profit Sector in Pakistan
Aisha Ghaus-Pasha, Hafiz A. Pasha and
M. Asif Iqbal
WP 1, 2002.

ANNUAL REVIEWS OF SOCIAL DEVELOPMENT IN PAKISTAN

The State of Social Development in Rural Pakistan
Annual Review 2012-13

Devolution and Social Development
Annual Review 2011-12

Social Impact of the Security Crisis
Annual Review 2009-10

Women at Work
Annual Review 2007-08.

Devolution and Human Development in Pakistan
Annual Review 2006-07.

Trade Liberalization, Growth and Poverty
Annual Review 2005-06.

Combating Poverty: Is Growth Sufficient?
Annual Review 2004.

The State of Education
Annual Review 2002-03.

Growth, Inequality and Poverty
Annual Review 2001.

Towards Poverty Reduction
Annual Review 2000.

Social Development in Economic Crisis
Annual Review 1999.

Social Development in Pakistan
Annual Review 1998.

SPDC BOOKS

In Search of Gendered Development: A Compendium
Khalida Ghaus, Haroon Jamal, Muhammad Sabir, Nadeem Ahmed, Iffat Ara and Rafea Anis: Edited by Kaiser Bengali
SPDCB 3, 2014.

Provincial Governments and the Social Sectors in Pakistan
Aisha Ghaus-Pasha, Hafiz A. Pasha and Zafar H. Ismail
SPDCB 2, 1997.

Resource Mobilization and Expenditure Planning in the Provinces of Pakistan
Hafiz A.Pasha, Aisha Ghaus-Pasha. and M. Aynul Hasan
SPDCB 1, 1996.

DATABASE REPORTS

Gender Disaggregated Indicators of the Labour Market in Pakistan
Iffat Ara and Aasiya Kazi
DB5, 2013

Socio-Economic Indicators by Gender: A Regional Comparison for Pakistan
Naushaba Khatoon, Muhammad Sabir & Iffat Ara
DB 4, September 2005

Database Report 1997: Education Module
Zafar H. Ismail, A. Rauf Khan, Abu Nasar et al.
DB 3, November 1997.

Database Report 1997: Provincial Finance Module
Zafar H. Ismail, A. Rauf Khan, Abu Nasar et al.
DB 2, September 1997.

Database Report 1997: Federal Finance Module
Zafar H. Ismail, A. Rauf Khan and Naeem Ahmed
DB 1, July 1997.

CONFERENCE PROCEEDINGS

Proceedings of the Seminar on Prospects and Policies for the Future
CPP 4, January 2000.

Proceedings of the Second Conference on Resource Mobilization and Expenditure Planning
CPP 2, March 1995.

Proceedings of the Conference on Resource Mobilization and Expenditure Planning
CPP 1, April 1993.

OTHER PUBLICATIONS

The Changing Landscape of Gender at SPDC: An Assessment
Aasiya Kazi and Rafea Anis
OP 4, April 2015

Report of Interactive Discussion Session on Integrated Energy Policy Formulation with Emphasis on Social Dimensions
Ziad Alahdad
OP 3, November 2012

The Elimination of Textile Quotas and Pakistan-EU Trade
Shaghil Ahmed, Iffat Ara, Aurangzeb, Haider Hussain and Abdul Aleem Khan
Research Report, March 2007

ABC of the Economics of Tariffs and Import Quotas
Shaghil Ahmed and Iffat Ara
Booklet, June 2007

CLIMATE CHANGE PROJECT REPORTS

Gender and Social Vulnerability to Climate Change: A Study of Disaster Prone Areas in Sindh
Khalida Ghaus, M. Asif Iqbal, Nadeem Ahmed, Manzoor Hussain, Memon, Meher M. Noshirwani, Naveed Aamir and Tabinda Areab
CCPR 1, May 2015

A.5

ANNUAL REVIEWS OF SOCIAL DEVELOPMENT IN PAKISTAN

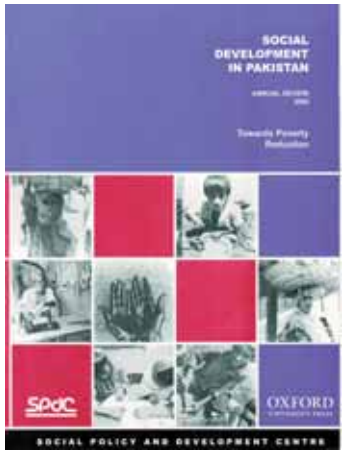
Annual Review of Social Development in Pakistan 1998

First of the annual series, the Review of Social Development in Pakistan was launched in the wake of a growing realization that the country was lagging behind in social development. It was felt that access to basic social services such as primary education, health care, and drinking water was limited, and that social underdevelopment had, perhaps, begun to slow down the pace of economic development as well. As such, the Review addressed the relationship between economic and social development, and the central role of human development in the growth process. It then traced in detail the evolution of the social sectors in Pakistan over the 50 years since independence, and compared Pakistan's social development between the provinces and with other countries in the region. Based on the custom-developed 242-equation Integrated Macroeconomic & Social Policy Model, a detailed quantitative analysis and assessment was made of the government's programmes and policies in the social sectors, including the Social Action Programme - the largest single social development programme in Pakistan's history - focusing on issues such as sources of financing, user-charges, and issues relating to cost-effectiveness of social service provision.

Social Development in Economic Crisis Annual Review of Social Development in Pakistan 1999

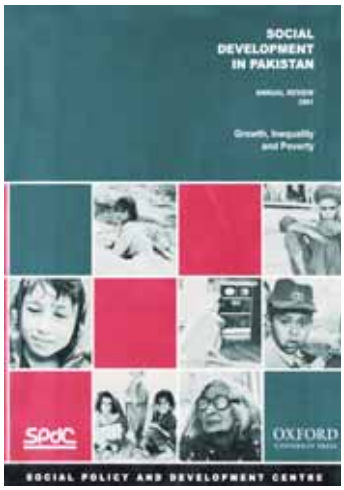
The second Review dealt with social development in an environment of severe economic crisis caused by international sanctions imposed on Pakistan following the country's decision to conduct the nuclear tests. The Review began by tracing the short and long term causes of the crisis, leading to Pakistan's return to the IMF/World Bank program. Further, based on SPDC's 246-equation Integrated Macroeconomic & Social Policy Model, it quantified the cost of the economic sanctions following the adoption of the nuclear path. It delineated the various options available to deal with the crisis, including the path of self-reliance, to achieve sustained development. It then explored the impact of each option on some of the key social dimensions: poverty, unemployment and the status of women and children. It also appraised the Social Action Programme, and forewarned that it was in jeopardy due to growing fiscal and institutional constraints. Given the prospect of rising poverty, it examined the types, nature and adequacy of different social safety nets - governmental as well as non-governmental - and highlighted the underlying problems of coverage and targeting.

Towards Poverty Reduction
Annual Review of Social Development in Pakistan 2000



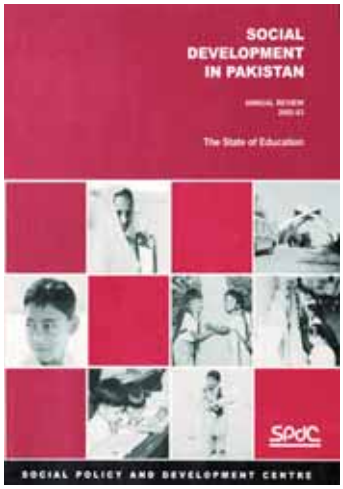
The Review focuses on the subject of poverty, identifying its nature, extent and profile, and highlighting the structural dimensions of poverty. Based on the conclusions that a poverty reduction strategy will have to be comprehensive and multidimensional in character, it covers a wide agenda. It comprises an appraisal of the role of the informal economy, not only as a residual employer but also as a household or community based welfare and support system, in mitigating poverty. Based on the results of SPDC's 250-equation Integrated Macroeconomic & Social Policy Model, it underlines the need for appropriate macroeconomic and fiscal policies to achieve faster growth in income and employment. In this respect, macro and micro aspects of a revival strategy, including options such as reducing the tax burden on the poor and orienting public expenditure towards the poor have been outlined. It also covers structural issues such as land reforms and development of human resources through access to social services, particularly pro-poor services. It discusses different elements of a strategy consisting of increased economic opportunities for the poor, their empowerment, and access to welfare and support through appropriate social safety nets, namely, public works, microfinance, food support and zakat. It also deals with issues of governance and poverty, devolution, economic governance, institutional capacity, and corruption.

Growth, Inequality and Poverty
Annual Review of Social Development in Pakistan 2001



The Review is a detailed analysis and documents the pervasive inequalities across class and regional lines and in access of social services. Spread over six chapters, it begins with the profile of achievements in the realm of economic and social development since 1947; acknowledging as well that the gains have not been equitably distributed. Based on SPDC's 255-equation Integrated Macroeconomic & Social Policy Model, it presents the macroeconomic analysis of the state of the economy, along with the factors behind the aggregates with respect to unemployment, inequality and poverty. It questions the balance between stabilization and growth objectives and discusses policy options that can help or hurt the poor. There follows a comprehensive analysis of inequality from different perspectives: income inequality, consumption inequality, inequality between income groups - nationally and province-wise - inequality in public services and land inequality. The next chapter is devoted to inequality between and within provinces, including a district analysis and ranking of deprivation levels. Social policy finds specific attention, with a review of housing and evaluation of the ambitious Five Point Programme and the Social Action Programme. The last chapter attempts to provide an overview of the factors that determine inequality and poverty, and more generally, social development.

The State of Education
Annual Review of Social Development in Pakistan 2002-03



The Review is an in-depth analysis of the state of education in Pakistan. It breaks new ground, given that the traditional discussion relating to education has generally been limited to the issue of enrolment, particularly primary and girls' enrolment, and resource allocation. The Review is spread over seven chapters and begins with a broad profile of education in the country: Pakistan's standing regionally; literacy, enrolment and dropout trends; and availability of schools and teachers. It then documents the regional and class inequalities in education indicators, issues relating to the role of education in development - particularly in the context of the emergence of the knowledge based economy - and fiscal and sociopolitical factors that have inhibited the growth of education. The discussion ranges from the federal-level macroeconomic policy imperatives that have constrained provincial-level resource allocation to social sectors to the role of land inequality on education. There follows specific chapters devoted to critical issues in primary education and science education - matters relating to curriculum, textbooks and examinations- and a final chapter that discusses the sociopolitical impact of the creation of multiple and mutually exclusive streams of education in the country.

Combating Poverty: Is Growth Sufficient?
Annual Review of Social Development in Pakistan 2004

SPDC has over the years consistently highlighted the problems of social underdevelopment and inequality and poverty. It has advocated a macroeconomic policy framework that is pro-poor and leads to equitable growth; with equity defined in terms of class, region and gender. The Annual Review 2004 attempts to further advance this agenda. While earlier Reviews have largely been diagnostic, this issue is more prescriptive in nature. It suggests a policy framework whereby accelerated growth and rapid poverty reduction can be rendered complementary and feasible in the medium term. The Review presents a vision of poverty reduction at the outset and subsequent chapters provide empirical support for the suggested strategy. Spread over five chapters, it begins with the analysis of the development experience during the different political eras over the past three decades. It appraises the officially adopted national and provincial Poverty Reduction Strategy Papers (PRSPs). The Review presents the hard empirical analysis of the relationship between growth, inequality and poverty reduction and establishes the imperative of engaging with the issue of inequality to achieve poverty reduction. It also analyses the distribution of the burden of taxes and the benefits of public expenditure, with the objective of rendering the fiscal regime pro-poor. Further, it discusses issues relating to land reform - considered an essential factor in rural poverty reduction. In addition, the Review also includes a Sector Study, which focuses on the demand and supply aspects of export growth as a means to manage the current account balance.

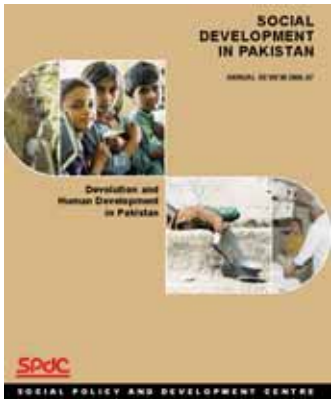
Trade Liberalization, Growth and Poverty
Annual Review of Social Development in Pakistan
2005-06

Since the late 1980s, there has been a clear effort to reduce trade barriers and to liberalize the economy in Pakistan, and this effort has been accelerating over time. The events of September 11, 2001 - and the GoP's response to them - have also led to a substantial change in the external environment facing Pakistan.

The above changes raise a host of questions: What has been the pace and sequencing of trade liberalization in Pakistan? How do Pakistan's trade restrictiveness measures compare to those of other developing countries in Asia? How has Pakistan's trade evolved over time in response to liberalization and how does this compare to the evolution of trade in other developing countries of Asia? What are the most important channels through which the process of trade liberalization affected Pakistan's economy? If trade had not been liberalized in Pakistan, would the economic growth, inflation and poverty situation be better or worse? How can policy makers guard against the adjustment costs of trade liberalization and reap maximum gains from any further increases in trade openness? How have the changes in the external environment and the policy responses resulting from the tragic events of September 11, 2001 shaped Pakistan's economy? How are the effects of the textile quota removal likely to play out on Pakistan's exports going forward? What policies would work best for the GoP's avowed objective in the MTDF of enhancing exports to achieve sustainable high growth?

Trade Liberalization, Growth and Poverty, SPDC's seventh annual review of social development in Pakistan, attempts to answer these questions. It places the on-going worldwide debate on the interactions between trade liberalization, growth and poverty in the context of Pakistan. The authors isolate the effects of trade liberalization on Pakistan's economy using econometric techniques and evaluate the empirical evidence in light of the predictions of economic theory. Policy implications concerning the GoP's goal of poverty alleviation are drawn from the results.

Devolution and Human Development in Pakistan
Annual Review of Social Development in Pakistan
2006-07



Implementation of the Devolution Plan in 2001 represents a significant move towards the decentralization of basic services in Pakistan. Six years ago a new legislative framework was introduced to bring a noticeable change in society. With the promulgation and implementation of the Local Government Ordinance, the responsibility of the provision of a large number of basic social services such as education, health and water supply and sanitation was devolved to the local level.

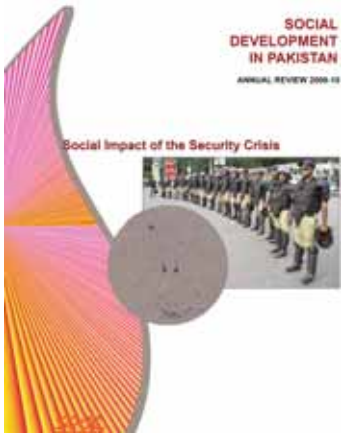
The critical appreciation of the efforts has raised questions such as: To what extent devolution has improved efficiency in public services? Has devolution empowered the people? Has it improved efficiency and equity in terms of fiscal decentralization? What has been the effect of devolution on human development, regional disparities, gender equality and poverty in Pakistan?

Devolution and Human Development in Pakistan being eighth in the series of Annual Review looks into various dimensions of the process of devolution and decentralization i.e. efficiency, equity, people's participation and empowerment. The report deals with the saliences of the problem and has proposed second generation reforms.social underdevelopment and inequality and poverty. It has advocated a macroeconomic policy framework that is pro-poor and leads to equitable growth; with equity defined in terms of class, region and gender. The Annual Review 2004 attempts to further advance this agenda. While earlier Reviews have largely been diagnostic, this issue is more prescriptive in nature. It suggests a policy framework whereby accelerated growth and rapid poverty reduction can be rendered complementary and feasible in the medium term. The Review presents a vision of poverty reduction at the outset and subsequent chapters provide empirical support for the suggested strategy. Spread over five chapters, it begins with the analysis of the development experience during the different political eras over the past three decades. It appraises the officially adopted national and provincial Poverty Reduction Strategy Papers (PRSPs). The Review presents the hard empirical analysis of the relationship between growth, inequality and poverty reduction and establishes the imperative of engaging with the issue of inequality to achieve poverty reduction. It also analyses the distribution of the burden of taxes and the benefits of public expenditure, with the objective of rendering the fiscal regime pro-poor. Further, it discusses issues relating to land reform - considered an essential factor in rural poverty reduction. In addition, the Review also includes a Sector Study, which focuses on the demand and supply aspects of export growth as a means to manage the current account balance.

Women at Work
Annual Review of Social Development in Pakistan 2007-08

In Pakistan, although women's labour force participation rate has increased from a very low level to almost 22 percent, it is still disappointing as out of the total female population, 78 percent of women of productive age are out of the labour force. A large part of employed women are working as unpaid family helpers or engaged in residual jobs. These alarming statistics guided SDPC to investigate questions such as: Is there any dynamism in the structure of female employment in Pakistan? Has improvement in women's education translated into their greater integration in the economy? Can women labour force participation be increased by encouraging women entrepreneurship? Will development of the microcredit sector help in generating employment opportunities for women? Does gender differential exist in access to paid jobs, especially at higher levels of education? Does vertical gender segmentation prevail in the labour market of Pakistan? What explains the gender wage gap? Is there any evidence of sexual harassment and violence against women in the workplace in Pakistan? Does domestic legislation provide an enabling environment for working women? How have the recent adverse economic developments affected the working woman? Women at Work, SPDC's ninth Annual Review of Social Development in Pakistan attempts to answer these questions. It also sets out a multi-pronged strategy for promoting women's employment in Pakistan by addressing gaps in various socioeconomic policies.

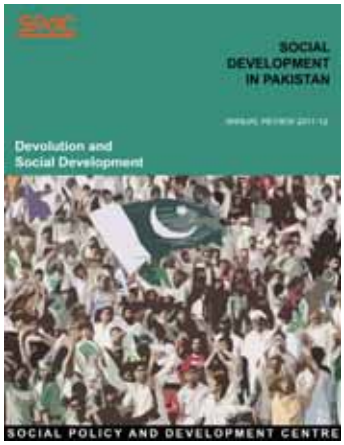
Social Impact of the Security Crisis
Annual Review of Social Development in Pakistan 2009-10



The South Asia region in general and Pakistan in particular are confronted with the daunting task of addressing the issues of terrorism, extremism and violence. Pakistan, undoubtedly, has been most adversely affected by the response of the United States following attacks on the twin towers of the World Trade Centre. The international political climate has not only created an urgency to redefine the security framework amid fears of transnational threats, but has affected global economic development. Today, international relations and domestic policy have become increasingly similar and intermingled.

Social Impact of the Security Crisis, SPDC's tenth Annual Review of Social Development probes the following aspects of the security related developments. What is the nature of the problem? What are the economic costs of the war on Pakistan's economy? How have the priorities of the federal and provincial budgets been affected as a result of the security crisis? What has been the affect of higher public spending on security on social development? How have local populations been affected by the security threat? What socio-economic impact has the conflict had on the household? How has the civil society responded to the changed security environment?

Devolution and Social Development
Annual Review of Social Development in Pakistan 2011-12



The 18th Amendment is a major charter of political rights as far as decentralisation and devolution of power to the provinces in Pakistan is concerned. It contains far-reaching stipulations for empowering Pakistan's four federating units – intended to give them unprecedented autonomy. Devolution and Social Development in Pakistan, being eleventh in the series of Annual Reviews of SPDC, examines the design and implementation issues of the decentralisation provisions of the 18th constitutional amendment and the 7th NFC Award. The two being major landmarks have the potential of having significant implications for the inter-governmental relations in Pakistan. However, much would depend on the consequential measures taken by the federal and the provincial governments in line with the constitutional provisions.

The report starts with looking into the underpinnings of the new devolution system and draws lessons from the other countries. It then discusses major changes related to legislative and fiscal autonomy and reviews the nature and status of the implementation of the transfer of functions to the provinces and lays out the financial and development implications of the Amendment. Implications of the 7th NFC Award and its impact on the finances of sub-national governments are also analysed along with the issues of sales taxation of services and borrowing powers of the provinces. Moreover, the report provides the current status and key features of the proposed laws related to the local government system. Finally, a number of emerging have been discussed which eventually have to be resolved through a consensus among the federating units, especially within the Council of Common Interests.

The State of Social Development in Rural Pakistan
Annual Review of Social Development in Pakistan 2012-13

In a comparative and empirical study of the state of social development in rural Pakistan, this Annual Review explains how the social sector has fared, particularly, after the promulgation of the 18th Amendment to the Constitution made the provinces primarily responsible for health and education. The report brings forward urban-rural differentials using development indicators such as population, demography, education and public health; profiles and quantifies the rural economy; provides latest estimates of poverty; and analyses the pattern and structure of employment in rural areas, access to education, the state of the health sector and the effectiveness of social safety nets. By shedding light on the social sector, and comparing and contrasting urban-rural disparities, the report reinforces the importance of a healthy, educated citizenry and its centrality to the prosperity of Pakistan.

BIBLIOGRAPHY

Anwar Shah, S. S. (2006). The new vision of Local Governance and the Evolving Roles of Local Governments. In E. A. Shah, *Local Governance in Developing Countries* (pp. 1-43). Washington DC: The World Bank.

CIET (2005), "Social Audit of Governance and Delivery of Public Services, Pakistan 2004/5," National Report Summary, prepared by A Cockcroft et al for Devolution Trust for Community Empowerment.

Ellis, Peter; Roberts, Mark. 2016. Leveraging Urbanization in South Asia : Managing Spatial Transformation for Prosperity and Livability. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/22549 License: CC BY 3.0 IGO.

Filmer, D. and L. Prichett (2001), "Estimating wealth effects without income or expenditure data-or tears: an Application of education enrollment in States of India", Demography 38(1)

Gauhar, A. (1996). *Ayub Khan: Pakistan's First Military Ruler.* Lahore: Sang e Meel.

Harris, J., and M. Todaro. "Migration, Unemployment, and Development: A Two-Sector Analysis." *American Economic Review* 60 (1): 126-42.

Harris, J., and M. Todaro. "Migration, Unemployment, and Development: A Two-Sector Analysis." *American Economic Review* 60 (1): 126-42.

http://www.spdc.org.pk/Data/Publication/PDF/RR-73.pdf

Jamal H. and Khan A. J. (2007), "Trends in Regional Human Development Indices", SPDC Research Report Number 73, Social Policy and Development Centre, Karachi.

Labor Force Survey, 2001-02 & 2013-14, Pakistan Bureau of Statistics, Statistics Division, Government of Pakistan.

Lewis, W. A. 1954. "Economic Development with unlimited Supplies of Labour." *Manchester School of Economics and Social Studies 22* (May): 139-91.

Lewis, W. A. 1954. "Economic Development with unlimited Supplies of Labour." *Manchester School of Economics and Social Studies 22* (May): 139-91.

Marco Mezerra, S. A. (2010). *Devolution row; An assesment of Pakistan's 2001 Local Governance Ordinance.* The Hague, The Netherlands: Netherlands Institute for International Relations.

Pasha and Pasha (2002), 'Cost of Living Index by City of Pakistan' Research Report Number 43, Social Policy and Development Centre (SPDC), Karachi.

Shafqat, Saeed (2014). "Local Government Acts 2013: Province-Local Government Relations", *Development Advocate Pakistan*, Vol 1, Issue 1, January 2014.

Shah, A. (2012). The 18th Constitutional Amendment: Glue or Solvent for Nation Building and Citizenship in Pakistan ? *The Lahore Journal of Economics 17*, pp 387-424.

Siddiqui, K. (1992). *Local Government in South Asia.* Dhaka: University Press Limited.

Sjaastad, L. A. 1962. "The Costs and Returns of Human Migration." *Journal of Political Economy 70* (5): 80-93.

Sjaastad, L. A. 1962. "The Costs and Returns of Human Migration." *Journal of Political Economy 70* (5): 80-93.

SPDC (2007). *Devolution and Human Development in Pakistan*, Annual Review 2006-07, Social Policy and Development Centre (SPDC).

United Nation Development Program, Pakistan (2003), Pakistan National Human Development Report, Oxford University Press, Karachi

United Nations Development Program, Human Development Reports 2014 "Sustaining Human Progress:Reducing Vulnerabilities and Building Resilience", UNDP, New York, USA