



PUNJAB MILLENNIUM DEVELOPMENT GOALS





Empowered lives. Resilient nations.



Millennium Development Goals





Table of Contents

List of Tables	Т
List of Abbreviations	II
Glossary	
Foreword	IV
Executive Summary	v

Chapter 1

1.	Introduction	1
1.1.1	Impacts of the Floods	1
1.1.2	Security Situation	2
1.2	The Province: An Overview	2
1.2.1.	Population and Land Mass	2
1.2.2	Resource Endowments	5
1.3	Medium Term Development Strategy	7

Chapter 2

2.	Millennium Development Goals	11
2.1	MDG 1 – Eradicate Extreme Poverty and Hunger	11
2.1.1	Poverty Incidence	11
2.1.2	Household Income	14
2.1.3	Household Characteristics	16
2.1.4	Nutrition and Food Security	17
2.1.5	Labour Force Participation	20
2.1.6	Challenges	21
2.1.7	Summary of Findings	22

Chapter 3

3	MDG 2: Achieving Universal Primary Education	25
3.1	Literacy	27
3.2	Enrolment and Completion Rates	30
3.3	Functionality	36
3.4	Challenges	38
3.5	Summary of Findings	38

Chapter 4

4	MDG 3: Promoting Gender Equality and Women's Empowerment	43
4.1	Gender Parity in Education	43
4.2	GPI for Adult Literacy	47

4.3	Employment	48
4.4	Parliamentary Representation	48
4.5	Challenges	48
4.6	Summary of Findings	49

Chapter 5

5	MDG 4: Reducing Child Mortality	53
5.1	Infant Mortality Rate	54
5.2	Immunization	55
5.3	Under Five Mortality Rate (U5MR)	58
5.4	Coverage of LHWs	60
5.5	Challenges	62
5.6	Summary of Findings	62

Chapter 6

MDG 5: Improving Maternal Health	67
Total Fertility Rate and Contraceptive Prevalence Rate	67
Ante-natal Care Coverage	68
Maternal Mortality Ratio	70
Challenges	70
Summary of Findings	70
	MDG 5: Improving Maternal Health Total Fertility Rate and Contraceptive Prevalence Rate Ante-natal Care Coverage Maternal Mortality Ratio Challenges Summary of Findings

Chapter 7

7	MDG 6: Combating HIV/AIDS, Malaria and Other Diseases	75
7.1	HIV/AIDS	75
7.2	Hepatitis B and C	76
7.3	Malaria	77
7.4	Tuberculosis	78

Chapter 8

8	MDG 7: Ensuring Environmental Sustainability	83
8.1	Water and Sanitation	83
8.2	Forest Area	90
8.3	Proportion of Urban Population Living in Slums	90
8.4	Challenges	90
8.5	Summary of Findings	90
Links Betwee	n MDGs 4, 5 and 7	91
Conclusion		93
Annexure		95

List of Table

Table 1.1	Estimated Population of Punjab	2
Table 1.2	Population Density and Urbanization	4
Table 1.3	Summary Statistics on Mineral Reserves	6
MDG Tracki	ng Table 1 Indicators for Poverty and Hunger	11
Table 2.1	Poverty Incidence in Punjab	12
Table 2.2	Distribution of Poverty by Assets in Punjab	12
Table 2.3	Poverty Incidence in Punjab by Agro-Climate Zones	14
Table 2.4	Total Monthly Income by Quintile	14
Table 2.5	Monthly Household Expenditure Data by Quintile	15
Table 2.6	Dependency Ratio and Average Household Size	16
Table 2.7	Caloric Poverty in Punjab	19
Table 2.8	Labour Force Participation Rates	20
Table 2.9	Percentage Distribution of Employed Persons by Key Industry Division	21
MDG Tracki	ng Table 2 Achieving Universal Primary Education	27
Table 3.1	Literacy Rate (Age 10+) by District	28
Table 3.2	Net Primary Enrolment Rate	32
Table 3.3	Primary Completion Rate	33
Table 3.4	Transition Rates for Government Schools	35
Table 3.5	Non-Functional Public Schools	37
MDG Tracki	ng Table 3 Gender Equality	43
Table 4.1	GPI's at Different Levels of Education in Public Schools	44
Table 4.2	GPI's at Different Levels of Education in Private Schools	45
Table 4.3	GPI for Adult Literacy	47
MDG Tracki	ng Table 4 Reducing Child Mortality	53
Table 5.1	Infant Mortality Rate	54
Table 5.2	Percentage of Children 12-33 Months Fully Immunized	56
Table 5.3	Percentage of Children 12-33 Months Immunized Against Measles	57
Table 5.4	Under 5 Mortality Rates	59
Table 5.5	LHW Coverage	61
MDG Tracki	ng Table 5 Improving Maternal Health	67
Table 6.1	Contraceptive Prevalence Rates	68
Table 6.2	Ante-Natal Care Coverage	69
Table 7.1	Awareness of HIV/AIDS in Punjab	75
Table 7.2	Prevalence of Hepatitis B and C	76
Table 7.3	Tuberculosis District wise	78
MDG Tracki	ng Table 7 Ensuring Environmental Sustainability	83
Table 8.1	Main Source of Drinking Water for Punjab	84
Table 8.2	Access to Improved Sources of Drinking Water	84
Table 8.3	Access to Improved Water Sources	86
Table 8.4	Type of Sanitation Facility Used by the Household	88
Table 8.5	Population Using Sanitary Means of Waste Disposal	88
Table 8.6	Type of Toilet Used by Household	89

List of Abbreviations

BHU	Basic Health Unit
BISP	Benazir Income Support Program
CPR	Contraceptive Prevalence Rate
CRPRID	Center for Research on Poverty Reduction and Income Distribution
EPI	Expanded Program for Immunization
ESP	Education Sector Plan
FBS	Federal Bureau of Statistics
GER	Gross Enrolment Rate
GPI	Gender Parity Index
GRAP	Gender Reform Action Plan
HIES	Household Income and Expenditure Survey
ILO	International Labor Organization
IMR	Infant Mortality Rate
LHW	Lady Health Worker
MDG	Millennium Development Goal
MNCH	Maternal, Newborn and Child Health Project
MTDF	Medium Term Development Framework
NACP	National AIDS Control Program
NER	Net Enrolment Rate
NFC	National Finance Commission
PDHS	Pakistan Demographic and Health Survey
PHC	Primary Health Care
PIHS	Pakistan Integrated Household Survey
PMDGR	Pakistan Millennium Development Goals Report
PMN	Pakistan Microfinance Network
PRSP	Poverty Reduction Strategy Paper
PSLM	Pakistan Social and Living Standards Measurement Survey
RHC	Rural Health Center
SPDC	Social Policy Development Center
SPRU	Social Policy Reform Unit
TMA	Tehsil Municipal Administration
WFP	World Food Program

Glossary

Antenatal Care Coverage	Proportion of women who delivered during the last 3 years and who made at least one antenatal care visit to either a public or private health practitioner
Caloric Poverty	Proportion of population consuming less than 2350 calories per adult equivalent per day
Contraceptive Prevalence Rate	Proportion of currently married women aged between 15 and 49 who are (or their spouses are) using contraception
Dependency Ratio	Number of household members aged below 15 and above 64 as a proportion of the working age members (15 to 64 years) of the same household
Full Immunization Rate	Proportion of children from 12 to 23 months of age who are fully vaccinated against the Expanded Program of Immuniza- tion (EPI) target diseases
Gender Parity Index	Proportion of girls to boys in any given category or group
Headcount Index	Incidence of poverty in terms of percent of persons below the poverty line. For Pakistan, the estimate is based on the of- ficial poverty line, which has been set at the monetary value, per capita per month, consistent with the attainment of 2350 calories per adult equivalent per day
Infant Mortality Rate	No. of deaths of children under 1 year of age per 1000 live births
Maternal Mortality Rate	No. of mothers dying due to complications of pregnancy and delivery per 100,000 live births
Net Primary Enrolment Ratio	Number of children aged 5 to 9 attending primary level classes, divided by the total number of children in this age cohort
Prevalence of Underweight Children	Proportion of children under 5 years who are underweight for their age
Primary Completion/Survival Rate	Proportion of students who complete grade 5
Total Fertility Rate	Average number of children delivered by a woman during her reproductive years
Under 5 Mortality Rate	No. of deaths of children under 5 years of age per 1000 live births

Note on Data

The Pakistan Social and Living Standards Measurement Survey (PSLM) includes data for Islamabad Capital Territory (ICT) in its aggregates for Punjab. Disaggregation of ICT data is beyond the scope of this report. The effects of inclusion of the ICT in Punjab aggregates is expected to be quite small, given that the population in the ICT is estimated at less than 2 percent that of Punjab. The provincial level data in this report has been compiled from PSLM 2010/11, Labour Force Survey (LFS) 2010/11, Household Income Expenditure Survey (HIES) 2010/11, and Multiple Indicator Cluster Survey (MICS) 2011 includes the ICT data.

Foreword

The Government of Punjab remains committed to the Millennium Declaration signed by the Government of Pakistan in 2000 and the achievement of Millennium Development Goals (MDGs) in the province. The MDG report is a key step in this direction and will enable effective policy making, planning and budgeting for MDGs acceleration in the province.

Within this context, the Government has initiated a number of programmes that contribute towards achievement of MDGs despite current budgetary constraints. These initiatives provide social protection, food security, and economic resilience to vulnerable populations. Other initiatives focus on provision of improved educational opportunities in the form of Danish schools to the talented and needy students, health sector reforms, and employment generation for youth. In parallel, the government has introduced medium term planning and budgeting to spur inclusive growth and enhance macroeconomic stability through collaboration with the civil society, private sector and international development partners.

Punjab Millennium Development Goals Report 2010 is the first report that provides an in-depth analysis of the progress made towards achievement of MDGs at the provincial as well as the district levels. It also identifies challenges faced in the implementation of MDGs and highlights opportunities and policy options to accelerate progress towards the achievement of MDGs. I am confident that the report will assist the government to lead and coordinate the provincial consultation process on the nature and focus of the post-2015 development agenda.

I would like to acknowledge the support provided by the United Nations Development Programme (UNDP) and the UN system in Pakistan during the preparation of this report. I also acknowledge the contribution made by various departments of the Government of Punjab by providing data and reviewing draft versions of the report.

The report highlights that Punjab has made substantial progress on a number of indicators as evident from the fact that the province has performed better on several MDG indicators in comparison with the national average. Still there is a need for prioritization of efforts in a few areas. I trust that with the economic and social reforms put in place by the Government of Punjab, the pace of progress towards MDGs will be further accelerated in the coming years. I want to provide my assurance that despite financial constraints, the Government of Punjab remains committed to achieving the MDGs by 2015.

Javaid Aslam Chairman P&D Board

Executive Summary

With nearly 60 percent of the country's population, progress on achieving MDGs in Punjab has a significant impact on the national MDG indicators. According to results of the PSLM 2010/11 and MICS 2011, Punjab's progress towards MDGs is better than the national average for a number of indicators, which points to the significant contribution that Punjab has made to the progress seen for those indicators at the national level. However, the relatively better performance for the Punjab in terms of some indicators conceals large variations in performance across districts and along the urban/ rural and gender divide. Moreover, in view of the recent pace of progress, substantial improvement has yet to be made in order to achieve any of the MDGs. Data and trends suggest that no MDG can be achieved in its entirety in the province by 2015, although some indicators for MDG 4 and MDG 7 could be met on average for the province. The latter qualitative assessment is made despite taking account of the progress made so far which would be further supported by the additional funds available to the provincial government as a result of the NFC award and the greater responsibilities acquired through the 18th Constitutional Amendment. These positive developments might be offset by the dysfunctional nature of the Local Governments, the adverse impact of the floods of 2010, the worsened security situation and the stagnant economy.

On MDG 1, Eradicate Extreme Poverty and Hunger, targets are unlikely to be met at the current rate of progress on indicators. The national target for headcount index is 13 percent. Punjab's performance on headcount index on poverty is inconsistent. The index for Punjab stood at 26 percent in 2001/2 which was 7 percentage points lower than the national average. By 2005/6 poverty incidence across agro climatic zones ranged between 5.5 percent and 25 percent. Again, while incidence in Punjab was in general lower than the national average of 22.3 percent, Punjab is unlikely to be able to reduce poverty sufficiently to meet the national goal.

On indicators other than the headcount index, Punjab's performance is mixed. In 2011, the number of children under 5 years in the province who were underweight for their age was recorded at about 33 percent, which is below national levels, but still 13 percentage points above the required national goal of less than 20 percent. Using the caloric poverty indicator (or the proportion of population living below 2350 calories per day), the incidence of poverty in Punjab was estimated at 36.3 percent in 2001/02.

On MDG 2, achieving Universal Primary Education, targets are also unlikely to be met. The Net Primary Enrollment Ratio stood at 61 percent in 2010/11 which is 5 percentage points higher than the national average but still far behind the target of 100 percent. This indicator only increased by 16 percentage points between 2001/02 and 2010/11. The literacy rate in the province was 2 percentage points higher than the national average at 60 percent but not likely to reach the national goal of 88 percent. The literacy in the province has increased by 13 percentage points between 2001/2002 and 2010/11. On both indicators, achievements varied significantly across districts, skewed in favor of urban areas and with significant gender gaps.

In contrast, on MDG 3, Promoting Gender Equality and Women's Empowerment, targets may be achieved with regard to gender equality in education if performance is maintained. Again, with large variations in achievements based on gender and the rural/urban divide, the GPI for adult literacy was 0.73 for Punjab –six percentage points above the national levels in 2008/09. Average GPIs for public schools ranged from 0.86 for high schools to 0.90 for primary schools. For private schools, GPIs were higher for middle schools, with evidence of gender parity being achieved in high schools. In both public and private schools however, the disparity across districts was significant at the middle and high school levels.

However, performance on other indicators, such as the share of women in wage employment in the non-agricultural sector was better than other provinces but insufficient for the achievement of the MDGs. Female labor force participation (including the agricultural sector) was officially recorded at just 20.7 percent for the province compared to 69.3 percent for men in 2009. The national average itself only grew by 0.99 between 2001 and 2008

For MDG 4, progress to date suggests that targets for some indicators could be met by 2015. Reducing Child Mortality targets on three indicators out of six will not be met. Targets for immunization in the province might be met as estimates from 2010/11 suggest that 86 percent of children from 12 to 23 months of age have been fully immunized whereas 14 districts out of 34 have already met the target of over 90 percent immunization. For the indicator of proportion of children between the ages of 1223 months immunized against measles, in 2010/11 the rate stood at 86 which was 6 points above the national average and close to the required rate of over 90. Finally, for the indicator on proportion of children suffering from diarrhoea, Punjab recorded a rate of 11 percent in 2010/11, equal to national targets. Despite promising performance on these indicators, variations manifested themselves between districts and across urban/rural divides.

Targets for reducing the Infant Mortality Rate to 40 per 1000 live births and the Under 5 Mortality Rate to 52 per 1000 live births are unlikely to be met. An insufficient rate of decline marks the former, which has fallen from 132.8 deaths per 1000 live births in 1991 to only 82 deaths per 1000 births in 2011. For the latter, the rate has remained constant at 77 deaths between 2004 and 2008. Targets for the indicator of Lady Health Worker (LHW) coverage will also not be met as only 55 percent of the province's targeted population had access to LHW as of May 2010.

On MDG 5, Improving Maternal Health, with the exception of targets on contraceptive prevalence rates, which stood at 32 percent in 2007/08, targets on other indicators are unlikely to be met. The Maternal Mortality Ratio which must be brought down to 140 maternal deaths per 100,000 live births stood at 227 in 2006/07.

On the indicator of total fertility rate there has been a very slight decline, from 5.4 to 3.58, in the mean number of children born per adult female between 1991 and 2011. However, an increase between 2007 and 2008 from 3.9 to 4.3 was recorded which indicated that perhaps targets for this indicator will not be met. Subsequent decrease between 2008 and 2011, however, from 4.3 to 3.58 suggests improvement in the indicator. Finally, ante-natal care coverage in the province was recorded at 68 percent in 2010/11 with access in rural areas at 60 percent, which was 8 percentage points below the access that expectant mothers have in urban areas. Tracking these indicators over time is problematic though as the data comes from different sources, which do not always use similar methodologies.

On MDG 6, Combating HIV/AIDS, Malaria, and Other Diseases, data on prevalence was limited to high risk groups, and available for only four districts. HIV prevalence was found to be highest amongst injecting drug users. Awareness of HIV/AIDS stood at only 18 percent of the population on average. Data on hepatitis B and C prevalence indicated fairly high rates in Punjab, at an average of 2.5 percent for Hepatitis B and 6.5 percent for Hepatitis C. Data from the National TB Control Program indicates that case detection rates were about 78 percent, and treatment success rates were 92 percent in Punjab in 2008 and 2009 respectively. Lack of sufficient data on key indicators makes it difficult to determine the province's progress on the goal.

On MDG 7, Ensuring Environmental Sustainability, targets have already been achieved on the indicator of the overall population having access to an improved source of drinking water. In 2011, access to improved water source was 1.1 percentage points above MDG targets of 93 percent. Targets for sanitation related indicators maybe met despite large variations amongst districts as 72 percent of the population in Punjab already had access to proper sanitation facilities (underground, covered or open drains) by 2007/08 compared to 58 percent in 2004/05.

Map of Punjab





Introduction

The Province: An Overview

Chapter-1

1.1 Introduction

Punjab is Pakistan's biggest province by population, accounting for 55.6 percent of the country's total population according to the last census. The province has a substantial industrial and agrarian base, and the provincial government estimates that it contributes about 58 percent to Pakistan's GDP, with contributions of over 50 percent in each major sector.¹ By any account, changes in development indicators in Punjab have a significant effect on weighted national indicators. This report on progress towards MDGs in Punjab is based on the PSLM 2010/11 and MICS 2011 data. Subsequent to the survey a number of significant changes have taken place which will impact provincial prospects of further progress towards MDGs; changes in the governance, constitution, fiscal parameters, security situation and above all the impact of the devastating floods of 2010.

Punjab Strategy of Accelerating Economic Growth and Improving Service Delivery, June 2009, acted as a key policy document for the Government of Punjab, which envisaged an annual growth rate of 7 to 7.5 percent for the province in the medium term. It is clear that this is no longer a realistic target, not least because of the downturn in the national economy. Punjab's future progress on the MDGs subsequent to the levels indicated by the results of the PSLM 2010/11 and MICS 2011 has to be assessed in the context of recovery in the aftermath of a major natural disaster, a depressed economy, and an ongoing militant threat.

1.1.1 Impacts of the Floods

In addition to the tensions associated with

1 Punjab Economic Report 2007, page 3.

increased terrorist activity in the province, Punjab was also badly affected by the floods of August 2010. According to the preliminary Damage Needs Assessment report issued by the government in collaboration with key donors, Punjab was the second worst affected province in terms of value of damage, with estimated losses of Rs. 222.3 billion (26 percent of the total assessed damage of Rs. 855 billion).² In terms of infrastructure damage, 8.8 percent of pre-flood educational facilities have been severely damaged or destroyed, but the province's secondary and tertiary health facilities remain largely intact, and less than 2 percent of primary health facilities were destroyed.³ Damage to housing was also extensive, with 9 percent of pre-flood housing stock having been partially or completely destroyed.

Agriculture in Punjab was estimated to have suffered damage worth Rs. 154 million, and up to 50 percent of cultivated land was lost in the most affected districts. Damage to irrigation infrastructure in the province amounted to an estimated Rs. 2.8 billion. Damage to crops (both standing and stored), loss of livestock, and damage to housing, transport and communications infrastructure accounted for the bulk of losses in the province.

In addition to the damage to infrastructure and the loss of livelihoods, a human tragedy unfolded in Punjab, as in other provinces, with an estimated 7.3 million people displaced. More than a million households were affected by the floods, of which half a million were assessed to be severely affected.

As a result of the devastating floods in 2010

3 Ibid. Pages 27 and 28.

² Pakistan Floods 2010: Preliminary Damage Needs Assessment Report. Government of Pakistan (Planning Commission), World Bank and Asian Development Bank, page 24.

about 1.2 million workers had suffered a loss of livelihoods. About 57 percent of these workers were thought to be affiliated with the agriculture sector, while a further 24 percent were working in the services sector. Since losses to livelihoods were primarily in the rural economy, it can be inferred that the livelihoods of unpaid family workers and own-account workers were also badly affected something which the data on declared workers will not pick up. The report further estimated that the damage to school buildings would affect about 1 percent of the school going children in Punjab. The most significant negative impacts that the report forecasted were in sanitation, with estimates suggesting that there was a 55 percent decrease in the number of people using toilets in the province. While the extent of the impact can be debated, there is little doubt that flood damage has negatively affected the province's path towards MDG goal attainment.

1.1.2 Security Situation

Although initially not on the frontlines of the war on terror, the province has recently (particularly 2008)

onwards) been the site of increased militant activity. Punjab witnessed 35 terrorist attacks in 2008, 46 in 2009 and 62 in 2010.¹⁰ These attacks also targeted the provincial capital, Lahore, as well as the military garrison town of Rawalpindi.

1.2 The Province: An Overview

Punjab is bordered by almost all regions of Pakistan – Azad Jammu and Kashmir to the north-east, Khyber Pakhtunkhwa to the north-west, Balochistan to the south-west and Sindh to the south. The province has an international border to the east with Pakistan's largest neighbor, India, and has longstanding cultural and linguistic links with the Indian states of Punjab and Rajhasthan. The topography of Punjab is primarily that of a level plain in the central regions of the province, with the Pothwar plateau lying to the north, and the Cholistan desert to the south.

1.2.1. Population and Land Mass

The province's estimated population according to the Government of the Punjab, as of mid 2011, was 94.40 million. ⁵

	2006	2007	2008	2009	2010	2011
Punjab	86,812	88,289	89,790	91,316	92,869	94401
Bahawalpur Div	9,174	9,347	9,524	9,705	9,888	10069
Bahawalpur	2,947	3,005	3,064	3,125	3,186	3247
Bahawalnagar	2,395	2,432	2,470	2,508	2,546	2584
R.Y.Khan	3,832	3,910	3,990	4,072	4,156	4238
D.G. Khan Divn.	7,983	8,152	8,324	8,500	8,678	8856
D.G.Khan	2,019	2,062	2,106	2,150	2,196	2241
Layyah	1,360	1,387	1,415	1,443	1,471	1500
Muzaffargarh	3,251	3,322	3,393	3,467	3,541	3615

Table 1.1: Estimated Population of Punjab (in 000s)

4 Data from successive issues of the Pak Institute for Peace Studies (PIPS) Annual Security Reports for 2008, 2009 and 2010.

5 Ibid. Page 297.

Rajanpur	1,353	1,381	1,410	1,440	1,470	1500
Faisalabad Divn.	11,444	11,616	11,790	11,967	12,148	12324
Faisalabad	6,349	6,451	6,555	6,660	6,768	6873
Chiniot		included in Jh	ang District		1,149	1163
Jhang	3,243	3,288	3,333	3,379	2,277	2308
T.T.Singh	1,852	1,877	1,902	1,928	1,954	1980
Gujranwala Divn.	13,285	13,490	13,698	13,910	14,125	14336
Gujranwala	4,061	4,135	4,210	4,286	4,364	4441
Gujrat	2,353	2,387	2,421	2,456	2,491	2525
Hafizabad	960	974	988	1,002	1,017	1031
Mandi Baha-ud-Din	1,305	1,320	1,336	1,352	1,369	1384
Narowal	1,430	1,448	1,466	1,485	1,503	1522
Sialkot	3,176	3,226	3,277	3,329	3,381	3433
Lahore Divn.	14,482	14,762	15,047	15,337	15,633	15926
Lahore	7,836	8,010	8,188	8,370	8,556	8739
Kasur	2,799	2,846	2,894	2,942	2,991	3040
Nankana Sahib	1,424	1,441	1,457	1,474	1,491	1508
Sheikhupura	2,423	2,465	2,508	2,551	2,595	2639
Multan Divn.	9,967	10,138	10,309	10,486	10,664	10840
Multan	3,694	3,759	3,825	3,892	3,960	4027
Khanewal	2,410	2,448	2,486	2,525	2,565	2604
Lodhran	1,390	1,415	1,439	1,465	1,490	1516
Vehari	2,473	2,516	2,559	2,604	2,649	2693
Rawalpindi Divn.	7,754	7,875	8,001	8,125	8,252	8379
Rawalpindi	3,994	4,064	4,137	4,210	4,284	4358
Attock	1,465	1,486	1,508	1,529	1,551	1573
Chakwal	1,227	1,243	1,259	1,275	1,291	1307
Jhelum	1,068	1,082	1,097	1,111	1,126	1141
Sahiwal Divn.	6,211	6,304	6,398	6,494	6,593	6689
Sahiwal	2,109	2,138	2,167	2,197	2,227	2257
Okara	2,597	2,637	2,678	2,719	2,762	2803
Pakpattan	1,505	1,529	1,553	1,578	1,604	1629
Sargodha Divn.	6,512	6,605	6,699	6,792	6,888	6982
Sargodha	3,014	3,052	3,091	3,130	3,169	3208
Bhakkar	1,245	1,267	1,289	1,312	1,334	1357
Khushab	1,029	1,043	1,057	1,070	1,085	1098
Mianwali	1,224	1,243	1,262	1,280	1,300	1319

Source: Punjab Development Statistics 2011.

The last census of Pakistan was conducted in 1998 and data on population density and urbanization has been estimated from the last census as shown in the table below.

Sno District Population **Popula-tion** Urban Average Area (sq km) Annual 1998 proportion Density **Growth Rate** 1 Attock 2.23 1,274,935 6857 185.90 21.3 2 Bahawalnager 2.41 2,061,447 8878 232.20 19.1 3 **Bahawalpur** 3.08 2,433,091 24830 98.00 27.3 4 Bhakhar 2.72 1,051,456 8153 129.00 16 5 Chakwal 1.99 12.2 1,083,725 6524 166.10 6 D.G.khan 3.31 1,643,118 11922 137.80 13.9 7 Faisalabad 2.51 927.20 42.7 5,429,547 5856 8 Gujranwala 2.85 3,400,940 3622 939.00 50.5 9 Gujrat 2.22 2,048,008 3192 641.60 27.7 Hafizabad 10 2.28 832,980 2367 351.90 27.3 Jehlum 11 2.09 936,957 3587 27.7 261.20 12 Jhang 2.16 2,834,545 8809 321.80 23.4 13 Kasur 2.63 2,375,875 3995 594.70 22.8 14 Khanewal 2.45 4349 475.60 17.6 2,068,490 Khushab 15 2.05 905,711 6511 139.10 25.3 16 Lahore 3.46 6,318,745 82.4 1772 3,565.90 17 Layyah 3.10 1,120,951 6291 178.20 12.9 18 Lodhran 2.74 2778 421.80 14.5 1,171,800 19 Mandi Bahuddin 1.87 15.2 1,160,552 2673 434.20 20 Mianwali 2.35 20.8 1,056,620 5840 180.90 Multan 21 2.73 3,116,851 3720 837.90 42.2 Muzaffar Ghar 22 3.38 2,635,903 8249 319.50 12.9 23 Nankana Sahib Narowal 24 1.96 1,265,097 2337 541.30 12.2 25 23 Okara 2.42 2,232,992 4377 510.20 472.30 14.2 26 Pakpatten 2.51 1,286,680 2724 27 Rahim Yar Khan 3.19 3,141,053 11880 264.40 19.6 28 Rajanpur 3.27 1,103,618 12319 89.60 14.5 29 Rawalpindi 5286 636.40 53.2 2.75 3,363,911 30 Sahiwal 2.16 1,843,194 3201 575.80 16.4 31 Sargodha 1.97 5854 28.1 2,665,979 455.40

Table 1.2: Population Density and Urbanization as per 1998 Census

32	Sheikhupura	2.70	3,321,029	5960	557.20	26.2
33	Sialkot	2.46	2,723,481	3016	903.00	26.2
34	T.T.Singh	2.12	1,621,593	3252	498.60	18.8
35	Vehari	2.70	2,090,416	4364	479.00	16
	Total Punjab	2.64	73,621,290	205345	490.14	31.3

Source: Population Census 1998, Population Census Organization, Government of Pakistan.

As the table shows, population density was highest by a significant margin, in the district of Lahore at over 3500 persons per sq. km. The districts of Faisalabad, Gujranwala and Sialkot which lie in north or north-central Punjab, and are all centers of industrial production (either heavy industry or light engineering) were also densely populated, albeit with estimated population densities of just less than 1000 persons per sq. km. The southern district of Rajanpur was the most sparsely populated; while other sparsely populated districts such as Bahawalpur and Dera Ghazi Khan also lie in the south.

Lahore was the most urbanized district in the province with 82 percent of the population living in urban areas. This exceptionally high level is typical of the district that houses the provincial capital, which in Punjab's case is the second largest city in the country. Rawalpindi, with a urbanization level of 53 percent was the second most urbanized district, while Faisalabad and Multan, also had high rates of urbanization with over 40 percent of the population living in a city or town. Removing these four districts would reduce Punjab's urbanization rate to about 20 percent. Chakwal, Layyah, Muzaffargarh and Narowal, four districts that are scattered throughout the province, were the least urbanized.

1.2.2. Resource Endowments

Punjab gets its name from the five rivers that flow through the province, merging into the Indus in the southern district of Muzaffargarh. Central and south Punjab form an alluvial plain, which is irrigated through a complex system of canals, amounting to over 30,600 canal miles,⁶ laid by the British in the 19th century.⁷ Agriculture is a key sector of the local economy and the province has about 12.6 million hectares of cultivated land - almost 60 percent of the total for Pakistan although it forms only a quarter of the country's landmass.⁸ According to the Government of the Punjab's estimates, the province produces 75 percent of the country's total output of wheat and cotton.⁹ Manufacturing is also a key sector, and the province had 8549 registered industrial units in 2008, employing over 800,000 persons.¹⁰ The province thus has a fairly diversified economy.

In addition to a wealth of cultivable land and an extensive irrigation network, Punjab has mineral resources valued at Rs. 33.9 million (see gross value added in table below). The minerals sector is relatively small within the province's overall gross provincial product, providing daily employment

9 Ibid. Page 25.

^{6 1} canal mile = 5000 feet.

⁷ Punjab Development Statistics 2010, Bureau of Statistics, Government of Punjab, page 52.

⁸ Ibid, page 24.

¹⁰ Ibid. Page 240.

to just over 23,000 people. Punjab has limited deposits of crude oil and natural gas, as shown in the table below, with the bulk of mineral resources

in the form of coal, and rock salt. The province has one of the largest deposits of rock salt in the world at Khewra, in the Chakwal district.

Та	b	e	1.3	B: :	Summary	Stat	istics	on	Mi	ineral	R	leserves	

Type of Minerals	Average Daily Employment (Nos)	Employment Cost	Gross Value of Production	Intermediate Cost	Miscellaneous Cost	Gross Value Added
All Minerals	23,729	2,208,720	38,771,174	3,473,604	1,374,678	33,922,892
Argi Clay	240	8,640	1,350,478	46,879	36,151	1,267,448
Bauxite	10	276	3,594	607	53	2,934
Bentonite	190	5,298	70,898	6,933	806	63,159
Calcite	31	1,116	5,057	223	175	4,659
China Clay	230	7,640	9,540	450	268	8,822
Coal	5,798	458,638	1,585,142	320,773	82,989	1,181,380
Crude Oil	3,896	657,582	16,160,149	1,436,369	950,408	13,773,372
Dolomite	267	7,016	20,436	1,319	1,875	17,242
Ebray Stone	3	72	109	5	4	100
Fire Clay	261	18,586	64,047	3,210	1,773	59,064
Fullers Earth	28	805	2,832	371	148	2,313
Gypsum	982	39,785	204,166	2,216	11,438	190,511
Iron Ore	38	2,152	60,463	4,357	2,579	53,527
Laterite	150	16,145	160,994	9,005	272	151,716
Lime Stone	4,278	385,618	7,250,476	527,149	67,062	6,656,265
Marble	40	1,516	3,066	253	141	2,672
Natural Gas	1,825	316,524	10,754,526	988,483	166,297	9,599,746
Ocher	127	5,685	23,815	1,339	276	22,200
Rock Salt	3,796	210,734	763,173	89,914	42,105	631,154
Silica Sand	1,214	48,136	131,328	21,816	6,882	102,630
Sulphur	325	16,756	146,886	11,933	2,976	131,977

Source: Census of Mining and Quarrying Industries, 2005/06.

1.3 Medium Term Development Strategy

The Government of the Punjab (GoPb) prepared a strategy in June 2009 to accelerate growth and improve service delivery in the province.¹¹ A brief document, the strategy lays out the "strategic framework within which specific programs and projects will be prepared."¹² The strategy notes that Punjab is likely to see an increase in the number of people falling in the working age population of 15 to 60 years in the long term (next 30 years). The GoPb sees this as both an opportunity and a challenge, recognizing that a trained, healthy labour force can be a boon, but that such a demographic dividend also places substantial demands on the government's service provision and job creation capabilities.

The strategy lays out five key objectives in macro management, including the need to maintain a provincial growth rate of 7 to 7.5 percent in the medium term; improve productivity in key sectors; reduce growth volatility particularly in agriculture; maintain a dialogue with the federal government to track changes in the interest rates and exchange rate; and lastly, the need to be more proactive in economic management through more regular data collection and processing of information on key indicators. In the short term, the GoPb pledged to increase investment in infrastructure, take steps to ensure food security, improve the quality and coverage of social services and reinforce social safety nets.

The strategy gives a list of general policy prescriptions for agriculture, human resource development, infrastructure development and urbanization. It does not, however, provide a costing of these prescriptions, nor does it specify targets or provide a timeframe for achievement of objectives. The strategy stipulates wide contours of policy reforms envisaged by the Government but does not provide an implementable action plan.

¹¹ Planning and Development Board, Government of Punjab. 2009. A Strategy for Accelerating Economic Growth and Improving Service Delivery. June.

¹² Ibid, page 11.



Goal 1: Eradicate Extreme Poverty and Hunger

Chapter-2

2. Millennium Development Goals

This section tracks Punjab's progress against the MDGs, assessing whether the province will be able to achieve the 2015 targets. The GoPb has expressed its commitment to achieving the MDGs in policy documents such as the Punjab Poverty Reduction Strategy Paper of 2003.

2.1. MDG 1 – Eradicate Extreme Poverty and Hunger

The table below shows how Goal 1 has been tracked in the Provincial MDG Report (PMDGR), showing national progress on the key indicators specified for the goal over the last decade. Where available, provincial level data for each indicator has been added to give a picture of Punjab's progress.

Indicators	Region	2001/02	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2011	MDG Target (2015)
Headcount	Pakistan	34.5	23.9	22.3	n/a	n/a	n/a	n/a	n/a	13
(percent) Proportion	Punjab	26.0	n/a	Ranging from 5.5 to 25% depending on agro-climatic zone	n/a	n/a	n/a	n/a	n/a	n/a
Proportion of children under 5 years who are underweight for their age	Pakistan	41.5	38	38	38	38	38	n/a	n/a	<20
	Punjab	n/a	n/a	n/a	n/a	33.6	n/a	n/a	32.6	<20
Proportion of	Pakistan	30	n/a	n/a	n/a	n/a	n/a	n/a	n/a	13
population below 2350 calories per day of food intake	Punjab	36.34	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

MDG Tracking Table 1: Indicators for Poverty and Hunger

Source: For national level indicators, PMDGR 2010. Other data from various sources as explained below. Headcount index figures for Punjab from SPDC 2004 and PMN 2010 respectively.

Proportion of underweight children from MICS 2007-8 & MICS 2011

Proportion of population falling below the caloric poverty line is a simple average calculated from WFP 2003.

Eradicating poverty is the essential objective of development policy in general. In Pakistan, research on poverty is constrained by lack of availability of disaggregated data – in particular official province and district level estimates of poverty incidence have not been issued in some years. Nevertheless, provincial poverty estimates have been calculated by some researchers, using mainly official data from national household surveys. These and other provincial indicators that are relevant to this goal are discussed below.

2.1.1 Poverty Incidence

Key Message: Poverty incidence in Punjab has historically been lower than the national average. In 2001/02, it was estimated at 26 percent, compared to a national average of 34.5percent;

while in 2005/06 it was estimated by agro-climatic zone, with all zones showing lower poverty incidence than the national average. Variation across zones, though, was significant.

Although official sources such as the Federal Bureau of Statistics (FBS) have not furnished provincial poverty estimates, the Social Policy Development Center (SPDC), an independent research institution based in Karachi, estimated poverty incidence by province for 2001/02 data from the Household Income and Expenditure Survey (HIES).¹³ Although this data is a decade old, it provides a reference point to assess the progress of the province in poverty alleviation.

The SPDC used an average poverty line of Rs. 646 per capita per month (Rs. 605 for rural and Rs. 761 for urban) to calculate poverty incidence. The line was defined by measuring the minimum income required per capita per month, in 2001/02 prices, to fulfill minimum caloric requirements, and basic necessities such as clothing, education, and healthcare. SPDC used the Small Area Estimation Technique to calculate provincial poverty estimates, given the relatively small size of provincial samples.

The technique regards household consumption as the variable of interest, and quantifies the independent variables "predicting" household consumption on the basis of their correlation with poverty incidence.¹⁴

The key estimates for Punjab from the SPDC study are reproduced in the table below. Overall poverty incidence in the province, or proportion of population falling below the poverty line, was estimated at 26 percent, as opposed to an estimated national average of 34.5 percent.

According to the SPDC's estimates there was little difference in rural and overall poverty incidence in the province, but urban poverty, in small cities and towns (of up to 1 million persons) was estimated at a staggering 43 percent for the province in 2001/02. Some of this disparity can be explained by the fact that small cities in Punjab typically service a large agrarian hinterland, and are often composed of migrants from that hinterland, many of whom flock to towns at times when agriculture has not performed well. In contrast, poverty in large cities was below the average for the province, and poverty in the provincial capital of Lahore was relatively low.

Table 2.1: Poverty Incidence in Punjab (Percent)

			Urban					
	Overall	Rural	Provincial capital	Large cities	Small cities and towns			
Punjab	26	24	18	22	43			

Source: SPDC 2004, Table 3.3.

Poverty was also disaggregated by asset ownership in the SPDC report as shown in the table:

Table 2.2: Distribution of Poverty by Assets in Punjab (Percent)

	Ru	ral		Urban				
Land Ownership	No Land Ownership	House Ownership	No House Ownership	Property Ownership	No Property Ownership	House Ownership	No House Ownership	
12.39	26.13	23.70	34.53	18.13	31.54	30.51	31.90	

Source: SPDC 2004, Table 3.5.

¹³ Social Policy Development Center (SPDC). 2004. Combating Poverty: Is Growth Sufficient? Annual Report, 2004.

¹⁴ For details of how the technique was used, see Box 3.2 of the SPDC report referenced earlier.

As the table shows, poverty incidence was highest for the rural population with no house ownership – typically households where the main breadwinners are casual agricultural labour who may or may not be migrants moving from farm to farm. Poverty incidence was also high, at just over a quarter of households, for the landless (but who may "own" a dwelling on part of a landlord's estate). Land ownership in rural areas was found to correspond with exceptionally low poverty incidence – only 12.4 percent of rural households who owned any land at all, fell below the poverty line.

In urban areas also, poverty incidence was highest amongst households who do not own a dwelling or any other property, but was not much lower for those who owned a house (30.5 percent). Thus in urban areas in Punjab, the ability to stay above the poverty line seemed to correspond more to ownership of property in general (and this property may well exist in a rural area), than to ownership of a dwelling.

More recently, a Pakistan Microfinance Network (PMN) study on poverty incidence by agroclimatic zones, based on the HIES 2005/06 data provides more insight into the poverty profile of the province.¹⁵ For this study, Punjab was divided into five agro-climatic zones (see map below) and poverty estimates were constructed separately for each zone.¹⁶ Poverty incidence was calculated using the official poverty line, designated by the Planning Commission, as the cut-off point. The line was defined at Rs. 944.47 per adult equivalent per month for 2004/05.



Map 4.1: Agro-Climatic Zones

¹⁵ Pakistan Micro-finance Network (PMN). 2010. Profiling Pakistan's Rural Economy for Microfinance.

¹⁶ These zones were first classified for Pakistan by Thomas Pinckney in 1989. See The Demand for Public Storage of Wheat in Pakistan – IFPRI Research Report 77. Dec 1989.

Agro-climatic Zone	Rural	Urban	Total	
Rice-Wheat Punjab	22.2	11.4	18.4	
Mixed Punjab	22.6	6.0	19.6	
Cotton-Wheat Punjab	22.6	13.3	21.8	
Low Intensity Punjab	26.1	16.7	25.0	
Barani Punjab	7.2	1.5	5.5	
Pakistan	27.0	13.1	22.3	

Table 2.3: Poverty Incidence in Punjab by Agro-climatic Zone 2005/06 (Percent)

Source: PMN 2010. Table 2.

As the table shows, there was considerable variation in poverty incidence in Punjab across zones. In particular, Barani Punjab (which lies in the northcentral part of the province), a region characterized by the prevalence of small landholdings and greater dependence on employment in the armed services and public sector, had poverty incidence levels which were comparable to those of highincome economies in 2005/06. Urban poverty in this region was estimated at just 1.5 percent. On the other hand, low-intensity Punjab (a narrow strip to the west of the province, bordering Balochistan and Khyber-Pakhtunkhwa) was characterized by relatively high levels of both urban and rural poverty. In the rest of the province, rural poverty levels did not vary by much across zones, but urban poverty was lower in Mixed (or central) Punjab than in the other regions (barring the barani area). This is a region which includes the major cities of Sargodha and Faisalabad, the latter being an

important industrial center. In general, for all agroclimatic zones, poverty levels were lower in Punjab compared to the national average.

2.1.2 Household Income

Key Messages: Wages and salaries, along with crop production account for the bulk (over half) of household income sources.

The latest data on average monthly income for Punjab, from the HIES 2010/11, shows a significant gap in rural and urban income.¹⁷ While the average monthly income is Rs. 22,859 in the province as a whole, in rural areas the average is only Rs. 19,778, as compared to the average of Rs. 29,949 in urban areas, a difference of almost Rs. 10,000. The gap between average income for the lowest and highest quintiles came to a little over Rs. 18,000 per month in Punjab. See Annex I for a rural/urban breakdown.

	Total	1st	2nd	3rd	4th	5th
Average monthly income (Rs.)	22859.30	11144.68	13936.66	16829.95	20904.46	40968.39
Total	100	100	100	100	100	100
Wages and Salaries	33.11	43.98	38.71	35.71	30.39	30.71
Crop Production	14.53	10.59	10.65	14.50	16.54	15.16
Livestock	9.71	10.73	11.60	12.53	11.88	7.48

Table 2.4: Total Monthly Income by Quintile

17 Federal Bureau of Statistics 2009. Household Income and Expenditure Survey 2007/08 & 2010-11

Other non agri Activities	17.08	13.66	17.55	15.90	17.57	17.68
Property (Owner Occupied Houses Excluded)	3.02	0.84	0.89	1.29	1.79	4.79
Owner Occupied Houses (Imputed Income)	8.49	6.66	7.60	7.64	8.05	9.40
Social Insurance Benefits Including Pension	1.97	0.51	1.48	1.75	2.14	2.30
Gift Assistance	2.59	6.24	4.48	3.33	2.25	1.54
Foreign Remittances	5.24	0.42	1.43	2.28	4.19	8.07
Domestic Remittances	3.72	4.08	4.56	5.29	4.91	2.58
Other Sources	0.53	2.29	1.06	0.34	0.28	0.29

Source; HIES (2010-11)

As the data shows, for the province as a whole, wages and salaries constitute one third of monthly income. The strength of the agrarian economy in Punjab is reflected by the fact that 14.50 percent of the income, on an average, came from crop production; while a further 9.71 percent came from livestock. For rural households, these proportions were of course higher, with almost a quarter of income coming from these two sources. Non-agricultural activities (commerce, trade, etc.) accounted for 17 percent of income, while remittances, both foreign and domestic, collectively amounted to a little below 9 percent. Punjab thus appears to have a fairly selfcontained economy, with significant dependence on commodity producing sectors.

The data on expenditure acts as a check on income data, and again can be interpreted to provide some insight into household characteristics. The table below gives a breakdown of expenditure data. Annex II gives a rural/urban breakdown.

Table 2.5: Monthly Household Expenditure Data by Quintile

	Total	1st	2nd	3rd	4th	5th
Average Monthly Consumption Expenditures (Rs.)	19067.71	10788.50	13572.56	15774.11	18272.76	30265.03
Percentage of Consumption Expenditure on:						
Total	100	100	100	100	100	100
Food, beverage and tobacco	48.11	57.73	55.73	54.15	51.23	40.35
Apparel, textile and footwear	5.39	5.83	5.83	5.81	5.71	4.88
Transport and communication	5.74	3.45	4.03	4.57	5.19	7.37
Cleaning, laundry and personal appearance	3.99	4.30	4.08	3.95	3.87	3.96
Recreation and entertainment	0.40	0.18	0.26	0.31	0.39	0.53
Education	3.88	1,81	2.26	2.49	3.26	5.55
Rent	13.10	8.70	9.75	10.61	11.55	16.58
Fuel and lighting	8.30	9.30	9.09	8.66	8.65	7.57
Miscellaneous	11.09	8.70	8.96	9.45	10.15	13.22

Source: HIES (2010-11)

As expected, the expenditure data closely mirrors income data, but the interesting finding here relates to the proportion of expenditure on food. In general, relative poverty can be inferred from this figure, as poorer households tend to spend a greater proportion of their monthly income on essential items. In general, the data was commensurate with this test, as the poorer income quintiles were found to spend more than half their income on food. This effect was more pronounced in rural areas with 53 percent of household income being spent on food on average, as compared to 41 percent for urban households(See annexes).

2.1.3 Household Characteristics

Key Message: The mean household size in Punjab is close to the national average at 6.9 persons per household. The dependency ratio is relatively low at 87.1.

The dependency ratio in Punjab was 87.1 overall, rising to 92.2 in rural areas and dropping to 76.6 in urban areas. The mean household size in the

province averaged 6.9 people per household.¹⁸ There was variation across districts, and dependency ratios were significantly higher than the average in the southern Punjab districts of Muzaffargarh, Dera Ghazi Khan and Rajanpur in particular. The lowest dependency ratios occurred in Lahore, Rawalpindi and Attock. The latter two districts are located in the prosperous (in terms of poverty incidence, as discussed in the earlier section) barani belt of Punjab. Interestingly, average household sizes were not necessarily low in these districts. In Lahore in fact, the average household size was higher than the average for the province as a whole at 7.1 persons.

The difference between urban and rural dependency ratios was striking, with a difference of 15.6 percentage points across the two regions on average. The most stark differences across regions were found in Dera Ghazi Khan (with a difference of 26 percentage points between urban and rural areas); Lahore (with a difference of 22 points); Multan and Sialkot (with differences of 21 and 20 percentage points respectively).

Table 2.6: Dependency Ratio and Average Household Size

S No	Districts	Total	Rural	Urban	Average household Size
1	Attock	78.5	81.1	69.2	6.1
2	Bahawalnagar	87.7	88.5	84.6	6.7
3	Bahawalpur	91.0	95.5	80.1	6.8
4	Bhakkar	93.8	94.9	88.4	6.6
5	Chakwal	81.8	83.0	73.8	5.7
6	D. G. Khan	109.9	114.0	87.6	7.8
7	Faisalabad	81.8	85.8	76.8	7.2
8	Gujranwala	86.9	93.5	80.8	7.5
9	Gujrat	84.1	89.0	72.5	6.6
10	Hafizabad	86.7	87.2	85.3	7.1
11	Jhang	85.9	87.1	81.8	6.5
12	Jhelum	80.4	86.3	66.5	6.1
13	Kasur	95.1	98.0	85.8	7.0
14	Khanewal	88.9	90.1	83.5	7.0

18 Unless mentioned otherwise, data in this sub-section is from the Population Census of 1998.

15	Khushab	83.5	84.4	81.0	6.2
16	Lahore	73.8	93.2	70.2	7.1
17	Layyah	99.0	101.7	82.5	7.3
18	Lodhran	97.8	98.4	94.6	7.2
19	Mandi Bahauddin	85.5	86.5	80.2	6.7
20	Mianwali	91.2	94.5	79.5	7.1
21	Multan	87.9	97.5	76.2	7.1
22	Muzaffargarh	106.7	109.2	91.6	7.3
23	Nankana Sahib				
24	Narowal	96.8	98.2	87.1	7.4
25	Okara	86.9	89.9	77.8	6.5
26	Pakpattan	88.5	89.7	81.0	6.4
27	Rahimyar Khan	97.2	99.3	88.9	7.5
28	Rajanpur	106.5	108.1	97.4	7.3
29	Rawalpindi	73.0	80.6	66.9	6.4
30	Sahiwal	83.3	85.1	74.7	6.9
31	Sargodha	84.4	86.8	78.7	6.4
32	Sheikhupura	90.2	92.0	85.3	7.3
33	Sialkot	85.6	91.2	71.2	7.3
34	Toba Tek Singh	85.6	86.6	81.5	7.1
35	Vehari	89.8	90.8	85.0	6.9
	Overall Punjab	87.1	92.2	76.6	6.9

Source: Population Census, 1998.

2.1.4 Nutrition and Food Security

Key Message: About 33 percent of children under 5 in the province are underweight, while caloric poverty levels are estimated again at just above a third of the population.

The first MDG is concerned not only with eradicating

poverty as whole, but with directly combating hunger. As a result, concerns about food security are an integral part of any assessment for MDG 1. The figure below shows proportion of underweight children under 5 by district. The data from MICS 2011 shows a modest decline by 1 percentage as against the 34 percent of underweight children under 5 in 2007-08.



Figure 2.1: Prevalence of Underweight Children by District (Percent)

Source: MICS 2011

Once again, districts in south and central Punjab had relatively high levels of underweight proportions in children under 5. The districts with the highest incidence of reported cases were DG Khan, Muzaffargargh, Vehari, Rahim Yar Khan, and Lodhran.

Food security is more difficult to assess, but a series of comprehensive studies on food security in rural and urban Pakistan conducted by the World Food Program (WFP), Sustainable Development Policy Institute (SDPI) in 2003 and along with Swiss Agency for Development and Cooperation (SDC) in 2009 also provides valuable insights into sub-national poverty incidence.¹⁹ The studies were based on an analysis of primary and secondary data, and assessed food availability, economic access to food and food absorption in rural and urban areas of all districts of Pakistan. The Food Insecurity Report 2009 delineates that nearly 12 percent of the districts in Punjab are food insecure while 38 percent lie at the borderline. This is a disturbing development since the figures show that food insecurity has more than doubled since 2003. The food secure districts in Punjab have decreased from 24 in 2003 to 17 in 2009.

¹⁹ World Food Program (WFP)/Sustainable Development Policy Institute (SDPI). 2003. Food Insecurity in Rural Pakistan. World Food Program (WFP)/Sustainable Development Policy Institute (SDPI)/Swiss Agency for Development and Cooperation (SDC). 2009. Food Insecurity in Pakistan.

Table 2.7: Caloric Poverty in Punjab (2003 & 2009)

District	Percent of population	Ranking 2009	Ranking 2003	
Rajanpur	55.3	1	1	
D.G. Khan	55.0	2	4	
Muzaffargarh	49.9	3	2	
Khusahb	48.3	4	18	
Multan	44.6	5	4	
Mianwali	44.0	6	13	
Bahawalpur	43.6	7	5	
Narowal	43.5	8	17	
Chakwal	41.7	9	16	
Attock	41.9	10	8	
Bhakar	40.8	11	20	
Kasur	40.2	12	21	
Sargodha	39.9	13	31	
Khanewal	39.2	14	12	
Lodhran	39.0	15	10	
Rahimyar Khan	39.0	16	7	
Jhang	38.7	17	15	
Gujrat	38.0	18	14	
Layyah	37.4	19	6	
Gujranwala	37.0	20	24	
Sheikhpura	35.8	21	30	
Vehari	35.4	22	19	
Jhelum	34.3	23	33	
Hafizabad	34.3	24	29	
Sahiwal	33.8	25	23	
Bahawalnagar	33.3	26	22	
Faisalabad	31.9	27	28	
Mandi Bahaudin	31.6	28	34	
Pakpattan	29.9	30	25	
Sialkot	29.2	31	27	
Toba T. Singh	29.9	29	32	
Lahore	29.1	32	9	
Rawalpindi	28.6	33	11	
Okara	26.1	34	26	

Source: WFP & SDPI (2003), WFP, SDC & WFP (2009)

2.1.5 Labour Force Participation

Key Message: Unemployment rates were estimated at 8.35 percent for females and 5.25 percent for males.

The level of participation in economic activity in the province can be gauged by analysis of employment data. Overall labour force participation rates were estimated at 35.21 percent of the total population in the Labour Force Survey of 2010/11. The key issue here is the stark disparity in male and female participation rates – for males, it was estimated at 50.56 percent, while for females at 19.57 percent. The following table gives the breakdown by age and region (rural or urban).

Table 2.8: Labour Force Participation Rates (Percent)

	Labor Force Participation Rates			Un-employment Rates			
	Total	Male	Female	Total	Male	Female	
Punjab							
Total (all ages)	35.21	50.56	19.57				
Total 10 years and over)	48.26	69.72	26.66	6.10	5.25	8.35	
10-14	12.58	14.32	10.67	14.84	19.00	8.70	
15-19	38.46	52.08	24.65	11.32	12.12	9.63	
20-24	55.92	85.02	28.59	8.87	7.10	13.82	
25-29	61.27	97.03	29.75	4.75	3.22	9.15	
30-34	62.01	97.76	31.01	2.65	2.00	4.62	
35-39	66.10	97.95	37.37	2.24	1.40	4.24	
40-44	67.15	97.88	37.78	1.76	0.73	4.31	
45-49	68.90	97.28	37.65	2.98	2.51	4.32	
50-54	66.74	95.85	35.70	3.31	3.07	3.98	
55-59	62.84	91.60	32.41	5.51	4.86	7.48	
60-64	55.04	81.61	23.90	8.57	6.05	18.67	
65 Years and Over	30.37	44.87	11.34	12.41	8.55	32.43	

Source: Labor Force Survey 2010/11

Unemployment rates (defined as the percent of unemployed among those looking for work) again show a gender differential, with female unemployment rates estimated at 8.35 percent of the population of over 10 years who are looking for work, as compared to an unemployment rate of 5.25 percent for men. Under-employment may also be rife in Punjab, given that 29.70 percent of all those employed were found to be unpaid family helpers according to the LFS 2010/11, a category that tends to disguise unemployment. participation rate followed predictable patterns, with participation rates for men remaining high and consistent for all age categories from 25 to 60. However, 52 percent of 15 to 19 year olds were also found to have entered the labour market, which may point to the low levels of tertiary educational attainment. Annex III provides a more complete picture.

Of those employed, 45.5 percent were found to be employed in the agriculture sector, while services collectively employed close to 40 percent of people (see table below).²⁰ Manufacturing employed about

The age-distribution pattern of the labour force

20 Where services include the wholesale and retail sectors, transport storage and communications, construction, education and health services, electricity gas and water, finance and insurance, and miscellaneous personal and community services.
13.65 percent of the workforce overall, and more than half of the working population in urban areas. Wholesale and retail trade was also an important commercial activity in Punjab and the second largest employer in the province by key industry division. In rural areas, close to 43.17 percent of the population was employed in agriculture, but manufacturing and wholesale and retail trade again employed more than quarter of the working population each. In urban areas, wholesale and retail trade was the main employer, absorbing about 9.15 percent of the employed population.

		Punjab			Rural		Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100	77.51	22.69	70.30	51.17	19.13	29.70	26.70	3.36
Agriculture, Forestry, Hunting and Fisheries	45.05	28.09	16.97	43.17	26.82	16.35	1.89	1.27	0.62
Mining and Quarrying	0.15	0.18	-	0.15	0.15	-	0.03	0.03	-
Manufacturing	13.65	11.20	2.45	6.19	4.66	1.53	7.47	6.54	0.92
Electricity, Gas and Water	0.48	0.47	0.01	0.20	-	0.28	0.27	0.27	0.01
Construction	6.95	6.91	0.04	4.98	4.95	0.03	1.97	1.95	0.02
Wholesale and retail trade, restaurants and hotels	16.15	15.78	0.37	7.00	6.78	.21	9.15	9.01	0.14
Transport, Storage and Communications	5.11	5.08	0.03	2.81	2.80	0.01	2.30	2.29	0.01
Public Administration and defense	2.88	2.79	0.09	1.34	1.33	0.01	1.53	1.45	0.08
Finance, insurance, real estate and business services	1.42	1.38	0.05	0.36	0.36	-	1.08	1.06	0.05
Community, Social and Personal Services	2.97	2.25	.73	1.46	1.16	0.30	1.50	1.08	0.42
Education and Health Services	5.18	3.41	1.75	2.66	2.00	0.66	2.51	1.42	1.09

Table 2.9: Percentage Distribution of Employed Persons by Key Industry Division

Source: Labour Force Survey 2010/11

For sectors other than agriculture, patterns of employment followed roughly similar patterns across urban or rural areas, for both males and females. Thus female employment in rural areas was concentrated in agriculture; but 11 percent of the employed female population in rural areas was found to work in the manufacturing sector. About 35 percent of employed females worked in the manufacturing sector in urban areas.

Status of Progress Against Goal 1: Target is unlikely to be met.

2.1.6 Challenges

• Punjab's economy closely reflects national

indicators because Punjab contributes more than 50 percent to total GDP, both in the commodity producing sectors as well as in services. Pakistan's economy as a whole has slowed down from 2008 onwards with average national GDP growth rates falling from a range of 5 to 7 percent to barely 1.2 in FY2009, recovering to 4.1 percent only in the last fiscal year. This might be a possible explanation for the increase in poverty over the last few years.

 As is the case with KP, Sindh and Balochistan, as mentioned in the Punjab Poverty Reduction Strategy Paper of 2003 (Planning and Development Department, Government of the Punjab 2003), women are not well represented in mainstream employment and even access to nutrition is limited by gender – male children are given preference over females whether it is related to health or education

- In the same paper, the Government of the Punjab's focus on gender equal interventions are highlighted "...they (women) lack access to credit, to formal labour markets and to land. Majority is deprived of education and skills and a number of social constraints are placed on their mobility" The GoPb is aware of the intra-provincial disparities in poverty and employment patterns, but needs perhaps through a more concerted effort to keep track of and analyze survey data.
- Further, the deterioration of the security situation due to terrorist attacks and violence often lead to delays in project and policy implementations. This challenge applies to the achievement of all MDGs.

2.1.7 Summary of Findings

Punjab is far from eradicating poverty by 2015. Poverty may actually have increased from 2007 onwards, as national GDP growth has slowed considerably. If over a third of Punjab's population fell below the poverty line in 2005/06, this number is unlikely to have fallen in the wake of recent developments, and is unlikely to show significant improvement over the next five years.

Policy Response

- At the federal level, the programs that are implemented in all provinces in Pakistan include the Benazir Income Support Program (BISP) which is a cash transfer program targeted at the poorest households, the distribution of Zakat (a tax collected for charity purposes), and programs for food support run under the auspices of the Pakistan Bait-ul-Mal.
- At the provincial level, the GoPb subsidizes

the sale of wheat, and an amount of Rs. 13 billion was allocated for this purpose in the budget of FY2011. Rs. 7 billion were also allocated for the sasti roti scheme, under which the price of bread is regulated; and for the Ramzan package in which poor households were given packages of wheat flour and sugar during the month of fasting. Targeting still remains an issue in many of these programs, as does irregular or delayed cash payments, making them unreliable for poor citizens in times of need.

- The Government of Punjab was also involved in giving out microfinance loans to the poorest of the poor under large-scale programs such as the National Rural Support Programme and the Punjab Rural Support Programme. Under the latter it disbursed over Rs.1 Billion between June 1998 and November 2001. Similarly, under the Khushali Bank micro credit intervention, implemented between 2002 and 2004, over Rs. 3 billion were given out.
- The Punjab Bait-ul-Maal has been active since 1991, and provides financial assistance to local NGOs, interest free loans to widows and jobless persons, stipends to poor students, and financial assistance to the destitute amongst other functions. In 2008/09, the Bait-ul-Maal had a grant of Rs. 200 million. The Punjab Welfare Trust for the Disabled, which has seed capital of Rs. 400 million, has also been active for twenty years and is providing assistance to more than 80 NGOs.
- Further, under the ADB supported Sustainable Livelihoods in Barani Areas project that concluded in July 2011, and had been in operation for almost 6 years, 10 districts were targeted where unemployed females were given vocational training and literacy skills amongst other community based poverty reduction interventions.

MDG1-Eradication of Extreme Hunger and Poverty Punjab





Goal 2: Achieving Universal Primary Education

Chapter-3

3. MDG 2: Achieving Universal Primary Education

Goal 2 is defined in terms of achieving universal primary education, i.e. a net primary enrolment ratio of 100 percent to be achieved by 2015 that will result in a literacy ratio of 88 percent in Pakistan. The PMDGR uses completion/survival rate (grade 1 to 5) to track progress towards the target.

Indicators	Region	2001/02	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2011	MDG Target (2015)
Net primary enrolment ratio	Pakistan	42	52	53	56	55	57	56	n/a	100
(percent)	Punjab	45	58	57	62	61	62	61	n/a	100
Completion/ survival rate Grade	Pakistan	57.3	67.1	72.1	54.7	52.3	54.6	n/a	n/a	100
1 to 5 (percent)	Punjab	n/a	n/a	n/a	n/a	51	n/a	n/a	78.2	100
Literacy rate (percent)	Pakistan	45	53	54	55	56	57	58	n/a	88
([,	Punjab	47	55	56	58	59	59	60	60	88

MDG Tracking Table 2: Achieving Universal Primary Education

Source: For national indicators, PMDGR 2010. For Punjab, PIHS 2001/02 and PSLM 2004/05 to 2010/11, MICS 2011

Education is a key factor in the determination of longterm sustainable economic growth, especially in today's era of globalized knowledge and skill-based economies. Pakistan compares poorly to other countries at comparable levels of development when it comes to education indicators. With more than 55 percent of the country's population, progress in Punjab makes a significant contribution to the achievement of the MDGs at the country level.

3.1 Literacy

Key Message: At 60 percent, the 10+ literacy rate in Punjab is higher than the national average by 2 percentage points. Literacy across the province is not uniform, with significant variation in literacy rates across districts, skewed in favor of urban areas and with significant gender gaps.

The 10+ literacy rate has shown a gradual but steady increase in Punjab over the last fifteen years. Achieving or surpassing the national MDG target of 88 percent literacy in 2015 will not be likely at this pace of progress. In each recorded year Punjab has posted figures slightly above the national average (by a few percentage points), however the rate of progress has been very slow. Figure 4.2 illustrates the trend over the period using data from the Pakistan Integrated Household Surveys (PIHSs) and the Pakistan Social and Living Standards Measurement Surveys (PSLMs).



Figure 3.1: Trend in Literacy Rates in Punjab (Percent)

Source: PIHS and PSLM, Various Issues.

As the chart shows, the overall literacy rate in the province has risen by roughly 19 percentage points since 1996. However the declining slope of the literacy rate graph suggests that the pace of improvement has slowed down in recent years compared to the period in the late 90's. An encouraging aspect of the disaggregation is that female literacy has shown slightly better progress, rising by approximately 21 percentage points (from 29 percent in 1996 to 50 percent in 2009) compared with progress in the male literacy rate which rose by roughly 17 percentage points (from 52 percent to 69 percent). This positive development is also endorsed while looking at the latest PSLM 2010-11 data which shows improvement in female literacy and shortens the gap further by 1 percentage. This is a positive outcome but the decline in gender disparity by 4 percentage points is small compared to the remaining disparity of 19 percentage points, not sufficient to merit an assumption that female literacy in the province will

achieve parity with male literacy anytime soon. On the other hand, a worrisome development is that male literacy has actually declined by 1 percentage points between 2007/08 and 2008/09 - a trend that could be particularly disturbing if it persists. Similarly, another negative development is the decline in rural literacy by 2 percentage points in 2008/09, which reversed the gains in reduction of the rural/ urban gap during the preceding years. Data from the PSLM 2007/08 indicate that the gap between urban and rural literacy had decreased from 23 percentage points in 2006/07 to 19 percentage points in 2007/08, but the PSLM 2008/09 data shows that the gap has widened again to 25 percentage points. However, the latest PSLM 2010/11 data delineates 2 percentage declines in the rural urban gap and regain the same position as it was during 2007/08.

The following table gives the literacy rates by district for 2009/10,

S No.	Region	Urban		Rural			Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	Pakistan	81	67	74	63	35	49	69	46	58
	Punjab	80	71	76	64	42	53	70	51	60
1	Attock	84	65	75	76	47	61	78	50	64
2	Bahawalnagar	71	58	65	54	46	45	58	40	49

Table 3.1: Literacy Rate (Age 10+) by District (Percent)

3	Bahawalpur	74	61	68	48	28	38	56	38	47
4	Bhakkar	77	57	67	62	29	46	65	34	49
5	Chakwal	90	80	85	90	65	77	90	67	78
6	D. G. Khan	81	62	71	53	23	39	57	29	43
7	Faisalabad	80	74	77	65	48	57	72	60	66
8	Gujranwala	82	75	79	75	64	69	79	70	74
9	Gujrat	82	76	79	76	62	69	78	66	71
10	Hafizabad	75	60	67	65	43	54	68	48	58
11	Jhang	75	59	67	63	31	47	66	38	52
12	Jhelum	89	77	83	85	61	72	86	65	75
13	Kasur	75	60	67	65	44	55	68	48	58
14	Khanewal	80	61	71	65	33	49	67	39	53
15	Khushab	83	55	69	74	39	56	77	43	60
16	Lahore	82	76	79	71	57	64	80	73	77
17	Layyah	77	63	70	65	37	51	67	42	55
18	Lodhran	69	48	59	58	31	45	59	34	47
19	Mandi Bahauddin	87	76	81	71	53	62	73	57	65
20	Mianwali	85	57	71	76	42	59	78	46	61
21	Multan	79	68	74	60	45	48	68	48	58
22	Muzaffargarh	76	58	67	53	24	39	57	29	43
23	Nankana Sahib	71	63	67	68	49	58	68	52	60
24	Narowal	82	72	76	65	47	55	67	51	58
25	Okara	79	65	73	59	33	46	62	38	50
26	Pakpattan	78	67	72	53	26	39	57	33	45
27	Rahimyar Khan	76	63	69	50	26	38	56	35	46
28	Rajanpur	81	62	71	39	14	28	45	22	34
29	Rawalpindi	88	78	83	85	64	74	87	71	79
30	Sahiwal	78	69	73	63	44	53	65	48	56
31	Sargodha	84	70	77	68	36	5	72	45	59
32	Sheikhupura	79	72	75	63	47	55	69	56	63
33	Sialkot	77	76	77	65	60	62	68	64	66
34	Toba Tek Singh	81	74	77	76	58	67	77	62	69
35	Vehari	79	67	73	64	37	50	67	43	55

Source: PSLM 2010/11

N.B. Literacy is defined as the ability to read a newspaper and write a simple letter.

Literacy rates vary greatly across districts, and present a mixed bag of results in terms of the urban-rural divide as well as the gender gap as shown in the table. In ten districts out of thirty-five, there is evidence of high literacy – over 65 percent (Chakwal, Gujranwala, Gujrat, Jhelum, Lahore, Mandi Bahauddin, Rawalpindi, Sheikhupura, Sialkot, and Toba Tek Singh, all of which lie in northern central Punjab). The highest overall literacy rates were in Chakwal (at 90 percent) and Rawalpindi (at 87 percent) but few other districts came close to this level. In fact, according to 2010/11 data there are only eight districts in Punjab with less than 60 percent literacy (Bahawalnagar, Bahawalpur, D G Khan, Lodhran, Muzaffargarh, Pakpattan, Rahimyar Khan, and Rajanpur- all southern districts except Pakpattan), of which Rajanpur recorded an exceedingly low rate at only 45 percent.

Literacy rates differ significantly across the urban/ rural divide with the urban areas in all districts having achieved higher literacy rates (well above the provincial average at 69 percent and above) with the exceptions of Jhang, Bhakkar, Kasur, Nankana Sahib (at 67 percent each) and Lodhran (at 59 percent). Overall rural literacy is much lower, but six districts recorded over 65 percent (Chakwal, Jhelum, T.T.Singh Gujrat, Gujranwala and Rawalpindi); however in these districts urban literacy is much higher. The lowest overall rural literacy was found in Rajanpur at only 14 percent (where urban literacy was much higher at 71 percent, i.e an urban/rural margin of 57 percentage points). The rural urban divide in Rajanpur has widened over the last five years.

The gender gap in literacy cuts across the urban/ rural divide. Even some of the urban achievers suffer high gender gaps (Khushab and Mianwali had the highest urban gender gap at 28 percentage points each). In comparison with the urban areas, the gender gap in the rural areas is however much more significant. In twenty-four out of thirty-five districts there was a gender differential of over 20 percentage points in rural literacy, the highest being for Khushab (at 35 percentage points).These results suggest literacy among rural females in the Punjab is the biggest challenge to achieving MDG targets.

3.2 Enrolment and Completion Rates

Key Message: There is strong evidence of regional disparity in enrolment patterns. Urban net enrolment was 69 percent in 2010-11, compared to only 58 percent for rural net enrolment. Overall female net enrolment is 7 percentage points below male net enrolment but there are clear outliers among the districts where the gender gap is severe.

The figures below show the trend in net and gross primary enrolment in the province over the last decade, using data from the Pakistan Integrated Household Surveys (PIHSs) and the PSLMs.



Figure 3.2: Primary Net Enrolment for Punjab

Source: PIHS and PSLM, Various Issues.

Figure 3.3: Primary Gross Enrolment for Punjab



Source: PIHS and PSLM, Various Issues.

Both the graphs have similar trends in that they show negative or low rates of growth in net and gross enrolment at the primary level from 1995/96 to 2001/02, and then a sharp rise in enrolment levels between 2001/02 and 2004/05. Since 2004/05 the growth spurt has abruptly worn off and the graphs show a leveling off from 2004/05 to 2007/08 with only a slight increase for net enrolment and in the last year of our analysis.

Similar to literacy patterns the urban-rural disparity is significant, particularly in net enrolment. The gender gap also remains persistent in both net and gross enrolment. There are a few interesting dips in the graphs for both net and gross enrolment for the years between 2004/05 and 2007/08. Female net enrolment actually declined between 2004/05 and 2005/06 (from 55 percent to 53 percent) while male net enrolment remained constant at 60 percent. Between 2006/07 and 2007/08 male net enrolment declined (from 64 to 62 percent) while female enrolment remained constant. Rural net enrolment fluctuated over the individual years, while urban net enrolment declined slightly between 2006/07 and 2007/08. Also, both male gross enrolment and rural gross enrolment fluctuated in step progressively between 2004/05 and 2007/08. More disturbingly, urban gross enrolment appears to be declining since 2006/07.

At 61 percent in 2010, the NER for the province at the

primary level is 5 percentage points higher than the national average. High primary enrolment levels of over 65 percent are visible in thirteen of thirty-five districts, including some districts like Faisalabad, Multan and Sheikhpura which do not figure in the list of high-literacy districts. Even districts where overall net enrolment rates were over 70 percent were found to show significant variation across urban and rural lines. The highest rate of enrolment was found to be in Chakwal (at 81 percent). However, in nine districts, including the south Punjab districts of Bahalwalpur, Bahawalnagar, Dera Ghazi Khan, Muzaffargarh, Rahimyar Khan and Rajanpur to name a few, the NER remains lower than the national average. The gender gap is generally low in most districts, although with some alarming outliers.

Across urban areas in eleven districts the gender gap appears to have reversed with the NER for females being higher than males. Khanewal had the highest urban NER at an impressive 82 percent. On the other hand there are pockets (Hafizabad, Mandi Bahauddin, and Nankana Sahib) where the gender gap in NER is still quite a concern, as male enrolment exceeds female by around 17 percentage points on average. Interestingly, Urban Bhawalpur shows gender parity in NERin Punjab.

Across most of the province, rural enrolment has not kept pace with the urban areas, with a few notable exceptions. In three districts – Jhelum, Chakwal and Attock – the rural NER actually exceeds that recorded in urban areas (by 3, 5 and 2 percentage points respectively).²¹ In stark contrast, however, primary level net enrolment in Muzafargarh was found to be 35 percentage points less in rural areas. An analysis of the gender gap in rural Punjab also shows some outliers. While in the rural areas of Dera Ghazi Khan and Khanewal, female enrolment

continues to lag behind male enrolment by over 13 percentage points, in five districts (Sialkot, Sheikhupura, Hafizabad, Mandi Bahaudin, & Gujrat) the rural gender gap is reversed – in rural Sialkot the NER for females is 7 percentage points higher than male primary enrolment.

Details of the net primary enrolment rate for the year 2010 are given in the table below

S	Region		Urban			Rural			Total	
No.		Male	Female	Total	Male	Female	Total	Male	Female	Total
	Pakistan	67	65	66	57	48	53	60	53	56
	Punjab	69	69	69	60	55	58	62	59	61
1	Attock	69	75	72	77	71	74	75	72	74
2	Bahawalnagar	72	68	70	52	47	49	55	51	53
3	Bahawalpur	54	54	54	38	31	35	42	38	40
4	Bhakkar	81	66	73	54	47	51	57	50	54
5	Chakwal	84	68	77	83	81	82	83	80	81
6	D. G. Khan	81	74	78	54	41	48	57	44	51
7	Faisalabad	66	67	66	62	59	60	63	62	63
8	Gujranwala	68	67	68	65	69	67	67	68	67
9	Gujrat	66	75	71	67	68	67	67	70	68
10	Hafizabad	68	69	69	65	69	67	66	69	67
11	Jhang	58	69	63	58	51	55	58	54	56
12	Jhelum	71	78	74	81	73	77	79	74	77
13	Kasur	68	63	66	63	59	61	64	60	62
14	Khanewal	86	78	82	67	53	60	70	58	64
15	Khushab	72	71	71	62	60	61	65	63	64
16	Lahore	69	67	68	68	61	65	69	66	68
17	Layyah	79	77	78	65	56	60	67	58	62
18	Lodhran	74	61	68	50	42	46	54	45	50
19	Mandi Bahauddin	73	68	71	66	71	68	67	71	69
20	Mianwali	80	71	76	68	64	67	70	65	68
21	Multan	67	70	68	59	49	54	62	56	59
22	Muzaffargarh	77	85	80	50	39	45	52	43	48
23	Nankana Sahib	69	76	72	66	60	63	66	63	65
24	Narowal	74	79	76	73	70	72	73	71	72

Table 3.2: Net Primary Enrolment Rate

²¹ This does not make intuitive sense and may very well be the result of errors in data collection or processing.

25	Okara	72	69	70	71	67	69	71	67	69
26	Pakpattan	83	77	80	62	57	59	64	59	62
27	Rahimyar Khan	67	65	66	40	37	38	45	42	43
28	Rajanpur	68	76	72	44	43	44	46	46	46
29	Rawalpindi	74	73	73	79	77	78	76	75	76
30	Sahiwal	78	62	70	67	62	64	68	62	65
31	Sargodha	73	69	71	65	64	64	67	65	66
32	Sheikhupura	65	71	69	60	63	61	62	66	64
33	Sialkot	75	72	74	62	69	65	64	70	67
34	Toba Tek Singh	77	71	74	75	64	70	75	66	71
35	Vehari	75	74	75	58	45	52	61	50	56

Source: PSLM 2010-11

N.B. The NER shown here is for ages 5-9, excluding nursery or Katchi.

The percentage of the population that has completed primary level also varies greatly by district. Compared with the NER, there are fewer instances of high primary completion rates. The completion rates at the Primary school level for Punjab vary greatly all over the Province, with the lowest rates prevalent in the districts of Southern Punjab and the highest rates skewed within the Northern districts. The poorest performing district is Rajanpur at 40.9 percent, followed closely by D.G.Khan at 45.7 percentages, while the districts with the highest rates of primary school completion are located within the northern areas of Punjab particularly in Mandi Bahauddin which has a completion rate of approximately 120 percent. This is at least 20 percentage points above the MDG target for the province. Five districts of Punjab have exceeded the MDG targets for Primary school completion with rates of approximately 100 percentages or greater percentage points. Approximately 9 districts have their completion rates in their nineties. Out of 35 districts 20 districts have their completion rates of 80 percent or above. The provincial average is above 50 percentages for Punjab, and thus indicates increase in the rates of completion at Primary school levels.

Details are provided in the table below:

S.No	Region	Primary Completion Rate
	Punjab	78.2
1	Attock	98.4
2	Bahawalnagar	71.1
3	Bahawalpur	54.7
4	Bhakkar	79.5
5	Chakwal	92.3
6	DG Khan	45.7

Table 3.3: Primary Completion Rate

7	Faisalabad	84.5
8	Gujranwala	102.6
9	Gujrat	108.9
10	Hafizabad	98.9
11	Jhang	69.5
12	Jhelum	108.5
13	Kasur	91.9
14	Khanewal	74.6
15	Khushab	76.5
16	Lahore	81.9
17	Layyah	67.5
18	Lodhran	64.2
19	Mandi Bahauddin	120.8
20	Mianwali	83.8
21	Multan	57.7
22	Muzaffargarh	53.8
23	Nankana Sahib	92.9
24	Narowal	98.4
25	Okara	56.8
26	Pakpattan	64.2
27	Rajanpur	40.9
28	Rawalpindi	100.5
29	RY Khan	56.3
30	Sahiwal	80.8
31	Sargodha	96
32	Sheikhupura	93.3
33	Sialkot	93.6
34	TT Singh	82.6
35	Vehari	84.5
Source: N	VICS 2011	

Data on the transition rate from primary to middle level education is also available by district from the Punjab MICS 2011. As shown in the table below, on average, approximately 92.9 percent²² of children who graduate from government primary schools

move on to middle school in Punjab. Ironically transition rate above 90 percent was recorded for the district of Rajanpur, which has the poorest figures in the province for most education indicators.

²² Calculated from Punjab MICS 2011

Table 3.4: Transition Rates for Government Schools (Percent)

S. No	Districts	Total
1	Attock	95.4
2	Bahawalnagar	93.2
3	Bahawalpur	89.0
4	Bhakkar	93.7
5	Chakwal	95.0
6	DG Khan	87.4
7	Faisalabad	92.6
8	Gujranwala	96.0
9	Gujrat	94.3
10	Hafizabad	90.3
11	Jhang	94.0
12	Jhelum	90.0
13	Kasur	94.9
14	Khanewal	94.8
15	Khushab	90.3
16	Lahore	95.6
17	Layyah	85.9
18	Lodhran	88.7
19	Mandi Bahauddin	90.0
20	Mianwali	98.0
21	Multan	88.9
22	Muzaffargarh	94.4
23	Nankana Sahib	96.3
24	Narowal	98.3
25	Okara	93.6
26	Pakpattan	86.5
27	RY Khan	92.6
28	Rajanpur	93.0
29	Rawalpindi	97.5
30	Sahiwal	91.7
31	Sargodha	94.2
32	Sheikhupura	94.9
33	Sialkot	96.6
34	TT Singh	89.3
35	Vehari	94.9

Source: MICS 2011

Based on data from the Annual School Census conducted under the aegis of the Puniab Education Sector Reform Program (PESRP), primary school enrolment made up almost half of the total number of students enrolled in public schools in the province in 2009.²³ In 2008/09, a total of 10.5 million students were enrolled in public schools in Punjab, of which 5.0 million were enrolled in primary schools.²⁴ The Annual Census Report for 2007/08 estimated private school enrolment at 5.8 million or a little over half of public school enrolment in 2008/09, but of this number only about 16.5 percent was in primary school. Enrolment in primary schools stood at just under a million for private schools in 2008/09, but increased to over 2.5 million at the middle level. It is not possible to make a conclusive statement without a tracking survey, but the data trends certainly point to a scenario where a shift takes place, to some degree, from public to private schools for those students who complete primary education and stay in school.

The teacher student ratio for public primary schools was of the order of I to 42 students in 2008/09.²⁵ This proportion fell to 30 for middle schools, and 34 for high schools. Of the total teachers employed, about 42 percent on average were primary school teachers. This proportion was not consistent across districts (figures range from 26 to 53 percent – Rajanpur was a significant exception with about 62 percent of all teachers employed at the primary school level).

Enrolment and schooling indicators for Punjab point to a broad trend wherein the regional gap between the south and north of the province is quite apparent, with the south at a distinct disadvantage. More specifically, the variation in educational indicators is significant between the southern agricultural economy based districts bordering Sindh and Balochistan, and the barani (or rainfed) districts in the north, where agricultural landholdings are typically small. The southern districts of Bahawalpur, Bahawalnagar, Dera Ghazi Khan, Lodhran, Rahimyar Khan and Rajanpur figure at the bottom of the list of districts for both, attainment of literacy and for net enrolment. At the same time, the MICS data on transition from primary to middle school for public schools shows that all of these districts had transition rates of over 90 percent with the exception of Lodhran which showed a transition rate of 87.8 percent. This would indicate that school retention is probably not significantly worse in southern Punjab, but getting children into school is an issue.

Annex Tables IV and V give total enrolment in public and private schools in Punjab. Annex VI gives the number of teachers in each district.

3.3 Functionality

Key Message: Almost all of the non-functional schools in the province are primary schools, of which nearly 79 percent are girls' primary schools.

Non-functionality of public schools has been a big issue in the education sector, with the presence of "ghost schools" being alleged by different stakeholders who maintain that a number of public schools exist only on paper, although there are teachers on the rolls who draw salaries for work at such non-functional entities. The Government of the Punjab has attempted to identify such schools through the Annual School Census exercise as shown in the table.

²³ Calculated from PMIU 2008/09 data

²⁴ PMIU 2008/09

²⁵ Calculated from PMIU 2008/09 data

		Total I Func	Number o tional Scl	of Non- nools	Total Nu	umber of Schools	Primary	Total Number of Middle Schools		
S.No	Districts	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Attock	9	2	7	9	2	7	0		
2	Bahawalnagar	50	26	24	49	26	23	1		1
3	Bahawalpur	28	13	15	28	13	15	0		
4	Bhakkar	10	0	10	10		10	0		
5	Chakwal	21	10	11	21	10	11	0		
6	D. G. Khan	27	9	18	27	9	18	0		
7	Faisalabad	9	5	4	9	5	4	0		
8	Gujranwala	38	4	34	38	4	34	0		
9	Gujrat	16	6	10	16	6	10	0		
10	Hafizabad	30	0	30	30		30	0		
11	Jhang	5	3	2	5	3	2	0		
12	Jhelum	50	2	48	50	2	48	0		
13	Kasur	38	1	37	36		36	2	1	1
14	Khanewal	14	2	12	10	1	9	4	1	3
15	Khushab	14	8	6	14	8	6	0		
16	Lahore	36	7	29	35	7	28	1		1
17	Layyah	11	4	7	11	4	7	0		
18	Lodhran	5	1	4	5	1	4	0		
19	Mandi Bahauddin	11	0	11	11		11	0		
20	Mianwali	46	3	43	46	3	43	0		
21	Multan	29	3	26	27	3	24	2		2
22	Muzaffargarh	31	0	31	30		30	1		1
23	Nankana Sahib	71	8	63	69	8	61	2		2
24	Narowal	10	2	8	10	2	8	0		
25	Okara	41	2	39	38	2	36	3		3
26	Pakpattan	6	0	6	6		6	0		
27	Rahimyar Khan	41	9	32	41	9	32	0		
28	Rajanpur	14	1	13	13	1	12	1		1
29	Rawalpindi	43	21	22	41	21	20	2		2
30	Sahiwal	2	0	2	2		2	0		
31	Sargodha	15	2	13	15	2	13	0		
32	Sheikhupura	56	10	46	56	10	46	0		
33	Sialkot	53	9	44	53	9	44	0		
34	Toba Tek Singh	11	2	9	11	2	9	0		
35	Vehari	5	0	5	5		5	0		

Table 3.5: Non-Functional Public Schools

Source: Government of the Punjab, Annual School Census 2007/08

Almost all of the non-functional schools across all districts of Punjab were primary schools (877 out of 896 total). However, there is extreme variation in the province on the gender gap in non-functional schools. In seven out of thirty-five districts all of the non-functional public schools recorded were girls' schools (Bhakkar, Hafizabad, Mandi Bahauddin, Muzaffargarh, Pakpattan, Sahiwal, and Vehari). The highest number of non-functional schools was in Nankana Sahib district (71, of which 63 were girls' schools). Conversely, only 2 non-functional schools occurred in Sahiwal (both girls' schools). Bahawalnagar, for instance, had a higher incidence of non-functional schools (50 in total) 48 percent of which were girls' schools - in Nankana Sahib this figure was as high as 89 percent. Overall the data on non-functional schools portray a dismal picture of the state of girl's primary schools. Of the 896 reported non-functional schools in Punjab, 704 (79 percent) were girls' primary schools.

Non-functionality did not necessarily correlate with the educational attainment indicators discussed earlier. Districts such as Lahore, Rawalpindi, Sialkot, Jhelum and Gujranwala, with relatively good education indicators still had significant numbers (around 40, or above) of non-functional schools. Rajanpur, the district with the worst education indicators overall had only 14 non-functional schools out of a total of 1252 public schools.

Status of Progress against Goal 2: The target may be partially met in that some districts may achieve full compliance

3.4 Challenges

The Government of the Punjab prepared a Strategy for Accelerating Economic Growth and Improving Service Delivery in 2009 (known as the Punjab Strategy), which broadly outlines priority policy concerns in the education sector and key strategies being adopted to address deficiencies. Broadly speaking the indicators for the sector demonstrate:

- The Government of the Punjab's lack of success in maintaining the physical infrastructure of the education sector;
- The inability to restructure resources to provide a more even coverage and distribution of accessible education to a large population.
- Inability (most notably in Rajanpur and Dera Ghazi Khan), to draw local communities into the schooling process, and to convince them of the utility and cost-effectiveness of basic education.
- Lack of effective strategy to address the particular needs of rural women.
- The gender gap is a persistent problem in the province and creates a governance and management problem. Girls' schools need to remain effective even when they are underutilized in order for the trend in female exclusion to arrest. Missing facilities in schools can cause enrolment rates to decline and the NER has shown an increasing but also erratic trend.
- Providing horizontal accessibility across all districts has a major cost implication for the GoPb, but the issue of geographic accessibility needs consideration in order to close the gap between urban and rural areas. Overall progress in the urban areas is negated by stagnant and often negative trends in the rural areas.
- According to the Preliminary Damage and Needs Assessment, the educational infrastructure in Punjab has suffered severe damage. The most damaged district in the province is Muzaffargarh, which by all standards is one of the poorer districts and has not shown good progress on education indicators. Rajanpur district, by far the worst performing district in Punjab, is reported to have lost 410 schools in the floods which will certainly slow down progress in this sector.

3.5 Summary of Findings

The key indicator for attainment of the MDG goal on

universal primary education is the NER. After a brief spurt between 2002 and 2005, the growth rate has slowed down to a pace which is insufficient to meet the MDG target by 2015. The GER in the province has followed a very similar pattern; however after 2005 the GER has remained at that level. A policy response to smooth out the erratic pattern in the enrolment will produce positive results on many levels. Variation in the province is significant and, furthermore, there are no clear winners among the districts on both urban- rural divide and the gender gap.

Policy Response

 The Punjab Government has undertaken large scale programs in order to increase access to and enrollment into schools for girls by removing the costs associated with education. For instance, under the Punjab Education Sector Reform Program, the government undertook a 6 year long project worth over 21 billion rupees. In the first three years of implementation, female students were given stipends and textbooks to ensure they enrolled and attended school. Until FY2010, 400,000 middle school girls in what were identified as "low literacy districts" were benefiting under the project.

- Whether programs such as these will be successful in the aftermath of the floods will require detailed assessments in the affected districts. Although policy commitment exists, for instance the MTDF 2010-13 and Development 2010/11 reiterates commitment Program to the achievement of MDG 2 and 3, actual achievements may slow down as a major donor that was contributing to increasing enrollment and completion rates in targeted areas, the WFP pulled out of certain projects in Punjab. WFP's Promotion of Primary Education for Girls project that began in 2004 will no longer be functional in FY 2012 and that was seemingly an important project focused solely on enhancing female enrollment and completion rates.
- The focus of most of the projects under the Development Program for 2010/11 remains on providing for missing facilities in Punjab under which 1500 schools will be equipped. These projects may help in decreasing the amount of functional schools in the province perhaps helping the province perform better on this indicator.

MDG2-Achieving Universal Primary Education Punjab





Goal 3: Promoting Gender Equality and Women's Empowerment

Chapter-4

4 MDG 3: Promoting Gender Equality and Women's Empowerment

Goal 3 is concerned with gender equality and has been articulated in the PMDGR in the form of the following target and indicators.

Indicators	Region	2001/02	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2011	MDG Target (2015)
Gender Parity Index (GPI) for primary education	Pakistan	0.82	0.85	0.85	0.81	0.85	0.84	n/a	n/a	1.00
	Punjab	n/a	0.89	0.91	0.90	0.90	0.90	n/a	0.95	1.00
Youth Literacy GPI	Pakistan	0.64	0.68	0.74	0.75	0.78	0.78	n/a	n/a	1.00
	Punjab	n/a	n/a	n/a	n/a	0.86	n/a	n/a	0.89	n/a
Share of Women in Wage Employment in	Pakistan	9.65	10.11	10.93	10.53	9.89	10.64	n/a	n/a	14.0
the non-agricultural sector (percent)	Punjab	6.57	n/a	7.67	5.53	4.16	7.1	n/a	n/a	n/a
Proportion of seats held by women in national	Pakistan	n/a	21	21	21	22	22	22	22	n/a
parliament (percent)	Punjab	n/a	20	20	20	20	20	20	20	n/a

MDG Tracking Table 3: Gender Equality

Source: National estimates from PMDGR 2010. Government of the Punjab targets from Punjab Economic Report 2007/08. Other Punjab sources of data detailed below:

GPI for primary education for 2008/09 calculated from PSLM 2008/09 & MICS 2011. The figure reported is for public schools. Youth literacy is also driven from MICS 2011. Share of women in wage employment in non-agricultural sectors calculated from various issues of the Labor Force Survey.

The indicators specified for the third MDG are concerned with gender parity in education; in wage employment; and in political representation. There are a number of vertical programs, funded by the federal government, that deal with gender equality and improving the position of women. These include the Gender Reform Action Program (GRAP), aimed at creating a positive bias towards women in the workplace, and targeted specifically towards government institutions. The Government of the Punjab has also endeavored to promote higher female enrolment in middle schools through the stipend scheme of the Punjab Education Sector Reform Program (PESRP).

4.1 Gender Parity in Education

Key Message: Average GPIs for public schools ranged from 0.86 for high schools to 0.90 for primary schools. For private schools, GPIs were higher for middle schools, with evidence of gender parity being achieved in high schools. In both public and private schools however, the disparity across districts was significant at the middle and high school levels.

The third MDG is to achieve gender parity in primary and secondary education initially and at all levels of education by the year 2015. For this, female participation in education has been measured by the gender parity indices (GPI) for different educational levels. A GPI of 1 or above would show that female enrolment is at par with or exceeds male enrolment, while a GPI lower than 1 would imply the opposite.

The discussion on MDG 2 elaborated on the unique challenges facing Punjab in addressing gender parity in education. While the gender gap in literacy and net enrolment has decreased over time, and the primary, middle, and high school GPIs for the province consistently exceed the national average, the extreme variation among the districts requires policy measures to address these disparities and even out the progress. The following tables show the GPIs for different levels of education in public and private schools. (Data for public schools is for the year 2010 drawn from the PSLM 2010-11while data for private schools is for 2008 extracted from the Government of the Punjab's Annual Census Report 2007/08).

		GPI Primary	GPI Middle	GPI Matric
	Pakistan	0.83	0.81	0.75
	Punjab	0.90	0.90	0.86
S. No.	Districts			
1	Attock	0.86	1.06	0.98
2	Bahawalnager	0.87	0.82	0.74
3	Bahawalpur	0.86	1.00	1.00
4	Bhakhar	0.83	0.47	0.55
5	Chakwal	0.93	1.14	0.82
6	D.G.Khan	0.77	0.48	0.50
7	Faisalabad	0.97	0.92	0.76
8	Gujranwala	1.03	1.07	1.12
9	Gujrat	0.98	1.24	0.70
10	Hafizabad	1.04	0.76	0.82
11	Jehlum	0.98	1.01	0.71
12	Jhang	0.93	0.80	0.69
13	Kasur	0.93	1.18	1.10
14	Khanewal	0.80	0.76	0.63
15	Khushab	0.86	0.83	0.48
16	Lahore	0.93	1.18	1.10
17	Layyah	0.86	0.57	0.50
18	Lodhran	0.92	0.60	0.60
19	Mandi Bahuddin	1.00	0.91	0.80
20	Mianwali	0.91	0.67	0.65
21	Multan	0.87	0.92	0.68
22	Muzaffar Ghar	0.80	0.76	0.88
23	Nankana Sahib	0.84	0.94	1.04
24	Narowal	0.99	1.00	1.08

Table 4.1: GPIs at Different Levels of Education in Public Schools (Females per Male)

25	Okara	0.88	0.64	0.70
26	Pakpatten	0.82	0.67	0.70
27	Rahim Yar Khan	0.84	0.84	0.75
28	Rajanpur	0.92	0.65	0.85
29	Rawalpindi	0.88	1.06	0.92
30	Sahiwal	0.89	0.83	0.86
31	Sargodha	0.90	0.70	0.92
32	Sheikhupura	0.98	0.98	1.14
33	Sialkot	0.91	1.23	1.25
34	T.T.Singh	0.86	1.16	0.94
35	Vehari	0.85	0.77	0.72

Source: PSLM 2010-11

Table 4.2: GPIs at Different Levels of Education in Private Schools (Females per Male)

		GPI Primary	GPI Middle	GPI Matric
	Punjab	0.89	0.91	1.00
S. No.	Districts			
1	Attock	0.79	0.79	0.71
2	Bahawalnager	0.87	0.78	0.71
3	Bahawalpur	0.85	0.76	0.85
4	Bhakhar	1.31	0.73	0.60
5	Chakwal	0.82	0.83	0.81
6	D.G.khan	0.77	0.67	0.62
7	Faisalabad	0.91	1.09	1.17
8	Gujranwala	1.10	1.13	1.14
9	Gujrat	1.05	1.10	1.08
10	Hafizabad	0.94	0.94	0.76
11	Jehlum	0.71	0.71	0.90
12	Jhang	0.84	0.84	1.05
13	Kasur	0.91	0.92	0.80
14	Khanewal	0.81	0.76	0.94
15	Khushab	0.83	0.75	0.70
16	Lahore	0.98	1.12	1.21
17	Layyah	0.93	0.67	0.74
18	Lodhran	0.77	0.62	0.63
19	Mandi Bahuddin	0.97	0.95	1.03
20	Mianwali	0.68	0.68	0.33
21	Multan	1.01	0.99	0.96

22	Muzaffar Ghar	0.74	0.56	0.61
23	Nankana Sahib	n/a	n/a	n/a
24	Narowal	1.04	1.11	1.04
25	Okara	0.80	0.87	1.11
26	Pakpatten	1.02	0.84	0.79
27	Rahim Yar Khan	0.77	0.72	0.79
28	Rajanpur	0.91	0.49	0.51
29	Rawalpindi	0.88	0.90	0.90
30	Sahiwal	0.76	0.81	0.74
31	Sargodha	0.74	0.76	0.70
32	Sheikhupura	0.92	0.96	0.90
33	Sialkot	0.95	1.01	1.09
34	T.T.Singh	0.87	0.86	0.73
35	Vehari	0.73	0.75	0.96

Source: GoPb Annual Census Report 2007/08

As the data illustrates, in the case of public schools, the GPI decreases for higher levels of education. The average GPI for primary schools in 2010-11 was 0.90, as compared to the national average of 0.83. Average GPIs for public sector middle schools and high schools were lower than primary schools, at 0.90 and 0.86 respectively. Compared to overall Pakistan, the province is doing better at higher levels of education (the public school GPIs were progressively higher than the corresponding national averages for middle and high schools).

In the case of private schools, the pattern in average GPIs across levels of education in Punjab was different – in this case the average GPI for primary schools was lower (at 0.89) than that for both middle schools and high schools, even though it was comparable to the GPI for primary schools in the public sector. Gender parity in private high schools was therefore the highest at 1.00.

As the 2009 data for public schools shows, GPIs across districts had a wide range. Primary school GPIs show three districts (Mandi Bahuddin, Gujranwala and Hafizabad) that have achieved gender parity (at 1.00 or higher) while most districts in the province have GPIs over 0.75. Variation across districts was more pronounced at higher levels of education. In middle schools twelve districts have achieved

gender parity (the best performance shown by Gujrat at 1.24), while eight districts had GPIs under 0.75. Bhakkar and Dera Gazi Khan posted abysmally low scores at 0.48 and 0.47 respectively. Gender disparity levels in districts were by far the most varied in public high schools. Sialkot had a GPI of an impressive 1.25 at the matric level, while for low performing districts the GPIs were lower than they were in primary or middle schools. Overall the high school GPI remained under 0.75 in sixteen of the thirty-five districts in 2009. The range of GPIs in public high schools was extremely wide – between 1.25 in Sialkot and 0.48 in Khushab.

Based on 2007/08 data for private school enrolment compared with 2008/09 PSLM data for public schools, private sector schools demonstrate fewer extremes in gender parity across the province and generally better outcomes. Average GPIs for private schools exceed those recorded for public schools at higher levels of education, while the GPIs for primary schooling are almost at par (0.90 for public schools in 2009, and 0.89 for private schools in 2008).

In six districts, by 2008, private schools had performed well and achieved gender parity in primary schools (Bhakkar had an extremely high GPI of 1.31 – highest among all districts for any level of education), while in only four districts the GPI remained lower than 0.75. Comparatively for middle schools the GPI was higher than 1.00 in six districts, while in another nine districts the GPI was lower than 0.75. Differences in gender disparity were yet again most stark in private high school enrolment – a total of nine districts have exceeded the gender parity target for 2015, while another thirteen have shown figures under 0.75. The range of GPIs in private high schools was between 1.21 in Lahore and 0.33 in Mianwali.

4.2 GPI for Adult Literacy

Key Message: The GPI for adult literacy was 0.73 for Punjab, compared to the national average

Table 4.3: GPI for Adult Literacy

		Literacy GPI
	Pakistan	0.67
	Punjab	0.73
S. No.	Districts	
1	Attock	0.64
2	Bahawalnager	0.68
3	Bahawalpur	0.69
4	Bhakhar	0.52
5	Chakwal	0.74
6	D.G.khan	0.51
7	Faisalabad	0.83
8	Gujranwala	0.89
9	Gujrat	0.85
10	Hafizabad	0.71
11	Jehlum	0.76
12	Jhang	0.58
13	Kasur	0.71
14	Khanewal	0.58
15	Khushab	0.56
16	Lahore	0.91
17	Layyah	0.63
18	Lodhran	0.58
19	Mandi Bahuddin	0.78
20	Mianwali	0.59

of 0.67. The trend for high and low performing districts was similar to other education indicators.

The following table gives the GPI for adult literacy (Age 10+) as reported in 2010/11. The pattern observed in enrolment GPIs was visible here also, as GPIs were highest in Lahore and Sialkot, and comparably high in Gujranwala and Gujrat. Once again, Rajanpur and Dera Ghazi Khan were the low performing districts, where the GPI for adult literacy were very low at 0.46 and 0.51.

21	Multan	0.71
22	Muzaffar Ghar	0.51
23	Nankana Sahib	0.76
24	Narowal	0.76
25	Okara	0.61
26	Pakpatten	0.58
27	Rahim Yar Khan	0.63
28	Rajanpur	0.46
29	Rawalpindi	0.82
30	Sahiwal	0.74
31	Sargodha	0.63
32	Sheikhupura	0.81
33	Sialkot	0.94
34	T.T.Singh	0.81
35	Vehari	0.64

Source: PSLM 2010/11

4.3 Employment

Key Message: In 2009 labor force participation rate for women (for population aged 10+) was just 20.7 percent for the province compared to 69.3 percent for men²⁶.

Overall the labor force participation rates remain low for women, at just 20.7 percent for the province as whole, compared to 69.3 percent for men. This may be attributed to definitional inconsistencies in the type of survey. For example, the labor force participation for rural women is estimated at a slightly better 26.4 percent (for females aged 10+) in the Labor Force Survey 2008/09, but this does not take into account women's contribution to livestock management and vegetable farming which is unpaid work contributing to household income. In urban areas the labor force participation rate for females is extremely low at only 10.1 percent compared to 66.3 percent for men. Women's status as an unpaid family helper also does not seem to be reflected adequately in official statistics - the Labor Force Survey states that 38.3 of those employed are unpaid family helpers, and that only 22.7 percent of these are women. The share of women in wage

employment in the non-agricultural sector was just 7.1 percent in 2008/09.

4.4 Parliamentary Representation

The total strength of the provincial assembly in Punjab is 370, of which 76 members are women. Of the total women legislators in the House, 65 are in the Assembly on seats reserved for women, while 11 women won the election on general seats. Women legislators constitute 20 percent strength of the provincial assembly.

Status of Progress Against Goal 3: The target may be partially met in that some districts may achieve full compliance.

4.5 Challenges

There could be a number of factors responsible for the lower female literacy rates, of which a few that are cited in the literature are:

- Poverty, domestic and farming responsibilities;
- Low access to schools;
- Early marriages and other socio-cultural practices.

An effort has to be made to identify precise reasons for the lag in female education indicators by region,

²⁶ Labor Force Survey 2008/09

and local-level strategies need to be developed to address the specific barriers to female entry in different communities.

Another major gap in gender parity is women's participation in the economy. Women are handicapped by:

- Cultural norms which are opposed to women working for a wage;
- Low educational attainment; and
- Difficulty in accessing employment opportunities due to low mobility.

In a time of economic crisis, such as the one Pakistan has been facing in recent years, women are disproportionately laid off in comparison to men.

Further, the deterioration of the security situation due to terrorist attacks and violence often lead to delays in project and policy implementations.

4.6 Summary of Findings

Gender disparity in educational indicators and in labor force data is highly evident in many parts of Punjab. Trends in the GPI illustrate the problematic nature of achieving gender parity in public education for the Government of the Punjab – for higher levels of education there are instances of certain districts doing extremely well - in middle schools and even better in high schools - but at the same there are equally poignant examples of poor performance and a widening gap between the high performing and low performing districts.

Policy Response

- There have been a number of steps taken to improve women's situation at the federal level, and these programs have been implemented in Punjab as well. These include poverty alleviation programs and microcredit facilities which offer cash transfers and small loans to women who might not otherwise have access to funds, as well as gender-mainstreaming policies such as the Gender Reform Action Program (GRAP), meant to improve women's status in government institutions by introducing better hiring practices, amongst other reforms.
- Punjab has recognized that gender disparity is

a problem, particularly at the decision making level where female representation is negligible (according to the Punjab Economic Report 2007/08) and is actively pursuing gender responsive budgeting practices.

- In the MTDF 2010-13 and Development Programme 2010 gender equality and mainstreaming are mentioned in the objectives of most sectoral interventions.
- Under the social protection initiative in the MTDF 2010-13 and Development Programme 2010/11, the construction of a hostel for the residence of working women in Sahiwal of a shelter is mentioned as an initiative being implemented for the first time during 2010/11. Resources for eight projects aimed largely at the construction or up-gradation of facilities for women's shelters, including GRAP and one jail, across major urban and semi-urban districts of Punjab are also allocated for 2010/11. An additional project also includes a vocational training institute to be developed in Bahawalpur.
- It is pertinent to mention the majority of the relevant interventions mentioned in the MTDF 2010-13 and Development Programme 2010/11 have no funds allocated beyond the 2010-11 period, indicating possible discontinuation of these programmes.
- Under the Asian Development Bank (ADB) supported Sustainable Livelihoods in Barani Areas project that concluded in July 2011, and has been in operation for almost 6 years, 10 districts were targeted where unemployed females were given vocational training and literacy skills.
- Additionally, under the Rs. 35 million Jafakash Aurat Economic Empowerment of Rural Women project was implemented in Sheikhupura and Gujranwala districts in 2006 by the First Women Bank. Under this project 10,000 females were encouraged to undertake enterprising business ventures to that would economically empower them.

MDG3-Promoting Gender Equality and Women's Empowerment Punjab





Goal 4: Reducing Child Mortality

Chapter-5

5. MDG 4: Reducing Child Mortality

Goal 4 is about reducing child mortality which has been defined in terms of five indicators as shown in the table below.

MDG Tracking Table 4: Reducing Child Mortality

Indicators	Region	2001/ 02	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2010- 11	2011	MDG Target (2015)
Under 5 Mortality Rate (Deaths per	Pakistan	n/a	n/a	n/a	n/a	94	n/a	n/a	n/a	n/a	52
Tooo Live Births)	Punjab		112	n/a	n/a	n/a	111	n/a	n/a	104	52
Infant Mortality Rate (Deaths per 1000	Pakistan	77	77	77	76	75	n/a	n/a	n/a	n/a	40
Live Births)	Punjab	n/a	77	n/a	n/a	n/a	77	n/a	n/a	82	40
Proportion of Fully Immunized Children	Pakistan	53	77	77	71	76	73	78	81	n/a	>90
12-23 Months	Punjab	57	50	84	76	83	76	85	86	n/a	>80
Lady Health Worker's Coverage (percent of	Pakistan	38	66	n/a	72	76	76	83	n/a	n/a	100
target population)	Punjab	n/a	35	n/a	n/a	n/a	50	55	n/a	48	100
Proportion of Children 12 -23	Pakistan	57	78	78	76	77	76	79	82	n/a	>90
Against Measles	Punjab	63	n/a	85	81	84	84	86	86	n/a	>90
Proportion of Children Under 5	Pakistan	12	14	16	12	11	10	10	11	n/a	<10
Diarrhoea in the Last 30 Days (percent)	Punjab	14	n/a	15	15	11	12	10	11	n/a	<10

Source: For national indicators, PMDGR 2010. Punjab MDG targets from Punjab Economic Report 2007/08. Data sources for Punjab include various issues of PSLM, PDHS, PIHS 2001/02, and the MICS 2003/04, 2007/08 & MICS 2011as detailed in the sections that follow. Data on LHWs from the National Program for Family Planning and Primary Health Care.

Health policy implementation has faced many challenges, which affect Punjab more acutely than other parts of Pakistan; for example, serving a large-scale population necessitates bigger human resource management concerns, particularly in the face of district disparities. Governance of health care distribution is therefore a priority area for the Government of the Punjab.

5.1 Infant Mortality Rate

Key Message: The infant mortality rate for Punjab in 2011 was 82 deaths per 1000 live births as against 77 in 2008. Although different data sources are not directly comparable, a declining trend in the IMR appears to have leveled off in recent years.

The main indicator measuring progress towards this particular goal is the Infant Mortality Rate (IMR), which has been measured in a range of surveys over time, most of which are not comparable due to differences in methodologies. The overall IMR for the province in 2008 was 77 deaths per 1000 live births as per the MICS of 2007/08.²⁷ While the infant mortality rate is likely to have declined in Punjab since 1997 (when, according to an earlier survey, the figure was 115 deaths per 1000 live births²⁸) the rate of decline is not easy to assess given the methodological differences across surveys. Between 1997 and 2004, it is safe to say that some decline took place - the IMR was recorded at 77²⁹ deaths per 1000 live births in the MICS for 2003/04. However, since 2004 the trend appears to have leveled out. The arrest of a declining trend can prove worrisome in the achievement of MDG targets for Punjab. This fact is also endorsed by the recently released MICS 2011 in which IMR slumped to 88 deaths per 1000 live births.

Table 5.1 Infant Mortality Rate

		IMR
	Punjab	82
S. No.	Districts	
1	Attock	71
2	Bahawalnager	96
3	Bahawalpur	100
4	Bhakhar	91
5	Chakwal	61
6	D.G.khan	96
7	Faisalabad	82
8	Gujranwala	69
9	Gujrat	57
10	Hafizabad	117
11	Jehlum	60
12	Jhang	86
13	Kasur	95
14	Khanewal	82
15	Khushab	79
16	Lahore	52
17	Layyah	74
18	Lodhran	78
19	Mandi Bahuddin	58

27 Multiple Indicator Cluster Survey (MICS) 2007/08.

28 Pakistan Integrated Household Survey (PIHS) 1996/97.

29 MICS 2003/04

20	Mianwali	63
21	Multan	80
22	Muzaffar Ghar	97
23	Nankana Sahib	90
24	Narowal	56
25	Okara	108
26	Pakpatten	130
27	Rahim Yar Khan	98
28	Rajanpur	82
29	Rawalpindi	51
30	Sahiwal	93
31	Sargodha	94
32	Sheikhupura	77
33	Sialkot	73
34	T.T.Singh	85
35	Vehari	97

Source: MICS 2011

The overall performance of the province presented a mixed picture with dwindling progress over the years. Recently conducted MICS 2011 released the district level estimates highlighting disparate results across the districts. The sixteen districts have outperformed the province average and recorded below the 82 deaths per 1000 live births. Out of thirty six districts, Pakpattan (130), Hafizabad (117), Okara (108) and Bhawalpur (100) including the all districts of Southern Punjab except Rajanpur have performed poorly as the IMR for these have crossed the province average. Overall the situation is more pervasive in rural (90) than the urban (61) manifesting disparities in Punjab.

5.2 Immunization

Key Message: Different data sources give startlingly disparate results, but immunization coverage is impressive overall for the province. The latest estimates suggest that 86 percent of children from 12 to 23 months of age in the province had been fully immunized.

The second major contributor to child health is a rigorous immunization program i.e. National Immunization Days. The percentage of children fully immunized between the ages of 12 to 23 months was estimated at 86 percent in 2010/11³⁰. The data suggests the percentage of immunization in Punjab at 86 percent exceeds the national average of 81 percent. This differs significantly from data collated in PDHS 2006/07 which cited a meager 52.6 percent as the rate of full immunization in the province, while PSLM 2006/07 claims an immunization rate of 83 percent.

Overall the province seems to be on track to achieve its targets on immunization coverage; however there are interesting variations across the data. According to latest estimates eleven of thirty-six districts in Punjab have already achieved the overall 2015 MDG target of over 90 percent full immunization.³¹ The district of Chakwal is particularly impressive with 99 percent immunization coverage, while rural (100 percent) outperformed urban (90 percent). Districts such as Gujrat & Nankana Sahib (96 percent each), Lahore & Mandi Bahaudin (95 percent each), Rawalpindi & Rajanpur (93 percent each), and Multan (91 percent) have also done well without much disparity in the

30 PSLM 2010/11

³¹ PSLM 2008/09

urban and rural statistics. Districts such as Dera Ghazi Khan (74 percent), Sheikhupura (76 percent) and Rahimyar Khan (77percent) have not done well, but in all these districts the urban areas have done much better than the rural areas. In Dera Ghazi Khan, immunization coverage in urban areas and rural areas stands at 74 percent each which is the lowest in Punjab.

All districts in Punjab have done well in urban areas with the exceptions of Sheikhupura (63 percent)

and Kasur (67 percent). Whereas in most cases the urban areas are doing better or are roughly at par with rural areas, there are thirteen districts (Attock, Chakwal, Sargoddha, Gujranwala, Gujrat, Kasur, Sheikhupura, Nankana Sahib, Lodhran, Rajanpur, Sahiwal, Pakpattan & Okara) where the rural areas have achieved better immunization coverage than urban areas by at least 5 percentage points or more. The table below shows children fully immunized against disease, by district and urban-rural divisions:

	Region	Total	Urban	Rural	
S.	Pakistan	81	85	79	
	Punjab	86	86	86	
1	Attock	87	64	90	
2	Bahawalnagar	81	89	80	
3	Bahawalpur	68	70	72	
4	Bhakkar	84	91	92	
5	Chakwal	99	90	100	
6	D. G. Khan	74	74	74	
7	Faisalabad	89	93	86	
8	Gujranwala	85	78	92	
9	Gujrat	96	90	98	
10	Hafizabad	95	97	94	
11	Jhang	88	95	86	
12	Jhelum	86	86	86	
13	Kasur	81	67	85	
14	Khanewal	87	100	84	
15	Khushab	88	95	87	
16	Lahore	85	86	84	
17	Layyah	90	100	89	
18	Lodhran	88	76	90	
19	Mandi Bahauddin	93	94	93	
20	Mianwali	80	79	80	
21	Multan	91	95	89	
22	Muzaffargarh	84	95	82	
23	Nankana Sahib	96	90	98	
24	Narowal	95	93	95	
25	Okara	91	86	91	

Table 5.2: Percentage of Children 12-23 Months Fully Immunized (by Recall and Record)
26	Pakpattan	79	78	79
27	Rahimyar Khan	77	80	76
28	Rajanpur	93	75	95
29	Rawalpindi	93	94	92
30	Sahiwal	89	72	92
31	Sargodha	83	70	87
32	Sheikhupura	76	63	84
33	Sialkot	88	93	97
34	Toba Tek Singh	83	90	82
35	Vehari	90	87	91

Source: PSLM 2010-11

N.B.

1. Full immunization means that the child has received: BCG, DPT1, DPT2, DPT3, Polio1, Polio2, Polio3 and measles. 2. Based on record: Children who reported having received full immunization who also have an immunization card, expressed as a percentage of all children aged 12-23 months.

3. Note that even the record-based measure cannot be based exclusively on vaccinations recorded on the health card, since it is not possible to identify the source of the information on each antigen. Instead, it is calculated for all children who had a health card, using all immunizations reported, whether or not these were recorded on the card. It is likely that most will have been recorded on the card.

The percentage of children fully immunized against measles between the ages of 12 to 23 months was estimated at 86 percent³² in 2010/11. In this case as well, the percentage of immunization in Punjab is far better than the national average of 82 percent. A district wise analysis reveals the situation in districts and trends in the urban-rural divide very similar to those in full immunization coverage. In Mianwali, 97 percent of children aged between 12 to 23 months were immunized against measles with urban (100 percent) and rural (97 percent) areas, while Dera Ghazi Khan was the worst performing district at 74 percent overall. It is encouraging to note that all the districts have crossed the 70 percent mark during 2010-11. Out of the thirty five districts, thirteen districts have already achieved the 2015 MDG target. The table below shows children immunized against measles, by district and urban-rural divisions:

Table 5.3: Percentage of Children 12-23 Months Immunized Against Measles (byRecall and Record)

	Region	Total	Urban	Rural
	Pakistan	82	87	80
	Punjab	86	87	86
1	Attock	87	64	90
2	Bahawalnagar	82	89	81
3	Bahawalpur	68	89	62
4	Bhakkar	85	91	84
5	Chakwal	99	90	100
6	D. G. Khan	74	74	74

32 PSLM 2010-11

7	Faisalabad	89	93	86
8	Gujranwala	85	78	92
9	Gujrat	96	90	98
10	Hafizabad	95	97	94
11	Jhang	88	95	86
12	Jhelum	86	86	86
13	Kasur	81	67	85
14	Khanewal	85	100	85
15	Khushab	88	95	87
16	Lahore	86	86	84
17	Layyah	90	100	89
18	Lodhran	88	81	90
19	Mandi Bahauddin	93	94	93
20	Mianwali	80	79	80
21	Multan	93	98	90
22	Muzaffargarh	85	95	83
23	Nankana Sahib	96	90	98
24	Narowal	95	93	95
25	Okara	91	86	91
26	Pakpattan	79	78	79
27	Rahimyar Khan	77	80	76
28	Rajanpur	93	75	95
29	Rawalpindi	93	94	92
30	Sahiwal	89	72	92
31	Sargodha	84	70	88
32	Sheikhupura	76	63	84
33	Sialkot	91	93	90
34	Toba Tek Singh	85	90	84
35	Vehari	91	87	92

Source: PSLM 2010-11

The data from different surveys shows a slow but steady upward trend during the first decade from 1991 to 2002. Since 2005 there are indications that progress has been uneven and the growth spurt has worn off.

5.3 Under Five Mortality Rate (U5MR)

Key Message: The trend in the under-5 mortality rate seems to be gradually declining over time

but the rate of decline has slowed since 1997. The rate was 132.8 deaths per 1000 live births in 1991, coming down to 104 deaths per 1000 births in 2011.

The under-5 child mortality rate is another indicator used to gauge the achievement of the fourth MDG. Data disaggregated by district is unavailable for this indicator. In Punjab the under-5 child mortality rate has seen a consistent decrease since 1991, when it was 132.8 deaths per 1000 live births,³³ coming down to 104 deaths per 1000 births in 2011.³⁴ In this case the province does not compare favorably with the national figure of 94 deaths per 1000 live births in 2006/07. ³⁵ The Under-five mortality rate has seen a very slow decline since 1993, a rate which

is insufficient for the province to compare with the national 2015 MDG target of less than 52 deaths per 1000 live births (which would require a reduction in the current Under-five mortality rate by more than 50 percent).

		MMR
	Punjab	104
S. No.	Districts	
1	Attock	88
2	Bahawalnager	124
3	Bahawalpur	130
4	Bhakhar	117
5	Chakwal	74
6	D.G.khan	124
7	Faisalabad	103
8	Gujranwala	85
9	Gujrat	68
10	Hafizabad	154
11	Jehlum	72
12	Jhang	109
13	Kasur	123
14	Khanewal	104
15	Khushab	100
16	Lahore	62
17	Layyah	92
18	Lodhran	97
19	Mandi Bahuddin	69
20	Mianwali	77
21	Multan	100
22	Muzaffar Ghar	124
23	Nankana Sahib	115
24	Narowal	66
25	Okara	141

Table 5.4 Under-5 Mortality Rate (deaths per 1000)

33 PDHS 1990/91

34 MICS 2011 35 PDHS 2006/07

26	Pakpatten	173
27	Rahim Yar Khan	127
28	Rajanpur	104
29	Rawalpindi	60
30	Sahiwal	119
31	Sargodha	121
32	Sheikhupura	97
33	Sialkot	90
34	T.T.Singh	107
35	Vehari	125

Source: MICS 2011

The district wise analysis shows variations across the whole province and few districts have also crossed the province average of 104 deaths per 1000 live births. Out of thirty six, ten districts have recorded below the 90 deaths per 1000 live births. Mianwali (60), Lahore (62), Narrowal (66), Gujrat (68) and Mandi Bahaudin (69) have showed impressive progress towards achieving MDG target of 52 by 2015. Pakpattan (173) is the worst performers followed by Hafizabad (154), Bhawalpur (130), Rahim Yar Khan (127) and Vehari (125). Overall, the incidence in Punjab is more pervasive in rural (115) than the urban (73).

Certain other indicators, such as the number of children under the age of five suffering from diarrhea over the past 30 days, show significant variation across districts in Punjab. Fifteen districts out of thirty-six recorded low rates (under 10 each), while eighteen districts recorded much higher rates (between 11 and 16). The highest rate occurred in Mianwali (26), followed by Layyah (19) and the lowest occurrence was seen in Gujrat (3).³⁶ The key message is that while the trend in under-5 mortality does appear to be declining over time, the rate of decline is slow and seems to be leveling out, like the infant mortality rate. The number of underweight children in the province is another facet of the indicators used for the assessment of the MDGs. As discussed under MDG 1, Vehari has the largest incidence of underweight children, while Gujrat has the least. Consistently underperforming districts like Dera Ghazi Khan, Rajanpur, and Muzaffargarh have very high prevalence of children who are undernourished.

5.4 Coverage of LHWs

Key Message: Only a little over half of the province's targeted population has access to an Lady Health Workers(LHW) – this average obscures significant variation across districts.

The extent of coverage of the LHW program is also a good indicator of maternal and child health by access to health care. The table below shows the basic data on LHWs available for the province for May 2010.

³⁶ PSLM 2010-11

Table 5.5 LHW Coverage

S. No	Districts	No. of Working LHWs	No. of Supervisors working	Percent Population Covered
1	Attock	979	27	63
2	Bahawalnagar	1.585	59	61
3	Bahwalpur	1.705	47	54
4	Bakkar	1.055	45	74
5	Chakwal	1,140	39	88
6	Chiniot	489	23	41
7	D.G. Khan	1,254	42	58
8	Faisalabad	2,569	109	74
9	Gujranwala	1,851	74	44
10	Gujrat	1,727	72	70
11	Hafizabad	672	24	63
12	Jhang	1,395	49	41
13	Jhelum	992	36	74
14	Kasur	1,427	39	50
15	Khenawal	1,992	81	83
16	Khushab	949	30	80
17	Lahore	1,857	69	24
18	Layyah	918	35	65
19	Lodhran	1,011	29	58
20	M.Bahauddin	1,328	48	83
21	Mianwali	1,103	35	80
22	Multan	1,749	64	46
23	Muzaffargarh	2,180	71	64
24	Nankana	845	24	48
25	Narowal	1,197	42	78
26	Okara	1,671	59	55
27	Pakpattan	856	28	54
28	R.Y. Khan	1,865	77	43
29	Rajanpur	649	34	43
30	Rawalpindi	1,810	66	45
31	Sahiwal	1,559	56	65
32	Sargodha	1,771	62	49
33	Sheikhupura	854	23	27
34	Sialkot	2,282	83	65
35	T.T. Singh	1,288	50	65
36	Vehari	1,313	57	51
	PUNJAB	49,887	1,808	55

Source: National Program for Family Planning and Primary Health Care, Program Status Proforma.

Punjab is Pakistan's most densely populated province, with a population density of 359 persons per sq. km.³⁷ Providing adequate coverage therefore presents a significant challenge. According to latest estimates there were a total of 49,887 LHWs working in the province at the end of the last fiscal year, and on average they were estimated to be covering about 55 percent³⁸ of the population , which does not compare favourably with the national average of 83 percent. Coverage is, however, not consistent across the districts. The highest recorded coverage was in Chakwal (88 percent) with only four other districts (Khanewal, Khushab, Mandi Bahauddin, and Mianwali) recording above 80 percent. While the lowest coverage was recorded in Lahore and Shiekhupura districts (at 24 percent and 27 percent respectively) nine other districts have recorded less than 50 percent LHW coverage in 2009.

Status of Progress against Goal 4: Progress is mixed. Targets in immunization and diarrhea control could be achieved. Targets in child mortality rates and coverage of Lady Health Workers will not be met.

5.5 Challenges

Most of the problems affecting child health and the provision of health services to children are the result of the social determinants of health. These include poverty, illiteracy, unemployment, gender inequality, social exclusion, lack of access to safe drinking water, and inadequate sanitation and food insecurity, combined with the slashing of funds to the health sector due to the prevailing fiscal crisis.

The other major issues relate to the health sector itself, which suffers from:

- · Weak management and governance systems;
- Partially functional logistics and supply systems;
- Poorly motivated and inadequately compensated staff;
- Lack of adequate supportive supervision;
- Lack of evidence-based planning and decisionmaking,

• Inequitable distribution of public sector expenditures between urban and rural areas.

This has had major implications for any child health program that has been instituted by the federal or the provincial governments.

Problems specific to child health are closely interlinked with some of the other targets set by the MDGs, such as lack of awareness due to low educational attainment. When combined with an absence of integrated management of childhood illnesses, this lack of awareness has major consequences for the spread of childhood diseases. Problems of access to healthcare for children – this includes both the availability and affordability of health services – the population growth rate, and inadequate allocation of budget to the health sector are also challenges that need to be overcome.

5.6 Summary of Findings

Punjab seems to have done reasonably well in immunization coverage, and is working steadily towards providing primary health care facilities at the community level through its LHW program, however the coverage of the LHW program also needs to be scaled up rapidly in order to keep pace with health target. Punjab's performance on the IMR indicator and on under-5 mortality rate, though showing improvement, is not strong enough to be able to meet the MDG target. The 2010 flood disaster has also caused problems for the Government with sizeable sections of the population at risk of disease.

Policy Response

- In the MTDF 2010-13 and Development Programme 2010/11, special emphasis is placed explicitly on the achievement of MDG 4 through the Punjab Millennium Development Goals Program, the Expanded Program of Immunization and the national Maternal and New Born Child Health Program.
- The crux of policy implementation as substantiated by resource allocations, seems to lean towards infrastructural institutional up-gradations– such as the improvement or establishment of existing health facilities and

³⁷ Punjab Economic Report 2007/08

³⁸ National Program for Family Planning and Primary Health Care, Program Status Proforma

hospitals at the district and tehsil level, capacity building of staff, operationalization of mobile health units and allocations for research and education across Punjab

- Although only two programs out of nine for ADP 2010/11 described under "Primary and Preventive," can be classified as interventions targeted solely towards the achievement of MDG 4. The province may progress further on the achievement of MDG 4 if and only if the provincial government invests in health care infrastructure and capacity building of medical and paramedical staff at local level.
- Rs. 481 Million Strengthening of the Expanded Program for Immunization (EPI) approved in 2009 has projected allocations reserved until 2013. It focuses on increasing the amount of immunized children through access of the improved health care services.

- The ADB supported three year long PMDG that was approved in 2009 aims to support the achievement of MDG 4 and 5 by enhancing the quality of and access to primary and secondary health services, their delivery and increasing "pro poor health care financing" system.
- In particular the "Chief Minister's Initiative for Primary Healthcare (CMIPHC) envisions that 95 percent of the BHUs across Punjab will have female staff to account for cultural conservatism and are supplied with the relevant equipment and medicines for optimal performance.
- Although it does not explicitly mention LHWs, certain components, such as those proposing training of nurses indicate increased capacity of districts to handle mother and child healthcare.

MDG4-Reducing Child Mortality Punjab





Goal 5: Improving Maternal Health

Chapter-6

6. MDG 5: Improving Maternal Health

Goal 5 is closely linked to Goal 4 at least in terms of policy implementation – programs for maternal and child health is often implemented in tandem. Goal 5 has been specified in terms of two targets and four key indicators as follows. Not only do the indicators for maternal health include maternal mortality estimates, but also indicators for awareness about reproductive health needs.

Indicators	Region	2001/ 02	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2011	MDG Target (2015)
Maternal Mortality Ratio	Pakistan	350	n/a	400	380	276	n/a	n/a	n/a	n/a	140
	Punjab	n/a	n/a	n/a	n/a	227	n/a	n/a	n/a	n/a	140
Proportion of Births Attended by Skilled	Pakistan	40	n/a	48	35	37	40	41	n/a	n/a	>90
Birth Attendants	Punjab		33				43		n/a	59	
Contraceptive Prevalence Rate	Pakistan	28	n/a	n/a	n/a	29.6	30.2	30.8	n/a	n/a	55
	Punjab	22	36	n/a	n/a	32.2	32	n/a	n/a	35	n/a
Total Fertility Rate (Mean Number of	Pakistan	n/a	n/a	n/a	n/a	4.1	3.85	3.75	n/a	n/a	2.1
Children)	Punjab	n/a	4.7	n/a	3.5	3.9	4.32	n/a	n/a	3.6	n/a
Antenatal Care Coverage (percent)	Pakistan	35	n/a	50	52	53	53	58	62	n/a	100
Coverage (percent)	Punjab	n/a	44	33	n/a	32	56	61	65	74	n/a

MDG Tracking Table 5: Improving Maternal Health

Source: For national indicators, PMDGR 2010. Punjab MDG targets from Punjab Economic Report 2007/08. Data sources for Punjab include various issues of PSLM, PDHS, PIHS 2001/02, and the Punjab MICS 2003/04 & 2007/08 as detailed in the sections that follow.

6.1 Total Fertility Rate and Contraceptive Prevalence Rate

Key Message: There has been a very slight decline, from 5.4 to 3.58, in the mean number of children born per adult female, in the last 20 years. The data on contraceptive prevalence rates is more encouraging, but differs by data source.

The Total Fertility Rate (TFR) in Punjab was estimated such that the mean number of children born per adult female was 5.4 in 1990/91³⁹. Over time this figure has declined to 4.32 in 2007/08⁴⁰ from 4.8 in 2004⁴¹, and then declined to 3.9 in 2007 according

39 PDHS 1990/91

to the PDHS 2006/07. Recently released MICS 2011 reports the TFR at 3.58 showing decline from its position in 2007/08. Overall the progress between 1991 and 2010 has been too modest compared with what is required to meet the national target of 2.1 in 2015.

Contraceptive prevalence rates (CPRs) have been calculated in a range of surveys, which use different methodologies and are not really comparable. According to the latest estimates the CPR for Punjab stands at 32.2 percent,⁴² which is an increase of almost 20 percentage points since 1991 when the PDHS 1990/91 reported a CPR of only 13 percent.

⁴⁰ Punjab MICS 2007/08

⁴¹ Punjab MICS 2003/04

⁴² Punjab MICS 2007/08

However, according to the Pakistan Reproductive Health and Family Planning Survey (PRHFPS) 2000/01 Punjab was already at 30 percent in the year 2000. Additionally the Punjab MICS 2003/04 indicate the CPR in 2004 was as high as 36 percent and 32.2 percent in 2007 indicates a downward trend during 2004-07. The MICS 2010/11 also indicate that contraceptive use is more prevalent across most districts. Out of thirty six, seventeen districts record CPR below 30 percentages. Unsurprisingly the lowest CPR was recorded in Bhakkar (21.8 percent) and Dera Gazi Khan (22.1 percent).

Table 6.1 Contraceptive Prevalence Rates

S.No	Region	Total
	Punjab	35.2
1	Attock	36.5
2	Bahawalnagar	25.9
3	Bahawalpur	34.3
4	Bhakkar	21.8
5	Chakwal	25.6
6	D. G. Khan	22.1
7	Faisalabad	40.8
8	Gujranwala	47.3
9	Gujrat	26.0
10	Hafizabad	23.8
11	Jhang	33.3
12	Jhelum	34.8
13	Kasur	29.0
14	Khanewal	40.4
15	Khushab	27.4
16	Lahore	41.2
17	Layyah	26.3
18	Lodhran	45.9

S.No	Region	Total
19	Mandi Bahauddin	34.5
20	Mianwali	32.3
21	Multan	42.7
22	Muzaffargarh	27.0
23	Nankana Sahib	38.6
24	Narowal	25.0
25	Okara	32.3
26	Pakpattan	32.0
27	Rahimyar Khan	28.7
28	Rajanpur	25.2
29	Rawalpindi	40.3
30	Sahiwal	36.8
31	Sargodha	32.6
32	Sheikhupura	44.7
33	Sialkot	37.3
34	Toba Tek Singh	33.6
35	Vehari	41.7

Source: MICS 2011

6.2 Ante-natal Care Coverage

Key Message: Ante-natal care coverage in the province was estimated at 68 percent. While 79 percent of expectant mothers in urban areas have access to ante-natal care just a little over 60 percent has access in the rural areas.

More directly relevant for maternal health is the ante-natal health care coverage indicator. For Punjab the PDHS for 1990/91 estimated this at 22.1percent (of pregnant women). Between 1991 and 2009 coverage has improved for the province and the latest reported data estimates coverage at 61 percent⁴³ in 2008/09. In the previous year the reported figure for Punjab was 53 percent according to the Punjab Multiple Indicator Cluster Survey (MICS). Various sources have also provided inconsistent estimates: in 2007 the PSLM 2006/07 reported ante-natal coverage in the province at 32 percent, whereas the PDHS for the same year reported almost double the coverage at 60.9 percent.

Across the districts, once again, there is significant

```
43 PSLM 2008-09
```

variation in coverage. The highest coverage was reported at Mandi Bahuadin at 88 percent, while Rawalpindi (86 percent) and Jhelum (85 percent) also did well, followed by Lahore at 82 percent, and Gujranwala at 81 percent. The lowest estimates (under 50 percent each) are reported for the districts of Narrowal (35 percent) and Bhakkar (48 percent). In some cases, and overall for most districts in the province, urban-rural estimates present stark disparities. Out of thirty six, eight districts (Bhawalpur, Chakwal, Faisalabad, Multan, Okara, Pakpattan, Rajanpur, & Vehari) have urbanrural gap of more than 20 percentages. However, Toba Tek Singh records exactly the opposite where the rural consultations are more than urban.

Table 6.2 Ante-natal Care Coverage

S.NO	Districts	Total	Urban	Rural
	Punjab	68	79	63
1	Attock	70	75	69
2	Bahawalnagar	57	70	54
3	Bahawalpur	64	79	57
4	Bhakkar	48	57	47
5	Chakwal	72	93	69
6	D. G. Khan	68	75	67
7	Faisalabad	62	77	51
8	Gujranwala	75	77	73
9	Gujrat	81	77	82
10	Hafizabad	50	52	49
11	Jhang	55	60	54
12	Jhelum	85	90	82
13	Kasur	66	85	68
14	Khanewal	65	80	62
15	Khushab	59	68	56
16	Lahore	82	85	68
17	Layyah	64	78	62
18	Lodhran	58	56	58
19	Mandi Bahauddin	88	86	88
20	Mianwali	58	55	59
21	Multan	65	83	57
22	Muzaffargarh	55	67	54
23	Nankana Sahib	78	78	78
24	Narowal	35	41	34
25	Okara	69	87	66
26	Pakpattan	61	79	57
27	Rahimyar Khan	59	69	56

28	Rajanpur	54	75	52
29	Rawalpindi	86	85	88
30	Sahiwal	78	81	77
31	Sargodha	57	67	53
32	Sheikhupura	77	89	69
33	Sialkot	67	73	65
34	Toba Tek Singh	78	57	81
35	Vehari	74	95	69

Source: PSLM 2010-11

6.3 Maternal Mortality Ratio

Key Message: Insufficient data is available to measure progress in this indicator and the data is inconsistent by source. However, available estimates and corresponding data suggest the MDG target will not be achieved.

The main indicator measuring progress towards this particular goal is the Maternal Mortality Ratio (MMR). Data for MMR in the province over time is unavailable. The only estimate available for the Maternal Mortality Ratio in Punjab is provided by the PDHS 2006/07 reporting 227 maternal deaths per 100,000 live births. In this case Punjab compares favorably with the national average reported for Pakistan at 276 maternal deaths per 100,000 live births in the same year. The Preliminary Damage and Needs Assessment of the 2010 floods cautions that the province of Punjab which was badly affected by the disaster could see a rise in both maternal and child mortality as a result. The full impact of the flooding on the state of maternal and child health has recently been compiled, and the data shows that the floods will certainly affect Punjab's ability to decrease the MMR to the target level by 2015.

Annex VII gives information on health facilities available in each district in the province.

Status of Progress Against Goal 5: Target is unlikely to be met.

6.4 Challenges

The major challenges specific to maternal health, faced by Punjab are:

- Lack of female staff in primary healthcare facilities, which reduces women's access to healthcare.
- Problem of the "three delays" "delay in deciding to seek medical care, delay in reaching appropriate care, and delay in receiving care at health facilities."⁴⁴ These stem from a lack of awareness, the absence of skilled birth attendants, little access to healthcare facilities, and inadequate provisions at any facilities that do exist. Facilities typically do not have trained personnel, emergency medicines, or functional equipment.
- Further, as delineated in the Punjab PRSP 2003, women in the province are subjected to early marriages, expectations of producing large families, habitation in unsanitary environments and most importantly, denied the choice to access healthcare due to the patriarchical setup that leave such decisions to male family heads.

6.5 Summary of Findings

The data indicates a recent upward trend in total fertility rates which is worrisome – this statistic may be the result of confusion caused by different data sources. Ante-natal care coverage in the province is quite low at 38 percent and coverage is heavily biased in favor of the urban areas.

Policy Response

• In the MTDF 2010-13 and Development

^{44 &}quot;Pakistan's Millennium Development Goals Report." Revised 8 June, 2010. pp. 67.

Program 2010/11, special emphasis is placed explicitly on the achievement of MDG 5 through the Punjab Millennium Development Goals Program (PMDG) and the National Maternal and Newborn Child Health Program.

- The ADB supported PMDG that was approved in 2009, aims to support the achievement of MDG 5 by enhancing the quality of and access to primary and secondary health services, their delivery and increasing "pro poor health care financing" system through interventions such as the Sehat Sahulat card that was piloted at the time of approval and transparency of operations under the intervention.
- In particular the project envisions that 95 percent of the BHUs across Punjab will

have female staff to account for cultural conservatism and are supplied with the relevant equipment and medicines for optimal performance.

- The crux of the program is largely to improve the management capacity of districts and the provincial center.
- It aims to bring together a centralized system to be implemented across Punjab for the achievement of MDG 4 and 5. This includes components such as the training of nurses, and a district health information system that has already been implemented in 23 districts that submit updates regularly, allowing for sufficient monitoring of provincial progress towards the achievements of the MDGs.

MDG5-Improving Maternal Health Punjab





Goal 6: Combating HIV/AIDS, Malaria and Other Diseases

Chapter-7

7. MDG 6: Combating HIV/AIDS, Malaria and Other Diseases

MDG 6 is primarily concerned with controlling the spread of HIV/AIDS and other communicable diseases. Data is hard to come by as there are no large, representative national or provincial surveys which assess disease prevalence. The available data focuses on high-risk groups, or on certain geographical locations, and thus does not enable an assessment of prevalence in the province as a whole. The following sections are based on an analysis of the available data, but may not be considered "representative" per se.

7.1 HIV/AIDS

The latest survey on HIV prevalence in Pakistan is the HIV Second Generation Surveillance, which dates from 2008.⁴⁵ Data on prevalence of HIV tends to focus on some high-risk populations such as Injecting Drug Users (IDUs), Male Sex Workers (MSWs) and Hijra (or transsexual) Sex Workers (HSW). Data on HIV prevalence on female sex workers is not available. Also, data is available for only eight districts from throughout Pakistan, of which four were in Punjab.

Table 7.1: Awareness of HIV/AIDS in Punjab

Sno	Districts	Knowledge of preventing HIV / AIDS	Negative attitude towards people with HIV/AIDS
	Punjab	18	43
1	Attock	16	51
2	Bahawalnagar	9.2	61
3	Bahawalpur	6.9	61
4	Bhakkar	9.4	58
5	Chakwal	31	16
6	D. G. Khan	13	55
7	Faisalabad	20	37
8	Gujranwala	18	53
9	Gujrat	32	54
10	Hafizabad	15	47
11	Jhang	9.0	43
12	Jhelum	32	35
13	Kasur	8.9	44
14	Khanewal	11	52
15	Khushab	28	63
16	Lahore	36	27
17	Layyah	12	45
18	Lodhran	4.1	57
19	M. B. Din	8.7	66
20	Mianwali	17	67

⁴⁵ Government of Pakistan, National Aids Control Program. 2008. HIV Second Generation Surveillance in Pakistan: National Report, Round III.

21	Multan	17	49
22	Muzaffargarh	10	65
23	Nankana	15	47
24	Narowal	12	53
25	Okara	12	33
26	Pakpattan	12	30
27	R. Y. Khan	5.6	52
28	Rajanpur	5.6	57
29	Rawalpindi	43	36
30	Sahiwal	18	50
31	Sargodha	11	38
32	Sheikhupura	17	42
33	Sialkot	34	40
34	T.T Singh	18	53
35	Vehari	19	34

Source: Punjab MICS 2007/08.

As the table shows overall knowledge of HIV/AIDS prevention is very low among the population at only 18 percent. The highest indicators of awareness are in primarily urban, developed districts like Rawalpindi and Lahore, while places like Lodhran show extremely low levels of knowledge among the population. Rawalpindi and Lahore also show lower levels of bias against people with HIV. Higher levels of bias are unsurprisingly found in areas with lower levels of HIV/AIDS prevention knowledge.

7.2 Hepatitis B and C

Data on prevalence of hepatitis B and C is given in the table below.⁴⁶ The data is from a small survey of 7500 households over the whole of Pakistan, with a sample size of 3500 households in Punjab.

Table 7.2: Prevalence of Hepatitis B and C

	Districts	HBsAg	НСУ
1	Attock	2.8	6.6
2	Bahawalnagar	2.4	10.1
3	Bahawalpur	2.1	9.9
4	Bhakkar	1.2	2.5
5	Chakwal	2.7	2.2
6	D. G. Khan	5.7	4.3
7	Faisalabad	1.2	8.5
8	Gujranwala	2.9	6.3
9	Gujrat	0.8	5.4

⁴⁶ Pakistan Medical Research Council 2008. The Prevalence of Hepatitis B and C in Pakistan.

10	Hafizabad	2.2	12.9
11	Jhang	4.1	8.7
12	Jhelum	2.4	3.1
13	Kasur	2.2	5.2
14	Khanewal	0.9	4.5
15	Khushab	2	2.9
16	Lahore	1.4	6.8
17	Layyah	3.7	3.7
18	Lodhran	1.8	6.7
19	Mandi Bahauddin	3.8	6.6
20	Mianwali	2.8	5.4
21	Multan	1.6	7.4
22	Muzaffargarh	2.5	1.9
23	Narowal	2.1	4
24	Okara	2.8	9.5
25	Pakpattan	0.7	10.6
26	Rahimyar Khan	4.7	6.6
27	Rajanpur	4	2.4
28	Rawalpindi	1.8	7.3
29	Sahiwal	2.4	7.1
30	Sargodha	2.1	4.9
31	Sheikhupura	1.6	8.7
32	Sialkot	2.2	7
33	Toba Tek Singh	3.2	7.2
34	Vehari	2.8	13.1
	Average	2.5	6.5

Source: Pakistan Medical Research Council, 2008.

As the table shows, the prevalence of hepatitis B was highest in D.G. Khan at 5.7 percent, and was also well above average in Jhang and Rahimyar Khan. The prevalence of the more lethal hepatitis C was exceptionally high in Vehari, Hafizabad, Pakpattan and Bahawalnagar. Average rates of prevalence in Punjab were fairly high for Hepatitis C at 6.5 percent, while Hepatitis B affected on average 2.5 percent of the surveyed population. Gujrat and Khanewal were the only two districts in Punjab where prevalence of Hepatitis B was found to be less than 1 percent.

Hepatitis C incidence was higher than 2 percent in almost every district except Muzaffargarh.

7.3 Malaria

According to the PDHS 2006/07, 2.7 percent of households in Punjab had a mosquito net, and only 0.1 percent had a treated net.⁴⁷ PDHS also reported that 0.3 percent of children under 5 in Punjab slept under a net.

⁴⁷ PDHS 2006/07.

7.4 **Tuberculosis**

Data from the National TB Control Program indicates that case detection rates were about 78 percent, and treatment success rates were 92 percent in Punjab in 2008 and 2009 respectively. Treatment was through the Directly Observed Treatment Short Course (DOTS) program.

A district wise breakdown is given in the table below.

Table 7.3: Tuberculosis District wise

District	Case Detection Rates Percent	Treatment Success Rates Percent
Attock	76	96
Bahawalpur	70	98
Bahawalnagar	73	91
Bhakkar	78	95
Chakwal	64	99
Chiniot	13	
Dera Ghazi Khan	70	94
Faisalabad	76	98
Gujranwala	111	97
Gujrat	75	98
Hafizabad	65	90
Jhang	94	93
Jhelum	61	97
Kasur	96	94
Khanewal	70	92
Khushab	112	96
Lahore	106	78
Layyah	66	97
Lodhran	72	91
Mandi Bahauddin	71	98
Mianwali	75	97
Multan	58	93
Muzaffargarh	47	92
Nankana Sahib	73	126
Narowal	85	97
Okara	67	94
Pakpattan	83	93
Rahimyar Khan	65	95
Rajanpur	86	89
Rawalpindi	62	86

Sahiwal	74	96
Sargodha	79	93
Sheikhupura	74	98
Sialkot	116	92
Toba tek singh	81	89
Vehari	69	89
Average	78	92

Source: National TB Control Program, Ministry of Health.

Case detection rates were exceptionally low in Chiniot, and significantly lower than average in Muzaffargarh. Treatment success rates were over 90 percent for most districts, with Lahore being a significant outlier, with a success rate of only 78 percent.

Status of Progress: Data on MDG 6 is not comprehensive enough to make a definitive statement.

Policy Response

In the MTDF 2010-13 and Development Program 2010/11, special emphasis is placed explicitly on the achievement of MDG 6. Three programs out of nine for 2010/11 that are described under "Primary and Preventive" ongoing programs can be classified as interventions targeted solely towards the achievement of MDG 6. These are:

 A TB control program that was approved in 2009 will be implemented until 2013. The project focuses on awareness raising, provision of free services to victims and capacity building of staff as well the provision of equipment across Punjab.

- A Safe Blood Transfusion Service Program focusing on the establishment of Regional Blood Transfusion Centers that was approved in 2010 and will be supported by a German endowment also has projected resource allocations until 2013.
- The Enhanced HIV / AIDS Control Program for Punjab that was approved in 2008 also has resources allocations approved until 2013. The program focuses on the prevention, awareness raising and capacity building of healthcare and program management staff in the HIV/AIDs sector in order to reduce incidence of infection.

In Phase I of the above project, studies to map vulnerable populations, dissemination of "service packages" to identified populations and funds for projects aimed at capacity building were given out.



Goal 7: Ensuring Environmental Sustainability

Chapter-8

8. MDG 7: Ensuring Environmental Sustainability

Goal 7 is very broadly defined by the UN, covering environmental policy, preservation of biodiversity, access to water and sanitation and urban development. The targets and indicators specified for the goal are given in the table below. Goal 7 was difficult to translate into sub-national terms, as data for some of the indicators specified is only available as national level data, while other data (such as the estimate of urban population living in slums) is not available at all.

Indicators	Region	2001/ 02	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2011	MDG Target (2015)
Forest Cover	Pakistan	4.8	4.9	5.02	5.02	5.02	5.02	n/a	n/a	6.0
	Punjab	n/a	n/a	n/a	n/a	n/a		n/a	3.1	n/a
Land Area Protected for Conservation of	Pakistan	11.25	11.3	11.3	11.3	11.3	11.5	n/a	n/a	12.0
Wildlife	Punjab	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a
No. of Vehicles Using	Pakistan	280	1000	1250	1600	1900	2200	n/a	n/a	920
	Punjab									
Sulfur Content in High Speed Diesel	Pakistan	1.0	1.0	1.0	1.0	1.0	1.0	n/a	n/a	0.5
	Punjab			Not rele federal g	vant as fu governme	iel quality ent	' is specifi	ed and m	onitored	by the
Proportion of Population with	Pakistan	64	66	66	66	66	65	n/a	n/a	93
Access to Improved Water Sources	Punjab	n/a	96	95	95	96	95	93	94	n/a

MDG Tracking Table 7: Ensuring Environmental Sustainability

Source: For national indicators, PMDGR 2010. Data sources for Punjab indicators are given below. Data on forest cover from GoPb District Statistics 2009/10.

Data on access to an improved water source from PSLM, various issues. For the PSLM data, the proportions shown are for water from taps, handpumps, and motorized pumps. Water from surface based sources was not considered an improved source. Data on forest cover is taken from Punjab Forest Department

8.1 Water and Sanitation

Key Message: 94 percent of the overall population in the province had access to an improved source of drinking water in 2011

Amongst other indicators, the seventh MDG is concerned with efficient and safe management of water and sanitation for the population. The MDG target is to halve the population without access to safe drinking water and sanitation by 2015. Progress in provision of safe drinking water and sustainable sanitation services is imperative as these conditions have a direct impact on targets in other MDG goals. The effectiveness of preventive health measures and risk of communicable and water-borne diseases is dependent on the quality water and sanitation services provided to the population. Enrolment rates are also affected by the lack of water and sanitation facilities in schools, thereby having a major impact on the achievement of education indicators as well.

Water Source	Urban	Rural	Overall	Urban	Rural	Overall
		PSLM 2008/09			PSLM 2010/11	
Tap Water	52	16	28	46	14	24
Hand pump	8	44	32	08	40	30
Motor pump	34	35	35	37	40	39
Dug well	0	2	1	1	3	2
Other	5	3	4	8	4	5
Total	100	100	100	100	100	100

Table 8.1: Main Source of Drinking Water for Punjab (Percent of Population)

Source: PSLM 2008/09 & 2010-11

A relatively small proportion (28 percent) of the population in the province had access to tap water supplied by the local government as a main source of drinking water in 2008/09 – in 2010/11 this proportion declined by 4 percentage points. The provision of tap water is largely skewed in favour of the urban population of which a substantial 46 percent has access, compared to only 14 percent for the rural areas in 2010.

The table shows the percent of population in each district with access to "improved" or non-surface based sources of drinking water in 2011. The next table gives the district-wise breakdown of use of improved sources of water, where improved sources are defined as hand or motor pumps, bottled or rainwater, tubewells or turbines, spring water or piped water supplies:

S.No	Region	Improved source of drinking water
	Punjab	94.1
1	Attock	91.2
2	Bahawalnagar	92.4
3	Bahawalpur	95.8
4	Bhakkar	99.9
5	Chakwal	91.0
6	DG Khan	84.7
7	Faisalabad	79.6
8	Gujranwala	95.6
9	Gujrat	97.9
10	Hafizabad	96.4
11	Jhang	98.9
12	Jhelum	95.1
13	Kasur	96.1

Table 8.2: Access to Improved Sources of Drinking Water (%)

14	1	Khanewal	99.2
15	5	Khushab	94.2
16	5	Lahore	96.3
17	7	Layyah	99.9
18	3	Lodhran	98.0
19	9	Mandi Bahauddin	95.1
20)	Mianwali	95.9
21		Multan	95.3
22	2	Muzaffargarh	98.1
23	3	Nankana Sahib	91.6
24	1	Narowal	93.4
25	5	Okara	97.2
26	5	Pakpattan	97.3
27	7	Rajanpur	86.5
28	3	Rawalpindi	86.7
29)	RY Khan	95.2
30)	Sahiwal	96.7
31	I	Sargodha	95.6
32	2	Sheikhupura	97.5
33	3	Sialkot	92.8
34	1	TT Singh	94.1
35	5	Vehari	96.0

Source: MICS 2011

There are no significant outliers at all but five districts have high rates of access to better sources of drinking water (above 98 percent). The only exception is Faisalabad which records 79.6 percent in the recently released MICS 2011. The low performance to access the drinking water from improved sources is attributed to the increased use

of commercial water carriers from filtration plants near the canal.

Data on improved water sources is also given in MICS 2007/08, the detailed table for which is reproduced below.

S
0
-
S
_
S
- Ai
U
0
<u> </u>
_
-
0
iñ
Ð
-
_
σ
U
0
0
—
-
S
S
U
Ŭ
-
••
~
1.1
_
00
60
0
le 8
ble 8
ble 8
able 8
Fable 8

				Ξ	nproved	sources					Unimpr	oved sou	urces		Total	Improved
District	Piped into dwelling	Piped into yard or plot	Public tap/ stand- pipe	Hand Pump	Donkey Pump	Protected well within dwelling	Tubewell/ turbine	Protected: well outside dwelling/ spring, rainwater	Bottled/ can water	Unpro- tected: well within or outside dwelling/ unpro- tected	Tanker/ Cart with small tank	Surface water	Bottled/ can water	Other/ Missing		source of drinking water*
Punjab	12.4	1.5	3.0	33.6	40.7	0.6	0.5	0.2	0.4	0.4	2.2	0.4	0.0	2.6	100.0	94.1
Attock	24.3	0.3	2.1	15.7	37.2	8.1	0.4	1.1	0.0	6.4	0.1	0.2	0.0	1.2	100.0	91.2
B. nagar	19.5	18.6	1.5	32.9	15.4	0.0	0.1	0.0	0.1	0.4	2.3	1.4	0.0	3.5	100.0	92.4
Bahawalpur	5.0	3.1	1.5	41.8	42.3	0.2	0.4	0.0	0.0	0.3	0.1	0.2	0.0	3.5	100.0	95.8
Bhakkar	0.2	0.1	0.2	66.1	33.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100.0	9.99
Chakwal	21.1	1.7	2.1	12.2	50.8	1.2	0.2	0.0	0.1	2.3	2.0	0.0	0.0	0.9	100.0	91.0
Chiniot	0.4	0.0	2.4	55.0	39.8	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	1.2	100.0	98.2
DG Khan	8.9	1.0	7.8	57.5	7.7	0.3	0.1	0.1	0.0	0.3	5.2	4.5	0.1	1.9	100.0	84.7
Faisalabad	7.2	3.0	6.1	25.6	36.2	0.0	0.0	0.0	0.5	0.0	18.5	0.2	0.0	1.6	100.0	79.6
Gujranwala	5.8	0.2	1.9	11.4	75.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	4.4	100.0	95.6
Gujrat	15.1	0.2	2.0	13.9	64.5	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	2.0	100.0	97.9
Hafizabad	0.1	0.1	0.7	54.9	39.7	0.0	0.3	0.0	0.2	0.0	0.3	0.4	0.0	2.9	100.0	96.4
Jhang	0.4	0.7	0.5	63.6	33.5	0.0	0.1	0.0	0.1	0.0	0.7	0.0	0.0	0.4	100.0	98.9
Jhelum	22.0	0.3	1.7	9.3	53.1	5.8	0.5	0.7	0.3	1.6	0.2	0.2	0.0	1.6	100.0	95.1
Kasur	10.3	1.9	3.8	30.2	47.4	0.0	0.3	0.0	0.5	0.0	0.4	0.1	0.0	3.3	100.0	96.1
Khanewal	1.5	0.1	2.1	28.6	65.3	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.8	100.0	99.2
Khushab	21.1	4.0	4.0	45.9	14.2	0.4	1.4	1.0	0.0	0.3	1.3	3.0	0.0	0.2	100.0	94.2

	0.4	1.6	3.4	21.2	0.0	0.2	0.0	2.5	0.0	0.1	0.0	0.0	3.6	100.0	96.3
0.0 0.2	0.2		77.2	22.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	99.9
1.1 12.2 2	12.2		28.5	53.2	0.0	0.6	0.0	0.1	0.0	0.3	0.0	0.0	1.7	100.0	98.0
0.1 0.7 5	0.7 5	L()	8.6	34.0	0.0	0.2	0.0	0.0	0.0	1.3	0.1	0.0	3.5	100.0	95.1
0.0 0.3 8	0.3	~~	36.7	9.7	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.1	100.0	98.1
1.3 3.9 3	3.9	,	38.1	30.8	0.4	1.0	0.3	0.0	1.3	0.6	1.3	0.0	0.5	100.0	95.9
0.1 9.3 2	9.3		25.2	58.6	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	4.3	100.0	95.3
0.0 0.7 4	0.7 4	4	10.0	48.0	0.0	0.3	0.0	0.4	0.0	5.0	0.3	0.0	3.1	100.0	91.6
0.0 5.3 2	5.3 2	7	4.4	60.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	6.6	100.0	93.4
0.7 1.4 3	1.4 3	ñ	9.4	50.7	0.0	1.3	0.0	0.1	0.0	1.4	0.0	0.0	1.3	100.0	97.2
1.1 3.4 1	3.4 1	-	9.3	67.9	0.0	2.3	0.0	0.0	0.0	0.2	0.0	0.0	2.5	100.0	97.3
2.5 2.1 5	2.1 5	ŝ	8.8	26.9	0.3	0.3	0.0	0.1	0.1	3.6	0.1	0.0	0.6	100.0	95.2
0.0 2.6 6	2.6 6	9	8.5	12.2	1.0	1.7	0.0	0.0	0.8	2.3	9.1	0.0	1.1	100.0	86.5
1.0 4.8	4.8		2.2	25.3	9.2	4.0	3.3	0.2	3.7	0.1	0.0	0.0	6.4	100.0	86.7
0.0 3.7	3.7	••	28.0	62.9	0.0	0.1	0.0	0.3	0.0	0.2	0.0	0.0	3.1	100.0	96.7
0.9 2.4	2.4		70.7	16.4	0.0	0.0	0.0	0.1	0.0	3.0	0.1	0.0	1.2	100.0	95.6
0.2 0.6	0.6		24.2	61.3	0.0	0.2	0.0	0.5	0.0	0.6	0.0	0.0	1.9	100.0	97.5
0.2 0.9	0.9		18.7	61.7	0.0	0.2	0.0	0.4	0.0	0.1	0.0	0.0	7.0	100.0	92.8
5.0 7.9	7.9		17.2	40.2	0.0	0.6	0.0	0.1	0.0	1.9	0.7	0.0	3.2	100.0	94.1
1.6 1.4	1.4		19.5	67.3	0.0	0.7	0.0	0.2	0.0	1.2	0.1	0.0	2.8	100.0	96.0

The data on sanitation facilities in the table below indicates more improvement over the situation in 2004/05. In 2007/08 about 70 percent of the population of Punjab had access to proper sanitation facilities (underground, covered or open drains) compared to 58 percent in 2004/05. Again,

urban residents benefit disproportionately from these facilities than rural residents – in 2008 only 7 percent of urban residents were without access to any type of sanitation facility, whereas a staggering 41 percent of the rural population in Punjab had no type of drainage system.

Table 8.4: Type of Sanitation Facility Used by the Household (Percent)

	2004-05 PSLM			2007-08 PSLM		
Type of Sanitation	Urban	Rural	Overall	Urban	Rural	Overall
Underground Drains	38	1	12	49	8	21
Covered Drains	7	1	3	6	5	5
Open Drains	47	42	43	38	46	44
No System	8	56	42	7	41	30
Total	100	100	100	100	100	100

Source: PSLM 2004/05 and 2007/08.

Table 8.5: Population Using Sanitary Means of Waste Disposal (Percent)

S.No	Region	Percentage of population using sanitary means of excreta disposal
	Punjab	72
1	Attock	78
2	Bahawalnagar	67
3	Bahawalpur	59
4	Bhakkar	67
5	Chakwal	80
6	DG Khan	41
7	Faisalabad	88
8	Gujranwala	96
9	Gujrat	86
10	Hafizabad	73
11	Jhang	47
12	Jhelum	83
13	Kasur	71
14	Khanewal	65
15	Khushab	71
16	Lahore	97
17	Layyah	59

18	Lodhran	62
19	Mandi Bahauddin	74
20	Mianwali	79
21	Multan	46
22	Muzaffargarh	46
23	Nankana Sahib	79
24	Narowal	82
25	Okara	56
26	Pakpattan	54
27	Rajanpur	33
28	Rawalpindi	84
29	RY Khan	60
30	Sahiwal	70
31	Sargodha	74
32	Sheikhupura	87
33	Sialkot	93
34	TT Singh	85
35	Vehari	68

Source: Punjab MICS 2011

As the table above shows, the sanitation indicators by district show a similar pattern of variation to other indicators for performing and underperforming districts. The range among districts is therefore quite wide. In 2011 the highest prevalence of sanitary waste disposal was in Lahore at 97 percent of the population. The worst case recorded was unsurprisingly in Rajanpur where a meager 33 percent of the population is using sanitary means of waste disposal.

The table below gives a breakdown of type of toilet in the household.

Table 8.6: Type of Toilet Used by Households (Percent)

Type of Toilet	2008-09 PSLM			2010-11 PSLM		
	Urban	Rural	Overall	Urban	Rural	Overall
Flush	96	56	69	97	51	66
Non- Flush	1	5	4	3	22	15
No Toilet	3	39	28	2	27	23
Total	100	100	100	100	100	100

Source: PSLM 2008/09 & PSLM 2010/11.

The data on type of toilet within the house is taken from PSLM 2010/11 and shows that while 97 percent of urban residents had access to flush toilets, only 51 percent of the rural population had similar facilities at their disposal – in fact 49 percent of the rural population did not have a toilet at all in 2010/11. Compared to data from 2008/09, the overall population without access to a toilet has decreased by only 6 percentage.

8.2 Forest Area

Forest cover in Punjab is estimated at only 3.1 percent which is lower than the national average of 5 percent and even lower than the MDG target for forest cover specified under the MTDF, which was 6 percent. According to District Statistics from 2009/10 roughly 79 percent of the total forest area in the province is concentrated in the district of Bahawalpur.

8.3 **Proportion of Urban Population** Living in Slums

Key Message: There has been little progress on regularization of katchi abadies in the province.

Slums, referred to as katchi abadies or communities with non-permanent dwellings in Pakistan, are a feature of all major urban centers. The Directorates of katchi abadies in each province undertook an exercise in 2008 to determine how many of such settlements could be considered for regularization, i.e. the ownership rights of the residents have been acknowledged by the government, and they will be considered eligible for provision of urban services by city authorities. According to data provided by UN-Habitat for this study, there were a total of 1210 katchi abadies in Punjab, of which 900 had been regularized by 2008.

Status of Progress Against Goal 7: Target may be met on drinking water related indicators, but not for others.

8.4 Challenges

 One of the basic problems for any developing country is balancing a rigorous development agenda with environmentally sustainable practices. In Punjab the main challenge in ensuring both hygienic and sustainable practices is the large population of the province. Generally, Punjab suffers from a lack of awareness about environmental issues, and environmentally sensitive policy-making is rarely effective even when attempted. A radical public awareness campaign is necessary to turn the situation around.

Furthermore natural disasters such as the recent floods have caused a substantial level of damage to existing infrastructure. These recent events will almost certainly slow down the progress on water and sanitation service delivery in the province, particularly in the flood-affected areas. According to the Preliminary Damage and Needs Assessment, Punjab was the second worst affected province, after Sindh with marked levels of devastation across the agricultural heartland.

8.5 Summary of Findings

The pace of growth in sanitation service delivery has been slow even though it is a priority area for the GoPb. Where progress has been made the outcomes are not uniformly positive across all indicators (water, drainage, toilet systems) even within each district. Therefore the dilemma relating to distribution of resources and building sufficient capacities affect the achievement of MDG 7 in the same way as it needs to be addressed to correct imbalances in MDGs 2, 3, 4, and 5.

Policy Response

Under the MTDF 2010-13 and Development Program 2010-11, the Government of the Punjab remains fully committed to the achievement of MDG 7 and highlights various interventions it has undertaken to ensure the achievement of this goal. A total of 1,087 water and sanitation projects are said to be ongoing for 2010/11. Out of these, an overwhelming majority of 926 are being implemented in rural areas of Punjab. These include:

- Rs. 17,125 million have been allocated for a total of 585 water supply projects out of which the majority (518) are being implemented in rural areas across Punjab. These projects cover rural areas in a number of districts. The majority of these schemes only have funds allocated for 2010/11.
- Rs. 15,706 million have been earmarked for 408 sanitation projects which are being implemented in rural areas across Punjab.

- Rural Sewerage/Drainage projects are being implemented in rural areas. In liaison with the Federal Government, the GoPb is also implementing a Rs. 2,332 million project for an additional 8 Water Supply and Sanitation interventions.
- In Dera Ghazi Khan, the Rural Water Supply & Drainage Scheme at Chashma Right Bank Canal is being implemented since 2008.
- The GoPb has approved the "Punjab Drinking Water Policy" in June 2011 which provides a framework for addressing the institutional, administrative, legal, regulatory, fiscal, social and environmental issues and challenges. A draft "Punjab Sanitation Policy" has also been prepared and is presently undergoing a political consensus process.
- Further under the sector of Forests, the MTDF 2010-13 and Development Program 2010/11 highlights that allocations to the sector have increased from Rs. 93.422 million in 2006/07 to Rs. 400 million in 2010/11. There are a total of 11 projects under implementation during

2010/11 and 5 are waiting approval. Other interventions under implementation include the construction of a park in Faisalabad and nurseries along roads in Punjab. Resources have also been set aside for research.

9. Links Between MDGs 4, 5 and 7

Water and sanitation indicators should have a direct linkage with child health and even maternal mortality. The available data, however, makes it difficult to establish this linkage as data on infant mortality is not broken down by district, and it is therefore not possible to establish a correlation between indicators such as access to improved sources of drinking water and access to sanitation services on the one hand, and maternal and child mortality on the other. In general though, the downward trend in infant mortality and under 5 mortality rates does seem to have moved concomitantly with an improvement in water supply and sanitation services. Establishing a more definite linkage would require more detailed data.

MDG7-Ensuring Environmental Sustainability Punjab


Conclusion

Pakistan's most populated province is unlikely to achieve any of the MDG targets by 2015. Progress towards the goals may have been slow to begin with, but has been severely derailed by the economic downturn, the difficult security situation in the past three years, and further by the effects of the devastating floods of 2010.

Nevertheless, Punjab's MDG indicators are for the most part higher than the national averages. On selected indicators like primary enrolment GPIs, immunization and diarrhoea control and provision of water from improved sources, Punjab is doing quite well, and would be on track to meet the MDGs.

Tracking progress is relatively simple for the provincial government, as Punjab has a very comprehensive set of development statistics, and the province has calculated provincial GDPs and published these in two successive Punjab Economic Reports (published in 2005 and 2007). It thus has a wealth of data and experience at its resources, and can use these to formulate a time-bound, medium term strategy to revive macroeconomic growth in the province, and improve access to services. The GoPb has been able to attract technical assistance and resources from a range of international donors in recent years. It can also tap these additional resources to its benefit. The province is thus well placed to, if not achieve the MDG goals in entirety, at least make substantial progress towards their achievement.

Postscript: Grouping of Districts in Agro-Climatic Zones

The table below shows how agro-climatic zones were defined in the Pakistan Microfinance Network's report (PMN 2010) quoted in the discussion on MDG 1. Essentially, each zone comprises of a set of districts, as shown in table below.

Table 8.7: Grouping of Districts in Agro-Climatic Zones

Zone		Districts	
Rice-wheat Punjab	Gujranwala	Mandi Bahauddin	Sialkot
	Lahore	Hafizabad	Sheikhupura
	Narowal	Kasur	Gujrat
Mixed Punjab	Sargodha	Khushab	Faisalabad
	Jhang	Toba Tek Singh	Okara
Cotton-wheat Punjab	Vehari	Multan	Pakpattan
	Bahawalpur	Rahimyar Khan	Sahiwal
	Khanewal	Lodhran	Bahawalnagar
Low-intensity Punjab	Mianwali	Dera Ghazi Khan	Muzaffargarh
	Bhakkar	Rajanpur	
Barani Punjab	Islamabad	Rawalpindi	Chakwal
	Attock	Jehlum	



Annex I: Monthly Income by Quintile

	Total	1st	2nd	3rd	4th	5th
Punjab: TOTAL						
Average monthly income	22859.30	11144.68	13936.66	16829.95	20904.46	40968.39
Total	100	100	100	100	100	100
Wages and Salaries	33.11	43.98	38.71	35.71	30.39	30.71
Crop Production	14.53	10.59	10.65	14.50	16.54	15.16
Livestock	9.71	10.73	11.60	12.53	11.88	7.48
Other non agri Activities	17.08	13.66	17.55	15.90	17.57	17.68
Property (Owner Occupied Houses Excluded)	3.02	0.84	0.89	1.29	1.79	4.79
Owner Occupied Houses	8.49	6.66	7.60	7.64	8.05	9.40
Social Insurance Benefits Including Pension	1.97	0.51	1.48	1.75	2.14	2.30
Gift Assistance	2.59	6.24	4.48	3.33	2.25	1.54
Foreign Remittances	5.24	0.42	1.43	2.28	4.19	8.07
Domestic Remittances	3.72	4.08	4.56	5.29	4.91	2.58
Other Sources	0.53	2.29	1.06	0.34	0.28	0.29
Punjab: Urban						
Average monthly income	24491.98	11584.26	15898.38	17605.76	22891.21	44996.97
Total	100	100	100	100	100	100
Wages and Salaries	43.32	55.29	53.59	50.75	44.38	40.26
Crop Production	2.04	1.82	1.11	0.93	1.13	2.55
Livestock	1.73	1.77	0.95	6.31	1.63	1.12
Other non agri Activities	26.17	18.98	28.22	23.18	29.08	26.01
Property (Owner Occupied Houses Excluded)	3.21	0.64	0.16	0.74	1.49	4.48
Owner Occupied Houses	11.64	9.42	9.58	9.68	10.55	12.55
Social Insurance Benefits Including Pension	2.52	0.51	0.78	1.88	2.12	3.00
Gift Assistance	2.33	4.93	2.46	2.10	2.98	2.05
Foreign Remittances	4.02	0.33	0.47	1.16	2.43	5.43
Domestic Remittances	2.15	3.76	1.74	3.14	3.40	1.63
Other Sources	0.87	2.54	0.93	0.14	0.81	0.91
Punjab: Rural						
Average monthly income	19778.31	11062.29	13354.46	16521.20	19971.00	37142.87

	Total	1st	2nd	3rd	4th	5th
Total	100	100	100	100	100	100
Wages and Salaries	26.05	41.76	33.45	28.57	22.86	19.73
Crop Production	23.18	12.31	14.02	20.25	24.84	29.67
Livestock	15.23	12.49	15.36	15.17	17.40	14.80
Other non agri Activities	10.79	12.61	13.78	12.81	11.37	8.10
Property (Owner Occupied Houses Excluded)	2.88	0.89	1.15	1.52	1.96	5.14
Owner Occupied Houses	6.32	6.12	6.90	6.78	6.71	5.77
Social Insurance Benefits Including Pension	1.58	0.51	1.72	1.69	2.15	1.49
Gift Assistance	2.77	6.49	5.20	3.85	1.85	0.95
Foreign Remittances	6.09	0.44	1.77	2.75	5.13	11.11
Domestic Remittances	4.81	4.15	5.56	6.20	5.72	3.67
Other Sources	0.30	2.24	1.10	0.42	0.01	0.01

Source: Household Income and Expenditure Survey, 2010/11.

Annex II: Monthly Household Expenditure Data by Quintile

	Total	1st	2nd	3rd	4th	5th
Punjab: TOTAL						
Average Monthly Consumption Expenditures (Rs.)	19067.71	10788.50	13572.56	15774.11	18272.76	30265.03
Percentage of Consumption Expe	enditure on:					
TOTAL	100	100	100	100	100	100
Food, beverage and tobacco	48.11	57.73	55.73	54.15	51.23	40.35
Apparel,textile and footware	5.39	5.83	5.83	5.81	5.71	4.88
Transport and communication	5.74	3.45	4.03	4.57	5.19	7.37
Cleaning, laundary and per- sonal appearance	3.99	4.30	4.08	3.95	3.87	3.96
Recreation and entertainment	0.40	0.18	0.26	0.31	0.39	0.53
Education	3.88	1,81	2.26	2.49	3.26	5.55
Rent	13.10	8.70	9.75	10.61	11.55	16.58
Fuel and lighting	8.30	9.30	9.09	8.66	8.65	7.57
Miscellaneous	11.09	8.70	8.96	9.45	10.15	13.22
Punjab: Urban						
Average monthly income	24227.81	11712.93	14703.51	15932.23	19999.83	34864.08
Percentage of Consumption Expe	enditure on:					
TOTAL	100	100	100	100	100	100
Food, beverage and tobacco	40.62	52.31	51.18	48.72	46.02	35.50
Apparel, textile and footware	5.17	6.09	6.10	5.94	5.45	4.77
Transport and communication	6.21	3.20	4.27	4.39	4.79	7.40
Cleaning, laundary and per- sonal appearance	3.74	4.62	4.31	4.17	4.13	3.41
Recreation and entertainment	0.68	0.39	0.45	0.60	0.72	0.73
Education	5.42	2.65	2.85	3.09	4.60	3.41
Rent	19.40	13.46	14.38	16.06	16.48	21.87
Fuel and lighting	8.04	9.67	8.96	8.61	8.59	7.55
Miscellaneous	10.73	7.61	7.49	8.43	9.22	12.19
Punjab: Rural						
Average monthly income	16673.68	10615.25	13236.92	15711.18	17461.31	25897.79
Percentage of Consumption Expe	enditure on:					
TOTAL	100	100	100	100	100	100

	Total	1st	2nd	3rd	4th	5th
Food, beverage and tobacco	53.17	58.85	57.23	56.35	54.04	46.56
Apparel,textile and footware	5.55	5.78	5.74	5.76	5.86	5.02
Transport and communication	5.42	3.50	3.95	4.64	5.40	7.33
Cleaning, laundary and per- sonal appearance	4.15	4.23	4.01	3.86	3.74	4.65
Recreation and entertainment	0.21	0.14	0.19	0.19	0.22	0.26
Education	2.83	1.63	2.07	2.24	2.53	4.23
Rent	8.85	7.72	8.23	8.42	8.89	9.82
Fuel and lighting	8.47	9.22	9.13	8.67	8.68	7.59
Miscellaneous	11.34	8.93	9.44	9.87	10.65	14.54

Source: Household Income and Expenditure Survey 2010/11.

Annex III: Labor Force Participation Rates (Percent)

	Labor Fo	orce Participati	on Rates	Un	-employed Rat	tes
	Total	Male	Female	Total	Male	Female
ALL AREAS						
Total (all ages)	35.21	50.56	19.57			
Total 10 years and over)	48.26	69.72	26.66	6.10	5.25	8.35
10-14	12.58	14.32	10.67	14.84	19.00	8.70
15-19	38.46	52.08	24.65	11.32	12.12	9.63
20-24	55.92	85.02	28.59	8.87	7.10	13.82
25-29	61.27	97.03	29.75	4.75	3.22	9.15
30-34	62.01	97.76	31.01	2.65	2.00	4.62
35-39	66.10	97.95	37.37	2.24	1.40	4.24
40-44	67.15	97.88	37.78	1.76	0.73	4.31
45-49	68.90	97.28	37.65	2.98	2.51	4.32
50-54	66.74	95.85	35.70	3.31	3.07	3.98
55-59	62.84	91.60	32.41	5.51	4.86	7.48
60-64	55.04	81.61	23.90	8.57	6.05	18.67
65 Years and Over	30.37	44.87	11.34	12.41	8.55	32.43
RURAL						
Total (all ages)	37.13	50.09	24.24			
Total 10 years and over)	51.18	70.62	33.19	5.09	4.58	6.17
10-14	15.33	16.21	14.34	11.90	15.73	7.03
15-19	43.17	55.61	30.92	8.85	9.90	6.99
20-24	60.10	88.58	34.36	7.15	6.27	9.21
25-29	64.54	97.48	36.31	3.88	2.59	6.84
30-34	66.24	97.80	39.82	2.27	1.81	3.23
35-39	70.42	97.64	46.73	1.84	1.33	3.06
40-44	71.96	97.95	47.44	1.46	.59	3.14
45-49	73.52	97.77	48.02	2.25	1.93	2.92
50-54	72.85	96.80	46.54	2.94	2.86	3.11
55-59	67.15	94.08	40.29	4.09	3.02	6.16
60-64	60.77	86.99	30.34	6.67	4.19	14.91
65 Years and Over	33.13	48.99	12.90	12.03	8.44	29.44
URBAN						
Total (all ages)	31.20	51.52	10.14			
Total 10 years and over)	41.24	67.99	13.42	8.61	6.59	19.24

	Labor Fo	orce Participati	on Rates	Un	-employed Ra	tes
	Total	Male	Female	Total	Male	Female
10-14	6.40	9.91	2.72	30.64	31.42	27.66
15-19	29.35	45.53	11.93	18.37	17.13	23.47
20-24	48.61	79.13	17.99	12.59	8.64	30.02
25-29	55.33	96.26	17.41	6.60	4.33	18.19
30-34	54.48	97.69	14.54	3.47	2.33	10.53
35-39	57.68	98.51	18.08	2.97	1.54	10.53
40-44	58.03	97.75	19.18	2.47	0.98	9.90
45-49	60.14	96.40	16.59	4.69	3.56	1.54
50-54	54.91	93.91	15.61	4.26	3.52	8.78
55-59	53.90	86.88	14.40	9.20	8.27	15.89
60-64	42.23	69.74	9.26	14.69	11.14	46.69
65 Years and Over	22.89	34.21	6.83	13.89	8.98	48.73

Source: Labor Force Survey 2010/11.

Annex IV: Enrolment in Public Schools

	Total	l Numbe tudents	r of	Numbe	r of stud Admitt	dents in ed	Numbe	r of stud Primary	ents in	Numbe	r of stud Middle	ents in	Numbe	r of stud High	ents in
Districts	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Attock	1,381	702	677	2			992	509	483	192	81	111	195	112	83
Bahawalnagar	2,659	1,214	1,229	216			1945	985	960	343	130	213	155	66	56
Bahawalpur	2,130	1,111	946	73			1691	940	751	241	93	148	125	78	47
Bhakkar	1,639	659	730	250			1174	530	644	142	77	65	73	52	21
Chakwal	1,303	634	637	32			899	449	450	212	91	121	160	94	66
D. G. Khan	2,107	895	747	465			1399	737	662	141	94	47	102	64	38
Faisalabad	2,732	1,364	1,302	66			1887	1,035	852	431	130	301	348	199	149
Gujranwala	2,012	951	992	69			1495	734	761	281	119	162	167	98	69
Gujrat	1,843	789	899	155			1280	593	687	201	74	127	207	122	85
Hafizabad	933	465	436	32			770	404	366	87	25	62	44	36	8
Jhang	3,049	1,375	1,606	68			2549	1,129	1,420	270	129	141	162	117	45
Jhelum	1,094	500	524	70			796	384	412	134	63	71	94	53	41
Kasur	1,683	863	793	27			1302	683	619	239	103	136	115	77	38
Khanewal	1,614	752	782	80			1096	527	569	297	126	171	141	66	42
Khushab	1,113	683	426	4			917	563	354	118	65	53	74	55	19
Lahore	1,304	637	620	47			795	421	374	189	79	110	273	137	136
Layyah	1,594	876	695	23			1266	735	531	213	87	126	92	54	38
Lodhran	891	374	489	28			650	260	390	146	66	80	67	48	19
Mandi Ba- hauddin	985	488	452	45			724	382	342	140	49	91	76	57	19
Mianwali	1,607	635	843	129			1238	487	751	160	93	67	80	55	25

	Tota s	l Numbe tudents	r of	Numbe Ur	r of stud Admitt	dents in ed	Numbe	r of stud Primary	ents in	Numbe	r of stud Middle	lents in	Numbe	r of stud High	ents in
Districts	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Multan	1,664	666	885	113			1219	477	742	197	60	107	135	66	36
Muzaffargarh	2,222	606	976	337			1587	734	853	199	100	66	66	75	24
Nankana Sahib	1,216	689	519	00			972	568	404	155	63	92	81	58	23
Narowal	1,644	614	006	130			1258	487	771	159	69	90	97	58	39
Okara	1,688	795	789	104			1202	605	597	253	96	157	129	94	35
Pakpattan	975	486	410	79			707	383	324	126	54	72	63	49	14
Rahimyar Khan	3,606	1,433	1,518	655			2458	1,156	1,302	325	161	164	168	116	52
Rajanpur	1,252	634	494	124			1009	559	450	70	41	29	49	34	15
Rawalpindi	2,413	1,069	1,241	103			1740	772	968	294	135	159	276	162	114
Sahiwal	1,294	676	618	I			879	483	396	270	95	175	145	98	47
Sargodha	2,567	1,190	1,180	197			1828	952	876	333	115	218	209	123	86
Sheikhupura	1,433	745	605	83			1095	622	473	166	64	102	89	59	30
Sialkot	2,495	1,068	1,427	I			2070	899	1,171	243	83	160	182	86	96
Toba Tek Singh	1,453	697	670	86			946	527	419	284	92	192	137	78	59
Vehari	1,683	747	749	187			1135	596	539	253	86	167	108	65	43

Source: GoPb, Annual School Census 2008/09.

Annex V: Enrolment in Private Schools

	Tota	l Numbe	er of Sch	ools	Total	Numbe Scho	r of Prir ools	nary	Tota	l Numb Sche	er of Mid ools	dle	Tot	al Numb Scho	oer of Hi ools	igh	Total N	lumber (Scho	of Highe ols	r Sec.
Districts	Total	Male	Female	Mixed	Total	Male	Female	Mixed	Total	Male	Female	Mixed	Total	Male	Female	Mixed	Total	Male	Female	Mixed
Attock	750	19	38	693	198	1	6	188	434	4	11	419	102	10	10	82	16	4	œ	4
Bahawalnagar	491	7	12	472	147	2	ŝ	142	276	2	2	272	60	ŝ	ŝ	54	8	0	4	4
Bahawalpur	953	19	18	916	322	ε	4	315	453	2	4	447	158	12	6	137	20	2	-	17
Bhakkar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chakwal	645	31	49	565	161	2	-	158	328	4	ŝ	321	124	18	26	80	32	7	19	9
D. G. Khan	516	34	12	470	138	12	7	119	319	15	5	299	55	9	0	49	4	1	0	3
Faisalabad	3,455	121	167	3,167	1,367	12	18	1,337	1,395	31	56	1,308	659	71	74	514	34	7	19	8
Gujranwala	2,444	61	66	2,317	502	ε	5	494	1,117	7	14	1,096	779	46	37	969	46	5	10	31
Gujrat	1,278	36	55	1,187	207	0	8	199	624	4	15	605	411	23	25	363	36	6	7	20
Hafizabad	469	36	30	403	150	2	-	147	209	9	11	192	96	27	13	56	14	1	5	8
Jhang	772	77	53	642	261	14	5	242	364	34	21	309	134	26	20	88	13	3	7	3
Jhelum	538	24	45	469	184	ε	2	179	201	7	12	182	140	13	23	104	13	1	8	4
Kasur	849	51	53	745	260	8	13	239	434	16	21	397	145	26	16	103	10	1	3	9
Khanewal	670	25	25	620	246	8	10	228	340	9	2	332	74	6	6	56	10	2	4	4
Khushab	362	24	17	321	131	5	4	122	181	6	7	165	46	8	9	32	4	2	0	2
Lahore	4,793	273	397	4,123	1,062	37	52	973	1,700	64	107	1,529	1,964	168	220	1,576	67	4	18	45
Layyah	270	15	8	247	30	0	2	28	178	9	1	171	60	6	5	46	2	0	0	2
Lodhran	312	8	6	295	63	1	6	56	220	2	1	217	26	4	2	20	3	1	0	2
Mandi Bahauddin	674	14	18	642	144	0	1	143	365	2	1	362	150	6	12	129	15	3	4	8

0	8	6	0	6	7	2	13	ŝ	42	ŝ	10	14	17	7	2
-1	4	-	0	ε	2	2	Ŋ	0	18	6	∞	ε	ε	m	2
0	7	5	0	1	0	0	m	0	10	ε	ε	ε	0	1	-
1	19	15	0	13	6	4	21	ε	70	15	21	20	20	11	5
11	150	55	0	112	95	37	241	33	772	55	122	317	481	42	49
5	32	11	0	13	20	۷	6	4	65	3	18	15	23	8	15
23	46	18	0	10	24	8	∞	13	82	8	18	15	22	12	21
39	228	84	0	135	139	52	258	50	919	66	158	347	526	62	85
98	832	418	0	367	421	272	447	112	1,146	398	772	857	982	175	447
13	25	14	0	6	7	ε	4	2	34	ε	7	15	16	6	10
24	23	49	0	ŝ	9	2	6	12	20	2	11	15	8	10	10
135	880	481	0	379	434	277	460	126	1,200	403	790	887	1,006	194	467
113	356	184	0	166	220	98	225	63	458	262	444	579	510	364	72
∞	8	4	0	9	m	35	œ	2	12	2	9	34	16	6	6
15	4	14	0	1	7	-	m	2	10	2	∞	26	7	9	5
136	368	202	0	173	230	134	236	67	480	266	458	639	533	379	86
222	1,346	666	0	654	743	409	926	211	2,418	718	1,348	1,767	1,990	588	570
27	69	30	0	31	32	47	26	8	129	17	39	67	58	29	36
62	80	86	0	15	37	11	23	27	122	15	40	59	37	29	37
311	1,495	782	0	700	812	467	975	246	2,669	750	1,427	1,893	2,085	646	643
Mianwali	Multan	Muzaffargarh	Nankana Sahib	Narowal	Okara	Pakpattan	Rahimyar Khan	Rajanpur	Rawalpindi	Sahiwal	Sargodha	Sheikhupura	Sialkot	Toba Tek Singh	Vehari

Source: GoPb, Annual School Census 2008/09.

Annex VI: No. of Teachers

	Total Nur	nber of te	eachers	Numbe	r of teacl Primary	hers in	Numbe	er of teacl Middle	hers in	Numbe	rr of teacl High	ners in	Numbe H	er of teach ligher Sec	ners in
Districts	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Attock	7,305	3,401	3,901	ω			2,819	1,294	1,525	1,651	522	1,129	2,832	1,585	1,247
Bahawalnagar	9,972	5,046	4,613	313			4,090	2,198	1,892	2,891	1,152	1,739	2,678	1,696	982
Bahawalpur	9,944	5,349	4,527	68			4,645	2,375	2,270	2,124	983	1,141	3,107	1,991	1,116
Bhakkar	5,275	2,876	2,162	237			2,552	1,199	1,353	1,267	742	525	1,219	935	284
Chakwal	6,562	3,076	3,459	27			2,151	848	1,303	1,866	770	1,096	2,518	1,458	1,060
D. G. Khan	7,472	3,986	2,852	634			3,860	2,122	1,738	1,340	899	441	1,638	965	673
Faisalabad	17,423	9,015	8,315	93			6,381	3,671	2,710	4,410	1,450	2,960	6,539	3,894	2,645
Gujranwala	11,278	5,952	5,231	95			4,294	2,227	2,067	3,001	1,380	1,621	3,888	2,345	1,543
Gujrat	8,900	4,011	4,741	148			3,537	1,465	2,072	1,766	641	1,125	3,449	1,905	1,544
Hafizabad	3,421	2,036	1,328	57			1,597	913	684	790	294	496	977	829	148
Jhang	11,575	6,391	5,135	49			6,096	2,959	3,137	2,496	1,289	1,207	2,934	2,143	791
Jhelum	4,853	2,536	2,302	15			1,937	955	982	1,278	643	635	1,623	938	685
Kasur	8,212	4,737	3,442	33			3,688	2,116	1,572	2,266	1,112	1,154	2,225	1,509	716
Khanewal	9,320	5,317	3,894	109			3,499	1,919	1,580	2,824	1,374	1,450	2,888	2,024	864
Khushab	4,776	3,042	1,728	9			2,368	1,458	910	1,216	689	527	1,186	895	291
Lahore	12,896	5,118	7,681	97			3,370	1,276	2,094	2,470	792	1,678	6,959	3,050	3,909
Layyah	6,075	3,286	2,768	21			2,590	1,382	1,208	1,768	854	914	1,696	1,050	646
Lodhran	3,965	2,221	1,706	38			1,665	800	865	1,091	569	522	1,171	852	319
Mandi Bahauddin	4,846	2,663	2,134	49			2,078	1,170	908	1,390	523	867	1,329	970	359

2,942 1,328 1,614
3,861 1,792
4,039 2,05
2,519 1,5
3,659 1,
3,460 1,
1,817 1
5,685
2,630
4,583
2,405
5,138
2,983
5,343
3,017
3,202

Source: GoPb, Annual School Census 2008/09.

Annex VII: Public Health Facilities in Punjab

3 7 104 35 7 214 35 7 214 - 10 187 13 2 103	3 7 104 75 35 7 214 89 35 7 214 89 - 10 187 2,20 13 2 103 44 - 3 100 53 - 3 100 53 14 2 36 36	3 7 104 759 35 7 214 895 - 10 187 2,204 13 2 10 895 13 2 10 895 - 10 187 2,204 13 2 103 447 - 3 100 531 14 2 76 363 34 5 148 815 35 12 361 4,032 35 12 361 4,032 35 12 361 4,032	3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 2 10 895 - 10 187 2,204 13 2 103 447 - 3 100 531 14 2 76 363 34 2 103 6415 34 2 76 363 34 2 148 815 35 12 391 4,032 35 12 391 4,032 35 9 212 1,642 35 9 217 926 31 9 177 926	3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 13 21 895 447 13 2 10 531 - 3 100 531 14 2 76 363 14 2 76 363 34 2 100 531 34 2 148 815 34 2 148 815 34 2 148 815 34 2 148 815 35 12 391 4,032 35 9 212 1,642 35 9 177 926 31 9 177 926 31 9 177 923 31 6 5 333 4 7 </th <th>3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 13 2 103 447 13 2 103 447 - 10 187 2,204 13 2 103 447 - 3 100 531 34 2 76 363 34 2 148 815 35 12 764 363 35 12 391 4,032 35 12 391 4,032 35 12 391 4,032 35 9 212 1,642 31 9 1,77 926 31 6 72 333 46 72 101 704 31 6 158 754 31 6 158 754 32 9 158 754 <!--</th--><th>3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 13 21 895 447 13 21 100 531 14 2 363 447 13 22 103 447 34 2 103 531 34 2 103 531 34 2 148 815 34 2 148 815 34 2 148 815 35 12 331 926 31 9 1177 926 31 9 1177 926 31 9 1177 926 31 9 1177 926 31 6 1177 926 31 9 1101 704 31</th><th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 895 447 - 10 187 2,204 13 21 103 447 - 33 100 531 34 2 103 447 35 33 100 531 35 12 764 363 35 12 391 4,032 35 12 391 4,032 35 12 391 4,032 31 9 177 926 31 9 177 926 31 9 177 926 31 9 177 926 31 6 177 926 31 6 101 764 31<th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 33 100 531 14 2 76 363 34 2 103 447 35 12 100 531 35 12 148 815 35 12 148 815 35 12 148 815 35 12 144 1642 31 0 11 704 31 0 177 926 31 0 177 926 31 0 177 926 31 0 147 764 31 0 147 764 31</th><th>3 7 104 759 35 7 214 895 35 10 895 895 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 34 2 103 447 34 2 103 447 35 12 100 531 35 12 391 4,032 35 12 391 4,032 31 0 177 926 31 0 1177 926 31 0 1177 926 31 0 112 754 31 0 112 754 31 0 112 754 31 0 120 550 31 0 120 550 31</th><th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 14 2 76 363 34 2 103 447 35 12 764 363 35 12 764 363 35 12 764 764 35 12 764 764 35 12 764 764 31 6 177 926 31 6 177 926 31 6 177 926 31 6 177 926 31 6 120 529 31 6 764 529 31</th><th>3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 10 187 2,204 13 21 103 447 34 2 103 447 35 12 100 531 35 12 212 1,642 35 12 231 4,032 35 12 231 4,032 35 12 333 4,032 35 12 346 764 31 2 14 704 31 2 14 704 31 2 11 704 31 2 11 704 31 31 11 71 31</th><th>37104759357214895357214895-101872,204-101872,2041323447-31005311423447132103447342103447351276436334214881535122314,03235122314,0323102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,64231021321431021421431021521631021621631021621631021621631021621631021621631021621631021621631021621631</th></th></th>	3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 13 2 103 447 13 2 103 447 - 10 187 2,204 13 2 103 447 - 3 100 531 34 2 76 363 34 2 148 815 35 12 764 363 35 12 391 4,032 35 12 391 4,032 35 12 391 4,032 35 9 212 1,642 31 9 1,77 926 31 6 72 333 46 72 101 704 31 6 158 754 31 6 158 754 32 9 158 754 </th <th>3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 13 21 895 447 13 21 100 531 14 2 363 447 13 22 103 447 34 2 103 531 34 2 103 531 34 2 148 815 34 2 148 815 34 2 148 815 35 12 331 926 31 9 1177 926 31 9 1177 926 31 9 1177 926 31 9 1177 926 31 6 1177 926 31 9 1101 704 31</th> <th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 895 447 - 10 187 2,204 13 21 103 447 - 33 100 531 34 2 103 447 35 33 100 531 35 12 764 363 35 12 391 4,032 35 12 391 4,032 35 12 391 4,032 31 9 177 926 31 9 177 926 31 9 177 926 31 9 177 926 31 6 177 926 31 6 101 764 31<th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 33 100 531 14 2 76 363 34 2 103 447 35 12 100 531 35 12 148 815 35 12 148 815 35 12 148 815 35 12 144 1642 31 0 11 704 31 0 177 926 31 0 177 926 31 0 177 926 31 0 147 764 31 0 147 764 31</th><th>3 7 104 759 35 7 214 895 35 10 895 895 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 34 2 103 447 34 2 103 447 35 12 100 531 35 12 391 4,032 35 12 391 4,032 31 0 177 926 31 0 1177 926 31 0 1177 926 31 0 112 754 31 0 112 754 31 0 112 754 31 0 120 550 31 0 120 550 31</th><th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 14 2 76 363 34 2 103 447 35 12 764 363 35 12 764 363 35 12 764 764 35 12 764 764 35 12 764 764 31 6 177 926 31 6 177 926 31 6 177 926 31 6 177 926 31 6 120 529 31 6 764 529 31</th><th>3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 10 187 2,204 13 21 103 447 34 2 103 447 35 12 100 531 35 12 212 1,642 35 12 231 4,032 35 12 231 4,032 35 12 333 4,032 35 12 346 764 31 2 14 704 31 2 14 704 31 2 11 704 31 2 11 704 31 31 11 71 31</th><th>37104759357214895357214895-101872,204-101872,2041323447-31005311423447132103447342103447351276436334214881535122314,03235122314,0323102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,64231021321431021421431021521631021621631021621631021621631021621631021621631021621631021621631021621631</th></th>	3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 13 21 895 447 13 21 100 531 14 2 363 447 13 22 103 447 34 2 103 531 34 2 103 531 34 2 148 815 34 2 148 815 34 2 148 815 35 12 331 926 31 9 1177 926 31 9 1177 926 31 9 1177 926 31 9 1177 926 31 6 1177 926 31 9 1101 704 31	3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 895 447 - 10 187 2,204 13 21 103 447 - 33 100 531 34 2 103 447 35 33 100 531 35 12 764 363 35 12 391 4,032 35 12 391 4,032 35 12 391 4,032 31 9 177 926 31 9 177 926 31 9 177 926 31 9 177 926 31 6 177 926 31 6 101 764 31 <th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 33 100 531 14 2 76 363 34 2 103 447 35 12 100 531 35 12 148 815 35 12 148 815 35 12 148 815 35 12 144 1642 31 0 11 704 31 0 177 926 31 0 177 926 31 0 177 926 31 0 147 764 31 0 147 764 31</th> <th>3 7 104 759 35 7 214 895 35 10 895 895 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 34 2 103 447 34 2 103 447 35 12 100 531 35 12 391 4,032 35 12 391 4,032 31 0 177 926 31 0 1177 926 31 0 1177 926 31 0 112 754 31 0 112 754 31 0 112 754 31 0 120 550 31 0 120 550 31</th> <th>3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 14 2 76 363 34 2 103 447 35 12 764 363 35 12 764 363 35 12 764 764 35 12 764 764 35 12 764 764 31 6 177 926 31 6 177 926 31 6 177 926 31 6 177 926 31 6 120 529 31 6 764 529 31</th> <th>3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 10 187 2,204 13 21 103 447 34 2 103 447 35 12 100 531 35 12 212 1,642 35 12 231 4,032 35 12 231 4,032 35 12 333 4,032 35 12 346 764 31 2 14 704 31 2 14 704 31 2 11 704 31 2 11 704 31 31 11 71 31</th> <th>37104759357214895357214895-101872,204-101872,2041323447-31005311423447132103447342103447351276436334214881535122314,03235122314,0323102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,64231021321431021421431021521631021621631021621631021621631021621631021621631021621631021621631021621631</th>	3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 33 100 531 14 2 76 363 34 2 103 447 35 12 100 531 35 12 148 815 35 12 148 815 35 12 148 815 35 12 144 1642 31 0 11 704 31 0 177 926 31 0 177 926 31 0 177 926 31 0 147 764 31 0 147 764 31	3 7 104 759 35 7 214 895 35 10 895 895 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 34 2 103 447 34 2 103 447 35 12 100 531 35 12 391 4,032 35 12 391 4,032 31 0 177 926 31 0 1177 926 31 0 1177 926 31 0 112 754 31 0 112 754 31 0 112 754 31 0 120 550 31 0 120 550 31	3 7 104 759 35 7 214 895 - 10 187 2,204 - 10 187 2,204 - 10 187 2,204 13 21 100 531 - 33 100 531 14 2 76 363 34 2 103 447 35 12 764 363 35 12 764 363 35 12 764 764 35 12 764 764 35 12 764 764 31 6 177 926 31 6 177 926 31 6 177 926 31 6 177 926 31 6 120 529 31 6 764 529 31	3 7 104 759 35 7 214 895 35 7 214 895 - 10 187 2,204 - 10 187 2,204 13 21 103 447 - 10 187 2,204 13 21 103 447 34 2 103 447 35 12 100 531 35 12 212 1,642 35 12 231 4,032 35 12 231 4,032 35 12 333 4,032 35 12 346 764 31 2 14 704 31 2 14 704 31 2 11 704 31 2 11 704 31 31 11 71 31	37104759357214895357214895-101872,204-101872,2041323447-31005311423447132103447342103447351276436334214881535122314,03235122314,0323102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,6423102121,64231021321431021421431021521631021621631021621631021621631021621631021621631021621631021621631021621631
3 / 10 [,] 35 7 21, - 10 18 [,] 13 2 10	3 / 10/ 35 7 21/ - 10 18 13 2 10 13 2 10 - 3 10	3 7 10 35 7 21 35 7 21 - 10 18 13 2 10 13 2 10 13 2 10 13 2 7 13 2 7 14 2 7 34 5 14 35 12 39	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
- 35 7 10 - 13 2	 35 35 35 10 13 2 13 2 13 2 14 2 	 35 35 10 13 13 14 36 34 5 84 35 12 	 35 35 10 13 13 13 14 35 34 5 35 9 31 33 34 35 35 36 31 35 35 36 31 36 31 35 36 37 38 38 31 31 31 32 33 34 35 35 36 37 38 38 39 31 32 33 34 35 35 36 37 38 38 39 31 31<	 35 35 10 13 13 13 13 14 2 14 3 14 3 34 35 34 35 36 31 9 31 9 31 9 31 9 31 32 33 34 35 35 36 37 37 38 36 37 37 38 38 39 30 30 40 41 41	 35 35 10 135 13 135 14 14 14 14 14 14 14 14 15 36 31 9 15 9 16 16 16 17 16 16 16 16 16 17 16 16 16 17 16 16 16 17 16 <	 35 35 10 13 13 14 12 14 14 15 34 35 34 36 3	 35 35 10 13 13 14 15 36 31 9 16 17 16 16 17 18 16 17 18 16 17 18 18 19 19 19 10 10 10 11 11 11 12 14 15 16 16 17 18 18 19 19 19 10 <l< td=""><td> 35 35 10 13 14 14 14 14 14 14 14 14 35 34 31 <</td><td> 35 35 10 13 14 14 14 14 14 14 14 14 15 16 </td><td> 35 35 10 13 14 14 14 14 14 14 14 35 34 35 31 <</td><td> 35 35 10 13 14 15 15 16 16 16 16 16 16 16 16 16 11 67 11 <</td><td> 35 35 10 13 13 13 14 14 14 14 14 14 14 14 14 15 11 <</td></l<>	 35 35 10 13 14 14 14 14 14 14 14 14 35 34 31 <	 35 35 10 13 14 14 14 14 14 14 14 14 15 16 	 35 35 10 13 14 14 14 14 14 14 14 35 34 35 31 <	 35 35 10 13 14 15 15 16 16 16 16 16 16 16 16 16 11 67 11 <	 35 35 10 13 13 13 14 14 14 14 14 14 14 14 14 15 11 <
- 3 3		3 3 3 - 1 - 1 - 3 3 8 - 8 -	3 3 3 - 1 - 1 - 3 36 2 84 - -	3 3 1 - - - 1 1 1 - 2 84 1 - 1 - 36 - 37 - 38 - 1 - 1 - 1 - 38 - 1 - 1 - 30 -	3 3 1 - 1 1 1 1 1 1 1 3 3 3 3 3 3 3 1 1 1 1 1 3 3	3 3 1 - 1 - 1 1 1 1 1 1 1 1 1 1 1 36 1 1 1 1 1 1 1 36 1 1 <td< td=""><td>3 3 . 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 1 1 1 1 </td><td>3 3 . 1 . . . 1 1 . . 2 84 . . 1 1 1 1 1 1 1 1 1 1 </td><td>3 3 -</td><td>3 3 . 1 . . . 1 1 . . 3 33 . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 1 1 1 1 </td><td>3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 </td><td>3 3 1 1 1</td></td<>	3 3 . 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 1 1 1 1 	3 3 . 1 . . . 1 1 . . 2 84 . . 1 1 1 1 1 1 1 1 1 1 	3 3 -	3 3 . 1 . . . 1 1 . . 3 33 . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 . . . 1 1 1 1 1 1 	3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 1 1 1
2 3 3 1 3 3	n m	7 m m m	·					7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	t 5			0 1
0 148 0 80	0 148 0 148 0 80 2 132 5 72	0 148 0 148 0 80 2 132 5 72 4 106 1 334	0 148 0 148 2 132 5 72 6 72 1 334 3 176 9 178	0 148 0 148 2 132 5 72 6 72 1 334 1 334 3 176 9 178 6 92 6 92	0 148 0 148 2 132 6 72 1 334 1 334 3 176 9 178 9 178 6 92 6 92 5 120 3 164	0 148 0 148 2 132 5 72 4 106 3 176 9 178 6 92 6 92 8 164 164 164	0 148 0 148 2 132 5 72 4 106 3 176 9 178 6 92 6 92 5 120 3 164 4 168 1 76	0 148 0 148 2 132 6 72 8 176 9 178 9 178 9 178 9 178 9 178 9 178 1 334 1 164 1 164 1 76 1 76 8 74	0 148 0 148 5 72 6 72 1 334 1 334 9 176 9 178 6 92 6 92 7 164 1 76 8 164 1 76 8 164 1 76 8 74 8 74	0 148 0 148 5 72 6 72 8 176 9 178 9 178 6 92 6 92 7 164 1 76 1 76 1 76 1 76 1 76 1 76 1 76 1 76 1 76 1 76 2 84 3 74 3 96	0 148 0 148 5 132 6 72 7 334 1 334 3 176 9 178 9 178 9 178 1 334 1 334 1 106 1 178 1 76 1 76 1 76 1 76 1 76 1 76 8 74 9 74 9 96 100 96	0 148 0 148 5 72 6 72 7 334 1 334 1 334 1 334 1 334 2 92 6 92 7 164 1 76 8 74 164 168 1 76 8 74 8 74 9 96 1 80
2 80 40	2 80 2 40 0 72 0 36	2 80 2 40 0 72 0 36 4 54 0 171	2 80 2 40 3 72 36 36 36 36 36 36 36 36 36 36 36 36 36	2 80 2 40 2 72 3 54 4 54 171 8 93 8 93 2 32 46	2 80 2 40 2 72 4 54 2 171 8 93 8 93 8 93 8 33 8 34 8 36 8 36	2 80 3 40 4 40 3 72 3 93 3 93 3 93 3 93 8 83 8 8 8 8	2 80 0 72 0 36 171 171 0 171 0 89 0 89 2 32 2 32 2 33 3 93 3	2 80 0 72 0 72 0 36 0 171 0 171 0 89 0 89 2 46 2 32 2 33 3 93 3 93 9 89 8 83 9 41 9 41	2 80 2 40 3 72 4 72 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 32 3 32 3 32 3 32 46 33 5 36 6 84 9 41 9 42 9 42 9 42	2 80 2 40 3 72 3 <td>2 80 2 40 3 72 4 54 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 33 3 33 3 33 3 33 3 33 4 33 4 33 5<td>2 80 2 40 3 72 4 72 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3</td></td>	2 80 2 40 3 72 4 54 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 33 3 33 3 33 3 33 3 33 4 33 4 33 5 <td>2 80 2 40 3 72 4 72 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3</td>	2 80 2 40 3 72 4 72 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 36 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 32 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3 33 3
82	-02 82 170 100	202 82 170 100 184 270	202 82 170 100 184 270 208 180	202 82 170 100 184 270 208 180 82 82 102	202 82 82 170 184 270 208 180 82 82 102 202	202 82 82 170 184 270 270 208 180 82 82 248 248 80	202 82 82 170 184 270 270 208 180 82 202 248 248 80 80	202 82 170 120 184 270 270 208 180 82 202 248 248 80 80 60	202 202 82 170 184 270 270 270 288 208 248 248 248 248 248 80 248 80 248 80 260	202 202 82 170 184 270 270 208 180 82 202 248 202 248 80 80 60 80 80 80	202 202 82 170 184 270 270 208 180 202 202 248 80 80 60 80 80 80 80 80 80	202 202 82 170 184 270 270 270 208 180 248 248 248 248 248 248 202 248 248 80 80 80 132 132 132 132 132 132 133 133 133 133
C	0 0 10	0 2 1 8	0 0 1 1 0 0	o 6 7 11 8 14 0 7 0	ο ο τ 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 6 7 11 81 6 7 9 1 4 4 7 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	0 6 7 11 8 1 6 9 1 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	o 6 5 1 8 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	o 6 11 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 6 9 1 8 1 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	o 9 111 111 111 111 112 112 112 112 112 11	0 0 1 1 2 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0
	' M	' m 4 '	, w 4 , 84	24 - 4 - 24 - 4	- 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4		- w 4 - 8 4 - 4					
										w 4 , 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	w 4 , 22 4	ω 4 , 48 42 4 , 4 ,
11	16	16 35 129	16 35 129 46 27	16 35 129 46 27 12 27 27	16 35 35 129 46 46 27 27 27 35 35	16 35 35 46 46 129 12 27 27 35 35 35	16 35 35 46 46 129 12 27 27 27 35 35 35 34	16 35 35 46 27 27 27 35 35 35 34 114	16 35 35 46 27 27 35 35 34 114 114	16 3 35 4 35 4 129 - 129 24 27 24 27 24 27 24 35 4 35 4 35 4 35 4 35 4 114 - 114 - 114 - 114 - 110 8	16 3 16 3 35 4 35 4 129 - 46 84 27 24 27 24 35 4 35 4 35 - 35 - 36 - 11 - 11 - 11 - 10 8 10 8 10 8	16 3 16 3 35 4 35 4 129 - 46 84 27 24 12 24 35 4 35 4 35 - 35 - 36 - 114 - 113 - 114 - 110 8 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 - 113 -
229 11	188 16	188 16 485 35 3,344 129	188 16 485 35 3,344 129 1,174 46 544 27	188 16 485 35 485 35 3,344 129 1,174 46 544 27 185 12 480 27	188 16 485 35 485 35 3,344 129 1,174 46 1,174 46 544 27 185 12 480 27 480 27 480 27 480 27 480 27 480 27 480 27 480 27	188 16 485 35 485 35 3,344 129 1,174 46 1,174 46 544 27 185 12 480 27 480 27 480 27 480 27 480 27 480 27 480 27 480 27 480 27 480 27 480 27 483 27 437 27 332 16	188 16 485 35 485 35 3,344 129 1,174 46 1,174 46 544 27 185 12 480 27 480 27 480 27 480 27 480 27 483 27 433 27 333 16 333 34	188 16 485 35 485 35 3,344 129 1,174 46 544 27 544 27 480 27 480 27 480 27 480 27 480 27 481 27 437 27 437 27 332 16 333 34 12,509 114	188 16 485 35 485 35 3,344 129 1,174 46 544 27 185 12 480 27 480 27 480 27 480 27 480 27 483 35 437 27 332 16 333 34 12,509 114 455 14	188 16 3 485 35 4 485 35 4 485 35 4 3,344 129 - 1,174 46 84 1,174 46 84 544 27 24 185 12 24 480 27 24 480 27 24 480 27 24 437 27 27 437 27 27 332 16 27 333 34 27 333 34 27 333 34 27 12,509 114 27 455 14 27 132 34 27 133 34 27 135 14 27 135 14 27 132 34 27 133	188 16 3 485 35 4 485 35 4 485 35 4 3,344 129 - 6 3,344 129 - 6 1,174 46 84 7 1,174 46 84 7 1,174 27 24 7 480 27 24 7 480 27 24 7 437 27 7 7 437 27 7 7 437 27 7 7 333 16 7 7 12,509 114 7 7 132 114 7 7 132 114 7 7 132 114 7 7 133 114 7 7 133 114 7 7 133	188 16 3 485 35 3 485 35 4 485 35 4 3,344 129 - 1,174 46 84 1,174 46 84 1,174 46 84 1,174 27 24 185 12 24 186 27 24 480 27 24 480 27 24 437 27 4 438 35 4 437 27 - 433 27 - 332 116 - 132 114 - 132 10 8 132 10 8 135 20 - 135 20 - 135 20 - 135 10 - 344 13
	5 229 11 2 188 16	5 229 11 2 188 16 6 485 35 24 3,344 129	5 229 11 2 188 16 2 188 16 6 485 35 24 3,344 129 14 1,174 46 12 544 27	5 229 11 2 188 16 2 188 16 6 485 35 24 3,344 129 14 1,174 46 12 544 27 12 544 27 12 185 12 13 146 27 14 1,174 27 15 544 27 16 480 27	5 229 11 2 188 16 6 485 35 24 3,344 129 24 3,344 129 14 1,174 46 12 544 27 12 544 27 10 480 27 11 480 27 12 185 12 10 480 27 10 480 27 10 480 27 11 480 27	5 229 11 2 188 16 6 485 35 24 3,344 129 24 3,344 129 14 1,174 46 12 544 27 12 544 27 12 185 12 12 544 27 13 480 27 10 480 27 10 480 27 11 480 27 12 185 12 13 437 27 14 332 16	5 229 11 2 188 16 6 485 35 24 3,344 129 24 3,344 129 14 1,174 46 12 544 27 12 544 27 10 480 27 10 480 27 11 440 27 12 185 12 13 443 27 14 443 27 15 437 27 16 333 16 17 437 27 18 333 16 18 333 34	5 229 11 2 188 16 2 188 16 6 485 35 1 3,344 129 24 3,344 129 14 1,174 46 12 544 27 12 544 27 10 480 27 11 480 27 12 148 27 13 443 27 14 437 27 15 437 27 16 332 16 16 333 34 17 333 34 12,509 114 14	5 229 11 2 188 16 6 485 35 24 3,344 129 14 1,174 46 12 544 27 12 544 27 12 1480 27 11 480 27 10 480 27 11 440 27 12 437 27 13 437 27 14 332 16 15 333 34 16 12,509 114 42 12,509 114 43 455 14		522911 $-$ 2188163218816323,344129 $-$ 243,344129 $-$ 241,17446 84 111,17446 84 12544272412544272410480274104802741148027 $-$ 1243727 $-$ 13332116 $-$ 1412,509114 $-$ 445514 $-$ 413210 8 413210 8 413210 8 413210 8 413210 8	5 229 11 - 2 188 16 3 6 485 35 4 7 3,344 159 4 24 3,344 129 - 24 3,344 129 - 14 1,174 46 84 12 544 27 24 12 185 129 4 12 480 27 24 10 480 27 4 11 480 27 4 12 437 27 4 13 332 116 - 14 12509 114 - 12,509 114 - - 13 132 14 - 13 132 14 - 13 13 10 - 14 132 14 - 15 11

Muzaffar Ghar	6	460	31	I	14	262	77	142	-	36	24	4	160	006
Nankana Sahib	m	124	22	I	7	168	51	98	-	I	12	9	102	390
Narowal	2	80	15	20	7	140	57	112	-	I	2	4	88	352
Okara	4	411	28	42	10	200	96	192	-	I	I	12	151	845
Pakpatten	Ŝ	145	14	I	4	80	53	106	-	I	00	2	87	331
Rahim Yar Khan	1	1,100	62	1	19	372	106	208	ω	36	I	8	209	1,716
Rajanpur	5	261	11	1	9	120	32	64	I	I	17	2	73	445
Rawalpindi	17	3,576	87	24	13	206	103	196	2	I	I	49	271	4,002
Sahiwal	∞	827	24	4	11	202	77	150	I	I	18	00	146	1,183
Sargodha	16	1,236	51	64	16	320	120	240	-	100	31	19	254	1,960
Sheikhupura	10	647	49	30	11	220	80	158	-	40	18	15	184	1,095
Sialkot	13	966	35	10	7	140	88	176	2	11	16	14	175	1,335
T.T.Singh	4	400	25	1	7	122	69	132	-	1	20	Μ	129	654
Vehari	4	270	37	1	11	202	78	154	I	I	23	7	160	626

S
2
0
•
+
σ
•
>
Ū.
Š.
9
9
4

Abbre	viations		Sources
HOSP	Hospitals	-	Health Department, Government of the Punjab.
RHC	Rural Health Center	2	Home Department (I.G. Prisons), Government of the Punjab.
BHU	Basic Health Unit	ŝ	Auqaf Department, Government of the Punjab.
DISP	Dispensary	4	Punjab Employee's Social Security Institutions.
MCH	Mother & Child Health Center	Ŋ	Pakistan Railways
TBC	TB Clinic	9	Director General Medical Services, WAPDA.
LC	Leprosy Center		

Source: Punjab Development Statistics 2010.

