

DISPARITIES IN ACCESS TO HEALTH AND OTHER CIVIC FACILITIES IN PAKISTAN-AN INTER AND INTRA-PROVINCIAL ANALYSIS

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ABSTRACT:: Human resources are the key factors of growth and development. Without proper education and health, human capital cannot prove an engine of growth. A sound mind requires a sound body. However, inequality along with poverty has been a serious challenge for most of the developing countries. Income poverty and inequality leads to many other dimensions of inequality like: gender, b) region, c) economic class, d) social identity, e) health and f) education, etc. which further aggravate vicious circles of poverty and inequality in the country. The present study provides a detailed analysis of the disparities in access to health and other basic civic facilities like potable water and sanitation at National, Provincial and District level in Pakistan. The analysis shows that the gaps between the haves and have-nots have been continuously widening. Inequality of economic opportunities and especially disparities in very basic needs like education, health, potable water, sanction, etc. leads to inequality of economic outcomes.

I. INTRODUCTION

Human capital is a key to socio-economic development and education and health are key indicators to develop human capital. Health is an integral part to the efforts of reducing poverty and inequality. Health indicators are on priority for the achievement of Millennium Development Goals (MDGs). However, health facilities are not equally available to the people of different regions in Pakistan. Inequality along with poverty has been a serious challenge and leads to many other dimensions of inequality like: gender, b) region, c) economic class, d) social identity, e) health and f) education, etc. which further aggravate vicious circles of poverty and inequality in the country. Unfortunately, the concept of segmented high growth and its trickle-down effect to the grass root level could not be materialized in most of the developing countries like Pakistan. Resultantly, the inter and intra regional inequalities on many fronts have been increasing overtime.

In Pakistan public spending on health is very low and has stagnated around 0.7 % of GDP. It is the lowest among SAARC countries. Besides, private sector is catering to 80% of health care delivery. Infant mortality rate of 65.1 per 1000 live births, and mortality rate of 95.2 per 1000, Pakistan not only lags behind the MDG targets, but is worst performer amongst regional and emerging economiesⁱⁱ. One of the primary causes of high maternal mortality ratio in Pakistan at 276 per 100,000 live births is the low %age of births attended by skilled health personnel (around 40%)ⁱⁱⁱ. Given the high maternal mortality rate and an abysmally low rate of births attended by skilled health personnel is going to pose serious health challenge to the country that must be addressed urgently.

According to World Development Report 2000-01 "Attacking Poverty" out of the world's 6 billion people, 2.8 billion—almost half—live on less than \$2 a day, and 1.2 billion—a fifth—live on less than \$1 a day. In rich countries less than 1 % of children do not reach its fifth birthday,

while in the poorest countries this ratio is 20 %. . Similarly, in rich countries fewer than 5 % of all children under five are malnourished; on the other hand in poor countries the ratio is above 50 %. The average income in the richest 20 countries is 37 times the average in the poorest 20—a gap that has doubled in the past 40 years.

Table 1: Health & Nutrition Expenditure

| Fiscal Years | Health Expenditure as % of GDP |
|--------------|--------------------------------|
| 2000-01 | 0.72 |
| 2001-02 | 0.59 |
| 2002-03 | 0.58 |
| 2003-04 | 0.57 |
| 2004-05 | 0.57 |
| 2005-06 | 0.51 |
| 2006-07 | 0.57 |
| 2007-08 | 0.57 |
| 2008-09 | 0.56 |
| 2009-10 | 0.54 |

Source: Economic Survey of Pakistan

This study aims at to make a critical analysis of the disparities occurred in access to health facilities, availability of potable water and access to sanitation in Pakistan. The layout of the paper is as follow: the review of relevant literature is presented in section II. Section III discusses the methodology and data sources. Discussion of the disparities in access to health, potable water and sanitation are depicted in section IV. Summary is given in the final section followed by references.

II. Review of Literature

By using the three years panel survey of 727 households during the period 1986-87 to 1988-89, the income Gini-coefficient has been calculated as 0.381 and Gini-coefficient of land ownership as high as 0.769, as 37 % of the surveyed households did not own any land. The household in the

lowest income quintile receive 50 % of the per capita income from non-farm income sources while the households in the top quintile receive more than 36 % of their per capita income from agriculture. According to the study non-farm income sources and livestock tends to decrease inequality. Agriculture income accounts for 35 to 45% of overall income inequality in rural areas [1].

It has been argued that economic led growth policies must be accompanied by distributional policies, which actually lead to trickles down effect, otherwise, only rich segment of the society benefits from such growth. According to the analysis inequality has increased during the last two decades in Pakistan in all dimensions [7].

The study analysed personal earnings inequality in Pakistan by using HIES 1993-94 data. According to them factors like education, health, occupation, gender, regional location, sector of employment and other non-market forces such as discrimination play a significant role in the distribution of earnings. The study reveals that any increase in income inequality accompanied by increase in workers' income throughout the population leading to improvement in the position of the poor is not a matter of great concern. However, if the gap between rich and poor increases at the cost of the poor, it is a serious problem. Proper distribution of personal earnings should be, therefore, focused to reduce the household income inequality [12].

Trends in inequality in Pakistan between 1998-99 and 2001-02 has been analysed by [2]. According to the study, poverty and inequality are closely related and for a given mean income, more income inequality leads to high poverty ratio.

The study was conducted to measure the poverty and inequality dynamics in Pakistan during the period 1988-1999. The impact of formal Structural Adjustment Lending (SAL) on welfare and poverty has also been analysed. Low economic growth during the reference period attributed to high poverty level especially in the rural areas [9].

Latter on multi-dimensional inter-temporal spatial inequality and level of development during the early 1980s and late 1990s in Pakistan has also been analysed. According to the study regional inequality is a dimension of overall inequality [10].

The study was conducted to measure multidimensional concepts of human well-being by using data from the PSLM 2006-07. In order to measure regional disparities in the quality of life, they developed objective well-being and subjective well-being indices. Their findings reveal that the Punjab districts are ranked top and Balochistan districts ranked lowest in terms of objective well-being. Sindh and NWFP (now KPK) districts are dominated in the category of lower medium well-being category. It was also found that districts which have higher achievements in hard facts of well-being, observe less subjective well-being in term of satisfaction. They suggested that under the MDGs concept of human development, more priorities and attention should be given to least developed districts for achieving the MDGs by 2015 [8].

It has been found that there are four key dimensions of structural inequality in Pakistan: a) gender, b) region, c)

economic class, and d) social identity. These forms of inequality represent vicious circles of poverty and inequality. There are two types of economic inequality; inequality of economic outcomes and inequality of economic opportunities. According to him, distributional inequality is not a policy concern in its own right in Pakistan and the distributional policy measures like direct taxes have been weak. According to him structural inequalities stems from historical and geographical patterns of deprivation, market distortions, less public attention to particular regions due to political, social or population factors. Gender deprivation and discrimination in labour markets is a great obstacle for female working force. This discrimination stems from social traditions, religion, political and economic norms. Women empowerment is one of the important policy measures. Social identity, race, ethnicity, region, religion, etc. remains one of the significant inequality dimensions. The inequality of opportunity in the form of education, health, economic activities, employment, region, assets, etc. must be addressed through favourable actions like government employment, infra-structure development, educational and health opportunities and assets provisions for such groups who suffer from these inequalities. According to study, the main inequalities of economic opportunity are regional underdevelopment, market distortions and unequal access to public services [4].

A comprehensive analysis regarding multi-dimensional gender inequalities in Pakistan has been conducted. It was found gender disparities in educational, health, employment, financial availability and other socio-economic areas in both provincial and national level in Pakistan [6].

It was found that the share of South Asia in the total number of poor has increased significantly from 40% in 1993 to 47% in 2004. Over the past decade, the number of malnourished people in the region has gone up from 290 million to 299 million. Out of 27 million children not immunized in the world, 11 million are in South Asia. Today, South Asia contains 15% of the total global population affected by HIV/AIDS. The proportion of the undernourished has ballooned from 19 to 24% of the total population of Pakistan. Gender gap in literacy rate in Pakistan has widened to almost 28% and it is highly unlikely that Pakistan will be able to achieve universal primary completion (UPC) and the education related MDGs by 2015 [11].

It was found that where the world has made significant aggregate progress in health, education and income, at the same time has been faced by high and persistent inequality, unsustainable production patterns and disempowerment of large groups of people around the world. The HDR 2010 also introduced two multi-dimensional measures of inequality. The inequality adjusted HDI (IHDI); this captures the losses in human development due to inequality in health, education and income. Pakistan 2010 IHDI stands at 0.49 and Pakistan is ranked at 125th out of 169 countries. This is below the average of 0.516 for the South Asian countries. It is also below the average of 0.592 for Medium Human Development Countries. According to HDR 2010, the Pakistan's loss due to inequality measured through IHDI was 46.4% due to educational inequality, 10.6% due to

income inequality and 32.9% due to inequality-adjusted life expectancy at birth. The overall inequality loss was reported to be 31.5% while income Gini- coefficient was calculated to be 31.2 during the period 2000-2010. The Gender Inequality Index (GII); it measures the gender disparities in educational attainment, reproductive health, empowerment and labour market participation. The GII value for Pakistan is 0.721 ranking it 112 out of 138 countries based on 2008 data [17].

III. Methodology and Data Description

An analysis regarding inter and intra-provincial disparities in access to health, potable water and sanitation at district, provincial and national levels in Pakistan is made based on the following data sources: the Pakistan Economic Survey (1990-91 & 2009-10 and other issues); Federal Bureau of Statistics (1999) 50 Years of Pakistan in Statistics: Volume I-IV Government of Pakistan, Islamabad. Data on education, health, consumption, water, sanitation and other social indicators is used from Pakistan Social and Living standard Measurement (PSLM), Federal Bureau of Statistics (various

issues). Human development indicators and data on other international comparison are used from Human Development Report, UNDP (2010) and World Development Report (2010).

IV. Disparities in Access to Health

Health is an integral part to the efforts of reducing poverty and inequality. Health indicators are on priority for the achievement of Millennium Development Goals (MDGs). However, health facilities are not equally available to the people of different regions. Table 2 shows the %age of children aged 12-23 months that have been immunized for the year 2007-08. The analysis of the data indicates that disparity is found across regions (rural/urban) and sex (male/female) for different quintiles. The overall %age for male immunized children is 74% with 82% for urban and 70% for rural areas. While for female this ratio is 68% with 79% in urban and 64% in rural areas. For both sexes the %age for immunized children is 71% with 80% and 67% for urban and rural areas, respectively.

Table 2: %age of Children Aged 12-23 Months that have been Immunized, Based on Recall and Record – Fully Immunized

| Quintile | Male | | | Female | | | Both Sexes | | |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|
| | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total |
| Quintile-1 | 71 | 63 | 65 | 71 | 63 | 65 | 71 | 63 | 65 |
| Quintile-2 | 74 | 70 | 71 | 65 | 58 | 60 | 69 | 63 | 65 |
| Quintile-3 | 87 | 65 | 70 | 73 | 65 | 67 | 80 | 65 | 68 |
| Quintile-4 | 91 | 78 | 82 | 83 | 64 | 70 | 86 | 71 | 76 |
| Quintile-5 | 88 | 84 | 86 | 94 | 83 | 88 | 91 | 84 | 87 |
| Overall | 82 | 70 | 74 | 79 | 64 | 68 | 80 | 67 | 71 |

Source: Pakistan Social and Living standard Measurement (PSLM), 2007-08

Table 3: Children Under 5 Years of Age Suffering from Diarrhea in Past 30 Days

| Quintile | Male | | | Female | | | Both Sexes | | |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|
| | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total |
| Quintile-1 | 10 | 8 | 8 | 8 | 10 | 10 | 9 | 9 | 9 |
| Quintile-2 | 8 | 12 | 11 | 13 | 12 | 12 | 10 | 12 | 12 |
| Quintile-3 | 10 | 12 | 11 | 11 | 9 | 9 | 10 | 10 | 10 |
| Quintile-4 | 11 | 9 | 10 | 10 | 13 | 12 | 11 | 11 | 11 |
| Quintile-5 | 10 | 11 | 10 | 9 | 14 | 11 | 9 | 12 | 11 |
| Overall | 10 | 10 | 10 | 10 | 11 | 11 | 10 | 11 | 10 |

Source: Pakistan Social and Living standard Measurement (PSLM), 2007-08

Table 4: Ever married women aged 15 – 49 years who had given birth in the last three years and who had attended at least one pre-natal consultation during the last pregnancy

| Quintile | Female | | |
|----------------|-----------|-----------|-----------|
| | Urban | Rural | Total |
| Quintile-1 | 74 | 50 | 56 |
| Quintile-2 | 54 | 37 | 40 |
| Quintile-3 | 65 | 44 | 49 |
| Quintile-4 | 70 | 53 | 58 |
| Quintile-5 | 83 | 60 | 67 |
| Overall | 87 | 69 | 77 |

Source: Pakistan Social and Living standard Measurement (PSLM), 2007-08

Table 5: %age of Children Aged 12-23 Months that have been Immunized, Based on Recall and Record – Fully Immunized

| Quintile | Punjab | | | Sindh | | | KPK | | | Baluchistan | | |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|
| | M | F | Both Sex | M | F | Both Sex | M | F | Both Sex | M | F | Both Sex |
| Quintile-1 | 68 | 70 | 69 | 63 | 54 | 59 | 76 | 82 | 80 | 33 | 36 | 35 |
| Quintile-2 | 72 | 59 | 65 | 67 | 50 | 58 | 77 | 80 | 79 | 44 | 34 | 37 |
| Quintile-3 | 76 | 66 | 71 | 76 | 63 | 69 | 44 | 74 | 59 | 63 | 64 | 63 |
| Quintile-3 | 87 | 72 | 78 | 77 | 69 | 73 | 69 | 64 | 66 | 83 | 76 | 80 |
| Quintile-5 | 91 | 91 | 91 | 79 | 89 | 84 | 48 | 70 | 61 | 95 | 90 | 93 |
| Overall | 79 | 71 | 75 | 71 | 62 | 66 | 65 | 76 | 71 | 48 | 41 | 44 |

Source: Pakistan Social and Living standard Measurement (PSLM), 2007-08

Table 6: Children Under 5 Years of Age Suffering from Diarrhea in Past 30 Days

| Quintile | Punjab | | | Sindh | | | KPK | | | Baluchistan | | |
|----------------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|-------------|----------|----------|
| | M | F | M&F | M | F | M&F | M | F | M&F | M | F | M&F |
| Quintile-1 | 8 | 11 | 10 | 9 | 7 | 8 | 9 | 10 | 10 | 7 | 9 | 8 |
| Quintile-2 | 15 | 16 | 15 | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 9 | 8 |
| Quintile-3 | 11 | 10 | 11 | 9 | 6 | 7 | 14 | 13 | 14 | 11 | 4 | 7 |
| Quintile-3 | 10 | 13 | 11 | 6 | 9 | 8 | 12 | 11 | 11 | 13 | 16 | 14 |
| Quintile-5 | 9 | 13 | 11 | 8 | 4 | 6 | 23 | 17 | 20 | 9 | 5 | 7 |
| Overall | 10 | 12 | 11 | 8 | 7 | 7 | 12 | 11 | 12 | 8 | 9 | 8 |

Source: Pakistan Social and Living standard Measurement (PSLM), 2007-08

Table 3 shows children under 5 years of age suffering from Diarrhea for the year 2007-08. The analysis of the data indicates that not much disparity is found across regions (rural/urban) and sex (male/female) for different quintiles.

Table 4 indicates the %age of married women between age 15-49 years who had given birth in the last three years and had attended at least one pre-natal consultation during the pregnancy for five quintiles across rural and urban areas. The ratio varies between 74% to 83% for the lowest to the highest quintile, respectively for urban areas; between 50% to 60% for the lowest to the highest quintile, respectively for rural areas and between 56% to 67% for the lowest to the highest quintile, respectively for Pakistan as a whole. Rural

areas are more deprived off as compared to urban areas in almost all the above given health indicators (table 2-4).

Inter-Provincial and Intra-Provincial Health Inequality

Like income and educational inequality, health inequality is found at both inter-provincial as well as intra-provincial levels. Table 5 shows inter-province %age of children aged 12-23 months that have been immunized for the year 2007-08. The overall data for both sexes show that the %age for the Punjab Province is 75%, for Sindh 66%, for KPK 71% and for Baluchistan the immunization ratio is 44%. Disparities are also found among the quintile distribution for both inter and intra provincial levels.

Table 7: Ever married women aged 15 – 49 years who had given birth in the last three years and who had attended at least one pre-natal consultation during the last pregnancy

| Quintile | Punjab | Sindh | KPK | Baluchistan |
|----------------|-----------|-----------|-----------|-------------|
| Quintile-1 | 59 | 59 | 34 | 39 |
| Quintile-2 | 42 | 45 | 43 | 32 |
| Quintile-3 | 52 | 50 | 50 | 35 |
| Quintile-3 | 60 | 59 | 57 | 50 |
| Quintile-5 | 67 | 72 | 72 | 55 |
| Overall | 56 | 57 | 51 | 42 |

Source: Pakistan Social and Living standard Measurement (PSLM), 2007-08

Table 8: Punjab: Intra-Province ranking Immunization 12-23 months

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|------------|------|------|--------------|------|------------|------------|------|------------|------------|-------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Jehlum | 86.4 | 1 | Jehlum | 99.2 | 1 | Gujrat | 98.0 | 1 | Nankana S | 100.0 |
| 2 | Rawalpindi | 86.2 | 2 | Sialkot | 97.7 | 2 | Chakwal | 97.6 | 2 | Gujrat | 98.0 |
| 3 | Sahiwal | 83.0 | 3 | Khushab | 96.5 | 3 | Jehlum | 97.2 | 3 | Chakwal | 97.6 |
| 4 | Attock | 82.1 | 4 | Attock | 95.4 | 4 | Khushab | 96.7 | 4 | Jehlum | 97.2 |
| 5 | Okara | 80.0 | 5 | Chakwal | 94.3 | 5 | Sialkot | 95.4 | 5 | Khushab | 96.7 |
| 30 | Rajanpur | 62.9 | 30 | DG Khan | 78.6 | 30 | Sargodha | 75.1 | 31 | Sargodha | 75.1 |
| 31 | Kasur | 62.5 | 31 | Hafizabad | 77.8 | 31 | Muzaffar | 74.8 | 32 | Muzaffar | 74.8 |
| 32 | Chakwal | 61.1 | 32 | Rajanpur | 72.2 | 32 | R. Y. Khan | 72.9 | 33 | R. Y. Khan | 72.9 |
| 33 | RY Khan | 56.4 | 33 | MuzaffarGarh | 69.0 | 33 | Rajanpur | 62.9 | 34 | Rajanpur | 62.9 |
| 34 | Layyah | 43.6 | 34 | Bahawalpur | 64.0 | 34 | DG Khan | 55.2 | 35 | DG Khan | 55.2 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 6 presents inter-provincial data for the children under 5 years of age suffering from Diarrhea in the past 30 days. The minimum number of children suffering from diarrheas found in Sindh followed by Baluchistan, KPK and Punjab.

Table 7 shows inter-provincial and intra-provincial data of ever married women aged 15 – 49 years who had given birth in the last three years and who had attended at least one pre-natal consultation during the last pregnancy for the year 2007-08. The maximum health consultation was reported in Sindh followed by Punjab, KPK and Baluchistan. The %age of availability of health facilities also vary among five quintiles for all the four provinces

Table 8 shows intra-province, district ranking in immunization for the Punjab. The top five and bottom five

districts have been selected. The analysis of data for the year 2008-09 shows that top five districts in immunization of children aged 12-23 months in the Punjab are Nankana S, Gujrat, Chakwal, Jehlum and Khushab with 100%, 98%, 97.6%, 97.2% and 96.7% immunization rates, respectively. While the five bottom districts are Sargodha, MuzafarGarh, R. Y. Khan, Rajanpur and DG Khan, with immunization rates of 75.1%, 74.8%, 72.9%, 62.9% and 55.2%, respectively. District Nankana S is the highest in immunization ranking with 100% immunization rate while district DG Khan is the lowest in the ranking with 55.2% rate.

Table 9: Sindh: Intra-Province ranking Immunization 12-23 months

| 1998 | | | 2005 | | | 2008-09-A | | | 2008-09-B | | |
|------|------------|------|------|------------|------|-----------|------------|------|-----------|------------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Larkana | 69.8 | 1 | Hyderabad | 87.9 | 1 | Karachi | 87.4 | 1 | Kashmore | 92.7 |
| 2 | N Feroz | 65.0 | 2 | N Feroz | 87.6 | 2 | Nowshero | 83.1 | 2 | Matiari | 90.5 |
| 3 | Karachi | 64.3 | 3 | Karachi | 83.4 | 3 | Hyderabad | 79.2 | 3 | Karachi | 87.4 |
| 4 | Sanghar | 63.7 | 4 | Shikarpur | 82.9 | 4 | Larkana | 75.9 | 4 | Hyderabad | 86.9 |
| 5 | Hyderabad | 63.1 | 5 | Larkana | 82.1 | 5 | Dadu | 74.6 | 5 | Nowshero | 83.1 |
| 12 | Nawabshah | 54.5 | 12 | Khairpur | 61.7 | 12 | Thatta | 49.1 | 18 | Sanghar | 49.0 |
| 13 | Tharparkar | 53.6 | 13 | Tharparkar | 53.6 | 13 | Sanghar | 49.0 | 19 | Shikarpur | 46.9 |
| 14 | Thatta | 51.9 | 14 | Nawabshah | 51.5 | 14 | Shikarpur | 46.9 | 20 | Nawabshah | 45.6 |
| 15 | Ghotki | 51.8 | 15 | Sanghar | 45.8 | 15 | Nawabshah | 45.6 | 21 | Jacobabad | 41.7 |
| 16 | Badin | 43.6 | 16 | Jacobabad | 35.2 | 16 | Tharparkar | 33.1 | 22 | Tharparkar | 33.1 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 10: KPK: Intra-Province ranking Immunization 12-23 months

| 1998 | | | 2005 | | | 2008-09 | | |
|------|------------|------|------|-------------|-------|---------|-----------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Chitral | 87.5 | 1 | Chitral | 100.0 | 1 | Malakand | 93.4 |
| 2 | Peshawar | 82.6 | 2 | Abbottabad | 92.6 | 2 | Swat | 89.4 |
| 3 | Mardan | 79.4 | 3 | Swat | 90.8 | 3 | Nowshera | 89.0 |
| 4 | Abbottabad | 79.2 | 4 | Charsada | 90.1 | 4 | Charsada | 88.6 |
| 5 | Lower Dir | 76.3 | 5 | Swabi | 88.3 | 5 | Chitral | 88.5 |
| 20 | Malakand | 49.9 | 20 | Kohat | 59.2 | 20 | Shangla | 51.7 |
| 21 | Tank | 49.8 | 21 | Bonair | 56.3 | 21 | Karak | 50.8 |
| 22 | Battagram | 49.6 | 22 | LakkiMarwat | 55.9 | 22 | Battagram | 47.9 |
| 23 | Kohistan | 48.0 | 23 | Shangla | 54.8 | 23 | Kohistan | 33.5 |
| 24 | Shangla | 25.3 | 24 | Kohistan | 48.2 | 24 | Lakki Mar | 33.2 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 9 shows intra-province, district ranking in immunization for Sindh. The analysis of data for the top five and bottom five districts for the year 2008-09 shows that top five districts in immunization of children aged 12-23 months in Sindh are Kashmore, Matiari, Karachi, Hyderabad and Nowshero with 92.7%, 90.5%, 87.4%, 86.9% and 83.1% immunization rates, respectively. While the five bottom districts are Sanghar, Shikarpur, Nawabshah, Jacobabad and

Tharparkar, with immunization rates of 49%, 46.9%, 45.6%, 41.7% and 33.1%, respectively. District Kashmore is the highest in immunization ranking with 92.7% immunization rate while district Tharparkar is the lowest in the ranking with 33.1% rate in Sindh province.

Table 11: Balochistan: Intra-Province ranking Immunization 12-23 months

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|----------------|------|------|----------------|------|------------|----------------|------|------------|-----------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Ziarat | 84.0 | 1 | Gwadar | 96.5 | 1 | Ziarat | 76.4 | 1 | Ziarat | 76.4 |
| 2 | Quetta | 71.7 | 2 | Zhob | 88.5 | 2 | Quetta | 72.9 | 2 | Quetta | 72.9 |
| 3 | Kech | 68.9 | 3 | Ziarat | 83.7 | 3 | Barkhan | 68.4 | 3 | DeraBugti | 70.7 |
| 4 | Gwadar | 66.0 | 4 | Quetta | 76.0 | 4 | Loralai | 67.7 | 4 | Barkhan | 68.4 |
| 5 | Panjgur | 65.6 | 5 | Kalat | 75.9 | 5 | QillaSaifullah | 62.6 | 5 | Loralai | 67.7 |
| 20 | QillaSaifullah | 39.3 | 20 | Musa Khel | 48.3 | 20 | Qilla Abdullah | 26.4 | 24 | Chagai | 20.0 |
| 21 | Musa Khel | 37.9 | 21 | Barkhan | 44.8 | 21 | Nasirabad | 26.0 | 25 | Washuk | 17.9 |
| 22 | Awaran | 36.2 | 22 | Qilla Abdullah | 41.3 | 22 | Mastung | 17.3 | 26 | Mastung | 17.3 |
| 23 | Sibbi | 31.5 | 23 | Jaffarabad | 32.5 | 23 | Khuzdar | 10.7 | 27 | Khuzdar | 10.7 |
| 24 | JhalMagsi | 29.6 | 24 | QillaSaifullah | 27.9 | 24 | Awaran | 0.0 | 28 | Awaran | 0.0 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 10 shows intra-province, district ranking in immunization for KPK province. The analysis of data for the top five and bottom five districts for the year 2008-09 shows that top five districts in immunization of children aged 12-23 months in KPK are Malakand, Swat, Nowshera, Charsada and Chitral with 93.4%, 89.4%, 89%, 88.6% and 88.5% immunization rates, respectively. While the five bottom districts are Shangla, Karak, Battagram, Kohistan and LakkiMarwat, with immunization rates of 51.7%, 50.8%, 47.9%, 33.5% and 33.2%, respectively. District Malakand is the highest in immunization ranking with 93.4% immunization rate while district LakkiMarwat is the lowest in the ranking with 33.2% rate in KPK province.

Table 11 shows intra-province, district ranking in immunization for Balochistan province. The top five districts in immunization of children aged 12-23 months in Balochistan are Ziarat, Quetta, DeraBugti, Barkhan and Loralai with 76.4%, 72.9%, 70.7%, 68.4% and 67.7% immunization rates, respectively. While the five bottom districts are Chagai, Washuk, Mastung, Khuzdar and Awaran, with immunization rates of 20%, 17.9%, 17.3%, 10.7% and 0%, respectively. District Ziarat is the highest in immunization ranking with 76.4% immunization rate while district Awaran is the lowest in the ranking with 0% immunization in Baluchistan.

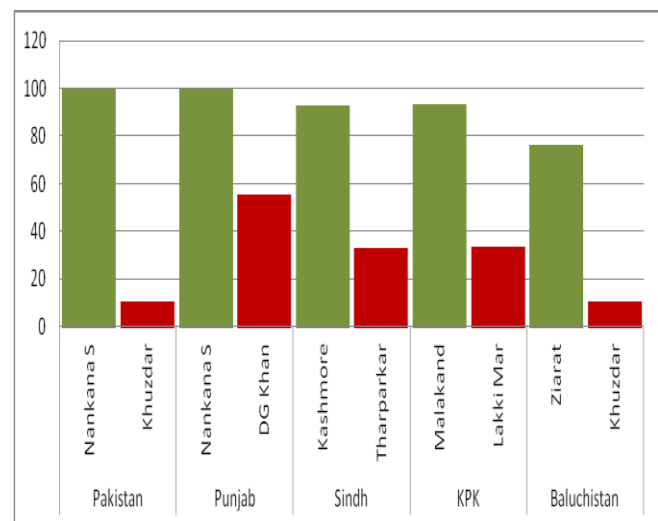
Table 12 shows data for national district ranking in immunization for top ten and bottom ten districts of Pakistan. Data for the year 2008-09 reveals that Nankana S, Gujrat, Chakwal, Jehlum, Khushab, Sialkot, B hakhar, Narowal, M. Bahuddin and Malakand are the top ten districts in immunization ranking in Pakistan with rates 100%, 98%, 97.6%, 97.2%, 96.7%, 95.4%, 94.4%, 94.4%, 93.5% and 93.4%, respectively. While the bottom ten districts are Lakhi Mar, Tharparkar, Kalat, Qilla Abdullah, Nasirabad, Chagai, Washuk, Mastung, Khuzadar and Awaran with the immunization rates of 33.2%, 33.1%, 28.1%, 26.4%, 26.0%, 20%, 17.9%, 17.3%, 10.7% and 0.0%, respectively. Nankana S is the highest in immunization ranking with 100.0% immunization while district Awaran is the lowest in the national ranking with 0% immunization.

The figure 1 provides a comparative picture of highest and lowest ranked districts in Pakistan and Provinces regarding immunization of the children. It can clearly be seen that

there exists huge disparities not only at National level but also at provincial level regarding immunization

Access to basic civic facilities-Safe Drinking Water and Sanitation

Access to safe drinking water and sanitation facilities are among the most important civic facilities for the population as, it provides good health and ensures economic benefits. Safe drinking water and basic sanitation is of crucial importance to the

Figure 1 Immunization 12-23 months

preservation of human health, especially among children. Water-related diseases are the most common cause of illness and death among the poor of developing countries. Households with improved services suffer less morbidity and mortality from water-related diseases (WHO). Table 13 shows intra-province, district ranking in water supply for the Punjab. The top five and bottom five districts have been selected. The analysis of data for the year 2008-09 shows that top five districts in water supply in Punjab are Layyah, Gujranwala, Gujrat, Lahore and M. Bahaudin with 100%, 99.9%, 99.9%, 99.8%, and 99.8% population with water supply respectively. While the five bottom districts are Rawalpindi, Faisalabad, Rajanpur, D. G. Khan and Attock with water supply availability rates of 84.2%, 83.4%, 77.8%, 74.4% and 71.8% respectively. District Layyah is the highest

in water supply for 100% population while district Attock is the lowest in the ranking with 71.8% rate.

Table 14 shows intra-province, district ranking in water supply for Sindh. The analysis of data for the year 2008-09 shows that top five districts in water supply are N. Feroz, Larkana, Kashmore, Shikarpur and Tando Mohammad Khan with 100%, 100%, 100%, 99.6%, and 99.5% population with

water supply respectively. While the five bottom districts are with water supply availability rates of 87.1%, 81%, 61.8%, 56.7% and 8.7% are Jacobabad, Jamshoro, Thatta, Mir PurKhas and tharparkar, respectively. District N Feroz is the highest in water supply for 100% population while district Tharparkar is the lowest in the ranking with 8.7% rate.

Table 12: Pakistan: National ranking Immunization 12-23 months

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|----------------|------|------|----------------|-------|------------|----------------|------|------------|----------------|-------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Chitral | 87.5 | 1 | Chitral | 100.0 | 1 | Gujrat | 98.0 | 1 | Nankana S | 100.0 |
| 2 | Jehlum | 86.4 | 2 | Jehlum | 99.2 | 2 | Chakwal | 97.6 | 2 | Gujrat | 98.0 |
| 3 | Rawalpindi | 86.2 | 3 | Sialkot | 97.7 | 3 | Jehlum | 97.2 | 3 | Chakwal | 97.6 |
| 4 | Ziarat | 84.0 | 4 | Gwadar | 96.5 | 4 | Khushab | 96.7 | 4 | Jehlum | 97.2 |
| 5 | Sahiwal | 83.0 | 5 | Khushab | 96.5 | 5 | Sialkot | 95.4 | 5 | Khushab | 96.7 |
| 6 | Peshawar | 82.6 | 6 | Attock | 95.4 | 6 | Bhakhar | 94.4 | 6 | Sialkot | 95.4 |
| 7 | Attock | 82.1 | 7 | Chakwal | 94.3 | 7 | Narowal | 94.4 | 7 | Bhakhar | 94.4 |
| 8 | Okara | 80.0 | 8 | Gujrat | 93.7 | 8 | M. Bahauddin | 93.5 | 8 | Narowal | 94.4 |
| 9 | Gujrat | 79.4 | 9 | Mianwali | 93.4 | 9 | Malakand | 93.4 | 9 | M. Bahauddin | 93.5 |
| 10 | Mardan | 79.4 | 10 | Bahawalnagar | 93.1 | 10 | Attock | 92.8 | 10 | Malakand | 93.4 |
| 89 | Bolan | 46.9 | 89 | Sibbi | 50.2 | 89 | Lakki Mar | 33.2 | 100 | Lakki Mar | 33.2 |
| 90 | Badin | 43.6 | 90 | Chagai | 48.8 | 90 | Tharparkar | 33.1 | 101 | Tharparkar | 33.1 |
| 91 | Layyah | 43.6 | 91 | Musa Khel | 48.3 | 91 | Kharan | 28.9 | 102 | Kalat | 28.1 |
| 92 | Khuzdar | 42.7 | 92 | Kohistan | 48.2 | 92 | Chagai | 28.3 | 103 | Qilla Abdullah | 26.4 |
| 93 | QillaSaifullah | 39.3 | 93 | Sanghar | 45.8 | 93 | Kalat | 28.1 | 104 | Nasirabad | 26.0 |
| 94 | Musa Khel | 37.9 | 94 | Barkhan | 44.8 | 94 | Qilla Abdullah | 26.4 | 105 | Chagai | 20.0 |
| 95 | Awaran | 36.2 | 95 | Qilla Abdullah | 41.3 | 95 | Nasirabad | 26.0 | 106 | Washuk | 17.9 |
| 96 | Sibbi | 31.5 | 96 | Jacobabad | 35.2 | 96 | Mastung | 17.3 | 107 | Mastung | 17.3 |
| 97 | JhalMagsi | 29.6 | 97 | Jaffarabad | 32.5 | 97 | Khuzdar | 10.7 | 108 | Khuzdar | 10.7 |
| 98 | Shangla | 25.3 | 98 | QillaSaifullah | 27.9 | 98 | Awaran | 0.0 | 109 | Awaran | 0.0 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 13: Punjab: Intra-Province ranking Water Supply

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|---------------|------|------|-------------|------|------------|-------------|-------|------------|-------------|-------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Gujranwala | 99.5 | 1 | Sheikhupura | 99.9 | 1 | Layyah | 100.0 | 1 | Layyah | 100.0 |
| 2 | MandiBahuddin | 99.4 | 2 | Narowal | 99.9 | 2 | Gujranwala | 99.9 | 2 | Gujranwala | 99.9 |
| 3 | Layyah | 99.3 | 3 | Layyah | 99.8 | 3 | Gujrat | 99.9 | 3 | Gujrat | 99.9 |
| 4 | Hafizabad | 99.2 | 4 | Gujranwala | 99.8 | 4 | Lahore | 99.8 | 4 | Lahore | 99.8 |
| 5 | Narowal | 99.0 | 5 | Bhakhar | 99.7 | 5 | M. Bahaudin | 99.8 | 5 | M. Bahaudin | 99.8 |
| 30 | Rajanpur | 80.4 | 30 | Mianwali | 89.0 | 30 | Rawalpindi | 84.2 | 31 | Rawalpindi | 84.2 |
| 31 | Chakwal | 70.2 | 31 | DG.Khan | 86.2 | 31 | Faisalabad | 83.4 | 32 | Faisalabad | 83.4 |
| 32 | Jehlum | 68.7 | 32 | Jehlum | 85.9 | 32 | Rajanpur | 77.8 | 33 | Rajanpur | 77.8 |
| 33 | Rawalpindi | 57.3 | 33 | Attock | 77.8 | 33 | D. G. Khan | 74.4 | 34 | D. G. Khan | 74.4 |
| 34 | Attock | 54.0 | 34 | Rawalpindi | 75.0 | 34 | Attock | 71.8 | 35 | Attock | 71.8 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 14: Sindh: Intra-Province ranking Water Supply

| 1998 | | | 2005 | | | 2008-09-A | | | 2008-09-B | | |
|------|------------|------|------|------------|------|-----------|-------------|-------|-----------|---------------------|-------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Shikarpur | 98.2 | 1 | Shikarpur | 99.7 | 1 | N Feroz | 100.0 | 1 | N Feroz | 100.0 |
| 2 | Jacobabad | 97.1 | 2 | Ghotki | 99.6 | 2 | Shikarpur | 99.6 | 2 | Larkana | 100.0 |
| 3 | Ghotki | 96.8 | 3 | Hyderabad | 99.0 | 3 | Khairpur | 99.5 | 3 | Kashmore | 100.0 |
| 4 | N Feroz | 94.9 | 4 | N Feroz | 99.0 | 4 | Nawabshah | 99.4 | 4 | Shikarpur | 99.6 |
| 5 | Nawabshah | 94.5 | 5 | Nawabshah | 98.9 | 5 | Hyderabad | 99.0 | 5 | Tando Mohammad Khan | 99.5 |
| 12 | Dadu | 68.9 | 12 | Badin | 88.0 | 12 | Karachi | 93.0 | 18 | Jacobabad | 87.1 |
| 13 | Mirpurkhas | 49.5 | 13 | Dadu | 73.7 | 13 | Dadu | 85.9 | 19 | Jamshoro | 81.0 |
| 14 | Badin | 41.4 | 14 | Thatta | 64.0 | 14 | Thatta | 61.8 | 20 | Thatta | 61.8 |
| 15 | Thatta | 40.3 | 15 | Mirpurkhas | 58.2 | 15 | Mir PurKhas | 56.7 | 21 | Mir PurKhas | 56.7 |
| 16 | Tharparkar | 4.2 | 16 | Tharparkar | 28.3 | 16 | Tharparkar | 8.7 | 22 | Tharparkar | 8.7 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 15 shows intra-province, district ranking in water supply for KPK. The top five districts in water supply in KPK are Bannu, Peshawar, Mardan, Swat and D. I. Khan with 95.6%, 88.4%, 85.5%, 84.2%, and 84% population with water supply respectively. While the five bottom districts are Lower Dir, Mansehra, Chitral, Shangla and Kohistan with

water supply availability rates of 60.8%, 57.5%, 52.6%, 36.1% and 8.5% respectively. District Bannu is the highest in water supply for 95.6% population while district Kohistan is the lowest in the ranking with 8.5% rate.

Table 15: KPK: Intra-Province ranking Water Supply

| 1998 | | | 2005 | | | 2008-09 | | |
|------|------------|------|------|-------------|------|---------|------------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Bannu | 72.8 | 1 | Bannu | 93.6 | 1 | Bannu | 95.9 |
| 2 | D.I.Khan | 70.4 | 2 | D.I.Khan | 87.8 | 2 | Peshawar | 88.4 |
| 3 | Peshawar | 66.3 | 3 | Peshawar | 84.5 | 3 | Mardan | 85.5 |
| 4 | Haripur | 66.1 | 4 | Nowshera | 82.8 | 4 | Swat | 84.2 |
| 5 | Abbottabad | 64.0 | 5 | LakkiMarwat | 82.6 | 5 | D. I. Khan | 84.0 |
| 20 | Swabi | 33.8 | 20 | Chitral | 49.1 | 20 | Lower Dir | 60.8 |
| 21 | Charsada | 33.4 | 21 | Battagram | 48.9 | 21 | Mansehra | 57.5 |
| 22 | Hangu | 31.8 | 22 | Upper Dir | 38.6 | 22 | Chitral | 52.6 |
| 23 | Shangla | 27.2 | 23 | Kohistan | 28.9 | 23 | Shangla | 36.1 |
| 24 | Kohistan | 14.0 | 24 | Shangla | 19.5 | 24 | Kohistan | 8.5 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 16: Balochistan: Intra-Province ranking Water Supply

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|----------------|------|------|------------|------|------------|-----------|------|------------|-----------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Quetta | 85.8 | 1 | Quetta | 84.7 | 1 | Gwadar | 77.0 | 1 | Gwadar | 77.0 |
| 2 | Qilla Abdullah | 57.7 | 2 | Pishin | 62.7 | 2 | Quetta | 75.2 | 2 | Quetta | 75.2 |
| 3 | Pishin | 54.3 | 3 | Awaran | 60.2 | 3 | Pishin | 63.0 | 3 | Naushki | 64.9 |
| 4 | Gwadar | 52.6 | 4 | Jaffarabad | 60.2 | 4 | Sibbi | 56.2 | 4 | Pishin | 63.0 |
| 5 | Chagai | 41.3 | 5 | Mastung | 58.7 | 5 | Khuzdar | 54.3 | 5 | Kharan | 59.8 |
| 20 | Khuzdar | 16.3 | 20 | Kech | 32.4 | 20 | JhalMagsi | 16.1 | 24 | Ziarat | 13.1 |
| 21 | Barkhan | 15.9 | 21 | Panjgur | 22.4 | 21 | Barkhan | 14.3 | 25 | Awaran | 11.1 |
| 22 | JhalMagsi | 13.0 | 22 | JhalMagsi | 22.0 | 22 | Ziarat | 13.1 | 26 | Kohlu | 6.8 |
| 23 | Musakhel | 11.6 | 23 | Musakhel | 17.3 | 23 | Awaran | 11.1 | 27 | Washuk | 3.5 |
| 24 | Panjgur | 3.4 | 24 | Ziarat | 11.2 | 24 | Musa Khel | 0.7 | 28 | Musa Khel | 0.7 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 17: Pakistan: National ranking Water Supply

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|---------------|------|------|-------------|------|------------|----------------|-------|------------|----------------|-------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Gujranwala | 99.5 | 1 | Sheikhupura | 99.9 | 1 | N Feroz | 100.0 | 1 | Kashmore | 100.0 |
| 2 | MandiBahuddin | 99.4 | 2 | Narowal | 99.9 | 2 | Layyah | 100.0 | 2 | Layyah | 100.0 |
| 3 | Layyah | 99.3 | 3 | Layyah | 99.8 | 3 | Gujranwala | 99.9 | 3 | N Feroz | 100.0 |
| 4 | Hafizabad | 99.2 | 4 | Gujranwala | 99.8 | 4 | Gujrat | 99.9 | 4 | Larkana | 100.0 |
| 5 | Narowal | 99 | 5 | Bakhar | 99.7 | 5 | Lahore | 99.8 | 5 | Gujranwala | 99.9 |
| 6 | MuzaffarGarh | 98.9 | 6 | Lahore | 99.7 | 6 | M. Bahaudin | 99.8 | 6 | Gujrat | 99.9 |
| 7 | Lahore | 98.8 | 7 | Kasur | 99.7 | 7 | MuzaffarGarh | 99.7 | 7 | Lahore | 99.8 |
| 8 | Sheikhupura | 98.8 | 8 | Shikarpur | 99.7 | 8 | Shikarpur | 99.6 | 8 | M. Bahaudin | 99.8 |
| 9 | Sialkot | 98.7 | 9 | Ghotki | 99.6 | 9 | Khairpur | 99.5 | 9 | MuzaffarGarh | 99.7 |
| 10 | Bakhar | 98.5 | 10 | Sialkot | 99.6 | 10 | Hafizabad | 99.5 | 10 | Nankana Sahib | 99.6 |
| 89 | Bolan | 20.8 | 89 | Upper Dir | 38.6 | 89 | Bolan/Kachhi | 27.0 | 98 | Mastung | 25.9 |
| 90 | Ziarat | 19.8 | 90 | Bolan | 33.3 | 90 | Mastung | 25.9 | 99 | Chagai | 19.5 |
| 91 | Nasirabad | 19.8 | 91 | Kech | 32.4 | 91 | QillaSaifullah | 18.7 | 100 | QillaSaifullah | 18.7 |
| 92 | Khuzdar | 16.3 | 92 | Kohistan | 28.9 | 92 | JhalMagsi | 16.1 | 101 | JhalMagsi | 16.1 |
| 93 | Barkhan | 15.9 | 93 | Tharparkar | 28.3 | 93 | Barkhan | 14.3 | 102 | Barkhan | 14.3 |
| 94 | Kohistan | 14 | 94 | Panjgur | 22.4 | 94 | Ziarat | 13.1 | 103 | Ziarat | 13.1 |
| 95 | JhalMagsi | 13 | 95 | JhalMagsi | 22 | 95 | Awaran | 11.1 | 104 | Awaran | 11.1 |
| 96 | Musakhel | 11.6 | 96 | Shangla | 19.5 | 96 | Tharparkar | 8.7 | 105 | Tharparkar | 8.7 |
| 97 | Tharparkar | 4.2 | 97 | Musakhel | 17.3 | 97 | Kohistan | 8.5 | 106 | Kohistan | 8.5 |
| 98 | Panjgur | 3.4 | 98 | Ziarat | 11.2 | 98 | Musa Khel | 0.7 | 107 | Kohlu | 6.8 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 18: Punjab: Intra-Province ranking Sanitation

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|---------------|------|------|---------------|------|------------|--------------|------|------------|--------------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Lahore | 87.0 | 1 | Lahore | 95.4 | 1 | Lahore | 96.6 | 1 | Lahore | 96.6 |
| 2 | Gujranwala | 64.7 | 2 | Gujranwala | 89.6 | 2 | Gujranwala | 93.2 | 2 | Gujranwala | 93.2 |
| 3 | Rawalpindi | 64.7 | 3 | Rawalpindi | 86.0 | 3 | Rawalpindi | 88.9 | 3 | Rawalpindi | 88.9 |
| 4 | Faisalabad | 57.9 | 4 | Sialkot | 83.2 | 4 | Kasur | 85.9 | 4 | Sheikhupura | 87.7 |
| 5 | Sialkot | 50.6 | 5 | Sheikhupura | 80.4 | 5 | Gujrat | 84.6 | 5 | Kasur | 85.9 |
| 30 | Layyah | 22.5 | 30 | Khushab | 52.6 | 30 | Bahawalnager | 47.2 | 31 | Bahawalnager | 47.2 |
| 31 | Bakhar | 22.0 | 31 | Lodhran | 51.6 | 31 | Jhang | 46.0 | 32 | Jhang | 46.0 |
| 32 | Narowal | 21.9 | 32 | Jhang | 50.5 | 32 | Layyah | 44.5 | 33 | Layyah | 44.5 |
| 33 | Rajanpur | 20.9 | 33 | Okara | 49.7 | 33 | D. G. Khan | 40.3 | 34 | D. G. Khan | 40.3 |
| 34 | MuzzaffarGarh | 18.9 | 34 | MuzzaffarGarh | 39.5 | 34 | Rajanpur | 19.3 | 35 | Rajanpur | 19.3 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 19: Sindh: Intra-Province ranking Sanitation

| 1998 | | | 2005 | | | 2008-09-A | | | 2008-09-B | | |
|------|----------------|------|------|----------------|------|-----------|---------------|------|-----------|---------------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Karachi | 95.8 | 1 | NowsheroFeroze | 98.3 | 1 | Karachi | 98.6 | 1 | Karachi | 98.6 |
| 2 | Larkana | 73.3 | 2 | Larkana | 97.6 | 2 | NowsheroFeroz | 96.8 | 2 | NowsheroFeroz | 96.8 |
| 3 | Hyderabad | 71.4 | 3 | Nawabshah | 96.0 | 3 | Hyderabad | 83.8 | 3 | Hyderabad | 96.3 |
| 4 | NowsheroFeroze | 71.0 | 4 | Karachi | 95.1 | 4 | Dadu | 77.3 | 4 | Larkana | 83.2 |
| 5 | Dadu | 67.2 | 5 | Sanghar | 94.9 | 5 | Nawabshah | 75.9 | 5 | Dadu | 80.4 |
| 12 | Sanghar | 43.7 | 12 | Khairpur | 72.1 | 12 | Badin | 51.4 | 18 | Khairpur | 44.7 |
| 13 | Badin | 43.4 | 13 | Badin | 70.0 | 13 | Khairpur | 44.7 | 19 | Kashmore | 39.4 |
| 14 | Jacobabad | 35.6 | 14 | Thatta | 63.9 | 14 | Jacobabad | 39.1 | 20 | Jacobabad | 38.8 |
| 15 | Ghotki | 26.7 | 15 | Mirpurkhas | 50.0 | 15 | Tharparkar | 37.5 | 21 | Tharparkar | 37.5 |
| 16 | Tharparkar | 22.1 | 16 | Tharparkar | 33.2 | 16 | Thatta | 32.2 | 22 | Thatta | 32.2 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 16 shows intra-province, district ranking in water supply for Balochistan. The top five districts in water supply in Balochistan are Gawadar, Quetta, Naushki, Pishin and Kharan with 77.0%, 75.2%, 64.9%, 63%, and 59.8% population with availability of water supply respectively. While the five bottom districts are Ziarat, Awaran, Kohlu, Washuk and Musa Khel with water supply availability rates of 13.1%, 11.1%, 6.8%, 3.5% and 0.7% respectively. District Gawadar is the highest in water supply for 77.0% population while district Musa Khel is the lowest in the ranking with 0.7% rate.

Table 17 shows overall district ranking in water supply for Pakistan. The top ten districts in water supply are Kashmore, Layyah, N Feroz, Larkana, Gujranwala, Gujrat, Lahore, M. Bahaiddin, MuzaffarGarh and Nankana Sahib with 100% water supply for the first five districts and with 99.9%, 99.9%, 99.8%, 99.7%, 99.6% for the remaining five districts, respectively with availability of water supply. While the Ten bottom districts are QillaSaifullah, JhalMagsi, Barkhan, Ziarat, Awaran, Tharparkar, Kohistan, Kohlu, Washuk and Musa Khel with water supply availability rates of 18.7%, 16.1%, 14.3%, 13.1%, 11.1%, 8.7%, 8.5%, 6.8%, 3.5% and 0.7% respectively. District Kashmore is the highest in water supply for 100% population while district Musa Khel is the lowest in the ranking with 0.7% rate in Pakistan

Figure 2 reveals that there exist huge disparities not only at National level but also at provincial level regarding access to

safe drink water. These disparities are at extreme in Baluchistan where 77 % of the population of Gawadar have access to safe drinking water while mere 0.7 % of the MauseaKhel population have access to safe drinking water. Table 18 shows intra-province, district ranking in Sanitation for the Punjab. The top five and bottom five districts have been selected. The analysis of data for the year 2008-09 shows that top five districts in the sanitation facility in Punjab are Lahore, Gujranwala, Rawalpindi, Sheikhupura and Kasur with 96.6%, 93.2%, 88.9%, 87.7%, and 85.9% population with sanitation facility, respectively. While the five bottom districts are Bahawalnagar, Jhang, Layyah, D. G. Khan and Rajanpur with sanitation availability rates of 47.2%, 46.0%, 44.5%, 40.3% and 19.3% respectively. District Lahore is the highest in sanitation for 96.6% population while district Rajanpur is the lowest in the ranking with 19.3% rate.

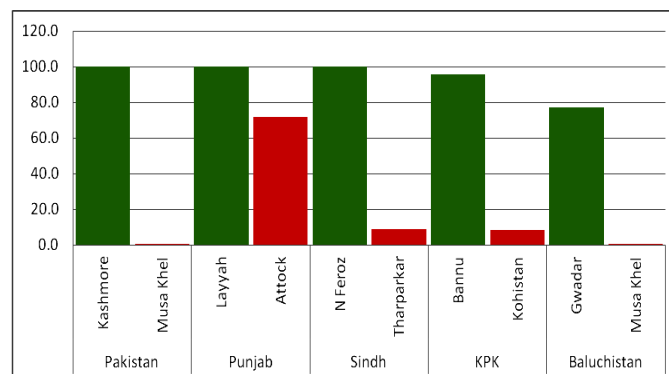
**Figure 2: Ranking access to safe drinking Water**

Table 19 shows intra-province, district ranking in Sanitation for Sindh. The top five districts in the sanitation facility in Sindh are Karachi, N Feroz, Hyderabad, Larkana and Dadu with 98.6%, 96.8%, 96.3%, 83.2%, and 80.4% population with sanitation facility, respectively. While the five bottom districts are Khaipur, Kashmore, Jacobabad, Tharparkar and Thatta with sanitation availability rates of 44.7%, 39.4%, 38.8%, 37.5% and 32.2% respectively. District Karachi is the highest in sanitation for 98.6% population while district Thatta is the lowest in the ranking with 32.2% rate.

Table 20 shows intra-province, district ranking in Sanitation for KPK. The top five districts in the sanitation facility in KPK are Peshawar, Chitral, Nowshera, D.I. Khan and Haripur with 92.2%, 86.5%, 85.4%, 83.1%, and 81.7% population with sanitation facility, respectively. While the five bottom districts are Swat, Bonair, LakhiMarwat, Karak and Kohistan with sanitation availability rates of 55.6%, 49%, 46.2%, 41.7% and 40.6% respectively. District Peshawar is the highest in sanitation for 92.2% population while district Kohistan is the lowest in the ranking with 40.6% sanitation rate.

Table 21 shows intra-province, district ranking in Sanitation for Balochistan. The top five districts in the sanitation facility in Balochistan are Quetta, Khuzdar, Pishin, Naushki and Awaran with 94.5%, 93.8%, 89.6%, 86.4%, and 79% population with sanitation facility, respectively. While the five bottom districts are Ziarat, Jafarabad, Musa Khel,

Nasirabad and Kohlu with sanitation facility 23.7%, 16.1%, 15.5%, 13.6% and 13.1%, respectively. District Quetta is the highest in sanitation facility for 94.5% population while district Kohlu is the lowest in the ranking with 13.1% sanitation rate.

Table 22 shows overall ranking of districts in Sanitation for Pakistan. The top ten districts in the sanitation facility in Pakistan are Karachi, N Feroz, Lahore, Hyderabad, Quetta, Khuzdar, Gujranwala, Peshawar, Pishin and Rawalpindi 98.6%, 96.8%, 96.6%, 96.3%, 94.5%, 93.8%, 93.2%, 92.2%, 89.6%, 88.9% population with sanitation facility, respectively. While the ten bottom districts are Tharpakar, Tahtta, Loralai, Washuk, Ziarat, Rajanpur, Jafarabad, Musa Khel, Nasirabad and Kohlu with sanitation facility 37.5%, 32.2%, 31.2%, 24.1%, 23.7%, 19.3%, 16.1%, 15.5%, 13.6% and 13.1%, respectively. District Karachi is the highest in sanitation facility for 98.6% population while district Kohlu is the lowest in the ranking with 13.1% sanitation rate.

V. SUMMARY

The present study has reviewed the situation of regional disparities in access to health and other civic facilities in Pakistan. By using the data of PSLM and Labour force Surveys a comprehensive analysis has been made for the existences of inequalities in attainment of health facilities

Table 20: KPK: Intra-Province ranking Sanitation

| 1998 | | | 2005 | | | 2008-09 | | |
|------|-----------|------|------|-----------|------|---------|-------------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Peshawar | 73.2 | 1 | Charsada | 99.3 | 1 | Peshawar | 92.2 |
| 2 | Mardan | 62.1 | 2 | Kohat | 99.1 | 2 | Chitral | 86.5 |
| 3 | Charsada | 59.2 | 3 | Mardan | 98.1 | 3 | Nowshera | 85.4 |
| 4 | Nowshera | 57.9 | 4 | Nowshera | 94.2 | 4 | D. I. Khan | 83.1 |
| 5 | Bannu | 54.0 | 5 | Peshawar | 93.0 | 5 | Haripur | 81.7 |
| 20 | Mansehra | 20.8 | 20 | Mansehra | 50.6 | 20 | Swat | 55.6 |
| 21 | Kohistan | 17.6 | 21 | Karak | 48.2 | 21 | Bonair | 49.0 |
| 22 | Batagram | 15.3 | 22 | Upper Dir | 48.0 | 22 | LakhiMarwat | 46.2 |
| 23 | Upper Dir | 15.0 | 23 | Batagram | 42.1 | 23 | Karak | 41.7 |
| 24 | Shangla | 13.6 | 24 | Kohistan | 11.7 | 24 | Kohistan | 40.6 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 21: Balochistan: Intra-Province ranking Sanitation

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|----------------|------|------|----------------|------|------------|----------------|------|------------|-----------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Quetta | 94.2 | 1 | Quetta | 99.7 | 1 | Quetta | 94.5 | 1 | Quetta | 94.5 |
| 2 | Qilla Abdullah | 74.3 | 2 | Pishin | 98.0 | 2 | Khuzdar | 93.8 | 2 | Khuzdar | 93.8 |
| 3 | Pishin | 72.9 | 3 | Chagai | 95.4 | 3 | Pishin | 89.6 | 3 | Pishin | 89.6 |
| 4 | Panjgur | 71.4 | 4 | Kech | 88.7 | 4 | Awaran | 79.0 | 4 | Naushki | 86.4 |
| 5 | Mastung | 61.1 | 5 | Kharan | 85.7 | 5 | Qilla Abdullah | 76.0 | 5 | Awaran | 79.0 |
| 20 | Nasirabad | 25.8 | 20 | Musa Khel | 43.2 | 20 | Loralai | 31.2 | 24 | Ziarat | 23.7 |
| 21 | Kharan | 23.1 | 21 | Zhob | 37.1 | 21 | Ziarat | 23.7 | 25 | Jafarabad | 16.1 |
| 22 | Barkhan | 21.6 | 22 | JhalMagsi | 28.6 | 22 | Jafarabad | 16.1 | 26 | Musa Khel | 15.5 |
| 23 | QillaSaifullah | 20.8 | 23 | QillaSaifullah | 15.9 | 23 | Musa Khel | 15.5 | 27 | Nasirabad | 13.6 |
| 24 | Musa Khel | 12.9 | 24 | Barkhan | 12.2 | 24 | Nasirabad | 13.6 | 28 | Kohlu | 13.1 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

Table 22: Pakistan: National ranking Sanitation

| 1998 | | | 2005 | | | 2008-09-A* | | | 2008-09-B* | | |
|------|----------------|------|------|----------------|------|------------|---------------|------|------------|---------------|------|
| Rank | District | Rate | Rank | District | Rate | Rank | District | Rate | Rank | District | Rate |
| 1 | Karachi | 95.8 | 1 | Quetta | 99.7 | 1 | Karachi | 98.6 | 1 | Karachi | 98.6 |
| 2 | Quetta | 94.2 | 2 | Charsada | 99.3 | 2 | NowsheroFeroz | 96.8 | 2 | NowsheroFeroz | 96.8 |
| 3 | Lahore | 87.0 | 3 | Kohat | 99.1 | 3 | Lahore | 96.6 | 3 | Lahore | 96.6 |
| 4 | Qilla Abdullah | 74.3 | 4 | NowsheroFeroze | 98.3 | 4 | Quetta | 94.5 | 4 | Hyderabad | 96.3 |
| 5 | Larkana | 73.3 | 5 | Mardan | 98.1 | 5 | Khuzdar | 93.8 | 5 | Quetta | 94.5 |
| 6 | Peshawar | 73.2 | 6 | Pishin | 98.0 | 6 | Gujranwala | 93.2 | 6 | Khuzdar | 93.8 |
| 7 | Pishin | 72.9 | 7 | Larkana | 97.6 | 7 | Peshawar | 92.2 | 7 | Gujranwala | 93.2 |
| 8 | Hyderabad | 71.4 | 8 | Nawabshah | 96.0 | 8 | Pishin | 89.6 | 8 | Peshawar | 92.2 |
| 9 | Panjgur | 71.4 | 9 | Chagai | 95.4 | 9 | Rawalpindi | 88.9 | 9 | Pishin | 89.6 |
| 10 | NowsheroFeroze | 71.0 | 10 | Lahore | 95.4 | 10 | Chitral | 86.5 | 10 | Rawalpindi | 88.9 |
| 89 | Karak | 21.0 | 89 | Awaran | 44.7 | 89 | D. G. Khan | 40.3 | 100 | Tharparkar | 37.5 |
| 90 | Rajanpur | 20.9 | 90 | Musa Khel | 43.2 | 90 | Jacobabad | 39.1 | 101 | Thatta | 32.2 |
| 91 | Mansehra | 20.8 | 91 | Battagram | 42.1 | 91 | Tharparkar | 37.5 | 102 | Loralai | 31.2 |
| 92 | QillaSaifullah | 20.8 | 92 | MuzaffarGarh | 39.5 | 92 | Thatta | 32.2 | 103 | Washuk | 24.1 |
| 93 | MuzaffarGarh | 18.9 | 93 | Zhob | 37.1 | 93 | Loralai | 31.2 | 104 | Ziarat | 23.7 |
| 94 | Kohistan | 17.6 | 94 | Tharparkar | 33.2 | 94 | Ziarat | 23.7 | 105 | Rajanpur | 19.3 |
| 95 | Battagram | 15.3 | 95 | JhalMagsi | 28.6 | 95 | Rajanpur | 19.3 | 106 | Jafarabad | 16.1 |
| 96 | Upper Dir | 15.0 | 96 | QillaSaifullah | 15.9 | 96 | Jafarabad | 16.1 | 107 | Musa Khel | 15.5 |
| 97 | Shangla | 13.6 | 97 | Barkhan | 12.2 | 97 | Musa Khel | 15.5 | 108 | Nasirabad | 13.6 |
| 98 | Musa Khel | 12.9 | 98 | Kohistan | 11.7 | 98 | Nasirabad | 13.6 | 109 | Kohlu | 13.1 |

Source: Calculations based on Pakistan Social and Living standard Measurement (PSLM) surveys (various editions)

, availability of safe drinking water and sanitation in the context of regional development.

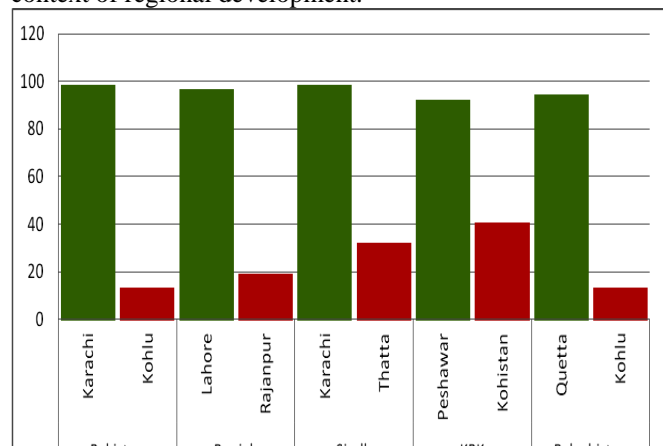


Figure 3 Ranking access to Sanitation facilities

Figure 3 reveals that there exist huge disparities not only at National level but also at provincial level regarding access to sanitation. The availability of health, potable water and sanitation is uneven not only among the provinces but also among various districts within a province. The maximum health consultation was reported in Sindh followed by Punjab, KPK and Baluchistan. The percentage of availability of health facilities also vary among five quintiles for all the four provinces. Nankana Sab is the highest in immunization ranking with 100.0% immunization while district Awaran is the lowest in the national ranking with 0% immunization. In case of water availability, district Kashmir is the highest in water supply for 100% population while district Musa Khel is the lowest in the ranking with only 0.7% population having the availability of potable water in Pakistan. So far as sanitation is concerned, district Karachi is the highest in sanitation facility for 98.6% population while district Kohlu is the lowest in the ranking with 13.1% sanitation rate.

The study concludes that not only overall economic development varies between provinces but there is also considerable inter-provincial variation in the level of economic development and poverty. The government should try to ensure the provision of very basic needs and facilities like health, education, potable water and sanitation to all of the people of the country. Hence there is need that regional disparities may be kept in mind while releasing the fund for the development and districts that are lagged behind may be given priority in the allocation of funds so that they can be able to match the development of other districts.

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ⁱ **Authors Note:** These are the author's personal views and do not reflect the views of their affiliated institutions in any respect.

ⁱⁱ Pakistan Economic Survey 2009-10, Government of Pakistan.

ⁱⁱⁱ Pakistan Millennium Development Goals Report (PMDGR) 2010.