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REPORT ON THE STATUS OF MILLENNIUM DEVELOPMENT GOALS SINDH



OCTOBER 2012



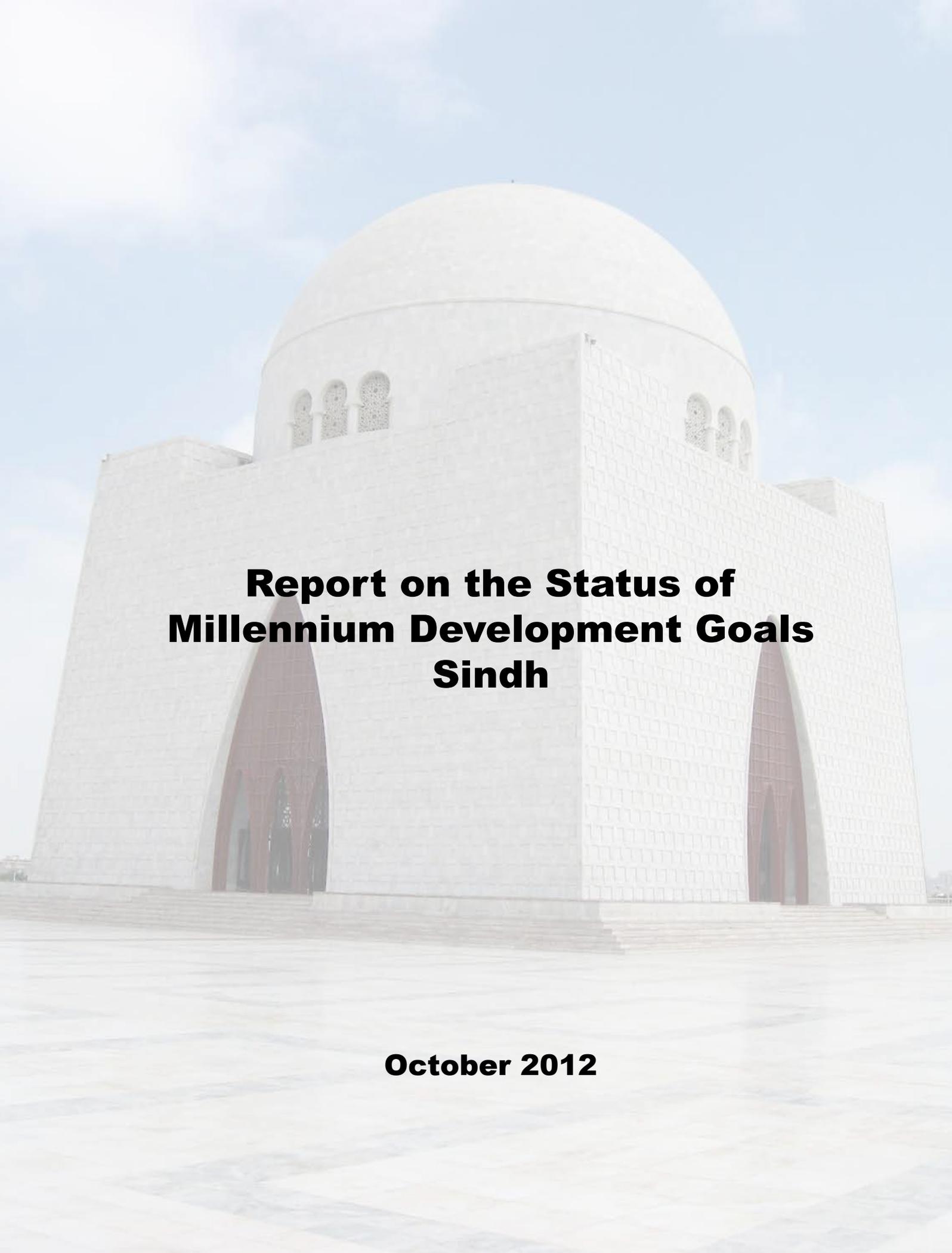
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**Report on the Status of
Millennium Development Goals
Sindh**

October 2012

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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
PBS	Pakistan Bureau of Statistics
GER	Gross Enrolment Rate
GPI	Gender Parity Index
GRAP	Gender Reform Action Plan
HIES	Household Income and Expenditure Survey
IBBS	Integrated Behavioral and Biological Surveillance
ILO	International Labor Organization
IMR	Infant Mortality Rate
LFS	Labor Force Survey
LHW	Lady Health Worker
MDG	Millennium Development Goal
MNCH	Maternal, Newborn and Child Health Project
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
PSLM	Pakistan Social and Living Standards Measurement Survey
RHC	Rural Health Center
SBI	Sindh Board of Investment
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 a contraceptive method
Full Immunization Rate	Proportion of children from 12 to 23 months of age who are fully vaccinated against the Expanded Program of Immunization (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 official 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

Foreword

In the year 2000, Pakistan along with other UN member states committed itself towards attaining the targets embodied in the Millennium Declaration by 2015. The Sindh Millennium Development Goals (MDGs) Report 2011 is a comprehensive report with an in-depth analysis of the progress towards MDGs at the provincial level. The MDGs Report provides valuable insight to policymakers and practitioners and even to the public at large about the current status of the Government of Sindh in its commitment to achieve these goals by 2015.

The Government of Sindh has already initiated various development programmes with a view to enhancing the progress towards human development in particular, and to eradicate poverty by providing decent employment opportunities for the people. It is worth mentioning that the Province has shown good performance in terms of improving education, promoting gender equality, women's empowerment and access to improved water sources. However, as pointed out in the report, the performance is not that satisfactory with regard to other indicators. This being said, there are signs of improvement as the Government of Sindh has shown a keen interest in addressing the lags, reflected in their Annual Development Plans. Keeping in view the 2015 deadline for the MDGs, I believe that there is a need to accelerate our efforts to improve the human development indicators in all dimensions.

I am sure that the Sindh MDGs Report is a valuable contribution towards improving our understanding about progress towards different aspects of human development. This will also further pave the way for deeper research into these areas and help identify factors that deter the province's performance on MDG related development indicators. Let me congratulate the United Nations Development Programme (UNDP) and the UN system in Pakistan for their continued support to the Government of Sindh in its effort to alleviate poverty and hunger through various initiatives. I also acknowledge the contribution of the Government of Sindh through providing data and comments which helped finalize this report.

Let me also point out that in the backdrop of devastating floods which inflicted considerable damage to infrastructure and loss of lives, the MDG related achievements of the Government of Sindh become even more significant. Without the occurrence of these natural calamities, we would have progressed further. I am quite satisfied with the current efforts of the Government of Sindh to achieve the MDGs and would stress that we need to further accelerate our efforts with a focused approach to achieve these targets by 2015.

Syed Qaim Ali Shah
Chief Minister
Sindh

Executive Summary

The tracking of the performance of Sindh on achievements on the Millennium Development Goals (MDGs) is important due to its status as a province housing the commercial capital of the country. As discussed in this report, the available datasets suggest that in general, the current rate of progress is insufficient for the province to be able to achieve MDGs in their entirety, by 2015, since progress within various goals shows wide discrepancies. Some targets under different MDGs are likely to be achieved, if the province continues to show good performance. In particular, few districts with exceptional performance are on track for achieving targets for education under MDG 3 for Promoting Gender Equality and Women's Empowerment, and access to safe drinking water indicator under MDG 7 for environmental sustainability. But the province lags behind on other indicators and goals, which also has an impact on national indicators. In fact, the achievements made so far are already at risk of being undone due to the declining economic and security situation of the country post-2007, and in the aftermath of the devastating floods of 2010. Moreover, within indicators for all MDGs, there are large variances amongst districts and along the urban/rural and where relevant, gender divide.

MDG 1: Eradication of Extreme Hunger and Poverty

On MDG 1, targets are unlikely to be met or improve significantly until 2015 at the current rate of progress. The performance of the province on the indicator of headcount index for poverty incidence, which must be brought down to 13 percent (nationally), stood at 31 percent in 2001/02, which was 2 percentage points higher than the national average. By 2005/06, the poverty incidence across three agro climatic zones ranged between 19 percent and 26 percent, compared to a national average of 22.3 percent against the national MDG target of 13 percent. Despite lack of access to more recent data, the chances for the province in achieving targets for this indicator are limited.

Further, until 2004/05, the proportion of under-weight children, under 5 years of age, was record-

ed at about 40 percent in the province, which was again 2 percentage points above national level, and twice the level that must be reached nationally (<20 percent) for the achievement of this target. Although the provincial data for subsequent period is not available, according to the progress at national level, this indicator has only declined from 41.5 percent in 2001/02 to 38 percent in 2004/05, followed by stagnation around this figure until 2008/09. Therefore, it seems unlikely that the province's performance has improved over the past few years. The third indicator of caloric poverty is also considerably higher than the MDG target, at 40 percent. Even with the exclusion of an extreme case district (Tharparkar at highest 72.4 percent), the rate falls to only 38 percent. The lowest estimated caloric poverty incidence, in case of Nawabshah, at 32 percent, was also higher than the MDG target of 13 percent.

MDG 2: Achieving Universal Primary Education

The targets on MDG 2 are also unlikely to be met at the current rate of progress. The Net Primary Enrolment Ratio stood at 53 percent in 2010/11 which is 3 percentage points below the national average, and about half the MDG target of 100 percent enrolment. This indicator only increased by 13 percentage points between 2001/02 and 2010/11. On the other hand, the literacy rate in the province is 1 percentage point higher than the national average at 59 percent, but still significantly behind the national target of 88 percent. Completion/survival rates from Grade 1 to 5 stood at 41 percent in 2010/11 which is 59 percentage points behind the target for 2015. On all indicators, under this MDG, achievements varied significantly across districts and rural/urban divides. Gender disparity was also evident across the province, which was more pronounced in rural than urban areas.

MDG 3: Promoting Gender Equality and Women Empowerment

In contrast, on MDG 3, the educational targets are likely to be achieved in certain districts and maybe achieved at the provincial level if the performance is maintained in the aftermath of the floods. The Gender Parity Index (GPI) for primary education was

0.77 for Sindh in 2010/11, which was 6 percentage points below the national level of 0.83. There were large variations recorded in the achievements based on gender and the rural/urban divide. However, district-wise performance varied exceptionally with Hyderabad approaching closer to the MDG target at 0.97, and Kashmore lagging far behind at 0.48 in 2010/11. The GPI for adult literacy was recorded at 0.61 for Sindh, which was 2 percentage points below the national average of 0.63, with the extreme variations in district wise performance.

On the indicator of the share of women in wage employment in the non-agricultural sector, the performance of Sindh was recorded as poor. Female labor force participation (including the agricultural sector) was officially recorded at just 15.9 percent compared to 70.3 percent for males in 2011. The national average for females labor force participation has increased by 7.3 percentage points between 2002 and 2011.

MDG 4: Reducing Child Mortality

The achievement of reduction in infant mortality rate is unlikely to be met. Estimates from 2010/11 suggest that 75 percent of children from 12 to 23 months of age have been fully immunized. This estimate has improved by 30 percentage points since 2001/02. However, it is still below the national average by 6 percentage points, and quite distant from achieving the MDG target of over 90 percent, despite some districts meeting the MDG target with 100 percent coverage in urban areas. For the indicator of proportion of children between the ages of 12-23 months immunized against measles, in 2010/11 the rate stood at 77 for Sindh, which was 10 percentage points below the national average. With regard to the indicator of proportion of children under 5 years of age, who suffered from diarrhoea in last 30 days, Sindh recorded a rate of 12 in 2010/11, against the national MDG target of less than 10.

There are issues related with the availability of latest data on other indicators under this MDG, which makes it difficult to assess the ability of the province in achieving MDG targets on these indicators. The

infant mortality rate was recorded at 71 deaths per 1000 live births in 2003/04, which is a substantial decline from the 110 recorded in 1996, but it is unclear whether this progress was maintained for the period following 2003/04. The target for bringing Under 5 Mortality to 52 per 1000 live births seems unlikely to be met by 2015, as it was last recorded at 100 in 2006/07 for Sindh, reduced from 112 in 2003/04. Likewise, the province recorded access to LHW by only 46 percent of its targeted population in May 2010, which is lower than the national rate of 83 percent, and far from the MDG target of 100 percent. Like other MDGs, extreme variations in the achievements on different indicators under MDG 4 were displayed across the urban/rural divides and between districts in Sindh.

MDG 5: Improving Maternal Health

On MDG 5, targets are not expected to be met by 2015. The Maternal Mortality Ratio which must be brought down to 140 maternal deaths per 100,000 live births, stood between 345 and 350 in 2008/09. Although this is a significant decline from 600 maternal deaths per 100,000 live births, recorded in 2003/04, the 2010 floods are expected to have adversely affected the performance on this indicator. According to the available data, a few indicators show reversal of progress, which is worrisome. This includes the contraceptive prevalence rate that has reduced to 22 percent in 2006/07 from 31 percent in 2003/04, and the total fertility rate (the mean of total children born per adult female) that has increased from 5.10 in 1991 to 5.25 in 2003/04 which is more than twice the target of 2.1. On the other hand, the remaining two indicators of maternal health, skilled birth attendants and antenatal care coverage have recently shown some improvement. The proportion of births attended by Skilled Birth Attendants in the province has increased from 38 in 2004/05 to 49 in 2010/11, and ante-natal care coverage has increased to 58 percent in 2010/11 from 41 percent in 2004/05. However, both of these indicators are still far from the MDG targets, raising questions on whether the respective goals of over 90 percent and 100 percent coverage can be attained in time by the province.

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

The available data on MDG 6 is generally based on small samples, which is not comprehensive enough to make a definitive statement on the progress of the province. Nonetheless, the data indicates relatively high incidence of HIV amongst injecting drug users in four selected districts, varying evidence on use of mosquito nets to guard against malaria, and relatively high incidence of Hepatitis B (at close to 3 percent) and Hepatitis C (at just over 5 percent). Moreover, case detection rates for tuberculosis were estimated at an average of 74 percent, while the treatment success rates were relatively high at 88 percent.

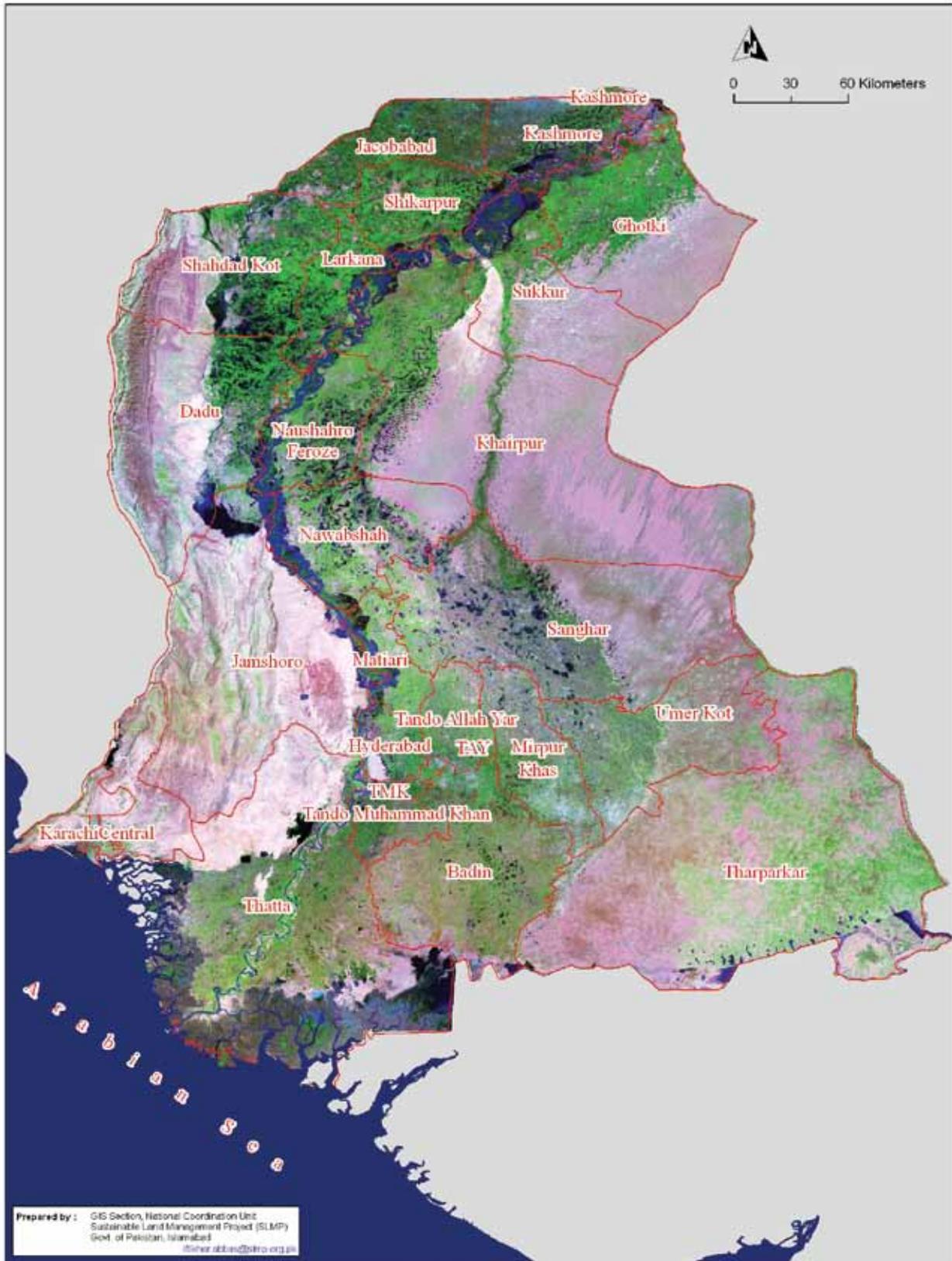
MDG 7: Ensuring Environmental Sustainability

Existing data on indicator for access to safe drinking water sources suggests that the target may be achieved by 2015, if the rate of progress is maintained. According to figures for 2010/11, 93 percent of the overall population in the province had access to an improved source of drinking water, which is on target. However, the situation in the aftermath of floods is yet to be evaluated to determine if the progress has continued.

On the other hand, on proper sanitation facilities (underground, covered or open drains), only about 55 percent of the population in Sindh had access in 2007/08, compared to 49 percent in 2001/02. Also, there existed sharp variations between urban/rural divides. For instance, by 2008, only 6 percent of the urban population was deprived of access to any type of sanitation facility, compared to 85 percent of the rural population in Sindh that had no drainage system.

Data on other indicators of MDG 7 is inadequate or not available to make an assessment.

Map of Sindh



Chapter 1

Introduction

The Province: An Overview

Medium Term Development Strategy

Chapter-1

Introduction

The province of Sindh takes its name from the local name of the river Indus, whose waters have supported the lives of the region's inhabitants for ages. The river bisects the province before flowing into the Arabian Sea in the south. Sindh has been the cradle of the Indus Valley Civilization which dates 5000 years in the past. The ruins of the ancient city of Moenjodaro¹ bear testimony to the sophistication of the Indus Valley Civilization which flourished from about 2500 to 1500 BC. Pakistan's largest city, Karachi, which is also a commercial center and hosts the main seaport of the country,² is located in Sindh. The city has attracted people from all over Pakistan, and the bulk of migrants from India at the time of Independence in 1947.

Sindh is a region of contrasts. On the one hand, Karachi, a bustling metropolis of over 13 million people,³ is said to generate 20 percent of Pakistan's GDP.⁴ On the other hand, the district of Tharparkar, which borders the Indian states of Rajasthan and Gujarat, is amongst the poorest districts of Pakistan with social indicators that fall, in general, far below the national averages.

Sindh is also characterized by its ethnic diversity, not only in Karachi, which is said to be a microcosm of Pakistan, but in all urban settlements of the province. Historically, this diversity was reflected in its culture, contributing to its tolerant and broad-minded environment, especially in the rural areas. But more recently Sindh's changing ethnic mix has been one of the factors behind the violence that has plagued its urban centers, particularly Karachi, for the last three decades.

More recently, Sindh has been the most severely affected province in the devastating floods that hit Pakistan in July/August 2010, as explained in more detail in the subsequent section. This has implications for the overall development and progress on social indicators of the province.

Impact of the Floods

According to the joint donor/government Damage and Needs Assessment (DNA) of the floods, Sindh was the most severely affected province in Pakistan.⁵ Estimated flood damage in the province amounted to \$4.38 billion or 44 percent of the total. In terms of damages in sectors directly linked to MDGs, 18.5 percent of the pre-flood educational facilities in Sindh suffered damage (either partial or total destruction of buildings and infrastructure); while 11 percent of health facilities were similarly affected. Direct damage to housing stock was also the most significant in Sindh, with 880,000 housing units completely or partially damaged. This amounted to 55 percent of total housing stock damaged in the floods. Damage to water and sanitation infrastructure was estimated at about \$28.1 million.

In addition to the infrastructure damage, the loss of livelihoods was devastating for the province. The DNA estimated that more than 90 percent of livelihoods from agriculture were affected as a result of the floods in the flood affected areas. In addition to losses in crop agriculture, over 93,000 large animals were thought to have died in Sindh, in addition to close to 82,000 small animals, and over 6.8 million heads of poultry.

In all, 6.7 million persons in Sindh were estimated to have been affected by the floods, of which 77 percent were severely affected. As 35% out of the total number of affectees in Pakistan, estimated at just over 19 million, was from Sindh, the human cost of the tragedy was thus disproportionately high.

The Province: An Overview

Sindh shares an international border with India to the east, while the Arabian Sea lies to the south of the province. It is bordered by some of the poorest and most deprived districts of Punjab to the north, and Balochistan to the west. Like Punjab, Sindh primarily has irrigated land, but also has extensive desert areas to the east and north-west.

1 a UNESCO World Heritage Site

2 The Gwadar Port, which was officially inaugurated in 2007, is the only other seaport in Pakistan and lies in the province of Balochistan.

3 Estimate of the UN World Urbanization Prospects database (See <http://esa.un.org/unup/p2k0data.asp>).

4 According to the Asian Development Bank's final report for TA4578: Karachi Mega Cities Preparation Project. August 2005.

5 Government of Pakistan, Planning Commission; Asian Development Bank and World Bank. 2010. Pakistan Floods 2010: Preliminary Damage and Needs Assessment. November.

Population and Land Mass

The province's population according to the Government of Sindh, was estimated at 42.4 million in 2010, growing by 2.8 percent annually from 30.4 million in the 1998 census.⁶ The population growth rate varied across districts, from 1.6 percent in NausheroFeroze and Nawabshah to over 3 percent in six districts, including Karachi, Ghotki, Larkana, Tharparkar, Umerkot and Shahadatkot.

Due to considerable urbanization, population

density in a number of districts in Sindh was higher than the national average (166.3 persons per square kilometer). High density districts include Karachi, Hyderabad, Shikarpur and Naushero Feroze; all with average population densities of over 350 persons per sq. km. Urbanization rates were also over 50 percent in Hyderabad and Sukkur, while the metropolis of Karachi, is of course, almost entirely urban. The average household size in Sindh was 6 persons. The following table shows population density in Sindh, by districts.

Table 1.1 Population by District

Sno	District	Annual Growth Rate	Population 1998	Projected Population 2010	Population Density	Urban proportion	Average household size
1	Badin	2.26	1,136,044	1,485,472	168.90	16.4	5.3
2	Dadu	2.65	1,106,717	1,514,761	88.60	21.4	5.5
3	Ghotki	3.26	970,549	1,426,274	159.60	16.3	5.5
4	Hyderabad	2.02	1,494,866	1,900,317	523.90	50.8	6
5	Jacobabad	2.04	741,910	945,359	270.10	24.4	5.6
6	Khairpur	2.71	1,546,587	2,131,705	97.20	23.6	6
7	Larkana	3.14	1,002,772	1,453,208	259.60	28.9	5.9
8	MirpurKhas	2.68	905,935	1,244,306	309.70	33.1	6.1
9	Tharparkar	3.13	914,291	1,323,441	46.60	4.4	5.6
10	NausheroFeroze	1.61	1,087,571	1,317,331	369.30	17.7	5.8
11	Nawabshah	1.63	1,071,533	1,300,974	238.00	26.4	6
12	Sanghar	2.74	1,453,028	2,009,781	135.40	22.8	5.8
13	Shikarpur	2.32	880,438	1,159,378	350.50	24.1	5.9
14	Sukkur	2.88	908,373	1,277,132	175.90	50.9	6.5
15	Thatta	2.26	1,113,194	1,455,594	64.10	11.2	5.1
16	Umerkot	3.28	663,095	976,721	118.20	16.8	5.4
17	Jamshoro	2.65	582,094	796,711			
18	Kashmore	2.04	683,662	871,138			
19	Matiari	2.02	494,244	628,297			
20	Shahdadkot	3.14	924,294	1,339,478			
21	Tando Allah Yar	2.02	493,526	627,385			
22	Tando M. Khan	2.02	408,852	519,745			
23	Karachi	3.56	9,856,318	14,997,512	2,794.50	94.8	6.7
	Total Sindh	2.80	30,439,893	42,399,477	216.00	48.8	6

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

Projections were calculated on the basis of the inter-censal growth rate for the two censuses of 1981 and 1998, and do not factor in changing fertility patterns.

⁶ Government of Sindh, Development Statistics 2008. Table 2.09, Page 48.

Resource Endowments

The province is blessed with rich resource endowments that contribute to a significant proportion of national income. According to the Sindh Board of Investment (SBI), the province, which has about 23 percent of the country's population, generates about 33 percent of the national GDP.⁷ Sindh has a rich agricultural base, in addition to housing a significant proportion of the country's industry that include 54 percent of country's textile units, 45 percent of its sugar mills, and overall, a third of national capacity in large-scale manufacturing. Accordingly, Sindh generates about 70 percent of Pakistan's income tax, and 62 percent of sales tax. Moreover, the province houses about a quarter of total cultivated area in Pakistan,

as estimated cultivated land in Sindh was about 5.6 million hectares in 2006-07.⁸ About 4.3 million hectares of this was private farmland, and close to 2 million hectares was irrigated by canal. The SBI estimates that Sindh produces 30 percent of the total rice and sugarcane crop in Pakistan, and on average, a quarter of the cotton, in addition to 14 percent of wheat.

Sindh's most important mineral resource is natural gas, with an estimated value added of Rs. 91.9 million in 2005-06. Crude oil extracted in the province yielded values of Rs. 14.8 million in the same year as shown in the table below. Collectively, natural gas, coal and crude oil mining provided employment to over 24,000 people per day.

Table 1.2 Summary Statistics on Mineral Reserves

Type of Minerals	Average daily employment (Nos)	Employment Cost (Rs.)	Gross Value of Production (Rs.)	Intermediate Cost (Rs.)	Miscellaneous Cost (Rs.)	Gross Value Added (Rs.)
All Minerals	28,303	4,297,851	126,223,544	15,124,311	2,067,938	109,031,295
Ball Clay	8	240	565	50	7	508
Chalk	125	13,145	2,647	138	95	2,414
China clay	132	3,654	10,616	676	315	9,625
Coal	7,358	503,678	1,965,112	896,016	134,526	934,570
Crude Oil	6,795	1,241,842	18,858,053	3,441,910	625,550	14,790,593
Dolomite	578	24,513	22,951	3,050	1,318	18,583
Fuller's Earth	289	8,219	7,428	905	284	6,239
Granite	15	440	425	19	9	397
Lake Salt	97	6,538	4,071	467	146	3,458
Laterite	50	1,517	3,579	555	137	2,888
Lime Stone	982	56,718	1,218,166	58,675	14,880	1,144,522
Marble	358	18,258	342	38	40	265
Natural Gas	10,284	2,351,846	103,957,703	10,716,071	1,286,647	91,954,984
Shale Clay	370	13,986	151,243	3,492	2,304	145,446
Silica Sand	837	51,960	18,867	1,881	1,620	15,366
Trona	26	1,297	1,778	279	61	1,437

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

Projections were calculated on the basis of the inter-censal growth rate for the two censuses of 1981 and 1998, and do not factor in changing fertility patterns.

⁷ All information in this paragraph is from the website of the Sindh Board of Investment (<http://www.sbi.gos.pk/sindh-economy.php>).

⁸ Government of Sindh. 2008. Sindh Development Statistics, 2007-08. Page xxxiv.

Medium Term Development Strategy

Recently, the Government of Sindh (GoS) published a concept note for a proposed Priority Development Plan (2011-13), which lays out the Vision, Strategy and Priorities of the government for its remaining tenure.⁹ The note acknowledges that the National Finance Commission (NFC) award of 2010 provided greater fiscal space to the provinces, but emphasizes the need to focus on the development of a few priority sectors in the short term, to make best use of limited resources. Sindh's two year development plan thus aims to invest significant resources in water, energy, roads, education, and health, as a means to build a strong foundation for the development of commodity producing and services sectors.

Vision

With reference to the specific MDG goals, the GoS in its two year development plan envisages achieving the objectives of eliminating hunger, halving malnutrition, and doubling enrolment rates by 2015. The vision of the GoS is summarized as follows:

1. To integrate the provincial economy and reduce regional income gaps;
2. To reduce the personal income gap (and thus income inequality) by ensuring gainful employment for every able-bodied person;
3. To ensure gender sensitivity of the development strategy.

Approach

The typical approach to development planning in Pakistan, in general (including Sindh), is to identify individual projects, and to list them in an Annual Development Plan (ADP). The concept note for development plan of GoS proposes a shift from this traditional approach towards a development plan that prioritizes sectoral goals such that they blend into a larger development strategy for the province. The ADP for 2010/11 embodied this approach in that it showed a concentration of resources in

designated priority sectors. These investments are to constitute a "Big Push" style investment in certain sectors. Although this approach is acknowledged to be likely to create inter-sectoral imbalances, the GoS is hopeful that the unbalanced growth, and the high level of investment in key sectors, is likely to create a "pull" effect for other sectors. In short, the investment in critical priority sectors will act as a trigger for the provincial economy as a whole.

Strategy

Overall, the proposed development strategy of GoS follows a four point agenda:

1. Identifying regional growth nodes;
2. Providing physical infrastructure (including water and energy supplies and high speed connectivity services) in these nodes;
3. Enhancing human capital;
4. Building income-augmenting infrastructure in high-multiplier impact sectors.

Under this overall strategy, the concept note also elaborates on the government's plans to develop a Road Network Master Plan, promote agro-based industries through Sindh Board of Investment, and carry out a range of development works in sectors such as agriculture, industry, energy and the social sectors.

⁹ Government of Sindh, Planning and Development Department. Concept Note for Priority Development Plan 2011-13: Vision, Strategy and Priorities. Karachi.

Chapter 2

Goal 1: Eradicate Extreme Poverty and Hunger

Chapter-2

Millennium Development Goals

The subsequent chapters will track the progress of Sindh against Millennium Development Goals (MDGs), assessing whether the province will be able to achieve the 2015 targets related to different indicators as part of the MDGs.

MDG 1: Eradicate Extreme Poverty and Hunger

The table below shows Goal 1 related indicators and targets, and tracks the progress of the country and the province against these targets over the last decade.

Poverty eradication is an important objective of development policy. In Pakistan, research on poverty is constrained by the lack of availability of disaggregated data – in particular, official estimates of poverty incidence for the province and districts have not been issued for the last few years. Nevertheless, provincial poverty estimates have been calculated by some research organizations, primarily using official data from national household

surveys. The provincial indicators that are relevant to this goal are discussed below.

Poverty Incidence

Key Message: Poverty in Sindh ranged from 19 to 26.5 percent in 2005/06 depending on the agro-climatic zone.

Although official sources, such as the Pakistan Bureau of Statistics (PBS), have not furnished provincial poverty estimates, the Social Policy Development Centre (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).¹⁰ Although this data is a decade old, it provides a reference point to assess the progress of the province in poverty alleviation. The key estimates for Sindh from the SPDC study are presented in the table below. Overall, poverty incidence in the province, or proportion of population falling below the poverty line, was estimated at 31 percent, as opposed to an estimated national average of 33 percent.¹¹

The estimates show a significant difference

MDG Tracking Table 1: Indicators for Poverty and Hunger

Indicators	Region	2001 /02	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	MDG Target (2015)
Headcount Index (percent)	Pakistan	34.5	23.9	22.3	n/a	n/a	n/a	13
	Sindh	31	n/a	From 19 to 26.5 (depending on zone)	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	<20
	Sindh	n/a	40	n/a	n/a	n/a	n/a	n/a
Proportion of population below 2350 calories per day of food intake	Pakistan	30	n/a	n/a	n/a	n/a	n/a	13
	Sindh	40	n/a	n/a	n/a	n/a	n/a	n/a

Sources: For national level indicators, PMDGR (2010). Other data from various sources as explained below.

Headcount index figures for Sindh from SPDC (2004) and PMN (2010) respectively.

Proportion of underweight children from MICS 2003/04.

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

n/a: not available.

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

11 The national average was heavily skewed because of the estimated poverty incidence in Balochistan which was exceptionally high at 48 percent.

between rural and overall poverty incidence in the province. Rural poverty in Sindh was estimated at 38 percent, 7 percentage points higher than the provincial average. Urban poverty, however, estimated for small towns and cities, was found to be higher relative to rural poverty by 2 percentage points. However, poverty in Karachi was low, at only 10 percent (which was the lowest poverty incidence for all four provincial capitals in the country). This contrast between Karachi and the rest of the province was striking and referred as “the dual nature of the province’s economy” in the SPDC report.

The poverty incidence for rural areas was considerably higher relative to urban areas across all categories of asset ownership, and in particular for rural population with no land ownership (41.26 percent). Surprisingly, however, poverty incidence among the rural population with house ownership is actually higher than those with no house ownership. This pattern is replicated in the urban population where poverty is also higher among house-owners. According to the SPDC report, this counter-intuitive trend may be attributed to the incidence of large

populations living in katchiabadis where “de-facto ownership” prevails. The lowest level of poverty appears to be among urban property owners.

The SPDC’s report included a clear exposition of its methodology, but its results were disputed by official institutions. The HIES data for 2001/02 was also analyzed by the Planning Commission’s Center for Research on Poverty Reduction and Income Distribution (CRPRID), which looked at trends in the headcount measure of poverty incidence across all the provinces from 1992/93 to 2001/02.¹² The CRPRID estimates differed significantly from those of SPDC, and claimed that prevailing incidence of poverty in Sindh in 2001/02 was just 20.1 percent.

More recently, a Pakistan Microfinance Network (PMN) study on poverty incidence by agro-climatic zones, based on the HIES 2005/06 data provides more insight into the poverty profile of the province.¹³ For this study, the country was divided into nine agro-climatic zones. Sindh was divided into three agro-climatic zones (see map below) and poverty estimates were constructed separately for each zone.

Table 1.1 Poverty Incidence in Sindh (Percent)

	Overall	Rural	Urban		
			Provincial capital	Large cities	Small cities and towns
Sindh	31	38	10	23	40

Source: SPDC (2004), Table 3.3.

Poverty was also disaggregated by asset ownership, as shown in the table below.

Table 1.2 Distribution of Poverty by Assets in Sindh (Percent)

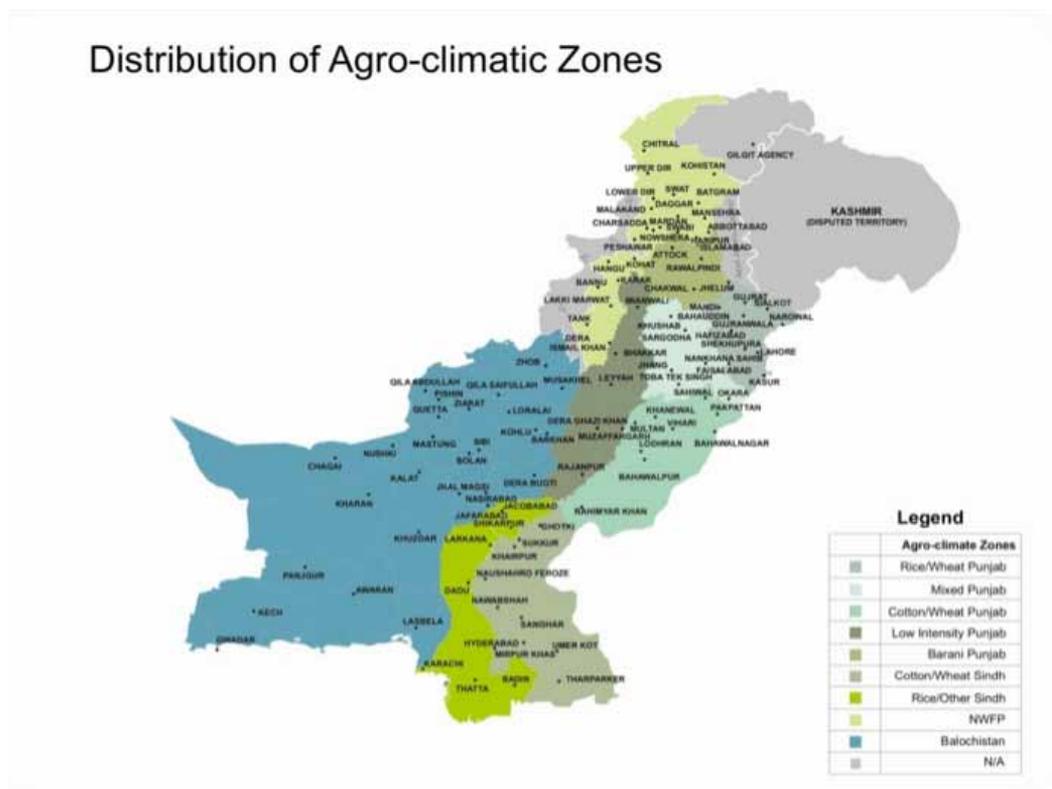
Rural				Urban			
Land Ownership	No Land Ownership	House Ownership	No House Ownership	Property Ownership	No Property Ownership	House Ownership	No House Ownership
20.97	41.26	38.46	32.68	8.72	20.15	22.11	13.31

Source: SPDC (2004), Table 3.5.

12 Cheema, Iftikhar Ahmed. 2005. A Profile of Poverty in Pakistan. Center for Research on Poverty Reduction and Income Distribution (CRPRID), Planning Commission, Islamabad. November. The CRPRID has now been reconstituted as the Centre for Poverty Reduction and Social Policy Development (CPRSPD).

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

Map 1.1 Agro-Climatic Zones



Source: Pakistan Micro-finance Network (2010).

Table 1.3 Poverty Incidence in Sindh by Agro-Climatic Zones 2005/06 (Percent)

Agro-Climatic Zone	Rural	Urban	Total
Rice-Other Sindh	35.1	4.9	19.0
Cotton-wheat Sindh	29.6	11.5	26.5
Other Sindh Urban	n/a	20.4	20.4

Source: PMN (2010). Table 2.

As the table shows, there was considerable variation in the poverty incidence in Sindh across the two zones and urban/rural disaggregation. In particular, Rice-Other Sindh (which is the eastern half of the province, bordering Balochistan), had greater poverty incidence levels at 35.1 percent. Urban poverty in this region was estimated at just 4.9 percent which may have to do with the fact that large urban centres, such as Karachi, fell in this belt. On the other hand, cotton-wheat Sindh (the western half of the province bordering India) was characterized by relatively lower discrepancy in levels of poverty between urban and rural areas.

The PMN report goes on to assess the depth of poverty in rural areas, by constructing “poverty bands” which classify households on the basis of their stated monthly expenditure, relative to the expenditure commensurate with the poverty line. Ten percent of the population in cotton-wheat Sindh, and 14 percent in Rice-other Sindh were classified as “ultra-poor,” a category which covered people whose income was between 50 to 75 percent of the poverty line. In each zone, a significant 24 percent were classified as “vulnerable,” or households that

can move below the poverty line as a response to a relatively mild shock.¹⁴ Additionally the PMN report claimed that 52 percent of “extremely poor” rural households across all nine agro-ecological zones in the country are in Rice-other Sindh, a figure which highlights the fragility of the economy in the region.

1.2 Household Income

Key Messages: Income from crop agriculture and livestock collectively amounts to only about 12 percent of average household monthly income in Sindh. In contrast, income from wages and salaries amounts to 57.5 percent, which points to the health of agriculture economy of the province.

The latest data on average monthly income for Sindh, from the HIES 2010/11, shows a gap in rural and urban income. While the average monthly income is Rs. 20,606 in Sindh, in rural areas the average is only Rs. 15,500, as compared to the average of Rs. 25,253 in urban areas, a gap of Rs. 9,753 (see Annex I for a rural/urban breakdown). In quintiles, this means that a household in the first quintile earns Rs. 11047.27, going up to Rs. 32914.25 in the fifth quintile on average, as shown in following table.

Table 1.4: Monthly Household Income by Source and Quintile

	QUINTILES					
	Total	1st	2nd	3rd	4th	5th
Sindh: TOTAL						
Average monthly income	20,606.2	11,047.3	14,441.1	15,964.7	20,249.6	32,914.3
Total	100	100	100	100	100	100
Wages and Salaries	57.52	65.14	55.46	57.05	55.83	57.61
Crop Production	8.24	13.01	16.82	13.54	10.63	2.27
Livestock	3.44	4.16	4.25	6.23	5.10	1.44
Other non agri Activities	10.39	4.69	11.54	7.01	11.67	11.64
Property (Owner Occupied Houses Excluded)	3.51	0.49	0.66	2.00	3.60	5.27
Owner Occupied Houses	14.60	8.47	8.57	10.58	11.14	20.18
Social Insurance Benefits Including Pension	1.29	0.37	0.87	1.26	1.19	1.62
Gift Assistance	0.70	2.54	1.80	1.26	0.36	0.04
Foreign Remittances	0.32	0.37	0.04	0.69	0.19	0.33
Domestic Remittances	0.37	0.61	0.09	0.54	0.40	0.34
Other Sources	-0.38	0.14	-0.10	-0.17	-0.10	-0.74

Source: Household Income and Expenditure Survey (HIES) 2010/11, Bureau of Statistics, Government of Pakistan.

14 PMN 2010 Figure 5

Table 1.5: Monthly Household Expenditure by Quintile

	QUINTILES					
	Total	1ST	2ND	3rd	4TH	5th
Sindh: TOTAL						
Average Monthly consumption expenditure (Rs.)	20,103.1	12,260.9	14,650.3	17,003.5	19,608.0	30,108.8
Percentage of consumption expenditure on:						
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00
Food, beverage and tobacco	47.93	61.80	59.73	56.75	52.48	35.87
Apparel, textile and footwear	3.97	4.83	4.57	4.41	4.10	3.37
Transport and communication	7.15	5.10	5.41	6.18	7.71	8.23
Cleaning, laundry and personal appearance	3.62	4.07	4.08	3.99	3.72	3.19
Recreation and entertainment	0.70	0.21	0.38	0.47	0.70	0.98
Education	2.89	0.89	1.10	1.62	2.28	4.63
Rent	18.50	9.25	10.57	12.18	14.59	27.14
Fuel and lighting	5.89	6.01	6.00	6.15	5.99	5.69
Miscellaneous	9.35	7.84	8.17	8.24	8.43	10.90

Source: HIES 2010/11, Bureau of Statistics, Government of Pakistan.

For urban households, income from wages and salaries (63.5 percent) constituted more than half of the monthly income, while making up a little less than half for rural households (at 46.8 percent). For rural households income from crop production was also an important component, at 21.5 percent, which is close to one fifth of the total average monthly income. In urban households, income from agricultural sources was understandably negligible. Thus, wages and salaries, and crop production are the most important sources of income for rural households, collectively making up almost three quarters of the average monthly income.

The data on expenditure acts as a check on income data, and can be interpreted to provide some insight into household characteristics. The table above gives a breakdown of expenditure data (see Annex II for a more detailed urban/rural breakdown). It is evident from the table above that the expenditure data closely mirrors income data, but the interesting finding here relates to the proportion of expenditure on food. In general, poverty levels can be inferred from this figure, as poorer households tend to spend a greater proportion of their monthly income

on essential items. The data was commensurate with this test, as the poorest income quintiles were found to spend more than half of their income on food. Interestingly, although this effect was more pronounced in rural areas, there was very little difference in the consumption patterns of the lowest income quintiles in urban and rural areas – a finding that points to the severity of poverty in urban areas of Sindh.

1.3 Household Characteristics

Key Message: The mean household size in Sindh is close to the national average at 6 persons per household. The dependency ratio is 94.2.

The dependency ratio in Sindh was 94.2 overall, rising to 97.4 in rural areas and dropping to 84.9 in urban areas. The mean household size in the province averaged 5.8 people per household.¹⁵ Unfortunately, district level data was not complete. Of the sixteen districts for which data was available, there was variation across districts. The dependency ratios were significantly higher than the average in the western cotton-wheat Sindh districts of Khairpur,

¹⁵ Unless mentioned otherwise, data in this sub-section is from the Population Census of 1998.

Table 1.6: Dependency Ratio and Average Household Size

S. No	Dependency ratio			Average household Size	
	Districts	Total	Rural		Urban
	Sindh	94.2	97.4	84.9	5.8
1	Badin	92.7	94.1	85.8	5.3
2	Dadu	87.4	88.6	83	5.5
3	Ghotki	97.7	98.7	92.5	5.5
4	Hyderabad	81.9	91.5	73.5	6
5	Jacobabad	94.9	96.7	89.6	5.6
6	Khairpur	97.1	99.5	89.7	6
7	Larkana	97.5	100.4	90.8	5.9
8	MirpurKhas	91.7	97.5	81	6.1
9	Tharparkar	117.5	119.2	85	5.6
10	NausheroFeroze	93.7	94.7	89.6	5.8
11	Nawabshah	91.8	95	83.2	6
12	Sanghar	93.4	95.7	86	5.8
13	Shikarpur	94.4	97.4	85.4	5.9
14	Sukkur	87.4	98	78.1	6.5
15	Thatta	87.9	89.1	79.4	5.1
16	Umerkot	99.6	102.6	86	5.4

Source: Population Census, 1998.

Ghotki, Umerkot, and Tharparkar (the highest at 117.5, which is an outlier in this case). Interestingly, the average household size in Tharparkar was 5.6, which is lower than the overall average for the province. The lowest dependency ratios was found in Hyderabad, where the average household size was higher than Tharparkar at 6.0 persons.

The difference between urban and rural dependency ratios was striking, estimated at 13 percentage points. Across the board, dependency ratios were higher in rural areas – the starkest difference across regions was noted in Tharparkar at 34.2 percentage points.

1.4 Nutrition and Food Security

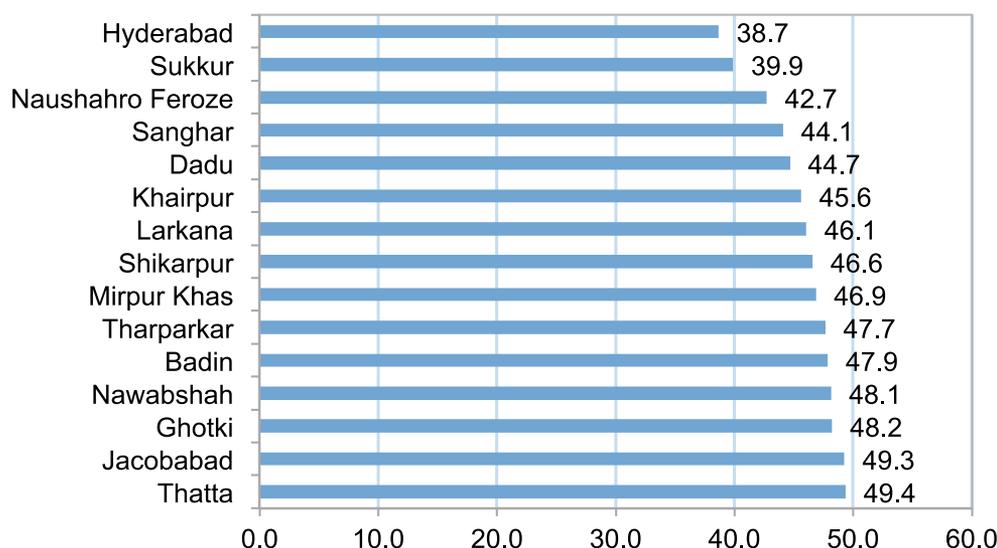
Key Message: More than a third of children in the province are underweight.

The first MDG is concerned not only with eradicating poverty as whole, but it also relates to combating

hunger. As a result, concerns about food security and underweight children under-5 are integral parts of any assessment of MDG 1. However, it has been difficult to ascertain the latest situation of underweight children in Sindh; as the available data dates from 2004.¹⁶ According to the estimates in that year, 40 percent of all children under the age of five were underweight.

16. Based on Multiple Indicator Cluster Survey (MICS) 2003/04 data.

Figure 1.1: Prevalence of Underweight Children Under 5 Years by District (Percent)



Source: Sindh MICS 2003/04.

The available figures for district-wise data (as shown in the chart above), do not show a geographic concentration of districts with strikingly higher levels of prevalence of underweight children under 5. However, among these districts, Hyderabad and Sukkur, which are relatively urbanized, had a lower proportion of underweight children.

With regard to the assessment on food security for the province, a comprehensive study on food security in rural Pakistan, conducted by World Food Program (WFP) in 2003, provides valuable insight into sub-national poverty incidence.¹⁷ The study was based on an analysis of secondary data, and assessed food availability, economic access to food and food absorption in rural areas of all districts of Pakistan. The results for Sindh are given in the table below.

Table 1.7: Caloric Poverty in Rural Sindh (Percent of Poor)

District	Caloric Poverty (Percent of Poor)
Tharparkar	72.4
Umerkot	46.2
Jacobabad	45.0
Sukkur	44.4
Khairpur	42.9
Ghotki	41.1
Thatta	40.7
Sanghar	38.6
Dadu	37.8
MirpurKhas	37.6
Larkana	37.2
Shikarpur	36.2
Hyderabad	34.0
Badin	33.9
Karachi	33.2
NausheroFeroze	32.6
Nawabshah	32.0

Source: WFP (2003).

¹⁷ World Food Program (WFP)/Sustainable Development Policy Institute (SDPI). 2003. Food Insecurity in Rural Pakistan.

Among the districts in Sindh, caloric poverty levels were highest in rural Tharparkar, a desert area, where close to two-thirds of the population was found to fall below the caloric poverty line, or to be food insecure. Given that crop agriculture is scarce in the region, and the sparse population subsists on livestock products and cultivation of small pockets of rainfed land, this was not a surprising result. The level of deprivation in Tharparkar far outstripped the other districts, which were evaluated in the WFP report. The district with the second highest caloric poverty was Umerkot, which borders Tharparkar but is a part of the irrigation network that services the province. Umerkot was found to have caloric poverty incidence of 46 percent in its rural areas, 26 percentage points lower than the level evident in Tharparkar. On average, the caloric poverty incidence in rural Sindh was found to be 40 percent. This proportion dropped slightly to 38 percent, if Tharparkar was excluded. These results are found to have worsened over time, with increases in the number of extremely food insecure districts from 1 to 4, and food insecure districts from 3 to 5 during

2009 in comparison to 2003¹⁸. Moreover, recent floods have also caused tremendous damage to the livelihoods, with severe implications for food security in Sindh¹⁹.

1.5 Labor Force Participation

Key Message: Employment rates show a significant gender variation, estimated at 51.5 percent for males in Sindh and 11.4 percent for females.

The level of participation in the economic activity can be gauged by analyzing employment data. Overall labor force participation rates were estimated at 33 percent of the total population in the Labor Force Survey of 2010/11 and at 45 percent for the population aged 10 and above. The main issue with labor force participation in Sindh is disproportionately low level of female participation rates, estimated at 11.4 percent, as compared to 51.5 percent for males. The following table gives the breakdown by age for Sindh (all areas), while Annex III provides a detailed employment picture with the rural/urban division illustrated.

Table 1.8: Labor Force Participation and Unemployment Rates (Percent)

	Labor Force Participation Rates			Un-employment Rates		
	Total	Male	Female	Total	Male	Female
Sindh- ALL AREAS						
Total (all ages)	32.69	51.52	11.41			
Total (10 years and over)	45.03	70.33	15.88	5.08	4.74	6.83
10-14	13.00	16.78	8.36	2.97	2.77	3.49
15-19	36.80	54.74	13.74	8.01	7.53	10.45
20-24	53.79	84.62	18.31	10.81	10.41	12.94
25-29	59.25	96.47	21.49	5.76	5.94	4.96
30-34	58.74	98.85	21.07	1.36	1.13	2.38
35-39	60.01	99.13	19.32	1.87	1.50	3.83
40-44	60.51	98.84	19.44	0.95	0.87	1.37
45-49	61.05	99.14	15.48	1.25	0.91	3.83
50-54	60.53	98.24	18.10	3.01	2.98	3.20
55-59	61.26	94.23	15.77	3.70	3.76	3.16
60-64	46.74	70.74	15.22	15.20	11.62	37.03
65 Years and Over	19.72	30.63	5.90	21.89	17.28	52.15

Source: Labor Force Survey 2010/11, Statistics Division, Government of Pakistan.

18 World Food Program (WFP)/Sustainable Development Policy Institute (SDPI). 2009. Food Insecurity in Pakistan.

19 World Food Program (WFP). 2011. PAKISTAN: Impacts of Shocks on Household Income and Food Consumption Simulation Modeling.

The gender differential, at the detriment of females, is also evident by the unemployment rates (defined as the percent of unemployed among those looking for work), where female unemployment rate was estimated at 6.8 percent of the population of over 10 years of age, who are looking for work, as compared to an unemployment rate of 4.7 percent for men (a differential of 2.1 percentage points). Under-employment may also be rife in Sindh, given that 35 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.

The age-distribution pattern of the labor force participation rate followed similar patterns, with

participation rates for men remaining high and consistent for all age categories from 25 to 60. However, 54.7 percent of male aged 15 to 19 years were also found to have entered the labor market, pointing to the low levels of tertiary educational attainment.

Of those employed, 45.3 percent were found to be employed in the agriculture, hunting, and forestry sector (see table below). Wholesale and retail trade employed 15.1 percent of the total workforce, while manufacturing was also an important commercial activity in Sindh, employing 12.5 percent of the population overall, as detailed in the table below.

Table 1.9: Percentage Distribution of Employed Persons by Key Industry Division

	All Areas			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Sindh- TOTAL	100.00	83.92	16.08	58.71	45.78	12.93	41.29	38.14	3.15
Agriculture, forestry, hunting	45.30	32.46	12.85	43.88	31.44	12.44	1.42	1.01	0.41
Fishing	0.43	0.43		0.37	0.37		0.07	0.07	
Mining and quarrying	0.18	0.18		0.12	0.12		0.05	0.05	
Manufacturing	12.47	11.72	0.75	1.99	1.78	0.21	10.47	9.94	0.53
Electricity, gas and water	0.64	0.64		0.12	0.12		0.51	0.51	
Construction	4.93	4.88	0.05	2.43	2.41	0.02	2.50	2.47	0.03
Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods	15.08	14.99	0.09	3.31	3.28	0.03	11.77	11.71	0.06
Hotels and restaurants	1.74	1.70	0.04	0.69	0.69		1.05	1.01	0.04
Transport, storage and communication	5.15	5.11	0.03	1.58	1.57	0.01	3.57	3.54	0.03
Financial intermediation	1.05	1.00	0.05	0.06	0.06		0.99	0.93	0.05
Real estate, renting and business activities	1.12	1.10	0.02	0.08	0.08		1.04	1.02	0.02
Public administration and defense, compulsory social security	4.07	3.94	0.13	1.41	1.40	0.01	2.66	2.53	0.12
Education	4.04	2.81	1.23	1.80	1.67	0.13	2.25	1.15	1.10
Health and social work	1.42	1.10	0.32	0.39	0.31	0.08	1.03	0.79	0.24
Other community, social and personal service activities	2.35	1.84	0.51	0.46	0.45	0.01	1.89	1.39	0.50
Activities of private households	0.02	0.02		0.01	0.01		0.01	0.01	
Extra territorial organization and bodies	0.01	0.01					0.01	0.01	

Source: Labor Force Survey 2010/11.

The above table also serves to highlight the differences between the urban and rural economies and between male and female patterns of employment. The dominance of agriculture in the rural areas was evident from the fact that the sector employed 69 percent of males and 96 percent of all females in the labor force. Rural males also found employment in construction, wholesale and retail trade, public service, education, transport and manufacturing sectors, but rural females had few alternative employment opportunities.

No one sector was as dominant in the urban areas. Wholesale and retail trade was the highest employer for men, with about 31 percent of the employed male labor force working in the sector. Manufacturing employed 26 percent of the male labor force. For females, the education sector was the largest employer, accounting for 35 percent of all female employment in urban areas. Manufacturing, health, and community and social services also provided a significant proportion of the total employment for women.

Status of Progress against Goal 1: Target is unlikely to be met. Our poverty estimates are dated, and poverty incidence is actually expected to have increased over the last two years. The situation is particularly dire in the aftermath of the floods.

1.6 Challenges

Sindh has a “dual” economy, where progress in urban zones, like Karachi, does not translate to the rest of the province and disparities in the performance of the analyzed indicators in rural areas relative to the urban areas persists.

As highlighted in the Sindh Development Review of 2008/09,²⁰ provincial government efforts remain geared towards poverty reduction through the development of youth vocational skills, micro-financing schemes and the development of natural resources but there seems to be a gap in the operationalization of these selected efforts owing

to logistical issues and the difficulties in accessing far flung populations.

Furthermore, the deteriorating security situation has created roadblocks in the achievements of the MDG.

1.7 Summary of Findings

Sindh is far from eradicating poverty by 2015. Poverty levels are high, and show sharp urban/rural and gender differences.

Although there is a need for new research to determine how many additional households have been pushed below the poverty line and how many more households have been made food insecure as a result of the floods, it is not irrational to fear that progress made in prior poverty reduction efforts were largely undone in all flood-impacted districts.

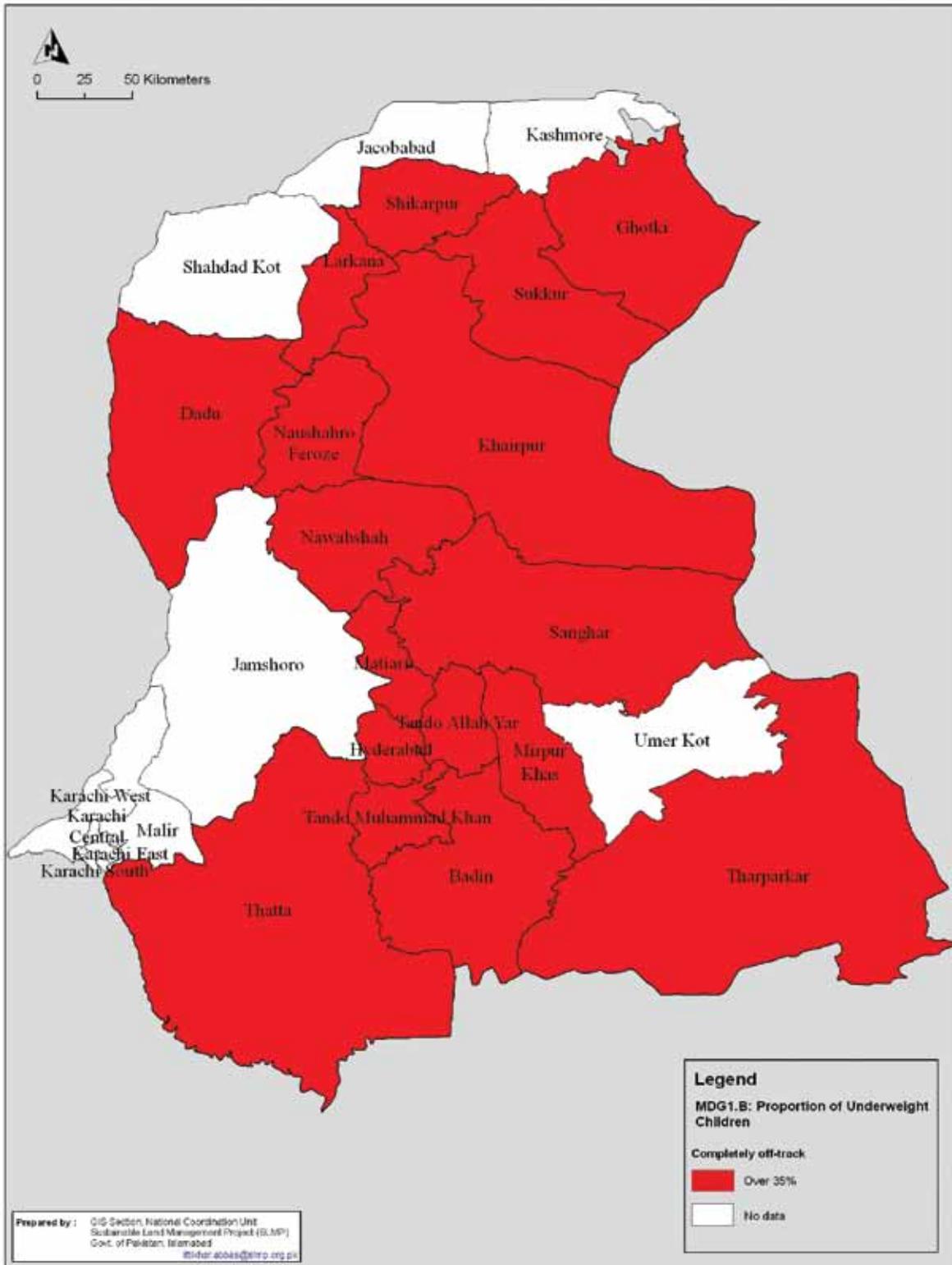
Policy Response

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 Zakat²¹, and programs for food support implemented under the auspices of the Pakistan Bait-ul-Mal.

²⁰ Government of Sindh.Planning and Development Department.2009. Sindh Development Review.

²¹ a tax collected for charity purposes.

MDG 1- Eradication of Extreme Hunger and Poverty Sindh



Chapter 3

Goal 2: Achieving Universal Primary Education

Chapter-3

MDG 2: Achieving Universal Primary Education

Goal 2 is defined in terms of achieving universal primary education, using the main target of net primary enrolment ratio of 100 percent to be achieved by 2015, which will result in a literacy rate of 88 percent in Pakistan. The PMDGR uses completion/survival rate (grade 1 to 5) to track progress towards the target. Education is a key factor in the determination of long-term 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, progress on which is critical to the achievement of the MDGs.

Over the last fifteen years, the literacy rate (10+ years) has shown improvement in Sindh. In 2001/02 the literacy rate for Sindh (at 46 percent) was above the national average (45 percent).²³ The subsequent PSLM data, for each year since 2004/05, also suggests figures for Sindh equivalent to, or slightly above, the national averages. Figure 2.1 illustrates the trend for Sindh using data from the Pakistan Integrated Household Surveys (PIHSs) and the Pakistan Social and Living Standards Measurement Surveys (PSLMs).

MDG Tracking Table 2: Achieving Universal Primary Education

Indicators	Region	FY 02	FY 05	FY 06	FY 07	FY 08	FY 09	FY 11	MDG Target (2015)
Net primary enrolment ratio (percent)	Pakistan	42	52	53	56	55	57	56	100
	Sindh	40	48	50	50	51	54	53	
Completion/survival rate Grade 1 to 5 (percent)	Pakistan	57.3	67.1	72.1	54.7	52.3	54.6	56*	100
	Sindh	n/a	n/a	n/a	n/a	n/a	51	41*	
Literacy rate (percent)	Pakistan	45	53	54	55	56	57	58	88
	Sindh	46	56	55	55	56	59	59	

Sources:

For national indicators, PMDGR 2010.

For Sindh, PIHS 2001/02 and PSLMs from 2004/05 to 2010/11.

* FY11 estimates are from Pakistan Education Statistics 2010/11.

N/a: Not available; FY: Fiscal year (July –June).

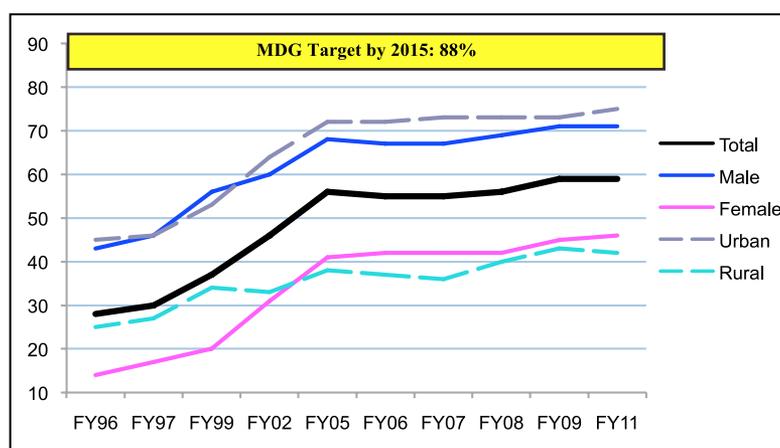
2.1 Literacy

Key Message: At 59 percent²², the literacy rate (10+ years of age) in Sindh is higher than the national average by 1 percentage point. However, literacy across the province is not uniform, with significant variations across the urban/rural divide. Gender disparity is also evident across the province on literacy rates, and is more acute in rural than in urban areas.

²² PSLM 2010/11.

²³ PIHS 2001/02

Figure 2.1: Trend in Literacy Rates in Sindh (Percent)



Sources: PIHS (FY96-FY02) and PSLMs (FY05-FY11), various issues.

As the above figure shows, the overall literacy rate in the province has risen by 31 percentage points since 1996. However the declining slope of the overall literacy rate seen in the graph, especially after increasing until 2004/05, suggests that the pace of improvement in the latter half of the decade has been slow.

The disaggregation allows for an encouraging comparison between trends in male and female literacy growth. An encouraging aspect is that female literacy has shown better progress, rising by approximately 32 percentage points (from just 14 percent in 1996 to 46 percent in 2011) compared to the progress in male literacy rate which rose by roughly 28 percentage points (from 43 percent to 71 percent over the same period). This is indeed a positive outcome. But the decline in gender disparity over last fifteen years (by 4 percentage points) is very small compared to the large remaining disparity of 25 percentage points in 2011. This is not sufficient to merit an assumption that female literacy in the province will achieve parity with male literacy anytime soon.

The disaggregation of data for the last fifteen years based on regional lines also shows discrepancy between the urban and rural literacy trends. Urban literacy increased by 30 percentage points (from 45 percent in 1996 to 75 percent in 2011), while rural literacy increased by just 17 percentage points (from 25 percent to 42 percent over the same period). The

gap between urban and rural literacy has increased by 13 percentage points between 1996 and 2011.

According to the PSLM 2010/11 data, the overall literacy rate for Sindh stands at 59 percent, 1 percentage point higher than the national average (58 percent). However, once again, there was significant variation across districts. Only three districts in Sindh (Karachi, Hyderabad and Dadu) reported literacy rates higher than the provincial average (in the range of 60-79), with Karachi performing highest at 79 percent literacy rate, far outstripping the national average as well as the average for Sindh. In the remaining districts, overall literacy rates ranged from 36 percent to 56 percent, indicating that the data for Karachi distorts the provincial average quite significantly. Thatta, TandoMohammad Khan, Jacobabad, Badin, and Kashmore had the lowest literacy rates, while four other districts also posted literacy figures below 45 percent (Shahdadt, Ghotki, Umerkot and Jamshoro).

The literacy rates for 2011 also show significant variation across the urban/rural divide. Overall, rural literacy trails urban literacy in Sindh by 33 percentage points, however this disparity is unevenly distributed across the province. In five districts (Khairpur, Shahdadt, Dadu, Umerkot and Sangar) the difference between urban and rural literacy rates is equal to or less than 15 percentage points. However, in the remaining districts of

the province the difference between urban and rural literacy is quite high (the highest being 35 percentage points in Kashmore and Hyderabad).

On the other hand, patterns of high gender disparity are also found quite consistently across both urban and rural areas in the province. Only two districts, Karachi and Hyderabad, both centers of higher literacy in the province, showed a comparatively low gender gap in the overall or total literacy. In Karachi, the overall gender gap was recorded at 8 percentage points in urban and 19 percentage points in rural areas, while Hyderabad stood at a slightly higher figure of 10 percentage points in urban, and even higher 34 percentage points in rural areas. In the remaining districts the overall gender gap remains very high (ranging from 13 to

52 percentage points). The highest gender gap was found in Ghotki (52 percentage points), Khaipur (43 percentage points), and Jacobabad districts (43 percentage points), all characterized by low literacy levels.

In most of the districts the gender gap in rural areas is higher than that in the urban areas by nine percentage points or more. In Hyderabad, MirpurKhas, and Sukkur, gender gaps in rural areas were equal to or more than 20 percentage points higher than the urban areas. Only Dadu had figures where the gender differential in urban and rural areas was almost equal.

The following table provides the literacy rates in Sindh, by district.

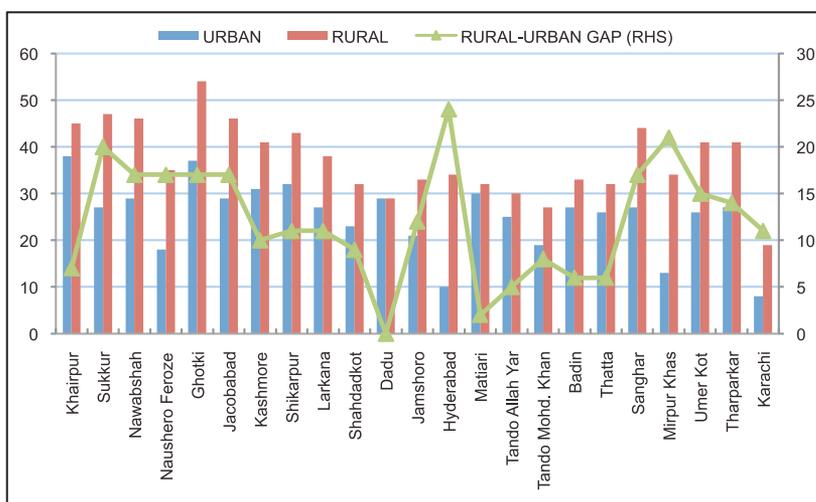
Table 2.1: Literacy Rate (Age 10+) by District (Percent)

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
	Sindh	82	68	75	60	22	42	71	46	59
1	Khairpur	80	42	62	69	24	48	72	29	52
2	Sukkur	81	54	68	68	21	46	74	37	56
3	Nawabshah	73	44	60	61	15	39	65	25	46
4	NausheroFeroze	83	65	74	67	32	51	70	39	55
5	Ghotki	82	45	65	66	12	40	69	17	44
6	Jacobabad	73	44	59	53	7	31	58	15	37
7	Kashmore	81	50	67	51	10	32	57	19	39
8	Shikarpur	87	55	71	63	20	43	68	29	50
9	Larkana	77	50	64	62	24	44	68	35	52
10	Shahdadkot	64	41	53	57	25	42	59	28	44
11	Dadu	80	51	66	78	49	64	79	49	65
12	Jamshoro	73	52	63	52	19	37	57	28	44
13	Hyderabad	80	70	75	56	22	40	75	62	69
14	Matiari	79	49	65	58	26	43	63	31	48
15	Tando Allah Yar	76	51	64	53	23	39	60	32	47
16	TandoM. Khan	60	41	51	46	19	33	49	23	36
17	Badin	69	42	56	51	18	35	54	22	39
18	Thatta	76	50	64	45	13	31	50	19	36
19	Sanghar	75	48	62	67	23	47	69	30	51
20	MirpurKhas	79	66	73	57	23	41	64	39	53
21	UmerKot	67	41	55	60	19	41	61	23	44
22	Tharparkar	81	54	69	64	23	45	65	25	46
23	Karachi	84	76	80	56	37	47	83	75	79

Source: PSLM 2010/11.

Note: Literacy is defined as the ability to read a newspaper and write a simple letter.

Figure 2.2 Gender literacy gap in rural and urban areas (percentage points)



Source: Staff calculations based on PSLM 2010-11 data.

Based on this data, one can conclude that female literacy across Sindh is the biggest challenge to achieving the MDG 2 targets. Furthermore policy needs to particularly concentrate on improving female literacy in rural areas, without compromising the needs of urban females.

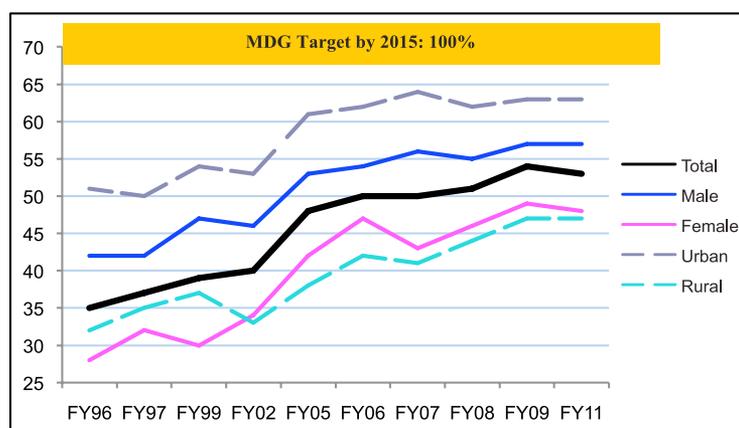
2.2 Enrolment and Completion Rates

Key Message: *Although enrollment rates have improved overtime, there is persistent evidence of regional disparity on enrollment patterns. In*

particular, these disparities are evident in primary net enrolment, and primary completion rates across urban and rural Sindh, which are also heavily skewed along gender lines.

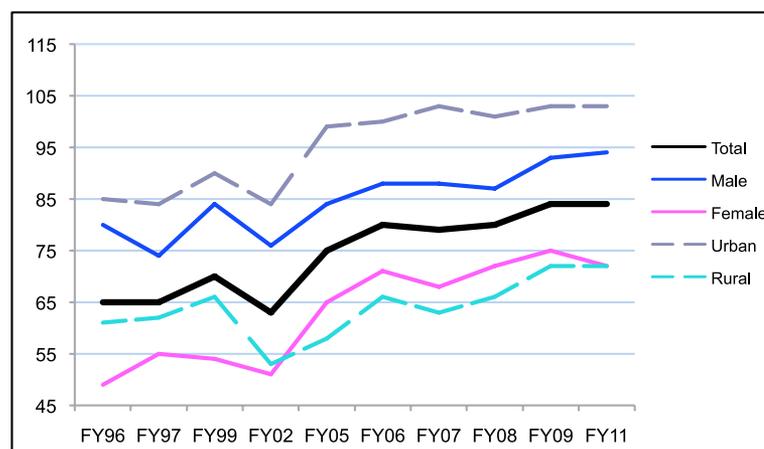
The figures below show the trend in net and gross primary enrolments in the province over the last decade, using data from the Pakistan Integrated Household Surveys (PIHS) and the Pakistan Social and Living Standards Measurement Surveys (PSLMs).

Figure 2.3 Primary Net Enrolment for Sindh (percent)



Sources: PIHS (FY96-FY02) and PSLM (FY05-FY11), various issues.

Figure 2.4 Primary Gross Enrolment for Sindh (percent)



Sources: PIHS (FY96-FY02) and PSLM (FY05-FY11), various issues.

The net and gross enrolments for primary level education have similar overall increasing trends. In the case of the net enrolment ratio (NER) the graph shows a gradual but consistent overall increase (of 5 percentage points) in net enrolment at the primary level from 1995/96 to 2001/02, with a sharper rise in enrolment levels between 2001/02 and 2004/05. Since 2004/05, the growth spurt has abruptly worn off, and the graph shows a leveling off from 2004/05 to 2006/07, followed by an increasing trend between 2007/08 and 2008/09, and a slight decrease (1 percentage point) in 2010/11. The chart for the gross enrolment ratio (GER) also shows an overall similar increasing pattern with an increase of 19 percentage points between 1996 and 2011. However, the GER trend witnessed dips at two points; first between 1998/99 and 2001/02 by an alarming 7 percentage points, and the second between 2005/06 and 2006/07 by just 1 percentage point.

The disaggregated trends in net enrolment are more irregular than the overall picture, with a few alarming dips. The pattern for male net enrolment generally shows a progressive trend. However, at two points, 2001/02 and 2007/08, male net enrolment dropped slightly by 1 percentage point, at each time from previous years. Irregularity in NER for female enrolment has been far more pronounced between 1996 and 2011. In 1998/99, female enrolment declined from the previous year

by 2 percentage points, and dropped again in 2006/07 by 4 percentage points from the previous year. But overall, thenet enrolment for females has increased at a faster rate than for males, which is encouraging. Over fifteen years the female NER increased by 20 percentage points compared to the corresponding increase of 15 percentage points for male enrolment.

Similarly, in the case of the disaggregated trends for GER, more irregularities were observed than in the overall trend. Male gross enrolment declined initially in 1996/97, before increasing dramatically by 10 percentage points between 1996/97 and 1998/99. It dropped again in 2001/02 to 76 percent from 84 percent recorded in 1998/99, before settling into a gradual increase until 2006/07. This trend was once again interrupted by a slight dip of 1 percentage point in 2007/08. The trend in the female GER was much more subdued with slight dips from the previous years, experienced in 1998/99, 2001/02 and 2006/07 respectively. Again, overall gross enrolment for women experienced a greater increase (23 percentage points over 15 years) compared to just 14 percentage points for males.

Similar to the literacy patterns, as discussed in the previous section, the urban-rural disparity is evident in both net and gross primary enrolments. The NER for both urban and rural areas has increased at a comparable pace between 1996 and

2011 (12 percentage points in urban areas and 15 percentage points in rural areas). Though the NER in rural areas has increased at a slightly faster rate, in 2011 the gap between net enrolment in urban and rural areas remained at 16 percentage points. The GER, on the other hand, evidences an alarming and worrisome increase in the gap between urban and rural enrolments. A steadily increasing GER in rural areas fell dramatically between 1998/99 and 2001/02 by 13 percentage points. It fell again in 2006/07 by 3 percentage points from the previous year. Consequently, in 2011, the disparity between the urban GER and rural GER stands significant at 31 percentage points.

According to the 2011 PSLM data, at 53 percent, the primary level NER for the province is 3 percentage points below the national average. Once again the districts of Hyderabad and Karachi, as well as Khairpur exhibited higher enrolment rates (at 67 percent, 60 percent, and 60 percent respectively). Tando M. Khan was the worst performing district with net enrolment at only 30 percent, followed by Thatta at 34 percent.

When analyzing the overall urban/rural divide for the year 2011, there appears significant variation across the province, but generally, rural NER is found to be less the urban NER. The minimum variation

witnessed between urban and rural NER is in the case of Khairpur district by only 2 percentage points, whereas, in ten districts (Kashmor, Hyderabad, Tharparkar, MirpurKhas, Shikarpur, Sanghar, Matiari, Thatta, Jacobabad and Karachi) primary net enrolment remains higher in urban areas by over 20 percentage points in each case.

The characteristics of these disparities are more acutely observed when the data for urban and rural primary net enrolment is disaggregated across gender lines. Overall, the gender gap in rural areas remains higher than in urban areas. The district of Kashmore ranked as the worst performing district with highest gender gap of 30 percentage points in rural areas and 16 percentage points in urban areas.

However, there have also been instances of gender parity and a reversal of gender gap (indicated by more female than male enrolments) in the province. The districts of Khairpur and Jacobabad showed gender parity in urban areas, but their rural areas continued to show a gender gap. The net primary enrolments of females exceeded those of males in the urban areas of the districts of Thatta, Tando M. Khan, Hyderabad, Badin, and Karachi. In case of rural areas, Dadu was the only province that witnessed gender gap reversal. Details are given in the table below.

Table 2.2 Net Primary Enrolment Rate in Sindh

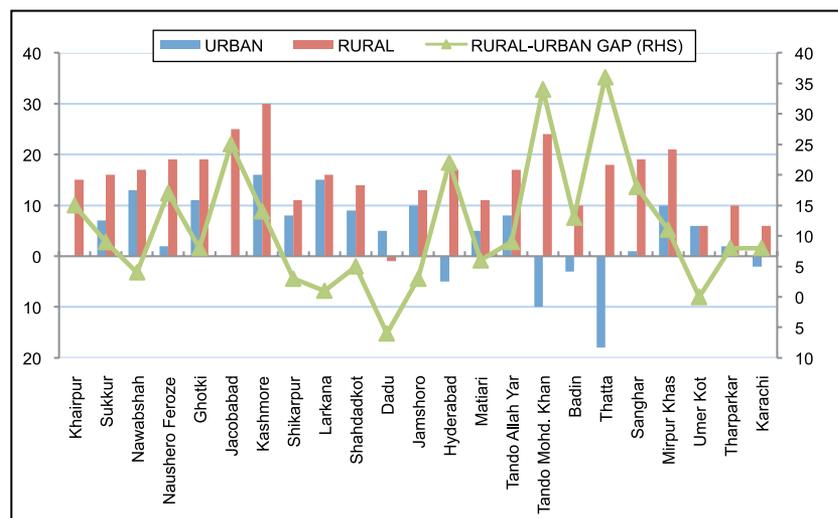
S No.	Region	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	Pakistan	67	65	66	57	48	53	60	53	56
	Sindh	63	62	63	54	39	47	57	48	53
1	Khairpur	61	61	61	66	51	59	65	53	60
2	Sukkur	65	58	61	60	44	53	62	50	56
3	Nawabshah	67	54	61	56	39	48	59	43	51
4	NausheroFeroze	70	68	69	58	39	50	60	45	54
5	Ghotki	69	58	65	54	35	45	57	38	48
6	Jacobabad	63	63	63	53	28	42	55	35	46
7	Kashmore	77	61	70	56	26	44	59	31	48
8	Shikarpur	72	64	69	50	39	45	54	43	49
9	Larkana	65	50	58	56	40	48	60	43	52
10	Shahdadt	58	49	54	48	34	41	50	37	44
11	Dadu	66	61	64	55	56	56	58	57	57

S No.	Region	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
12	Jamshoro	63	53	58	45	32	39	48	37	43
13	Hyderabad	71	76	73	55	38	47	67	68	67
14	Matiari	69	64	67	50	39	45	54	44	49
15	Tando Allah Yar	51	43	47	47	30	39	48	34	41
16	Tando M. Khan	30	40	34	39	15	29	38	19	30
17	Badin	44	47	46	45	35	40	45	37	41
18	Thatta	44	62	54	40	22	32	40	28	34
19	Sanghar	73	72	73	57	38	49	60	46	54
20	MirpurKhas	76	66	71	57	36	46	61	43	53
21	UmerKot	66	60	63	60	54	57	61	55	58
22	Tharparkar	78	76	77	56	46	52	57	47	52
23	Karachi	60	62	61	43	37	40	60	60	60

Source: PSLM 2010/11.

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

Figure 2.5 Gender NER gap between rural and urban areas (percentage points)



Source: Staff calculations based on PSLM 2010/11 data

Note: Figures in red represent higher rural than urban gender gap.

On the other hand, the overall primary school completion rate for Sindh is 3 percentage points higher at 52 percent than the national average of 49 percent. Overall, the highest completion rates were unsurprisingly found in the two outlier districts of Karachi, and Hyderabad (at 72 percent and 61 percent, respectively), and Dadu and Sukkur (at 53 percent, and 51 percent respectively). Thatta was the worst performing district where the primary

completion rate was only 28 percent, followed by Jacobabad at 29 percent. Nine other districts had primary school completion rates lower than 40 percent (in the range of 30-38 percent).

The overall primary completion rate in urban areas was higher than rural areas in all districts, with Karachi and Kashmir possessing the highest urban-rural gap (both at 35 percentage points), and Umer Kot with lowest gap (13 percentage points).

District-wise disaggregated data on primary completion rates is provided in the table below.

Table 2.3 Primary Completion Rate in Sindh

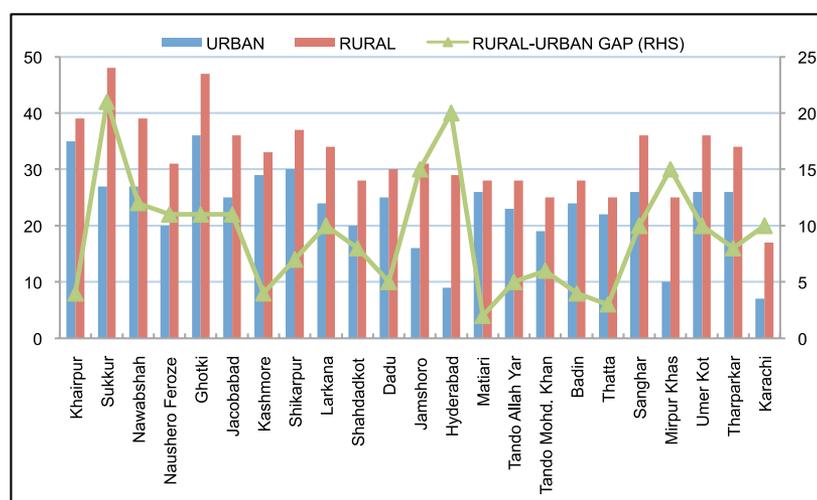
S No.	Region	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	Pakistan	72	61	67	52	28	40	59	39	49
	Sindh	74	62	68	49	16	34	62	40	52
1	Khairpur	70	35	54	57	18	39	61	23	43
2	Sukkur	73	46	60	64	16	42	69	31	51
3	Nawabshah	64	37	51	49	10	31	54	19	38
4	NausheroFeroze	76	56	66	57	26	42	60	32	47
5	Ghotki	74	38	57	57	10	34	59	14	38
6	Jacobabad	61	36	49	41	5	24	45	12	29
7	Kashmore	74	45	60	40	7	25	47	16	33
8	Shikarpur	78	48	63	52	15	35	58	23	41
9	Larkana	68	44	56	51	17	34	58	28	43
10	Shahdadkot	55	35	46	46	18	32	48	21	35
11	Dadu	76	51	64	64	34	50	67	38	53
12	Jamshoro	69	53	61	45	14	31	51	24	38
13	Hyderabad	72	63	67	47	18	34	67	55	61
14	Matiari	70	44	58	49	21	36	53	27	41
15	Tando Allah Yar	67	44	56	45	17	32	52	26	40
16	Tando M. Khan	52	33	43	39	14	27	41	18	30
17	Badin	60	36	48	42	14	29	45	18	32
18	Thatta	67	45	57	34	9	23	39	14	28
19	Sanghar	64	38	51	53	17	37	56	24	41
20	MirpurKhas	71	61	66	43	18	32	53	34	44
21	UmerKot	58	32	46	49	13	33	51	16	35
22	Tharparkar	74	48	62	48	14	32	49	15	33
23	Karachi	77	70	74	47	30	39	76	69	72

Source: PSLM 2010/11.

While the problem of female enrolment not keeping pace with male enrolment has been discussed at length, the gender gap was found to be alarmingly wide in the case of the population that has completed primary level. Compared with the NER, there are absolutely no instances of districts where the gender gap in primary completion appears reversed. On the contrary the differential between males and females is startlingly pronounced (especially in rural areas it reached maximum 48 percentage points in case of Sukkur).

With Karachi, as the regular outlier (possessing the minimum rural and urban gender gap), all districts continued to show the same trend of higher gender gap in rural areas as compared to the gender gap in their urban areas. Even in the case of Karachi, the only exception, the female primary completion rate in rural areas trailed male completion by 17 percentage points.

Figure 2.6 Rural and urban areas gender gap in achieving primary education (percentage points)



Source: Staff calculations based on PSLM 2010/11 data
 Note: Figures in red represent higher rural than urban gender gap.

Based on the 2010/11 data from National Education Management Information System, primary school enrolment in Sindh made up almost 66 percent of the total number of students enrolled in public schools in the province in 2011. In 2010/11, a total of 4,015,038 students were enrolled in public schools, of which 2,653,802 were enrolled in primary schools.²⁴ Annex Table IV gives the total enrolment in public schools in Sindh (by districts) for 2010/11.

The teacher-student ratio was higher for public middle and primary levels, on average. For public primary schools it was of the ratio of 1 teacher to approximately 26 students in 2010/11. This proportion astonishingly rose to approximately 66 for middle schools, and fell to a reasonable estimate of about 13 for high schools. Of the total teachers employed, about 71 percent on average were primary school teachers. However, this proportion was not consistent across districts (figures range from 54 to 85 percent – Tharparkar had the highest figure at 85 percent of all teachers employed at the primary school level in the public school system)²⁵. Annex Table V provides the total number of teachers in public schools in each district.

2.3 Functionality

Key Message: Sindh has a significant number of non-functional schools in the province, of which a majority are related with the primary schools. Primary girl's schools constitute about 30 percent of the total number of non-functional schools in Sindh.

Non-functionality of public schools has been a big issue in the education sector, as different stakeholders maintain that a number of public schools exist only on paper. With the help of Annual School Census exercise, the Government of Sindh has attempted to identify the number of non-functional schools, which have reduced overtime. Based on available data, the district -wise non-functional school are shown in the table below.

²⁴ Calculated from Pakistan District Education Profile 2010/11 data, National Education Management Information System.

²⁵ All figures are calculated from Pakistan District Education Profile 2010/11 data, National Education Management Information System

Table 2.4 Non-Functional Public Schools in Sindh

S.No	Districts	Total Schools			Primary			Middle Schools		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Badin	192	74	118	173	66	107	19	8	11
2	Dadu	135	58	77	123	52	71	12	6	6
3	Ghotki	191	141	50	179	132	47	12	9	3
4	Hyderabad	22	10	12	21	9	12	1	1	
5	Jacobabad	291	193	98	287	190	97	4	3	1
6	Khairpur	392	262	130	344	239	105	48	23	25
7	Larkana	85	34	51	78	29	49	7	5	2
8	MirpurKhas	254	166	88	221	147	74	33	19	14
9	Tharparkar	923	718	205	842	646	196	81	72	9
11	NausheroFeroze	449	256	193	406	234	172	43	22	21
10	Nawabshah	154	80	74	126	69	57	28	11	17
12	Sanghar	489	415	74	444	382	62	45	33	12
13	Shikarpur	277	190	87	261	182	79	16	8	8
14	Sukkur	135	83	52	130	79	51	5	4	1
15	Thatta	318	192	126	302	189	113	16	3	13
16	Umerkot	542	373	169	499	353	146	43	20	23
17	Jamshoro	70	44	26	67	41	26	3	3	
18	Kashmore	329	229	100	322	225	97	7	4	3
19	Matiali	57	34	23	49	26	23	8	8	
20	Shahdadkot	244	148	96	231	141	90	13	7	6
21	Tando Allah Yar	67	47	20	62	45	17	5	2	3
22	Tando M. Khan	84	45	39	77	42	35	7	3	4

Source: Government of Sindh, Annual Census Report 2007/08.

Sindh has a very high incidence of non-functional schools. Almost all of the non-functional schools (92 percent) across all districts of Sindh were primary schools (5,244 out of 5,700 total). However, there is an extreme variation in the province in non-functional schools along district lines. The highest number of non-functional schools were in Tharparkar district (at 923, of which 842 were primary schools). Conversely, only 22 non-functional schools occurred in Hyderabad (of which 21 were primary schools). In four districts (Badin, Dadu, Hyderabad, and Larkana) the incidence of total non-functional girls' schools was higher than non-functional boys' schools. Overall, approximately 34 percent of reported non-functional schools in the province in 2007/08 were girls' schools.

Further, non-functionality did not necessarily correlate with the educational attainment indicators as discussed earlier. For instance, district Naushero Feroze, with relatively good education indicators, had high incidences (around 449 in number) of non-functional schools. **Annex Tables V and VII** shows the number of functional public and private schools in 2007/08.

Status of Progress Against Goal 2: Targets in literacy and primary net enrolment rates are unlikely to be met. Although the province has shown improvement in literacy rates and net primary enrollment, the pace of progress is insufficient to achieve respective MDG targets of 88 percent and 100 percent by 2015.

2.4 Challenges

According to the Sindh Development Review 2008/09, the Government of Sindh, through the Sindh Education Reform Program (SERP) is trying to promote gender parity in education through a scholarship program for girls. However, this specific program targets female students only at the secondary level of education. Data on the primary completion rate shows a heightened level of gender disparity as compared to NER, which indicates the need to expand the focus of such scholarship programs to primary level of education as well. Furthermore, the SERP includes a rehabilitation component for schools through performance-based agreements, which has the potential to introduce more gender-friendly performance measures.

In view of the discussion related with MDG 2 in this section, several policy options may need to be revisited. Broadly, the indicators for the education sector demonstrate:

- Extremely high instance of non-functional schools pointing to challenges faced by the Government of Sindh in maintaining the physical infrastructure of the education sector.
- The inability to restructure resources to provide an even coverage and distribution of accessible education to a large population.
- Inability (in districts like Ghotki, Thatta, Kashmore, Jacobabad, etc) 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 under-utilized in order for the trend in female exclusion to arrest. Missing facilities in schools can cause enrolment rates to decline and the GER has shown an increasing but also erratic trend.
- Providing horizontal accessibility across all districts has a major cost implication for the

Sindh Government, 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 donor's and government's Preliminary Damage and Needs Assessment, Sindh is the province worst affected by the 2010 floods and the educational infrastructure of the province has suffered severe damages. Early estimates indicate that a staggering 5,655 schools in the province have suffered partial or complete physical destruction. Almost all of these (5,417 or roughly 96 percent) were primary schools, and 811 schools were female schools. The most damaged district in the province is Jacobabad (1,247 schools), followed by Thatta (966), Dadu (764), and Kashmore (571), which are mostly among the poorer performing districts (except Dadu which performed better than others discussed here) on education indicators. In the aftermath of the floods, the progress on this sector will have certainly slowed down.

2.5 Summary of Findings

The key indicator for the attainment of the MDG goal on universal primary education is the NER. Between 1996 and 2011, although the province has made overall improvement in 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 targets by 2015. The GER in the province has suffered due to dramatic irregularities in the rate of progress for male enrolment and rural enrolment disparately. Furthermore, the increasing disparity over time between the urban and rural GERs is a worrisome trend. Completion rates in the province are generally poor, and an urgent policy response is required to address the difference between gender parity in urban and rural areas.

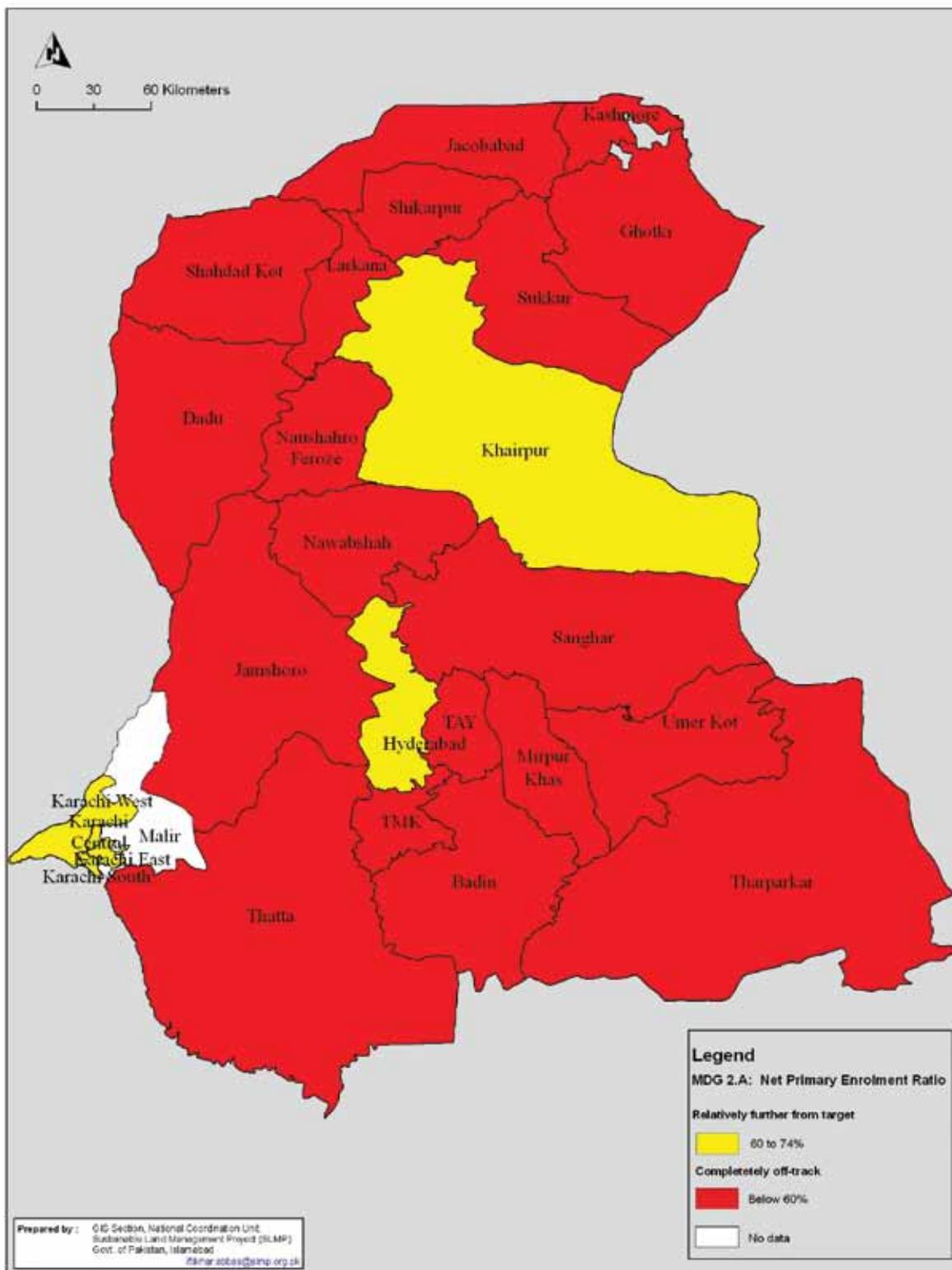
Variation in performance in the province is not as significant as the challenge that progress will be overestimated by the existence of a few outliers, namely Karachi and Hyderabad. Further, variation among the districts does not follow any

clearly discernible pattern of expectation across all indicators in this particular goal. It appears, however, that literacy, enrolment, and primary completion indicators among females in the rural areas are uniformly poor, and can be the major determinant in the momentum of progress.

In particular, to address primary enrollment related concerns, the government of Sindh has made some progress under Sindh Education Reform Program (SERP) regarding improved access, quality

and governance in education sector. The key interventions under this program include school rehabilitation program, school management committees, merit based teachers recruitments, public-private partnership for promoting low cost private schools in Sindh, free textbooks, and girls' stipends. However, there is a need to include greater and more innovative measures to incentivize girls' participation in education.

MDG 2- Achieving Universal Primary Education Sindh



Chapter 4

Goal 3: Promoting Gender Equality and Women's Empowerment

Chapter-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 four indicators:

MDG Tracking Table 3: Gender Equality in Sindh

Indicators	Region	FY02	FY05	FY06	FY07	FY08	FY09	FY11	MDG Target (2015)
Gender Parity Index (GPI) for primary education	Pakistan	0.82	0.85	0.85	0.81	0.85	0.84	0.83	1.00
	Sindh	0.67	0.77	0.81	0.77	0.83	0.81	0.77	1.00
Youth Literacy GPI	Pakistan	0.64	0.68	0.74	0.75	0.78	0.78	n/a	1.00
	Sindh	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Share of Women in Wage Employment in the non-agricultural sector (percent)	Pakistan	9.65	10.11	10.93	10.53	9.89	10.64	11.13	14.0
	Sindh	6.17	n/a	8.33	6.95	5.95	7.93	8.32	n/a
Proportion of seats held by women in national parliament (percent)	Pakistan	n/a	21	21	21	22	22	22*	n/a
	Sindh	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Sources:

National level estimates from PMDGR 2010 until FY09; FY11 figures calculated from PSLM 2010/11 and LFS 2010/11.

Data sources for Sindh include:

GPI for primary education calculated from PIHS 2001/02 and PSLM 2004/05 - 2010/11. The figures are for public schools.

Share of women in wage employment in non-agricultural sectors calculated from various issues of the Labor Force Survey.

* UN Statistics Division, MDG Database

n/a: not available; FY= fiscal year (July-June).

The indicators specified for the third MDG are concerned with gender parity in education, wage employment, and 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 Action Reform Program (GRAP), aimed at creating a positive bias towards women in the workplace, and targeted specifically towards government institutions. The Government of Sindh has also endeavored to promote gender equality through the introduction of a Gender Based Governance System (GBG).²⁶

3.1 Gender Parity in Education

Key Message: Average GPIs for public schools

ranged from 0.77 for primary schools to 0.71 for high schools. With the exception of a few high performing districts, gender parity across most of the province is quite poor. Variation across districts is more pronounced at higher levels of education.

Gender parity in education is the main indicator under the third MDG. To assess the performance against this indicator, 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 data shows that gender disparity in education is a considerable and complex challenge for the

²⁶ According to the Sindh Development Review 2008/09.

Government of Sindh. The problem persists across all education indicators (literacy, net primary enrolment, and particularly primary school completion). Data from the PIHS 1995/96 and PSLM 2010/11 indicate that the gender gap in literacy and net enrolment has decreased over time. Although, male literacy exceeded female literacy during last fifteen years, overtime the male-female literacy gap has declined from 29 percentage points in 1996 to 25 percentage points in 2011. However, the current gender gap of 25 percentage points is still a staggering figure. In the case of net enrolment rates (NER), the improvement over time has been greater than in the case of the literacy rate. A gender gap

of 14 percentage points between male and female net primary enrolment recorded in 1996 reduced to 9 percentage points in 2011– an improvement of 5 percentage points over a period of fifteen years, but even this rate of progress is too slow to achieve gender parity targets in the near future.

Furthermore, GPIs for primary and matric schools (high school) for the province consistently fall below the national average, and the extreme variation across the districts requires policy measures to address these disparities and even out the progress. The following table shows district-wise GPIs for different levels of education in public schools in 2011, based on PSLM 2010/11 data.

Table 3.1 GPIs at Different Levels of Education in Public Schools (Females per Male)

S.No.		GPI Primary	GPI Middle	GPI Matric
	Pakistan	0.83	0.81	0.75
	Sindh	0.77	0.81	0.71
1	Khairpur	0.76	0.72	0.54
2	Sukkur	0.80	0.51	0.41
3	Nawabshah	0.66	0.39	0.29
4	NowsheroFeroze	0.73	0.67	0.68
5	Ghotki	0.57	0.24	0.25
6	Jaccobabad	0.55	0.41	0.47
7	Kashmore	0.48	0.37	0.47
8	Shikarpur	0.67	0.75	0.44
9	Larkana	0.68	0.76	0.71
10	Shahdadkot	0.74	0.55	0.36
11	Dadu	0.90	0.70	0.65
12	Jamshoro	0.67	0.56	0.59
13	Hyderabad	0.97	1.15	0.71
14	Matiori	0.69	0.49	0.62
15	Tando Allah Yar	0.68	0.58	0.38
16	TandoMuhd Khan	0.58	0.46	0.32
17	Badin	0.65	0.49	0.45
18	Thatta	0.56	0.41	0.63
19	Sanghar	0.68	0.74	0.57
20	Mir PurKhas	0.60	0.92	0.64
21	UmerKot	0.77	0.54	0.40
22	Tharparkar	0.74	0.48	0.23
23	Karachi	0.94	1.10	0.96

Source: PSLM 2010/11.

As the data illustrates, with regards to public schools, over all GPI decreases for higher levels of education. The average GPI for primary schools in 2011 was 0.77, lower than the national average of 0.83. Average GPI for public sector middle schools was the same as national average (0.81), whereas, the overall GPI for high schools at 0.71 was not only lower than national average, but also lower than primary schools.

According to the 2011 data for public schools, there were wide variations on GPI across all districts in Sindh. Gender parity at the primary level ranged from the lowest 0.48 in Kashmore to the highest 0.97 observed in Hyderabad district. Hyderabad was the sole example in the province of a district that is almost near gender parity at the primary level. In two other districts gender parity figures exceeded the national average (falling between 0.90 and 0.94). Overall Sindh data shows better progress in gender parity at the primary level compared with the matric level. The major concern is that the gender gap remains uneven across the province (the difference between highest and lowest performing districts was 0.49), indicating the need for a more targeted strategy to promote gender parity.

Variation across districts was more pronounced at higher levels of education. At the middle school level, although the average GPI matched with the national level, variation across districts was far more pronounced than at the primary level. In this case Karachi and Hyderabad, two districts with the best education indicators, achieved gender parity with GPIs at 1.10 and 1.15 respectively. While the status of progress in Karachi and Hyderabad is encouraging, the figures tend to raise the provincial average to project a picture unrepresentative of the rest of the province. Middle schools GPIs for 15 of 23 districts fall below 0.70, and nine of these districts (Nawabshah, Ghotki, Jaccobabad, Kashmore, Mititari, Tando M. Khan, Badin, Thatta, and Tharparkar) have not even achieved 50 percent parity for females at the middle school level. Ghotki is the worst performing district at 0.24 (compared with Karachi at 1.12). The high school/matric level, with lower average GPI than national level, shows a GPI pattern that is mostly similar to primary levels across districts. There are no districts that have achieved full gender parity

(not even Karachi at 0.96), and there are twelve districts in the province that are below 50 percent parity (Sukkur, Nawabshah, Ghotki, Jaccobabad, Kashmore, Shikarpur, Shahadatkot, Tando Allah Yar, Tando M. Khan, Badin, Umerkot and Tharparkar).

3.2 GPI for Adult Literacy

Key Message: The GPI for adult literacy was 0.61 for Sindh, compared to the national average of 0.63. The trend for high and low performing districts was similar to other education indicators.

The GPI for adult literacy in Sindh is quite poor, even compared to GPIs for primary, middle, and high schools. As shown in the table below, none of the districts in the entire province have achieved gender parity in adult literacy (the closest being Karachi at 0.89). The pattern observed in educational indicators was also visible here as GPIs were highest in Karachi and Hyderabad. Except, Nowshero Feroze, Dadu, and Mir Pur Khas, all other districts (18 in total) are still below 50 percent parity for female literacy. Once again, Jaccobabad, Ghotki, and Tharparkar are among the biggest concerns where the GPI for adult literacy were very low at 0.19, 0.22, and 0.24 respectively.

Table 3.2 GPI for Adult Literacy (Age 15+)

S.No		Adult Literacy GPI
	Pakistan	0.63
	Sindh	0.61
1	Khairpur	0.33
2	Sukkur	0.43
3	Nawabshah	0.33
4	NowsheroFeroze	0.51
5	Ghotki	0.22
6	Jaccobabad	0.19
7	Kashmore	0.29
8	Shikarpur	0.36
9	Larkana	0.44
10	Shahdadkot	0.41
11	Dadu	0.58
12	Jamshoro	0.45
13	Hyderabad	0.78
14	Matiari	0.46

15	Tando Allah Yar	0.49
16	TandoMuhd Khan	0.42
17	Badin	0.35
18	Thatta	0.35
19	Sanghar	0.35
20	Mir PurKhas	0.56
21	UmerKot	0.28
22	Tharparkar	0.24
23	Karachi	0.89

Source: PSLM 2010/11

3.3 Employment

Key Message: In 2011, labor force participation rate for women (for population aged 10+) was just 15.88 percent for the province compared to 70.33 percent for men²⁷.

Labor force participation rates remain low for women overall, at just 15.88 percent for the province as whole, compared to 70.3 percent for men. However, these estimations have a few issues especially with their very definitions. For example, the labor force participation for rural women is estimated comparably better at 25.2 percent (for females aged 10+) in the Labor Force Survey (LFS) 2010/11, 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 7.2 percent compared to 65.5 percent for men. Women's status as an unpaid family helper also does not seem to be reflected adequately in official statistics – according to LFS 2010/11, 34.9 percent of under-employed persons are unpaid family helpers, and that only 17.2 percent of these are women. Nevertheless, women's participation in wage-earning employment is indeed exceptionally low by all accounts.

²⁷ Labor Force Survey 2010/11

²⁸ Hon. Minister SassuiPalijo won the elections against a general seat (PS-85 Thatta II) in Sindh Assembly in 2008.

²⁹ Increasing female teachers is likely to help increase girls school enrollments, as mentioned in the recent Gender Awareness Policy Analysis of the Government of Sindh.

3.4 Parliamentary Representation

The provincial assembly of Sindh has 168 members, of which 29 are women. All of the women legislators have been nominated against seats reserved for women. However, recently this trend has been changed with the nomination of one of the woman legislator on a general seat.²⁸

The Government of Sindh, with assistance from UNDP, is implementing a "Gender Based Governance Systems" (GBG) project aimed at promoting women's empowerment and improving gender parity in the province's political representation. A great portion of the project focus is on training and capacity building for women leaders in the province (parliamentarians, and local level representatives).

Status of Progress Against Goal 3: Targets in education indicators are likely to be met only in a few districts across the province.

3.5 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;
- Low ratio of female teachers²⁹;
- 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, 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.

3.6 Summary of Findings

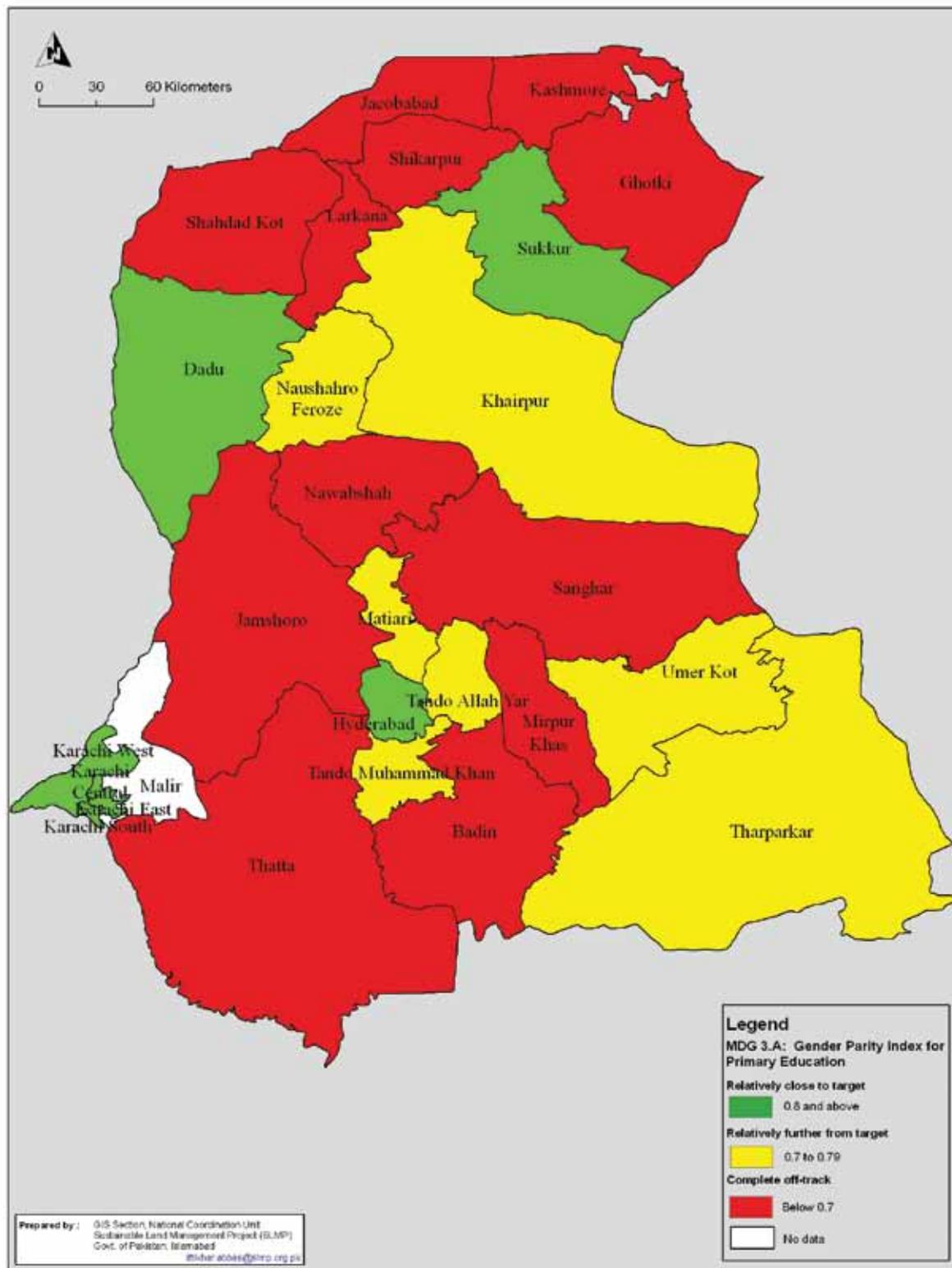
There is high evidence of gender disparity across the province of Sindh. The problem is more acute in rural areas, which needs to be addressed. The GPI data provided is not disaggregated by urban and rural areas, however combined with the evidence from the discussion on MDG 2, we can safely assume that GPIs for rural areas are likely to be much lower than those recorded for urban areas.

Trends in the GPI illustrate the problematic nature of achieving gender parity in public education for the Government of Sindh – there are repeated instances of two districts doing extremely well at the primary, middle, and high school levels, but data from the rest of the province provides poignant examples of terrible performance and a widening gap between

the high performing and low performing districts. In public education the highest number of districts achieved gender parity at the middle school level, but the number of districts with less than 50 percent gender parity increases at higher levels of education. Whether this is the result of public sector programs disproportionately benefitting urban centers, or due to contributions from the private sector, correcting this imbalance will require a targeted response from the Government of Sindh.

There have been a number of steps taken to improve women's situation at the federal level, and these programs have been implemented in Sindh 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), aimed to improve women's status in government institutions by introducing better hiring practices, amongst other reforms.

MDG 3- Promoting Gender Equality and Women's Empowerment Sindh



Chapter 5

Goal 4: Reducing Child Mortality



Chapter-5

MDG 4: Reducing Child Mortality

Goal 4 on reducing child mortality has been defined in terms of six indicators as shown in the table below:

MDG Tracking Table 4: Reducing Child Mortality

Indicators	Region	FY02	FY04	FY05	FY06	FY07	FY08	FY09	FY11	MDG Target (2015)
Under 5 Mortality Rate (Deaths per 1000 Live Births)	Pakistan	n/a	n/a	n/a	n/a	94	n/a	n/a	n/a	52
	Sindh	n/a	112	n/a	n/a	100	n/a	n/a	n/a	
Infant Mortality Rate (Deaths per 1000 Live Births)	Pakistan	77	n/a	77	76	75	n/a	n/a	n/a	40
	Sindh	n/a	71*	n/a	n/a	n/a	n/a	n/a	n/a	
Proportion of Fully Immunized Children 12-23 Months	Pakistan	53	77	77	71	76	73	78	81	>90
	Sindh	45	n/a	73	71	65	67	69	75	
Lady Health Worker's Coverage (percent of target population)	Pakistan	38	66	n/a	72	76	76	83	n/a	100
	Sindh	n/a	n/a	n/a	n/a	n/a	n/a	46	n/a	100
Proportion of Children 12-23 Months Immunized Against Measles	Pakistan	57	n/a	78	76	77	76	79	82	>90
	Sindh	46	n/a	73	73	66	68	70	77	>90
Proportion of Children Under 5 Who Suffered from Diarrhoea in the Last 30 Days (percent)	Pakistan	12	n/a	14	12	11	10	10	11	<10
	Sindh	11	n/a	18	8	12	7	12	12	

Sources: For national indicators, PMDGR 2010, and PSLM 2010/11 for FY11.

Data sources for Sindh include various issues of PSLM, PDHS, PIHS, PFFPS 1996/97 and MICS 2003/04.

Data on LHWs from the National Program for Family Planning and Primary Health Care for May 2010.

*The Sindh Development Review 2008/09 quotes the same figure without clarifying if it stands as a current statistic.

n/a: not available; FY: fiscal year (July-June).

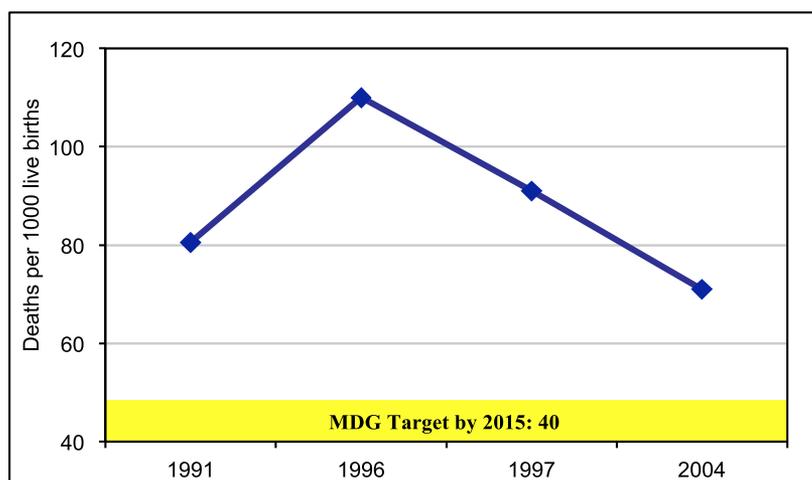
Generally, indicators for health in Sindh show low levels of progress and at times negative trends. Across the province, progress remains disproportionate among different districts. Also, there is stark variation in the levels of development across the urban/rural divide which points to the urgent need for policy measures to even out the distribution of health care services.

4.1 Infant Mortality Rate

Key Message: The infant mortality rate for Sindh in 2004 was 71 deaths per 1000 live births. The declining trend in the IMR witnessed between 1996 and 2004 is encouraging, but the lack of data beyond 2004 makes it impossible to estimate if progress has been sustained during the last decade.

The main indicator measuring progress towards this particular goal is the Infant Mortality Rate (IMR). According to the available estimates from MICS 2003/04, overall IMR for the province was recorded as 71 deaths per 1000 live births in 2004 (disaggregated district-wise data is not available for this indicator). By looking at the trend for the previous decade, the rate in 2003 has certainly declined, as the IMR in Sindh was recorded at 110 deaths per 1000 live births in 1996 (highest during nineties), which reduced to 91 in 1997, and then to 71 in 2004, as shown in the figure below. Over a period of eight years, between 1996 and 2004, the IMR has declined by approximately 39 percent.

Figure 4.1 Infant Mortality Rates (Deaths per 1000 Live Births)



Sources: PDHS 1990-91; PIHS 1995-96; PFFPS 1996-97; and MICS 2003-04

However, given the lack of availability of data for the period after 2004, it is difficult to comment on the consistency of the rate of decline. If the trend in IMR decline has in fact sustained itself beyond 2004 at a rate of progress similar to what was recorded between 1996 and 2004, there may be reason to expect that Sindh will be able to meet the MDG 2015 target by bringing the IMR down to 40 deaths per 1000 live births, which is the national target. But unfortunately, the lack of recent data on this indicator makes it difficult to accurately assess the progress of the province.

4.2 Immunization

Key Message: The latest estimates suggest that only 75 percent of children from 12 to 23 months of age in the province have been fully immunized compared to the national average of 81 percent.

The second major contributor to better child health is a rigorous immunization program. With the help of these programs and the institutional mechanism, such as National Immunization Days, the percentage of children fully immunized between the ages of 12 to 23 months was estimated at 75 percent (on the basis of recall and record)³² in 2010/11. Here, it is important to note that different surveys have quoted different estimates, which is a cause of concern. Although, this report mostly relies on

PIHS/PSLM data, it has also used other sources where the PIHS/PSLM data is not available. There have been a few contradictory claims on some of the immunization data by other surveys. For example, the PDHS 2006/07 claimed a low 37 percent rate of full immunization in Sindh, while PSLM data for the same year cited a much higher rate of 65 percent – a finding that created a lot of controversy when the data was first released.

Across the province, the overall results in immunization in 2010/11 are varied. There is no clear pattern of certain districts doing well consistently both in terms of the gender gap and with respect to the urban/rural divide. Disparity in immunization coverage between urban and rural areas is in high evidence across most of the province.

According to the latest estimates, only two districts in Sindh – Karachi and Jamshoro (both at 91 percent) – achieved the overall 2015 MDG target of over 90 percent full immunization.³³ Karachi district showed good progress with 91 percent immunization coverage in urban areas for both males and females, and 90 percent immunization in rural areas, where male immunization was slightly below female immunization. Jamshoro also showed improvement with 92 percent immunization coverage across the urban areas and 91 percent in

³² PSLM 2010/11.

³³ PSLM 2010/11.

rural areas for both males and females. However, the level of immunization coverage exhibited by these two districts was not replicated anywhere else across the province.

In four of the total 23 districts (Jacobabad, Tando M. Khan, Sanghar, and Tharparkar), overall immunization coverage was less than 60 percent. In fact, two of these districts (Tando M. Khan and Tharparkar) performed even below 50 percent. The situation in Thando M. Khan is particularly alarming, with abysmally low overall coverage of 43 percent, the highest rural-urban divide/gap of 51 percentage points (overall 36 percent rural, and 87 percent urban coverage), and a wide gender gap in the range of 27 percentage points. However, surprisingly, there was 100 percent immunization coverage among urban females compared with just 17 percent for rural females.

With regard to the rural-urban disparity, there were eight districts where the rate of immunization in rural areas was actually better than the urban areas. These included, Khairpur, Nawabshah, Ghotki, Larkana, Dadu, Badin, Umerkot and Tharparkar. Overall performance of these districts was in the range of 60-85 percent, with only one exception of Tharparkar district (46 percent). There was also an incidence of rural-urban equality in immunization in case of Sanghar district (both at 58 percents), whereas, in the remaining 14 districts, urban immunization coverage was better than in the rural areas. Overall high performers in this indicator, Karachi and Jamshoro, are also part of this group showing better urban performance. The district-wise immunization details are mentioned in following table.

Table 4.1 Percentage of Children 12-23 Months Fully Immunized (by Recall and Record)

Sr.No	Region	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	Pakistan	87	84	85	80	77	79	82	79	81
	Sindh	83	87	85	70	64	67	75	74	75
1	Khairpur	62	82	70	80	67	74	75	70	73
2	Sukkur	91	70	82	63	64	64	74	66	71
3	Nawabshah	58	68	62	72	66	69	67	67	67
4	NowsheroFeroze	86	56	71	64	58	61	66	57	62
5	Ghotki	31	84	58	60	65	63	58	66	63
6	Jacobabad	89	90	89	53	46	50	60	55	57
7	Kashmore	81	100	91	77	54	65	77	62	70
8	Shikarpur	81	89	85	73	83	78	74	84	79
9	Larkana	82	87	84	89	83	86	86	85	85
10	Shahdadkot	100	83	90	88	76	81	90	78	83
11	Dadu	70	89	80	83	88	86	79	88	84
12	Jamshoro	91	93	92	91	91	91	91	91	91
13	Hyderabad	87	86	86	63	35	51	79	78	78
14	Matiari	100	100	100	83	70	77	86	76	81
15	Tando Allah Yar	70	100	88	69	46	60	69	64	67
16	Tando M. Khan	66	100	87	56	17	36	57	30	43
17	Badin	64	52	57	71	59	65	70	58	64
18	Thatta	78	87	83	63	54	59	65	61	63

Sr.No	Region	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
19	Sanghar	53	62	58	56	60	58	55	61	58
20	Mir PurKhas	79	100	89	55	55	55	61	68	64
21	UmerKot	85	55	73	87	86	86	86	82	84
22	Tharparkar	24	64	45	57	36	46	55	38	46
23	Karachi	91	91	91	89	91	90	91	91	91

Source: PSLM 2010/11.

Notes:

1. 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.

2. Full immunization means that the child has received: BCG, DPT1, DPT2, DPT3, Polio1, Polio2, Polio3 and measles.

3. 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 month.

With regards to the percentage of children fully immunized against measles, between the ages of 12 to 23 months, an overall 77 percent was estimated for Sindh in 2010/11.³⁴ In this case as well, the percentage of immunization in Sindh is below national average of 82 percent. A district wise analysis reveals that the situation in districts and trends in the urban-rural divide are almost similar to those in full immunization coverage. Under this indicator, only three districts, that also include previous performers with higher results, have achieved the overall 2015 MDG target of above 90 percent. These districts are: Dadu (96 percent), Karachi (92 percent) and Jamshoro (91 percent). Dadu achieved 100 percent coverage in urban, and 95 percent in rural areas. Whereas, Jaccobabad and Tando M. Khan again recorded low levels of overall coverage, at 57 percent and 43 percent, respectively.

In addition, 17 districts (including the aforementioned high performers) showed disparities on measles immunization to the detriment of rural areas. The highest rural-urban disparity was recorded in case of Tando M. Khan with the rural-urban gap of 51 percentage points. Rural-urban gaps for remaining 16 districts ranged between 1 and 39 percentage points. Of all districts, Mitiari and Dadu achieved 100 percent

immunization coverage in urban areas. Whereas, in 5 districts performance in rural areas was better than urban areas. These include: Nawabshah, Ghotki, Larkana, Badin and Tharparkar. Khairpur had similar level of immunization in both rural and urban areas (74 percents). The following table shows children immunized against measles, by district and urban-rural divisions.

34 PSLM 2010/11.

Table 4.2 Percentage of Children 12-23 Months Immunized Against Measles (by Recall and Record)

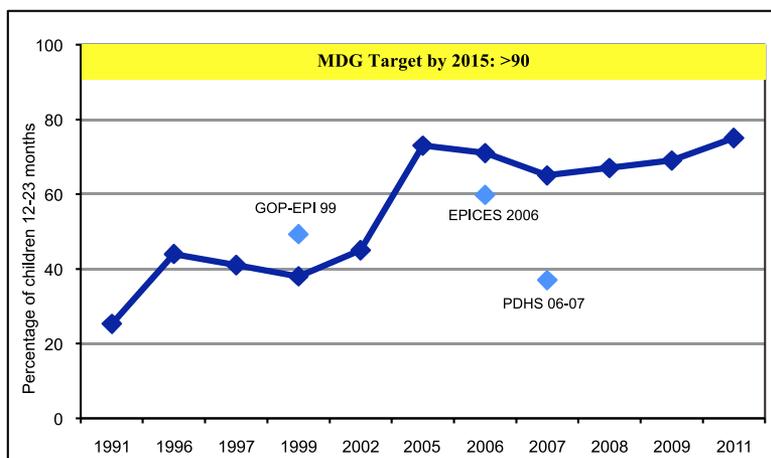
S.no.	Districts	Total	Urban	Rural
	Pakistan	82	87	80
	Sindh	77	87	70
1	Khairpur	74	74	74
2	Sukkur	78	82	75
3	Nawabshah	70	65	72
4	NowsheroFeroze	62	71	61
5	Ghotki	65	58	65
6	Jaccobabad	57	89	50
7	Kashmore	76	91	72
8	Shikarpur	79	85	78
9	Larkana	86	84	87
10	Shahdadkot	83	90	81
11	Dadu	96	100	95
12	Jamshoro	91	92	91
13	Hyderabad	78	86	51
14	Matiari	81	100	77
15	Tando Allah Yar	67	88	60
16	TandoMuhd Khan	43	87	36
17	Badin	64	57	65
18	Thatta	64	83	60
19	Sanghar	60	65	58
20	Mir PurKhas	68	89	60
21	UmerKot	87	91	86
22	Tharparkar	62	45	63
23	Karachi	92	92	90

Source: PSLM 2010/11.

Based on information from different data sources, it appears that pace and rate of progress on immunization coverage has been uneven during the last two decades. Between 1991 and 1999, the overall immunization coverage increased by 13 percentage points, and the trend followed a trajectory of increase, decline and then picked up again. A similar trend appeared between 2002 and 2007, but with a better rate of progress at 20 percentage points. However, since 2007, full immunization coverage is gradually and steadily increasing (10 percentage points between 2007

and 2011). Based on the continuity of this increasing trend, and rate of progress, although the province would get closer to achieving the MDG target of immunization coverage by 2015, it is insufficient to actually achieve the target.

Figure 4.2 Trend in Percentage of Children 12-23 Months Fully Immunized



Sources: PDHS 1990-91; PIHS 1995-2002; and PSLM 2004-11 (for trend line on chart), and for other figures Government of Pakistan- EPI 1999; EPICES 2006; and PDHS 2006-07.

4.3 Under Five Mortality Rate (U5MR)

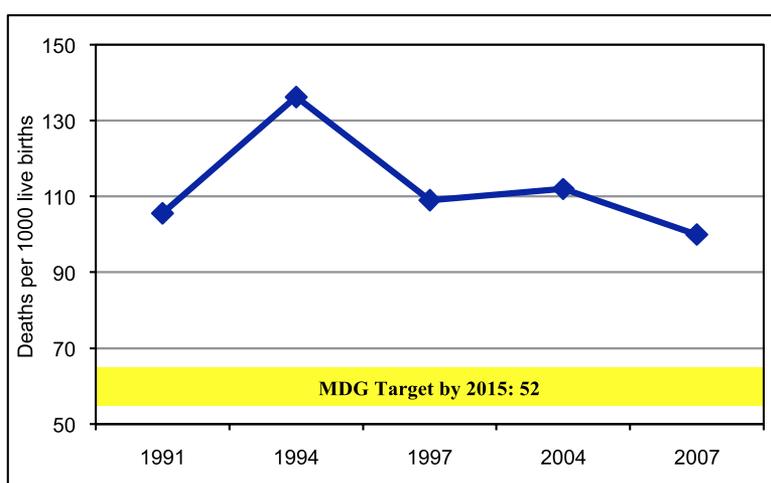
Key Message: The recent trend in the under-five mortality rate is gradually declining. The rate has reduced from 112 deaths per 1000 live births in 2004 to 100 deaths per 1000 births in 2007.

The under-5 child mortality rate is another indicator used to gauge the achievement of the fourth MDG. During last two decades the overall rate in Sindh has declined from 105.6 deaths per 1000 live births in 1991,³⁵ to 100 deaths per 1000 live births in 2007.³⁶

However, it is higher than the national average

of 94 deaths per 1000 live births in 2006/07,³⁷ and insufficient or quite distant from achieving 2015 MDG target of less than 52 deaths per 1000 live births. For the achievement of MDG target, reduction in current U5MR by almost 50 percent in less than 3 years is required, which is a challenge for the province given its slow pace of progress on this indicator. Based on different data sources, the U5MR trend for Sindh is presented in the figure below, showing an overall decline, but clearly an insufficient pace of progress for being able to meet the 2015 MDG target.

Figure 4.3 Trend in Under-Five Mortality Rate in Sindh



Sources: PDHS 1990-91 & 2006-07; PDS 1993-94; PFFPS 1996-97; and MICS 2003-04.

35 PDHS 1990/91.

36 PDHS 2006/07.

37 PMDGR 2010, based on PDHS 2006-07 data

On this indicator, the disaggregated data by districts is not available. However, certain other relevant indicators pertinent to the under-five mortality rate, such as the number of children under the age of five suffering from diarrhea over the past 30 days, show significant variation and worrisome trends across districts in Sindh. According to PSLM 2010/11, only one of the 23 districts (Kashmore) recorded a rate lower than 5 percent. In ten other districts the incidence of children suffering from diarrhea in the last 30 days was equivalent to or in excess of

15 percent. These districts are: Nowshero Feroze, Shahadkot, Hyderabad, Mitiari, Tando Allah Yar, Tando M. Khan, Badin, Sanghar, Mirpur Khas, and Tharparkar. In Sanghar and Tando Allah Yar overall rates were alarmingly high (at 33 percent and 29 percent, respectively). Also, there was greater rural-urban disparity recorded during 2011. The highest recorded instance was in urban areas of Sanghar, where approximately 44 percent of total (mostly boys at 45 percent) suffered diarrhea in the last 30 days.

Children Under 5 Suffering From Diarrhea in Past 30 Days (By Province and District)

Sr. No.	Region	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	Pakistan	11	11	11	12	11	12	12	11	11
	Sindh	12	12	12	12	14	13	12	13	12
1	Khairpur	7	9	8	6	9	8	7	9	8
2	Sukkur	12	17	15	7	13	10	9	15	12
3	Nawabshah	27	18	23	5	10	8	12	12	12
4	NowsheroFeroze	16	11	13	16	15	16	16	14	15
5	Ghotki	6	7	7	8	9	9	8	9	8
6	Jaccobabad	2	6	4	8	6	7	7	6	7
7	Kashmore	0	2	1	2	3	3	2	3	2
8	Shikarpur	6	1	4	7	5	6	7	5	6
9	Larkana	17	7	12	13	16	14	14	13	14
10	Shahdadtkt	12	8	10	14	21	17	14	18	16
11	Dadu	7	16	11	12	10	11	10	12	11
12	Jamshoro	19	18	19	9	14	12	11	15	13
13	Hyderabad	18	18	18	18	18	18	18	18	18
14	Matiari	18	23	21	19	16	18	19	18	19
15	Tando Allah Yar	36	37	36	23	30	26	26	31	29
16	Tando M. Khan	26	18	21	20	12	16	21	13	17
17	Badin	16	14	15	11	19	15	12	18	15
18	Thatta	16	14	15	9	11	10	10	12	11
19	Sanghar	45	44	44	29	32	30	32	35	33
20	Mir PurKhas	7	8	8	21	18	19	18	16	17
21	Umerkot	15	21	18	15	10	13	15	12	14
22	Tharparkar	20	15	17	17	16	17	17	16	17
23	Karachi	8	9	9	9	10	9	8	9	9

Source: PSLM 2010/11

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, Jaccobabad and Thatta had the highest prevalence of underweight children, while Hyderabad had the least³⁸. Whereas, these districts present quite a different picture on incidence of child diarrhea, with Thatta and Jaccobabad recording below 15 percent children with diarrhea, and Hyderabad with above 15 percent. This also points at the possible progress on MDG 1 indicator of underweight children by 2011, which cannot be properly assessed due to the unavailability of data. On the other hand, under-performing districts on the incidence of diarrhea, like Sanghar and Tando Allah Yar also show very high prevalence of children who are undernourished.

4.4 Coverage of LHWs

Key Message: *Less than half of the province's targeted population has access to an LHW – this average obscures significant variation across districts and is skewed by one or two high performing outliers.*

The extent of coverage of the LHW program is an indicator of maternal and child health by access to health care. Sindh is Pakistan's second-most densely populated province with a projected population of over 40 million for 2010. Providing adequate coverage therefore presents a significant challenge and stretches the capacity of the health-care providing institutions. According to the latest estimates, there were a total of 22,767 LHWs working in the province by the end of fiscal year 2010, with about 46 percent³⁹ coverage of the population on average. This level of coverage is much lower than the national average of 83 percent⁴⁰. Moreover, there is evidence of inconsistent coverage across all districts in Sindh. The highest recorded coverage was in Naushero Feroze (87 percent), and Tando Allah Yar (80 percent). On the other hand, the lowest coverage was recorded in Karachi followed by Jacobabad (at 21 percent and 26 percent, respectively). Four other districts, including Jamshoro, Thatta, Kashmore and Ghotki, also recorded less than 50 percent LHW coverage in 2010. The following table presents district-wise LHWs availability data as of May 2010.

Table 4.4 LHW Coverage in Sindh, by District

S. No	Districts	No. of Working LHWs	No. of Supervisors working	Percent of Population Covered
1	Karachi City	2840	113	21%
2	Hyderabad	1180	43	59%
3	TandoAllahYar	537	17	80%
4	TandoM. Khan	439	13	54%
5	Matari	546	19	65%
6	Dadu	1225	44	64%
7	Jamshoro	492	17	49%
8	Badin	1105	39	55%
9	Thatta	699	21	31%
10	MirpurKhas	983	39	62%
11	Umerkot	585	24	55%
12	Sanghar	1206	43	67%
13	Tharparkar	658	27	53%

38 MICS 2003-04.

39 National Program for Family Planning and Primary Health Care, Program Status Proform, May 2010.

40 PMDGR 2010.

S. No	Districts	No. of Working LHWs	No. of Supervisors working	Percent of Population Covered
14	Larkana	1103	37	57%
15	Kamber	913	31	55%
16	Jacobabad	600	11	26%
17	Kashmore	518	16	43%
18	Shikarpur	921	21	70%
19	Sukkur	1232	40	77%
20	S. Benazirabad	1213	41	74%
21	Khairpur	1650	52	61%
22	Ghotki	748	24	38%
23	NausheroFeroze	1374	50	87%
	Total - SINDH	22767	782	46% (Average)

Source: National Program for Family Planning and Primary Health Care, Program Status Proforma, May 2010.

Status of Progress against Goal 4: Progress is slow and insufficient. Targets in immunization, diarrhea control, child mortality rates, and coverage of Lady Health Workers are unlikely to be met, although it is difficult to comment on the status of infant mortality target due to lack of data.

4.5 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 illiteracy, unemployment, gender inequality, social exclusion, lack of access to safe drinking water, and inadequate sanitation and food insecurity, combined with inadequate funds allocation to health sector.

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 decision-making,
- Inequitable distribution of public sector

expenditures between urban and rural areas.

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

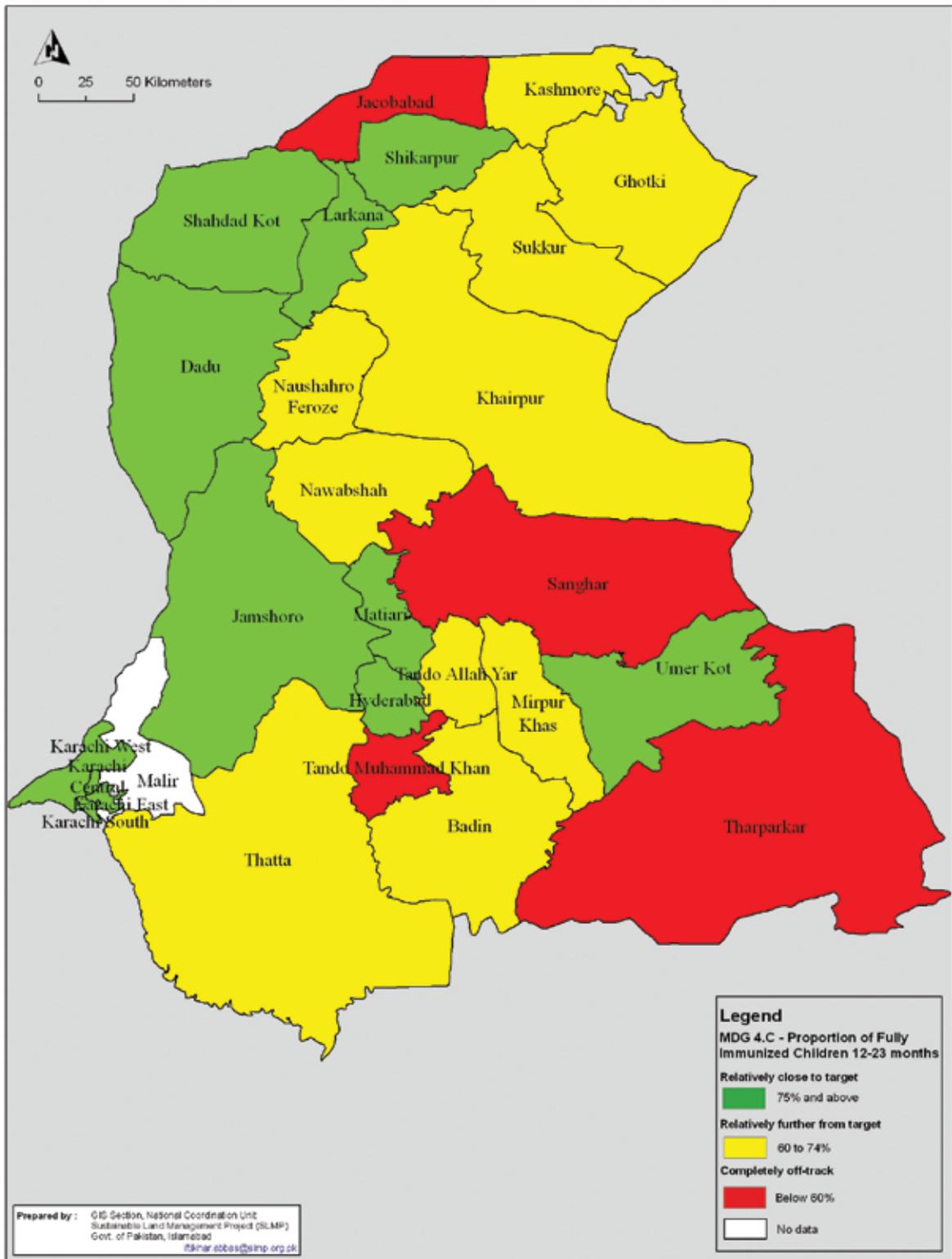
Problems specific to child health are closely interlinked with some of the other targets set by the MDGs, such as lack of awareness due to low educational attainment. When combined with the absence of integrated management of childhood illnesses, this lack of awareness has major consequences for the spread of childhood diseases. Moreover, 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, need to be addressed.

4.6 Summary of Findings

Despite the unavailability of recent data on infant mortality rate in Sindh, the past trend shows that province has done reasonably well. However, at the same time it is difficult to estimate if Sindh is on track to achieve MDG targets in 2015. Progress on under-five mortality rate has been very slow and uneven to be satisfactory. Also, on immunization coverage, there is slow and uneven progress, and the province lags behind from national average. The Government is working steadily towards providing primary health care facilities at the

community level through its People's Primary HealthCare Initiative (PPHI) and Lady Health Worker programs. However, it remains to be seen if this policy framework sufficiently addresses the stark rural/urban disparities across the province. The Preliminary Damage and Needs Assessment, in the wake of the 2010 floods, estimated complete destruction or damage of 11 percent of public health care infrastructure in Sindh. Most of basic health units (BHUs) and dispensaries are reported to have been severely damaged. As the worst affected province by the 2010-flood disaster, the Government of Sindh is likely to face greater health challenges with sizeable sections of the population at the risk of disease.

MDG 4- Reducing Child Mortality Sindh



Chapter 6

Goal 5: Improving Maternal Health

Chapter-6

MDG 5: Improving Maternal Health

In terms of policy implementation, Goal 5 is closely linked to Goal 4, as programs for maternal and child health are often implemented jointly. Goal 5 has been specified in terms of five key indicators, mentioned as below. Not only do these indicators include maternal mortality estimates, but they also include indicators for awareness about reproductive health needs.

The Total Fertility Rate (TFR) in Sindh has witnessed an overall increase during last two decades. The estimated mean number of children born per adult female was recorded at 5.2 in 1990/91⁴¹, which declined to about 5 in 1997⁴², and then increased to 5.25 in 2003/04.⁴³ The data beyond 2004 is not available to help establish if the TFR indeed has continued with this upward trend, or has been arrested (at national level, the more recent data suggests a declining trend overall TFR – from 4.1 in 2006/07 to 3.75 in 2008/09). Nonetheless, based on available estimates for Sindh that point to the

MDG Tracking Table 5: Improving Maternal Health

Indicators	Region	FY02	FY04	FY05	FY06	FY07	FY08	FY09	FY11	MDG Target (2015)
Maternal Mortality Ratio	Pakistan	350	n/a	400	380	276	n/a	n/a	n/a	140
	Sindh	n/a	600	n/a	n/a	n/a	n/a	345-350*	n/a	140
Proportion of Births Attended by Skilled Birth Attendants	Pakistan	40	n/a	48	35	37	40	41	43	>90
	Sindh	n/a	n/a	38	n/a	41	n/a	42	49	>90
Contraceptive Prevalence Rate	Pakistan	28	n/a	n/a	n/a	29.6	30.2	78	n/a	55
	Sindh	15	31	n/a	n/a	22	n/a	n/a	n/a	n/a
Total Fertility Rate (Mean Number of Children)	Pakistan	n/a	n/a	n/a	n/a	4.1	3.85	3.75	n/a	2.1
	Sindh	n/a	5.25	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Antenatal Care Coverage (percent)	Pakistan	35	n/a	50	52	53	56	58	64	100
	Sindh	n/a	42	41	n/a	46	n/a	49	58	n/a

Sources:

For national indicators: PMDGR (2010) until FY09, and PSLM 2010/11 for FY11.

Data sources for Sindh include various issues of PSLM, PDHS, PIHS 2001/02, and MICS 2003/04.

*The Sindh Development Review 2008/09 provides an estimate for the MMR between 345-350 for the province.

Note: Skilled Birth Attendants include doctors (or MOs), nurses (or LHV) and midwives. The ante-natal care coverage also depends on same skilled providers.

n/a: not available; FY: fiscal year (July-June)

5.1 Total Fertility Rate and Contraceptive Prevalence Rate

Key Message: There has been an increase from 5.10 to 5.25 in the average number of children born per adult female between 1991 and 2004. The data on contraceptive prevalence rates although differs by source, it shows overall negative trend.

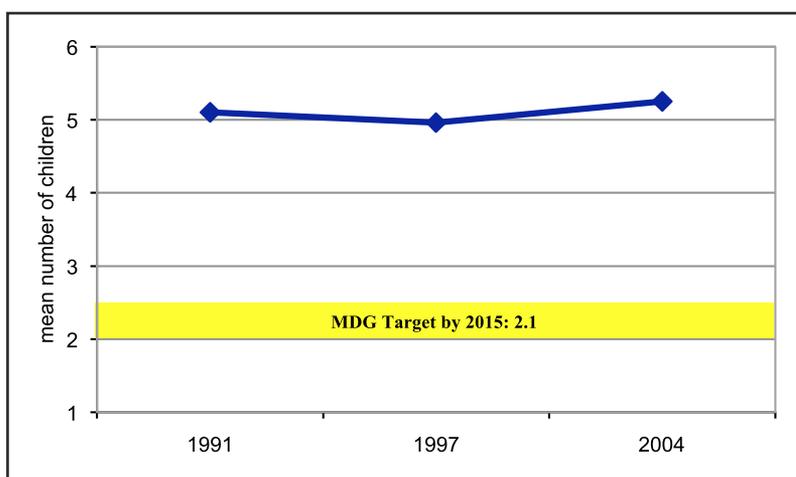
slow progress between 1991 and 2004, it seems unlikely for the province to be able to contribute to meeting the national target of 2.1 in 2015 – in fact, with rising fertility trend, the situation in Sindh may have an adverse impact on the country's overall progress.

41 PDHS 1990/91.

42 PFFPS 1996/97.

43 Sindh MICS 2003/04.

Figure 5.1 Trends in Total Fertility Rates in Sindh

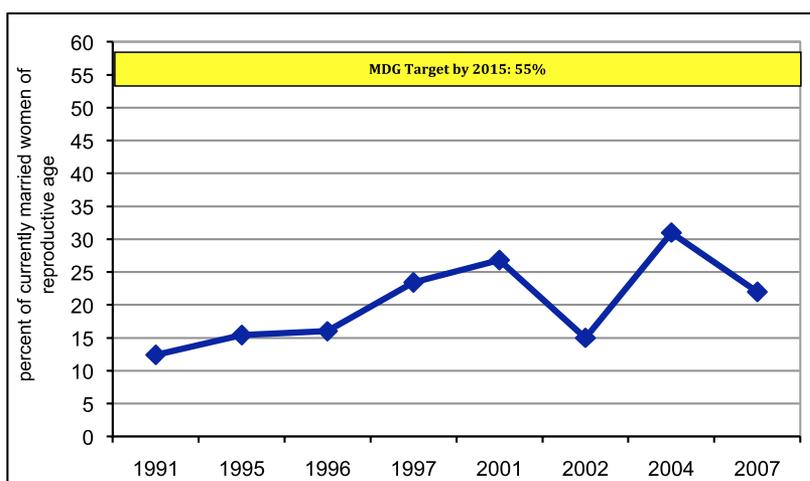


Sources: PDHS 1990-91; PFFPS 1996-97; MICS 2003-04.

Compared to the TFR, there is more recent data available on the Contraceptive Prevalence Rates (CPR) in Sindh. The data indicates that contraceptive prevalence in Sindh has increased overall by 9.6 percentage points during the sixteen years period between 1991 (12.4 percent) and 2007 (22 percent).⁴⁴ However, the trend line for the last decade shows that overtime CPR has declined, although it followed an uneven path with abrupt drops between 2001 and 2002 (by 11.8 percentage points), followed by a sharp rise in 2004⁴⁵

(by 16 percentage points, highest in last two decades), and then finally dropped again in 2007 by 9 percentage points. This analysis of CPR is based on different data sources, which may have used different methodologies, but the point of concern is the latest estimates show a decrease in contraceptive prevalence in Sindh from 31 percent in 2004 to 22 percent in 2007.⁴⁶ Furthermore, this figure was fairly lower than the national average of 29.6 percent in the same year.

Figure 5.2 Trends in Contraceptive Prevalence Rates in Sindh



Sources: PDHS 1990-91 & 2006-07; CPS 1994-95; PIHS 1995-96 & 2001-02; PFFPS 1996-97; PRHFPS 2000-01; MICS 2003-04.

44 PDHS 1990/91 and 2006/07.

45 Sindh MICS 2003/04.

46 PDHS 2006/07.

The district-wise disaggregated data from MICS 2003/04 suggests that contraceptive use was far more prevalent in urban areas (at 46 percent) compared to rural areas (at 20 percent). The district-wise disaggregation for 2003/04 is not complete (not available for all districts). However, the available figures suggest highest contraceptive prevalence in districts of Khairpur (39 percent), Ghotki (34 percent), and Dadu (also 34 percent). The lowest CPRs were recorded in Jacobabad (9 percent) and Tharparkar (only 5 percent).

5.2 Ante-natal Care Coverage and Skilled Birth Attendant Coverage

Key Message: Ante-natal care coverage in the province is low at 58 percent with a large disparity between districts, and urban and rural areas. The coverage of skilled birth attendants is also low, but gradually improving.

As a direct maternal health indicator, ante-natal health care (ANC) coverage is used to assess the progress of the province on this indicator. Over last two decades, the ANC coverage in Sindh has improved by 12 percentage points between 1991 and 2011. During last decade, overall coverage has both increased and declined. The trend line shows that ANC coverage for expectant mothers was highest in 2001 at 60 percent, after which it declined for two consecutive years (42 percent in

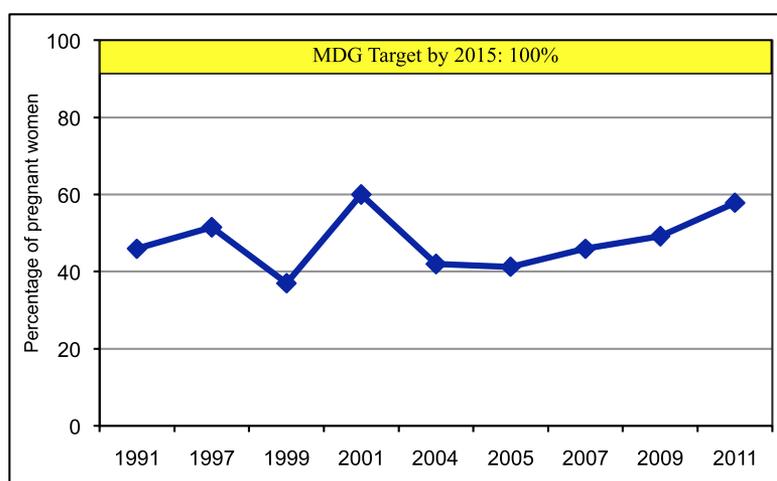
2004, and 41 percent in 2005), before settling in for a gradual rise in the coverage. The latest situation with the estimate of 58 percent (according to PSLM 2010/11) has indeed improved from the record of last seven years, but compared to the national average of 64 percent in the same year, the province is lagging behind by 6 percentage points, and stands far from MDG target.

It is also important to note that various sources have been used to assess the progress overtime, and any inconsistency among estimates can be the result of different methodologies used to collect the data.

According to the district data, significant variation in ANC coverage was recorded across districts, which is worrisome. The highest overall ANC coverage was recorded for Karachi at 86 percent, which was more than four times higher than the lowest coverage of 20 percent in Umer Kot. A higher degree of ANC coverage was unsurprisingly found in another common outlier, Hyderabad, at 78 percent. Three districts, Sukkur, Dadu and Mititari, had coverage between 72 and 64 percent, whereas, the remaining 18 districts fell below 60 percent.

On the rural-urban ANC coverage variations, a similar kind of picture is presented with approximately 79 percent of expectant mothers

Figure 5.3 Trend in Ante-natal Care Coverage in Sindh



Sources: PDHS 1990/91; PFFPS 1996/97; PIHS 1998/99, PRHFPS 2000/01; MICS 2003/04; PSLMs 2004/05 – 2010/11.

in urban areas having access to ante-natal care, and in rural areas about half of this proportion has the access. This reiterates a chronic problem in health care service delivery for Sindh. The overall differential between urban and rural ANC coverage was 38 percentage points, whereas all twenty three districts of the province recorded estimates with rural-urban disparities to the detriment of rural populations. The district of Tando M. Khan had the highest disparity with urban ANC coverage ahead of rural by 54 percentage points.

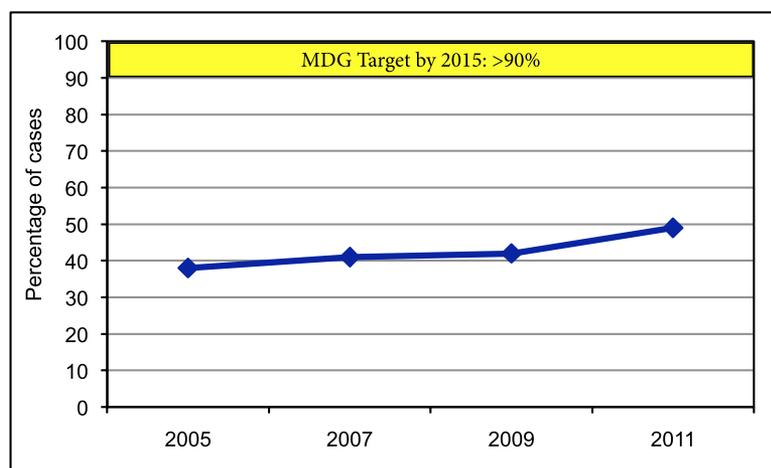
The data on prevalence of Skilled Birth Attendants (SBA) for the province show a pattern almost similar to the ante-natal care coverage. Based on PSLM data, the overall SBA coverage in Sindh has been gradually increasing, from 38 percent in 2005 to 49 percent in 2011. In fact, the recent estimates place Sindh higher than national average by 6 percentage points. However, it remains to be distant from the MDG target of more than 90 percent coverage.

Table 5.1 Ante-natal Care Coverage in Sindh (Percent of Pregnant Women)

Sr.No	Districts	Urban	Rural	Total
	Sindh	79	41	58
1	Khairpur	52	33	38
2	Sukkur	76	67	72
3	Nawabshah	73	36	47
4	NowsheroFeroze	64	46	49
5	Ghotki	51	37	38
6	Jaccobabad	62	51	53
7	Kashmore	48	43	44
8	Shikarpur	53	35	39
9	Larkana	62	39	47
10	Shahdadkot	54	38	41
11	Dadu	66	64	64
12	Jamshoro	67	48	53
13	Hyderabad	88	43	78
14	Matiari	98	57	64
15	Tando Allah Yar	55	29	36
16	Tando M. Khan	73	19	28
17	Badin	54	36	39
18	Thatta	75	45	50
19	Sanghar	55	42	45
20	Mir PurKhas	63	22	33
21	UmerKot	46	15	20
22	Tharparkar	46	42	42
23	Karachi	87	59	86

Source: PSLM 2004/05 – 2010/11

Figure 5.4 Trends in Coverage of Skilled Birth Attendants (SBA) in Sindh



Source: PSLM 2004/05 – 2010/11

Amongst 23 districts of Sindh, the highest incidents of overall SBA coverage are found in Karachi (88 percent) and Hyderabad (77 percent), and lowest coverage is recorded in case of Tharparkar (13 percent). The coverage in Karachi was about 7 times higher than in Tharparkar. SBA coverage for sixteen other districts fell below 45 percent with considerable urban-rural

disparities. Overall, the differential between urban and rural SBA coverage is 46 percentage points. In Hyderabad, rural SBA coverage is less than urban areas by an even larger margin of 52 percentage points. The following table presents district-wise estimates for Skilled Birth Attendants' coverage as of 2011.

Table 5.2 Coverage of Skilled Birth Attendants in Sindh (Percent of Cases)

Sr.No	Districts	Urban	Rural	Total
	Pakistan	66	33	43
	Sindh	76	30	49
1	Khairpur	42	23	28
2	Sukkur	70	32	48
3	Nawabshah	56	37	43
4	NowsheroFeroze	58	48	50
5	Ghotki	61	27	31
6	Jacobabad	41	13	18
7	Kashmore	56	30	35
8	Shikarpur	50	25	30
9	Larkana	51	22	32
10	Shahadadkot	47	28	31
11	Dadu	37	30	31
12	Jamshoro	69	27	36
13	Hyderabad	89	37	77
14	Mitiari	74	45	50

Sr.No	Districts	Urban	Rural	Total
15	Tando Allah Yar	57	31	38
16	Tando M. Khan	67	26	34
17	Badin	59	34	38
18	Thatta	63	21	27
19	Sanghar	46	36	38
20	Mir PurKhas	77	46	55
21	Umerkot	44	43	43
22	Tharparkar	53	12	13
23	Karachi	90	52	88

Source: PSLM 2010/11.

5.3 Maternal Mortality Ratio

Key Message: According to available estimates, the situation in Sindh is worse than national averages. However, due to insufficient and inconsistent data from various sources, it is difficult to measure progress on this indicator.

The main indicator measuring progress towards this particular goal is the Maternal Mortality Ratio (MMR). According to the available estimates from MICS 2003/04, MMR in Sindh was estimated at 600 maternal deaths per 100,000 live births, which is very high compared to the national average of 400 in 2004/05⁵⁰. According to the latest estimates of Sindh Development Review-2008/09, the MMR for Sindh has reduced and lies somewhere between the range of 345-350 per 100,000 population, however, it still remains higher than the target of 140 maternal deaths per 100,000 live births. The Sindh Development Review-2008/09, further estimates that the MMR is much higher in the rural areas at 410 compared with 240 in urban areas. At the district level, it estimates the MMR to be lowest in Karachi at 180, on exclusion of which the MMR for the province reaches 400 deaths per 100,000 population.

Moreover, according to the Preliminary Damage and Needs Assessment of the 2010 floods, both child and maternal mortality rates in Sindh are expected to have risen. The full impact of the flooding on the state of maternal and child health is yet to be

recorded but preliminary estimates suggest that approximately 11 percent of health facilities are partially or completely destroyed. These losses will certainly affect the ability of Sindh to decrease the MMR to the MDG target level by 2015.

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

5.4 Challenges

Sindh faces following major challenges specific to maternal health:

- Lack of female staff in primary healthcare facilities, which reduces women's access to healthcare. According to the Sindh Development Review 2008/09 the presence of lady doctors in rural Sindh is a very recent development.
- The problem of "three delays" (delay in deciding to seek medical care, delay in reaching appropriate care, and delay in receiving care at health facilities)⁵¹, stems from a lack of awareness, absence of skilled birth attendants, little access to healthcare facilities, and inadequate provisions at existing facilities. Facilities typically do not have trained personnel, emergency medicines, or functional equipment. The Sindh Development Review 2008/09 repeatedly raises the issue of under-utilization of public health facilities in Sindh.
- Most maternal health programs are closely tied

⁵⁰ PMDGR 2010, p.67.

⁵¹ PMDGR, 2010

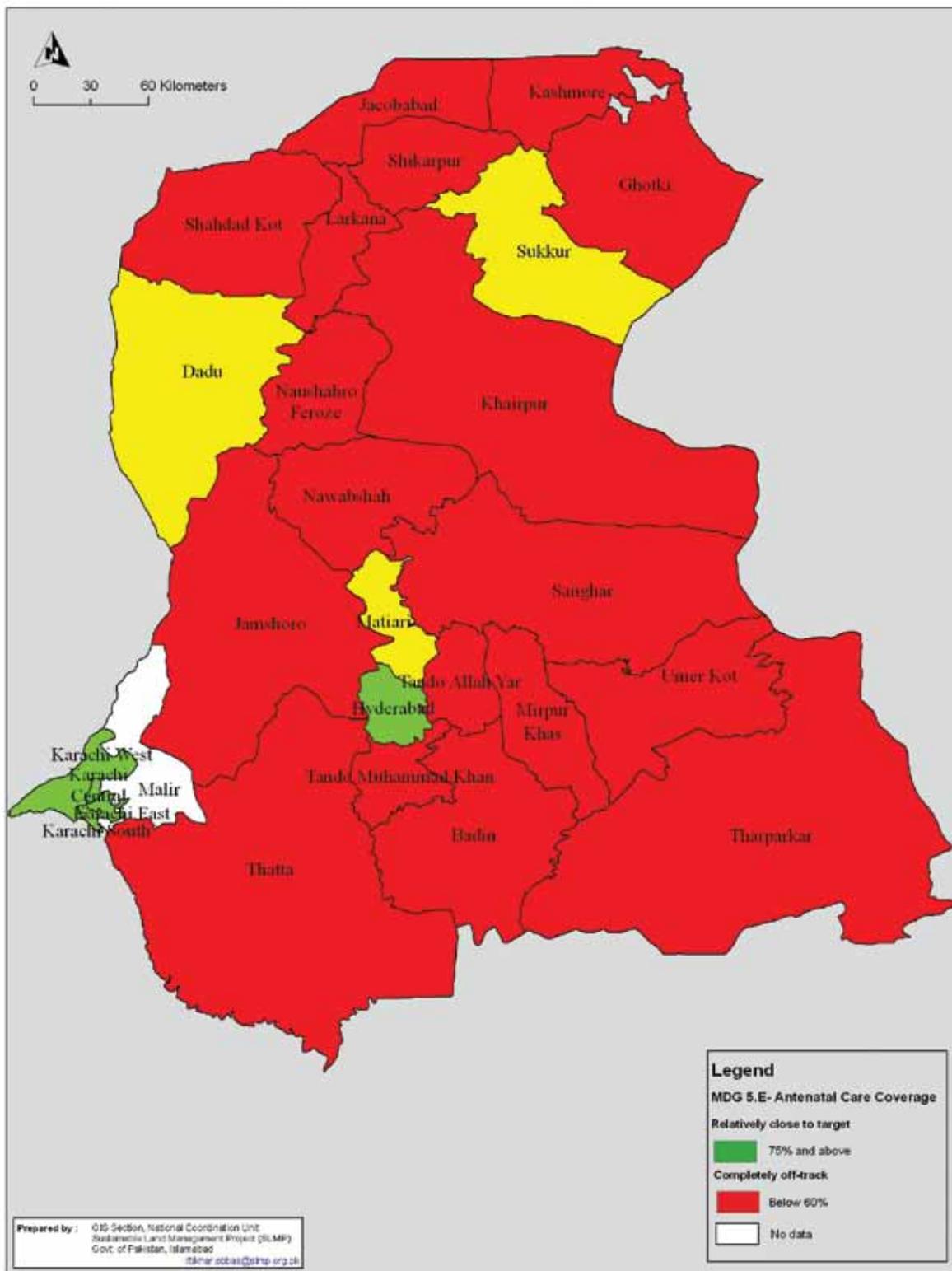
to child health programs, implemented in line with federal government policy-making.

5.5 Summary of Findings

The available data indicates a number of extremely worrisome results: 1) high maternal mortality ratio; 2) an upward trend in total fertility rates; and 3) a recent decrease in the contraceptive prevalence rate. At the same time there has been some progress in increasing the proportion of

expectant mothers with access to antenatal care, and presence of skilled birth attendants, which is likely to have reduced the maternal mortality ratio (MMR). However, a reversal of progress on other indicators (rising fertility and decreasing contraceptive prevalence rates) as well as a lack of latest data, makes it difficult to assess the latest situation for expectant mothers. But overall, indicators point to the dire situation for expectant mothers, particularly those in rural Sindh.

MDG 5- Improving Maternal Health Sindh



Chapter 7

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

Chapter-7

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

It is difficult to get data on MDG 6 as there are no large representative national or provincial surveys which assess the prevalence of disease. 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.

6.1 HIV/AIDS

The latest survey on HIV prevalence in Pakistan is the HIV Second Generation Surveillance, which dates from 2011.⁵² Data on prevalence of HIV tends to focus on some high-risk populations such as Injecting Drug Users (IDUs), Male Sex Workers (MSWs), Female Sex Workers (FSWs), and Hijra (or transsexual) Sex Workers (HSW). From throughout Pakistan, the data is available for only 15 districts in case of IDUs, 12 for FSWs, and 11 for MSWs and HSWs. Of all these districts, data for Sindh is represented only by 4 districts for IDUs, and 3 districts for other high-risk groups, as presented in following table.

Among all four vulnerable groups, the highest prevalence of HIV was found among injection drug users, with Karachi showing the highest rates at 42.2 percent. At this rate of IDUs HIV occurrence, Karachi was also ranked as the second highest district nation-wide, after Faisalabad, which is quite worrisome. After IDUs, the second highest HIV incidence was found to be with HSWs, with Larkana showing particularly high rates as compared with other districts of the province. In the case of male sex workers group, again Karachi recorded highest prevalence at 5.9 percent, followed by Larkana at 3.1 percent. The female sex workers were found to have least HIV prevalence rates.

6.2 Hepatitis B and C

The latest data available on Hepatitis B & C prevalence in Pakistan dates from 2008, as presented in the table below.¹ The data is based on a small survey of 7500 households nationwide, with a sample size of 1560 households in Sindh. The overall prevalence of Hepatitis B (HBV) in Sindh was estimated at an average of 2.9, while the incidence of Hepatitis C (HCV) was higher at 5.2 percent of the population. Both these figures for Sindh are higher than the national averages of 2.5 percent for HBV, and 4.9 percent for HCV.

Table 6.1 : HIV Prevalence Among Vulnerable Groups in Sindh (Percent)

Region	Injecting Drug Users	Male Sex Workers	Female Sex Workers	Hijra Sex Workers
Dadu	16.0	n/a	n/a	n/a
Karachi	42.2	5.9	1.9	12.0
Larkana	18.6	3.1	1.9	14.9
Sukkur	19.2	2.2	0.8	6.2

Source: National Aids Control Program (2011).

n/a: not available.

Note: Integrated Behavioral and Biological Surveillance (IBBS) was not conducted/completed in Hyderabad, Mirpurkhas, and Nawabshah.

52 Government of Pakistan, National Aids Control Program. 2011. HIV Second Generation Surveillance in Pakistan: National Report, Round IV.

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

Table 6.2 Prevalence of Hepatitis B and C

S.No	Districts	HBs Ag (Percent)	HCV (Percent)
	Average for Sindh	2.9	5.2
1	Badin	1.7	4.5
2	Dadu	2.2	7.2
3	Ghotki	5.9	12.7
4	Hyderabad	2.6	5.7
5	Jacobabad	3.3	5.3
6	Karachi	1.4	4.2
7	Khairpur	6.3	3.3
8	Larkana	4.3	2.1
9	Mirpurkhas	3.0	4.9
10	Nawabshah	1.6	4.9
11	NowsheroFeroz	4.0	3.1
12	Sanghar	2.8	7.8
13	Shikarpur	3.3	5.3
14	Sukkur	1.5	3.7
15	Tharparkar	0.0	3.9
16	Thatta	3.1	5.4

Source: Pakistan Medical Research Council (2008), Prevalence of Hepatitis B&C in Pakistan.

As it is shown in the table above, the spread of disease/viruses is uneven across the districts, with highest prevalence of hepatitis B in Khairpur at 6.3 percent, followed by Ghotki at 5.9 percent. Other districts with relatively higher (higher than average) incidence of Hepatitis B included Larkana, Jacobabad, MirpurKhas, NowsheroFeroze, Shikarpur, and Thatta. Conversely, Tharparkar had zero percent cases of hepatitis B occurrence in the district. On the other hand, the prevalence of an even more lethal virus, hepatitis C, was exceptionally high in Gotki at 12.7 percent. Prevalence was also higher than average in Dadu, Hyderabad, Sanghar, Thatta, Jaccobabad, and Shikarpur. In particular, Ghotki, with the high rates of both HBV and HCV, stands at the risk of dual infections. All districts with high incidence of the viruses need urgent attention.

6.3 Malaria

The malerimetric survey was conducted in four target districts of Sindh in 2009. According to the

survey, none of the households of these districts had a mosquito net, either treated or otherwise.⁵⁴ But according to an earlier survey under PDHS 2006/07, 15.9 percent of households in Sindh had a mosquito net, and 1 percent had a treated net.⁵⁵ PDHS also reported that only 5.4 percent of children under 5 in Sindh slept under a net.

6.4 Tuberculosis

Data from the National TB Control Program indicates that overall case detection rates were about 74 percent, and treatment success rates were 88 percent in Sindh in 2009 and 2008, respectively. The treatment was conducted through the Directly Observed Treatment Short Course (DOTS) program. A district wise breakdown is given in the table to follow.

⁵⁴ Ministry of Health/World Health Organization.2009. Malariometric Survey in Target Districts.

⁵⁵ PDHS 2006/07.

Table 6.3 Proportion of Cases Detected and Cured under DOTS

Sr. no	District	Case Detection Rate (2009, Percent)	Treatment Success Rate (2008, Percent)
1	Badin	57	89
2	Dadu	57	87
3	Ghotki	68	86
4	Hyderabad	59	86
5	Jacobabad	67	83
6	Jamshoro	208	81
7	Karachi	67	90
8	Kashmore	90	97
9	Khaipur	71	91
10	Larkhana	89	85
11	Matari	98	80
12	Mirpurkhas	69	85
13	NaushahroFeroze	68	94
14	Nawabshah	76	88
15	Sanghar	72	87
16	Shahdadkot	69	86
17	Shikarpur	74	88
18	Sukkar	80	86
19	TandoAllahyar	97	86
20	Tharparkar	71	82
21	Thatta	66	81
22	T.M.Khan	83	96
23	Umerkot	112	89
	Average	74	88

Source: Ministry of Health, National TB Control Program.

Among 23 districts of Sindh, the case detection rates were lowest in Badin and Dadu at 57 percent. These rates were exceptionally high in Jamshoro and Umerkot (possibly because of cases originating from other areas being detected in these districts). The treatment success rates, on the basis of DOTS program, were quite encouraging for all districts, between the range of 80 and 97 percent. Kashmore and Tando M. Khan had the highest success rates of 97 percent and 96 percent, respectively.

Status of Progress Against Goal 6: The available data is not comprehensive enough to make a definitive statement.

6.5 Summary of Findings

Although, there are issues related with the availability of latest data and the comprehensiveness of available data, the estimates present an extremely worrisome picture of Sindh with high HIV/AIDS prevalence among vulnerable groups (especially IDUs); a higher than average incidence of hepatitis B and C; varying, but generally, inadequate evidence of malaria preventive measures (usage of mosquito nets); and high TB detection rates. However, the success rates for TB treatment are quite encouraging. There is a need for special health awareness programs and measures to combat these diseases.

Chapter 8

Goal 7: Ensuring Environmental Sustainability

Chapter-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. It is difficult to translate Goal 7 into sub-national terms, as data for some of the indicators specified is only available for sub-national level, while other data (such as the estimate of urban population living in slums) is not available at all.

and insufficient improvement.

Amongst other indicators, the seventh MDG is concerned with the efficient management of water and sanitation for the population. The MDG target is to halve the population without access to improved drinking water sources and basic sanitation by 2015. Progress on these indicators is imperative as these conditions have a direct impact on the achievement of targets under other MDG goals. For example, the effectiveness of preventive health measures and risk of communicable and water-borne diseases is dependent on the quality of water and sanitation services provided to

MDG Tracking Table 7: Ensuring Environmental Sustainability

Indicators	Region	FY02	FY05	FY06	FY07	FY08	FY09	FY11	MDG Target (2015)
Forest Cover (% of total land area)	Pakistan	4.8	4.9	5.02	5.02	5.02	5.02	5.17*	6.0
	Sindh	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Land Area Protected for Conservation of Wildlife (% of total land area)	Pakistan	11.25	11.3	11.3	11.3	11.3	11.5	11.3*	12.0
	Sindh	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
No. of Vehicles Using CNG (000)	Pakistan	280	1000	1250	1600	1900	2200	2740*	920
	Sindh	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Sulphur Content in High Speed Diesel (proxy for ambient air quality)	Pakistan	1.0	1.0	1.0	1.0	1.0	1.0	n/a	0.5-0.25
	Sindh	Not relevant as fuel quality is specified and monitored by the federal government							
Proportion of Population with Access to Improved Water Sources	Pakistan	64	66	66	66	66	65	n/a	93
	Sindh	90	92	94	91	91	93	93	

Sources:

For national level indicators until FY09, PMDGR 2010. FY11 figures are from Pakistan Economic Survey 2011/12. Data sources for Sindh are given below:

Data on improved access to water from PIHS and various issues of PSLM.

* FY11 figures from Economic survey 2011-12.

Note: Improved water sources are taken as piped water supplies and groundwater (water from taps, handpumps, motorized pumps, and dugwells). Surface water supplies are not considered as improved water sources.

n/a: Not available; FY: fiscal year (July-June).

7.1 Water and Sanitation

Key Message: Overall, 93 percent of the population in Sindh had access to an improved source of drinking water in 2011⁵⁶. However, the available data on access to sanitation facilities shows slow

the population. Similarly, enrolment rates are also affected by the lack of water and sanitation facilities in schools. Thus, lack of safe drinking water and sanitation facilities impact both health and education indicators, through their cross-cutting effect.

56 PSLM 2010/11

Table 7.1: Main Source of Drinking Water for Sindh (Percent of Population)

Water Source	2004/05			2010/11		
	Urban	Rural	Overall	Urban	Rural	Overall
Tap Water	71	19	44	72	13	43
Hand pump	13	60	37	7	62	34
Motor pump	10	3	6	17	6	12
Dug well	2	8	5	0	8	4
Other	5	11	8	4	10	7
Total	100	100	100	100	100	100

Source: PSLM 2004/05, 2010/11.

On the access to drinking water indicator, the PSLM data suggests that in 2004/05, less than half (44 percent) of the population in Sindh had access to tap water supplied by the local government as a main source of drinking water. By 2010/11, this proportion had further declined by 1 percentage point (to 43 percent). Moreover, as in case of other social services in Sindh, the provision of tap water was also found to be heavily skewed in favour of urban population, with 72 percent access, compared to a meagre 13 percent access for the rural areas in 2011. This is a persistent problem, as indicated by data from previous years. However,

hand pumps were extensively used in rural areas, with 62 percent of population having access to such a source. Thus, mainly due to the widespread use of tap water and motor pumps in urban areas, and hand pumps and dug wells in rural areas, the overall access of the population to improved water sources turned out to be quite high in Sindh. Based on PSLM 2010/11 data, the following table presents district-wise breakdown of the use of improved sources of water in Sindh, as percent of population. The data represents improved sources of water from piped water supplies (taps, hand or motor pumps), and ground water.

Table 7.2: Access to Improved Sources of Drinking Water in Sindh (Percent of Population)

Sr. No.	Districts	Urban	Rural	Overall
	Sindh	96	89	93
1	Khairpur	96	101	99
2	Sukkur	98	98	99
3	Nawabshah	97	98	97
4	NowsheroFeroze	100	100	100
5	Ghotki	99	100	100
6	Jacobabad	44	95	84
7	Kashmore	93	98	98
8	Shikarpur	100	100	100
9	Larkana	100	101	100
10	ShahdadKot	72	91	88
11	Dadu	100	76	81
12	Jamshoro	99	81	85
14	Matuari	100	100	100
14	Matuari	100	100	100

Sr. No.	Districts	Urban	Rural	Overall
	Sindh	96	89	93
15	Tando Allah Yar	95	95	95
16	Tando M. Khan	99	99	99
17	Badin	91	80	82
18	Thatta	89	69	72
19	Sanghar	100	96	96
20	Mir PurKhas	98	72	80
21	UmerKot	91	58	63
22	Tharparkar	100	94	94
23	Karachi	95	81	95

Source: Staff calculations based on PSLM 2010/11 data.

Note: Improved water sources are taken as piped water supplies and groundwater (water from taps, hand pumps, motorized pumps, and dug wells). Surface water supplies are not considered as improved water sources.

According to the table above, the overall rate of improvement in access to safe drinking water in Sindh was estimated at 93 percent⁵⁷, which was mostly skewed towards urban areas. Among a total of 23 districts, there was some degree of variation, although not as pronounced as in case of other data sets/indicators for the province. Only eight districts recorded access to safe drinking water below 93 percent, falling in the range of 63-88 percent, with Umer Kot showing the worst performance at 63 percent. Other districts in this range included Jaccobabad, Shahadkot, Dadu, Jamshoro, Badin, Thatta, and Mirpur Khas. The remaining fifteen districts showed access to improved sources of drinking water by more than 93 percent households in 2011. The districts that showed exceptionally high performance of overall 100 percent access were not the regular outliers in most of other indicators (Karachi and Hyderabad), but Nowshero Feroze, Ghotki, Shikarpur, Larkana, and Matiari. Hyderabad and Karachi had respective access of 98 and 95 percents of households, largely skewed towards urban areas. This indicates spread of new informal settlements or katchi abadies in the cities, which are not being serviced by the city administration. Residents of such localities typically access services through private contractors, a process that can take

time in installations.

With regard to the sanitation facilities, the following table shows some improvement in overall rates between the period 2001/02⁵⁸ and 2007/08⁵⁹. In 2007/08, about 55 percent of the population of Sindh had access to proper sanitation facilities (underground, covered or open drains), compared to only 49 percent in 2001/02. However, similar to the case of safe drinking water, urban residents benefited more from improvements in sanitation facilities than rural residents. In 2008, only 6 percent of the urban residents were without access to any type of sanitation system, whereas a staggering 85 percent of the rural population had no drainage system. A comparison of these estimates with 2002 figures suggests that only a small degree of improvement has taken place over 6 years. There are high chances of deterioration of sanitation facilities in the aftermath of the 2010 floods, as according to the Preliminary Damage and Needs Assessment, the flooding in Sindh was “less violent” but “more extensive”, resulting in greater damage to drainage systems in the communities, leaving the Government of Sindh with another challenge of rebuilding the damaged infrastructure.

57 These estimates may have changed after factoring-in the impact of floods of August 2010, which destroyed infrastructure across the province.

58 PIHS 2001/02.

59 PSLM 2007/08

Table 7.3: Type of Sanitation Facility Used by the Household in Sindh (Percent)

Type of Sanitation	2001/02			2007/08		
	Urban	Rural	Overall	Urban	Rural	Overall
Underground Drains	65	1	30	66	1	34
Covered Drains	6	0	3	2	0	1
Open Drains	22	12	16	27	14	20
No System	7	87	51	6	85	45
Total	100	100	100	100	100	100

Sources: PIHS 2001/02 and PSLM 2007/08.

The district-wise data available on the sanitary type of toilet is based on MICS 2003/04, which is available for only 15 districts. As shown in the following table, a similar pattern appears among districts, where Tharparkar had lowest performance with only 17 percent of population having access

to sanitary means of waste disposal. Thatta was second in line at 23.2 percent. However, the range of variation among districts was wide given that the best performance (at 73 percent for both Sukkur and Shikarpur) was not from the usual high performers⁶⁰.

Table 7.4: Population Using Sanitary Means of Excreta Disposal (Percent)

Sr. No	District	Percentage of population using sanitary means of excreta disposal	Number of household members
	Sindh	49.4	23,253
1	Badin	30.8	880
2	Dadu	40.0	1,059
3	Ghotki	51.4	803
4	Hyderabad	61.1	1,468
5	Jacobabad	33.8	964
6	Khairpur	53.7	996
7	Larkana	62.8	1,139
8	MirpurKhas	29.7	1,019
9	Tharparkar	17.0	723
10	NausheroFeroze	47.7	848
11	Nawabshah	52.8	824
12	Sanghar	45.4	970
13	Shikarpur	73.3	769
14	Sukkur	73.0	958
15	Thatta	23.2	843
16	Umerkot	n/a	n/a
17	Jamshoro	n/a	n/a
18	Kashmore	n/a	n/a
19	Matiari	n/a	n/a
20	Shahdadkot	n/a	n/a

⁶⁰ Data for Karachi was not available.

Sr. No	District	Percentage of population using sanitary means of excreta disposal	Number of household members
	Sindh	49.4	23,253
21	Tando Allah Yar	n/a	n/a
22	Tando M. Khan	n/a	n/a
23	Karachi	n/a	n/a

Source: Sindh MICS 2003/04.

Table 7.5: Type of Toilet Used by the Households (Percent)

Type of Toilet	2004/05			2010/11		
	Urban	Rural	Overall	Urban	Rural	Overall
Flush	88	17	51	95	26	62
Non- Flush	7	56	32	3	60	31
No Toilet	5	27	16	1	14	8
Total	100	100	100	100	100	100

Sources: PSLM 2004/05, 2010/11.

Based on PSLM 2004/05 and 2010/11, the table above presents rural-urban disaggregation on the type of toilet used by the households in Sindh. It shows that while 95 percent of urban residents had access to flush toilets, only 26 percent of the rural population had similar facilities at their disposal – in fact 14 percent of the rural population did not have a toilet at all in 2011. Overall, 8 percent of population did not have access to the toilet, which, compared to the situation in 2004/05, has actually improved by 8 percentage points.

7.2 Proportion of Urban Population Living in Slums

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

Slums, referred as katchi abadies (or communities with informal and non-permanent dwellings), are a feature of major urban centers in Pakistan. The Directorates of katchi abadies in all provinces of Pakistan undertook an exercise in 2008 to determine the possibility of regularizing such settlements by officially acknowledging the ownership rights of the residents, thereby making them eligible for the

provisions of urban services under city authorities. According to data provided by UN-Habitat for this study, there were a total of 1293 katchi abadies in Sindh, of which 1157 were being considered for regularization, and 720 were actually regularized in 2008.

Status of Progress Against Goal 7: Targets on access to improved water sources related indicators may be achieved. However, access to sanitation facilities remains insufficient, and data on other targets is inadequate to make a statement.

7.3 Challenges

One of the basic challenges for any developing country is balancing a rigorous development agenda with environmentally sustainable practices. This is more difficult at sub-national levels. In Sindh, like other provinces of the country, the main challenge is ensuring both hygienic and sustainable practices for the large urban and rural population. Generally, there is lack of awareness about environmental issues that leads to the ineffectiveness of environmentally sensitive policies. This calls for a radical public awareness campaign to turn the situation around.

Furthermore, natural disasters, such as the recent floods, have caused a substantial level of damage to existing infrastructure in the province. The Preliminary Damage and Needs Assessment speculates on a large scale damage in Sindh across its agricultural heartland, forests and wetlands, as well as the sanitation infrastructure. This will almost certainly have slowed down the progress on water and sanitation service delivery in the province, particularly in the flood-affected areas.

Another problem is related with the slow progress on access to sanitation facilities, which also has impact on the achievement of other MDG goals. Poor sanitation is a major public health concern across Sindh. Access to safe drinking water sources and sanitation, where available, are thought to be below acceptable standards in many areas. The relatively slow improvement in the indicators under both MDGs 4 and 5 may have something to do with the slow progress in extension of water supply and sanitation facilities.

7.4 Summary of Findings

The pace of growth in water and sanitation service delivery has been slow, even though it is a priority area for the Government of Sindh. And where progress has been made, the outcomes are not uniformly positive across all indicators (especially, drainage, and toilet systems). Even within each district, the distribution of progress is uneven across the urban/rural divide, which is an acute problem in Sindh. There fore, similar to the case of imbalances in MDGs 2, 3, 4, and 5, the main problem in case of MDG 7 is also related with the distribution of resources and existing capacities, which needs to be addressed.

7.5 Links Between MDGs 4, 5 and 7

Water and sanitation indicators (MDG 7) have a direct linkage with child health (MDG 5) and maternal mortality (MDG 6). However, it is difficult to establish this linkage quantitatively, as district-wise data on infant mortality is not available. There fore, it is 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. Furthermore, available data on various indicators is often available for disparate time periods, which makes it harder to map out the complete situation in any given year. Nonetheless, in general, downward trends in infant mortality and under 5 mortality rates do seem to have moved concurrently with an improvement in water supply and sanitation services. In this regard, establishing a more definite linkage would require more detailed data.

MDG 7- Ensuring Environmental Sustainability Sindh



Conclusion

Social sector development is important for Sindh as it is a commercial hub of the country, which then contributes to the overall development of the country. The evidence on the progress of different MDGs, as discussed in this report, suggests that at the disaggregated level, few of the districts of the province are likely to achieve targets for education under MDG 3, and access to safe drinking water under MDG 7. However, efforts have so far been inadequate for the province to be able to achieve MDGs in their entirety by 2015. Wide gender disparities and rural/urban gaps (to the detriment of females and rural areas) are common problems along all MDG indicators. These also point to the issue of distribution of resources. These problems need to be addressed.

At the same time it is important to note that the government's efforts have so far been constrained by different events, including the overall economic slow-down of the country, and recent devastating floods of 2010, resulting in the contraction of development funds and diversion of resources to damage recovery. According to the initial findings by donors' Damage Needs Assessment, the floods have particularly damaged the infrastructure at large, and increased health issues. Hence, the progress towards the MDGs goals is likely to have been derailed by the effects of the floods.

In its development plans, the Government of Sindh has set out some ambitious goals to address these issues. Furthermore, there are different programs working to address issues in education and health sectors, in particular. There is a need for more targeted programs towards the lagging sectors and regions of the province, without compromising on other sectors and regions. In this regard, the government can seek support from the international development community by showing some progress on MDGs indicators. So far, given different constraints, the progress made by the province is commendable and provides reasons for being optimistic, even if the current status shows concern by its lag in achieving overall targets.

ANNEXURE

Annex I: Monthly Household Income by Source and Quintile

Source	QUINTILES					
	Total	1st	2nd	3rd	4th	5th
Sindh: TOTAL						
Average monthly income	20606.21	11047.27	14441.11	15964.65	20249.64	32914.25
Total	100.00	100.00	100.00	100.00	100.00	100.00
Wages and Salaries	57.52	65.14	55.46	57.05	55.83	57.61
Crop Production	8.24	13.01	16.82	13.54	10.63	2.27
Livestock	3.44	4.16	4.25	6.23	5.10	1.44
Other non agri Activities	10.39	4.69	11.54	7.01	11.67	11.64
Property (Owner Occupied Houses Excl.)	3.51	0.49	0.66	2.00	3.60	5.27
Owner Occupied Houses	14.60	8.47	8.57	10.58	11.14	20.18
Social Insurance Benefits Incl. Pension	1.29	0.37	0.87	1.26	1.19	1.62
Gift Assistance	0.70	2.54	1.80	1.26	0.36	0.04
Foreign Remittances	0.32	0.37	0.04	0.69	0.19	0.33
Domestic Remittances	0.37	0.61	0.09	0.54	0.40	0.34
Other Sources	-0.38	0.14	-0.10	-0.17	-0.10	-0.74
Sindh: URBAN						
Average monthly income	25253.11	12196.83	17352.67	16572.61	20982.51	34378.27
Total	100.00	100.00	100.00	100.00	100.00	100.00
Wages and Salaries	63.50	70.22	60.77	71.99	67.80	60.67
Crop Production	0.83	7.74	2.50	1.20	1.04	0.14
Livestock	0.28	1.04	0.53	0.53	0.48	0.10
Other non agri Activities	13.03	7.59	24.27	9.23	12.79	12.65
Property (Owner Occupied Houses Excl.)	1.90	0.37	0.76	0.90	2.67	2.04
Owner Occupied Houses	18.45	9.24	9.31	13.54	13.49	22.50
Social Insurance Benefits Incl. Pension	1.63	0.76	1.26	1.35	1.44	1.84
Gift Assistance	0.21	1.94	0.79	0.37	-0.17	0.15
Foreign Remittances	0.32	0.18	0.00	0.69	0.12	0.37
Domestic Remittances	0.41	0.50	0.05	0.50	0.43	0.43
Other Sources	-0.57	0.43	-0.25	-0.31	-0.08	-0.86
Sindh: RURAL						
Average monthly income	15499.65	10713.34	13043.48	15533.06	19115.29	26320.64
Total	100.00	100.00	100.00	100.00	100.00	100.00
Wages and Salaries	46.81	63.47	52.07	45.74	35.49	39.61
Crop Production	21.51	14.76	25.96	22.89	26.92	14.86
Livestock	9.11	5.19	6.63	10.55	12.94	9.32
Other non agri Activities	5.65	3.73	3.42	5.33	9.76	5.71
Property (Owner Occupied Houses Excl.)	6.39	0.53	0.59	2.83	5.20	24.31

Owner Occupied Houses	7.69	8.22	8.10	8.33	7.14	6.54
Social Insurance Benefits Incl. Pension	0.67	0.24	0.61	1.19	0.76	0.36
Gift Assistance	1.58	2.74	2.44	1.94	1.26	-0.59
Foreign Remittances	0.33	0.44	0.06	0.69	0.31	0.08
Domestic Remittances	0.31	0.65	0.12	0.58	0.34	-0.15
Other Sources	-0.04	0.04	0.00	-0.06	-0.12	-0.05

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

Annex II: Monthly Household Expenditure by Commodity Groups and Quintile

Commodity Groups	QUINTILES					
	Total	1st	2nd	3rd	4th	5th
Sindh: TOTAL						
Average Monthly consumption expenditure (Rs.)	20103.07	12260.94	14650.25	17003.49	19608.03	30108.81
Percentage of consumption expenditure on:						
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00
Food, beverage and tobacco	47.93	61.80	59.73	56.75	52.48	35.87
Apparel, textile and footwear	3.97	4.83	4.57	4.41	4.10	3.37
Transport and communication	7.15	5.10	5.41	6.18	7.71	8.23
Cleaning, laundry and personal appearance	3.62	4.07	4.08	3.99	3.72	3.19
Recreation and entertainment	0.70	0.21	0.38	0.47	0.70	0.98
Education	2.89	0.89	1.10	1.62	2.28	4.63
Rent	18.50	9.25	10.57	12.18	14.59	27.14
Fuel and lighting	5.89	6.01	6.00	6.15	5.99	5.69
Miscellaneous	9.35	7.84	8.17	8.24	8.43	10.90
Sindh: URBAN						
Average Monthly consumption expenditure (Rs.)	23795.77	12378.80	15308.75	17603.69	20490.28	31445.86
Percentage of consumption expenditure on:						
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00
Food, beverage and tobacco	40.59	58.08	54.82	51.58	48.20	33.11
Apparel, textile and footwear	3.69	4.72	4.26	4.30	4.07	3.31
Transport and communication	7.66	4.55	6.10	6.75	8.26	7.99
Cleaning, laundry and personal appearance	3.38	3.91	3.88	3.85	3.68	3.10
Recreation and entertainment	0.99	0.47	0.75	0.86	0.97	1.07
Education	3.98	1.37	1.65	2.13	2.92	5.13
Rent	24.57	13.11	15.34	16.99	18.32	29.97
Fuel and lighting	5.68	6.04	5.97	6.03	5.80	5.52
Miscellaneous	9.47	7.75	7.24	7.51	7.78	10.80
Sindh: RURAL						
Average Monthly consumption expenditure (Rs.)	16045.11	12226.71	14334.15	16577.41	18242.47	24087.01
Percentage of consumption expenditure on:						
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00
Food, beverage and tobacco	59.91	62.89	62.25	60.66	59.92	52.13
Apparel, textile and footwear	4.42	4.86	4.73	4.50	4.14	3.72
Transport and communication	6.32	5.27	5.06	5.75	6.75	9.61
Cleaning, laundry and personal appearance	4.00	4.12	4.18	4.09	3.79	3.71
Recreation and entertainment	0.23	0.14	0.19	0.18	0.23	0.45
Education	1.11	0.74	0.81	1.24	1.17	1.65

Rent	8.60	8.11	8.12	8.56	8.11	10.49
Fuel and lighting	6.24	6.00	6.01	6.24	6.32	6.71
Miscellaneous	9.17	7.87	8.64	8.78	9.56	11.51

Source: Household Income and Expenditure Survey, 2010/11

Annex III: Labor Force Participation and Unemployment Rates (Percent)

	Labor Force Participation Rates			Un-employment Rates		
	Total	Male	Female	Total	Male	Female
SINDH- ALL AREAS						
Total (all ages)	32.69	51.52	11.41			
Total (10 years and over)	45.03	70.33	15.88	5.08	4.74	6.83
10-14	13.00	16.78	8.36	2.97	2.77	3.49
15-19	36.80	54.74	13.74	8.01	7.53	10.45
20-24	53.79	84.62	18.31	10.81	10.41	12.94
25-29	59.25	96.47	21.49	5.76	5.94	4.96
30-34	58.74	98.85	21.07	1.36	1.13	2.38
35-39	60.01	99.13	19.32	1.87	1.50	3.83
40-44	60.51	98.84	19.44	0.95	0.87	1.37
45-49	61.05	99.14	15.48	1.25	0.91	3.83
50-54	60.53	98.24	18.10	3.01	2.98	3.20
55-59	61.26	94.23	15.77	3.70	3.76	3.16
60-64	46.74	70.74	15.22	15.20	11.62	37.03
65 Years and Over	19.72	30.63	5.90	21.89	17.28	52.15
RURAL						
Total (all ages)	35.50	51.73	16.86			
Total (10 years and over)	52.26	75.21	25.18	1.92	1.81	2.30
10-14	21.03	25.68	14.80	2.10	1.71	3.00
15-19	52.21	71.98	23.98	3.12	2.91	4.02
20-24	60.04	91.45	24.96	4.28	4.27	4.32
25-29	63.60	98.10	32.18	1.85	2.13	1.09
30-34	65.57	99.04	33.57	0.64	0.42	1.26
35-39	65.16	99.63	28.22	0.39	0.50	
40-44	66.66	99.27	31.64	0.21	0.21	0.21
45-49	67.25	99.59	26.94	0.61	0.36	1.72
50-54	67.28	98.81	30.71	0.35	0.34	0.39
55-59	67.76	96.93	28.74	0.41	0.50	
60-64	57.54	86.77	19.82	6.84	4.65	19.16
65 years and over	25.21	41.11	7.23	10.72	8.98	21.94
URBAN						
Total (all ages)	29.61	51.29	5.53			
Total (10 years and over)	38.10	65.54	7.16	9.24	8.03	21.70
10-14	3.31	5.08	1.34	9.72	9.81	9.34
15-19	22.34	37.06	5.15	18.73	16.73	35.53
20-24	49.13	79.65	13.21	16.75	15.53	25.43
25-29	54.98	95.03	9.77	10.21	9.42	18.91
30-34	51.72	98.66	8.46	2.29	1.87	6.86

35-39	54.54	98.59	10.16	3.74	2.61	14.76
40-44	54.49	98.42	7.55	1.83	1.53	6.07
45-49	55.60	98.74	5.82	1.94	1.42	12.04
50-54	54.68	97.74	7.50	5.85	5.36	12.89
55-59	55.84	92.04	4.60	7.02	6.56	20.13
60-64	37.46	57.15	11.18	26.24	20.59	64.78
65 years and over	16.17	24.38	4.95	33.17	25.63	83.95

Source: Labor Force Survey, 2010/11.

Annex IV: Number of Students Enrolment in Public Schools (by District)

Sr.No	Districts	Total			Pre-Primary			Primary			Middle		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Badin	127,469	45,092	172,561	26,249	12,057	38,306	81,892	26,905	108,797	19,328	6,130	25,458
2	Dadu	181,787	52,505	234,292	49,320	16,645	65,965	114,636	28,023	142,659	17,831	7,837	25,668
3	Ghotki	173,492	29,309	202,801	38,321	6,397	44,718	112,262	17,777	130,039	22,909	5,135	28,044
4	Hyderabad	81,773	64,653	146,426	9,625	9,650	19,275	56,276	36,455	92,731	15,872	18,548	34,420
5	Jacobabad	118,375	34,492	152,867	26,997	8,700	35,697	79,818	19,988	99,806	11,560	5,804	17,364
6	Jamshoro	55,070	19,812	74,882	10,917	4,406	15,323	36,445	12,073	48,518	7,708	3,333	11,041
7	Shahdadtot	148,621	34,730	183,351	33,265	6,730	39,995	99,574	20,442	120,016	15,782	7,558	23,340
8	Karachi	241,962	246,025	487,987	22,299	19,193	41,492	166,915	143,972	310,887	52,748	82,860	135,608
9	Kashmore	85,637	12,399	98,036	15,296	1,909	17,205	60,669	7,866	68,535	9,672	2,624	12,296
10	Khairpur	235,378	67,632	303,010	58,595	19,480	78,075	137,998	37,086	175,084	38,785	11,066	49,851
11	Larkana	153,424	51,691	205,115	17,282	6,321	23,603	111,484	32,741	144,225	24,658	12,629	37,287
12	MirpurKhas	105,537	38,035	143,572	8,262	6,554	14,816	81,180	23,204	104,384	16,095	8,277	24,372
13	Mitiari	66,499	17,915	84,414	10,282	3,522	13,804	45,536	10,538	56,074	10,681	3,855	14,536
14	NausheroFeroze	183,129	48,877	232,006	55,761	14,320	70,081	96,574	23,148	119,722	30,794	11,409	42,203
15	Nawab Shah	151,879	39,258	191,137	44,429	12,682	57,111	88,248	19,013	107,261	19,202	7,563	26,765
16	Sanghar	192,868	47,478	240,346	34,978	9,137	44,115	134,851	28,469	163,320	23,039	9,872	32,911
17	Shikarpur	88,987	28,216	117,203	6,769	4,681	11,450	67,452	17,508	84,960	14,766	6,027	20,793
18	Sukkur	103,475	37,421	140,896	12,961	5,928	18,889	73,944	21,971	95,915	16,570	9,522	26,092
19	Tando Allah Yar	48,286	14,819	63,105	11,230	3,700	14,930	29,312	7,840	37,152	7,744	3,279	11,023
20	TandoM. Khan	45,855	12,371	58,226	10,759	3,365	14,124	31,032	7,220	38,252	4,064	1,786	5,850
21	Tharparkar	155,057	56,930	211,987	2,799	1,516	4,315	135,739	50,374	186,113	16,519	5,040	21,559
22	Thatta	109,033	45,151	154,184	7,678	4,864	12,542	91,239	36,117	127,356	10,116	4,170	14,286
23	Umerkot	90,081	26,553	116,634	6,437	2,137	8,574	71,750	20,246	91,996	11,894	4,170	16,064

Source: District Education Statistics 2010-11, National Education Management Information System (NEMIS), Government of Pakistan

Annex Table V: Number of Teachers in Public Schools (by District)

Sr. No	Districts	Total			Primary			Middle			High			Higher Secondary		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Badin	4,751	1,369	6,120	3,764	1,111	4,875	255	76	331	527	146	673	205	36	241
2	Dadu	5,609	1,598	7,207	4,373	1,205	5,578	214	100	314	821	224	1045	201	69	270
3	Ghotki	3,798	754	4,552	2,895	588	3,483	241	78	319	566	35	601	96	53	149
4	Hyderabad	4,587	4,046	8,633	2,962	2,375	5,337	255	301	556	1,135	1,081	2,216	235	289	524
5	Jacobabad	3,672	1,102	4,774	2,784	796	3,580	240	171	411	428	85	513	220	50	270
6	Jamshoro	2,049	737	2,786	1,479	565	2,044	78	25	103	410	98	508	82	49	131
7	Shahdadkot	3,326	913	4,239	2,582	731	3,313	123	65	188	475	57	532	146	60	206
8	Karachi	14,849	12,188	27,037	8,391	6,314	14,705	1,403	1,558	2,961	4,597	3,831	8,428	458	485	943
9	Kashmore	2,580	471	3,051	1,876	363	2,239	148	58	206	294	35	329	262	15	277
10	Khairpur	6,901	2,424	9,325	4,460	1,741	6,201	533	233	766	1,397	366	1,763	511	84	595
11	Larkana	4,888	1,955	6,843	3,628	1,351	4,979	150	125	275	744	304	1,048	366	175	541
12	MirpurKhas	4,098	1,814	5,912	3,070	1,248	4,318	206	121	327	526	254	780	296	191	487
13	Mitiari	2,704	788	3,492	2,102	636	2,738	127	24	151	441	128	569	34	0	34
14	NausheroFeroze	5,005	1,729	6,734	3,571	1,225	4,796	434	259	693	708	143	851	292	102	394
15	Nawab Shah	4,754	1,420	6,174	3,791	1,123	4,914	257	125	382	549	122	671	157	50	207
16	Sanghar	6,940	2,152	9,092	5,472	1,572	7,044	249	195	444	895	240	1,135	324	145	469
17	Shikarpur	3,378	1,050	4,428	2,373	723	3,096	116	107	223	646	178	824	243	42	285
18	Sukkur	3,684	1,502	5,186	2,308	879	3,187	255	201	456	928	244	1,172	193	178	371
19	Tando Allah Yar	1,428	505	1,933	1,076	390	1,466	66	22	88	233	49	282	53	44	97
20	TandoM. Khan	1,680	506	2,186	1,337	367	1,704	111	21	132	209	118	327	23	0	23
21	Tharparkar	4,089	1,380	5,469	3,394	1,231	4,625	286	76	362	330	73	403	79	0	79
22	Thatta	4,219	1,367	5,586	3,519	1,093	4,612	84	63	147	451	187	638	165	24	189
23	Umerkot	2,895	956	3,851	2,418	809	3,227	84	40	124	196	94	290	197	13	210

Source: District Education Statistics 2010-11, National Education Management Information System (NEMIS), Government of Pakistan

Annex Table VI: Number of Functional Public Schools

S No	Districts	Total Schools			Primary			Middle Schools			High Schools			Higher Sec. Schools		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Badin	2920	506	356	2755	476	318	107	13	25	52	15	11	6	2	2
2	Dadu	1932	248	310	1707	201	274	166	28	25	50	18	8	9	1	3
3	Ghotki	1792	288	222	1662	263	197	94	16	21	32	9	2	4	0	2
4	Hyderabad	994	211	306	825	135	240	74	31	26	84	42	35	11	3	5
5	Jacobabad	1197	247	179	1109	215	155	53	15	17	28	14	4	7	3	3
6	Khairpur	3285	424	579	2963	391	485	214	17	69	95	12	24	13	4	1
7	Larkana	1248	185	239	1125	144	199	63	17	22	51	21	14	9	3	4
8	MirpurKhas	1832	312	342	1670	268	293	96	19	31	58	22	16	8	3	2
9	Tharparkar	2953	1008	406	2732	936	391	181	62	11	38	9	4	2	1	0
11	NausheroFeroze	2118	300	315	1951	273	269	108	13	34	50	13	10	9	1	2
10	Nawabshah	2293	244	344	1991	199	282	230	29	44	63	14	14	9	2	4
12	Sanghar	2740	402	361	2548	354	307	113	23	36	65	22	14	14	3	4
13	Shikarpur	1079	239	168	970	189	137	53	17	19	48	30	10	8	3	2
14	Sukkur	1172	252	192	1034	214	146	80	15	30	49	21	12	9	2	4
15	Thatta	2792	614	343	2633	553	294	88	30	31	59	29	16	12	2	2
16	Umerkot	1950	445	375	1791	419	320	119	14	45	32	10	9	8	2	1
17	Jamshoro	777	110	138	684	85	115	55	16	12	34	9	9	4	0	2
18	Kashmore	1189	400	177	1110	369	160	47	20	13	25	10	3	7	1	1
19	Matiari	946	86	148	872	66	131	40	8	7	31	11	10	3	1	0
20	Shahdadkot	1315	209	220	1206	190	184	67	6	26	33	11	6	9	2	4
21	Tando Allah Yar	745	97	138	676	83	121	44	6	12	22	8	4	3	0	1
22	Tando M. Khan	799	151	101	753	136	89	23	4	7	23	11	5	0	0	0

Source: Government of Sindh, Annual School Census, 2007/08.

Annex VII: Number of Functional Private Schools

S.No	Districts	Total			Primary Schools			Middle Schools			High Schools			Higher Sec. Schools							
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Mixed				
1	Badin	88	1	2	85	28	0	2	26	28	0	0	28	26	1	0	25	6	0	0	6
2	Dadu	268	2	37	229	79	0	25	54	132	1	12	119	54	0	0	54	3	1	0	2
3	Ghotki	140	2	2	136	14	0	2	12	89	2	0	87	24	0	0	24	13	0	0	13
4	Hyderabad	813	23	27	763	272	7	12	253	327	3	5	319	187	11	8	168	27	2	2	23
5	Jacobabad	90	5	2	83	15	0	1	14	52	3	0	49	16	1	0	15	7	1	1	5
6	Khairpur	322	1	37	284	145	0	33	112	131	0	4	127	35	0	0	35	11	1	0	10
7	Larkana	196	3	12	181	43	1	10	32	126	0	2	124	23	1	0	22	4	1	0	3
8	MirpurKhas	338	7	9	322	93	1	6	86	176	0	1	175	57	3	1	53	12	3	1	8
9	Tharparkar	46	0	0	46	27	0	0	27	15	0	0	15	3	0	0	3	1	0	0	1
11	Naushero-Feroze	180	2	4	174	63	1	4	58	89	0	0	89	27	1	0	26	1	0	0	1
10	Nawabshah	112	0	1	111	30	0	1	29	57	0	0	57	18	0	0	18	7	0	0	7
12	Sanghar	255	6	8	241	62	2	6	54	159	1	0	158	30	3	2	25	4	0	0	4
13	Shikarpur	48	2	0	46	10	0	0	10	28	1	0	27	9	0	0	9	1	1	0	0
14	Sukkur	184	1	4	179	34	1	3	30	117	0	0	117	27	0	1	26	6	0	0	6
15	Thatta	69	5	1	63	26	5	1	20	18	0	0	18	24	0	0	24	1	0	0	1
16	Umerkot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Jamshoro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Kashmore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Matiari	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Shahdadkot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Tando Allah Yar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Tando M. Khan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Government of Sindh, Annual School Census 2007/08.

