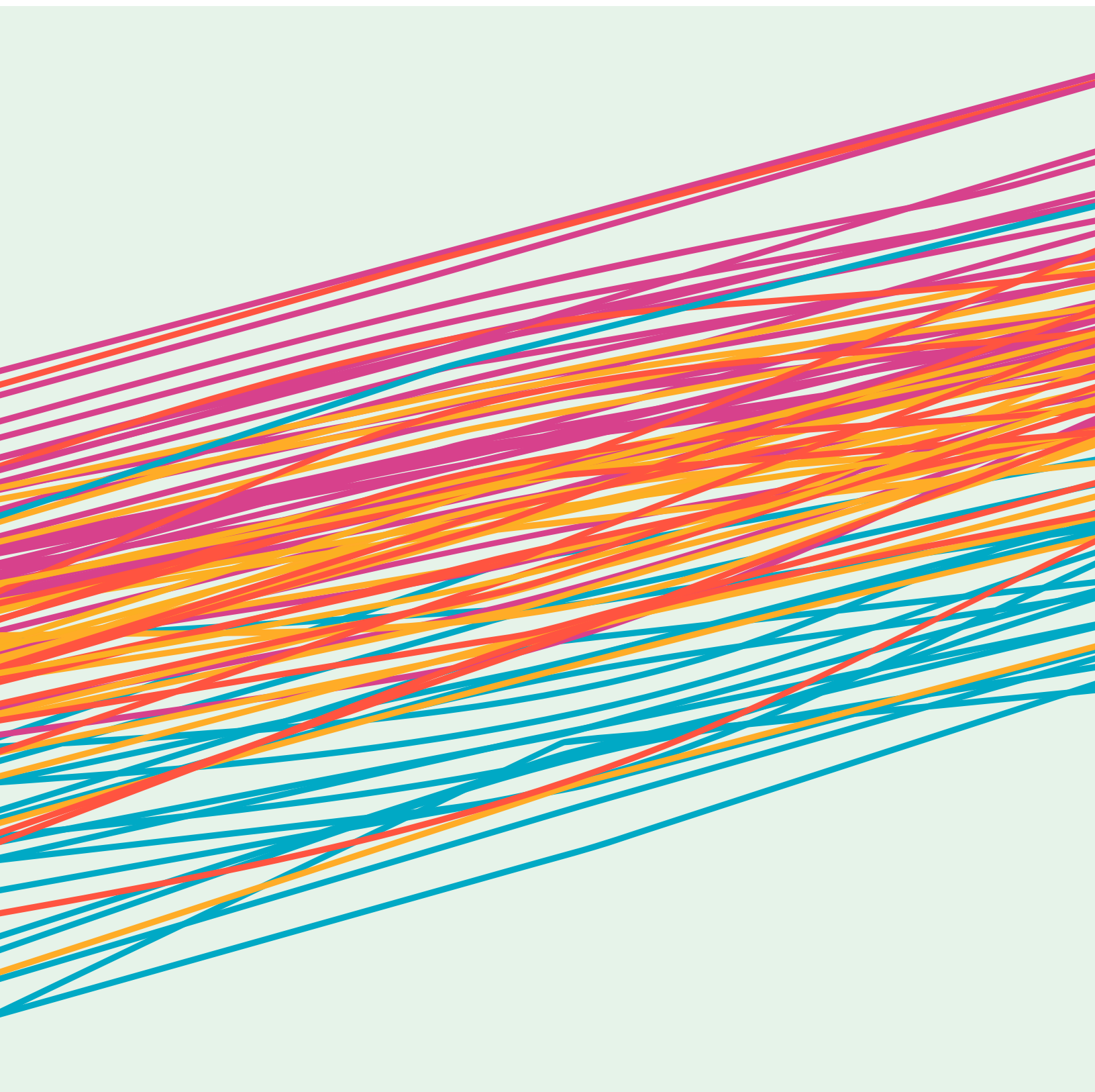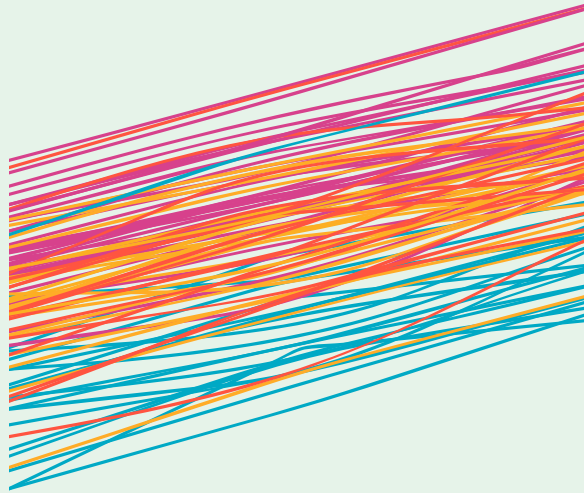# Pakistan
Human Development
Index Report

The front cover design reflects Pakistan's district wise inter-provincial Human Development Index (HDI) over a decade. Districts of a province or region have the same colour – Punjab, pink; Balochistan, blue; Sindh, orange; and Khyber Pakhtunkhwa, yellow. For this report, 114 district level HDIs are calculated for 2015.

The HDI lines show that Balochistan's districts have had moderate success in improving their HDI but are nowhere near the pace and magnitude experienced by districts in Punjab. Districts in KP and Sindh fall between the two extremes and have demonstrated a gradual improvement in their HDIs.

Pakistan Human Development Index Report **2017**

UNDP
Pakistan

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Human Development Reports: In 1990, Dr. Mahbub ul Haq produced the first Human Development Report, introducing a new concept of human development focusing on expanding people's opportunities and choices, and measuring a country's development progress though the richness of human life rather than simply the wealth of its economy. The report featured a Human Development Index (HDI) created to assess the people's capabilities. The HDI measures achievements in key dimensions of human development: individuals enabled to live long and healthy lives, to be knowledgeable, and have a decent standard of living. Subsequent Human Development Reports (HDRs) released most years have explored different themes using the human development approach. These Reports, produced by the UNDP's Human Development Report Office and ensured editorial independence by UNGA, have extensively influenced the development debate worldwide.

National Human Development Reports: Since the first national Human Development Reports (NHDRs) were released in 1992, local editorial teams in 135 countries have produced over 700 NHDRs with UNDP support. These reports bring a human development perspective to national policy concerns through local consultations and research. National HDRs have covered key development issues ranging from climate change to youth employment, to inequalities driven by gender or ethnicity. This is Pakistan's first National Human Development Report in over a decade. The last one in 2003, the NHDR on Poverty, focusing on growth and governance, was authored by Dr. Akmal Hussain.

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Pakistan's Human Development Index

Development from Human Development Perspective

Human development is about "expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices".[1] Since the 1980s, this has been a contentiously debated topic that economic growth does not automatically translate into an improvement in the lives of people. Previously used measures of development, Gross Domestic Product (GDP) and other national income measures say much about how rich the economy is, but are largely silent on the human development aspect, or how rich the lives of its people are. The wealth of a nation is a poor proxy for the quality of life that its individuals are able to enjoy; because it does not take into account the prevailing income inequality amongst people. As a solution, Mahbub ul Haq introduced the concept of human development, based on the human centric approach, as one that focuses on enlarging the set of people's capabilities by providing 'freedom of choice' and increased number of opportunities and choices available to them.[2] In other words, human development aims to expand people's capabilities 'to be' and 'to do' what they value.

The Human Development Index (HDI), based on this human centric approach, was thus introduced in 1990, in the first *Human Development Report* (HDR). It aimed to replace the longstanding reliance on GDP per capita as a measure of economic and social progress and placed people firmly in the center of measures of development.[3] It was a bold attempt to include – in a single, simple, and appealing statistic – information people can lead.

The HDI measures development by quantifying three dimensions of human life – education, health, and standard of living. These dimensions are looked upon to understand how healthy and knowledgeable an individual is and what is the level of his/her standard of living in comparison to the maximum anyone could enjoy in that place and at that time. Although a rudimentary measure of development, it still serves as the starting point of a richer analysis of human development. It is centred around people – who are the real wealth of a nation – and not income, which then becomes a "subset of the human development paradigm".[4] Income is simply a means to help individuals achieve some ends; it does not represent overall opportunities available to them for improving their well-being. In contrast, the HDI is a means of charting the social and economic progress made by countries, in creating and widening freedoms that allow individuals to live the lives they value.[5]

The HDI measures the progress a country has made in translating its wealth into prosperity for its people. This implies that two countries may be equally wealthy, but have very different levels of development and vice versa. Many countries with comparable national per capita incomes have different levels of success in sharing this income with the population at large. Inequalities in income distort the income shares of the population, and erode gains made through economic growth. But the human development approach is about the quality of lives that people lead, as opposed to the incomes they may command. The two are deeply inter-connected, but the ability 'to be' and 'to do' what one values is so much more than just command over commodities. Moreover, there is little evidence of a link between national incomes

and expenditure on health and education,[6] suggesting that Gross Domestic Product (GDP) and other measures of national income are inadequate indicators of human development.[7]

The HDI has faced its share of criticism as well; over being too crude a statistic to do justice to the complexities of human development. It is thought that its simple focus on health, knowledge and standards of living, has become as dominant a framework for measuring development as the GDP it sought to replace.[8] Moreover, the inclusion of national per capita income as one of the indicators has been questioned, as the human development approach regarded income as a means, and not an end. The HDI claims to use income as a means of attaining valuable outcomes beyond having good education and a healthy life.[9] Much of the remaining ideological debate centers around what the HDI does not encompass: for example, the ability to have a secure life in a clean environment, without discrimination, in a country where people have a say in economic and political affairs. While true, this should not detract one from seeing the tremendous success that the HDI has had in replacing per capita GDP as a measure of human development. The HDI represented two ideological departures: the first from an approach centered on the economy towards one focussed on people; and the second, a reconceptualization of the appropriate yardstick of development, shifting from money to capabilities, i.e., what people can become or achieve. Other critiques of the HDI concentrate on methodology, indicators, and weights, especially with respect to their arbitrary selection. However, companion indices to complement and facilitate a richer analysis of development are now a part of the global HDRs. For example, the Gender Inequality Index focuses on more nuanced assessments of development gaps that bind at the gender level. A more substantial shortcoming of the HDI is its inability to account for inequality and poverty. The inequality-adjusted HDI (i-HDI) accounts for development losses due to inequality and the Multidimensional Poverty Index (MPI) quantifies deprivation and its intensity. Both indicators are now a standard part of the global HDRs.

Perhaps the biggest contribution of the HDI is the academic and empirical enquiry that it spawned. It must be acknowledged that, in large part, this debate on what to measure as development, how to include deeper aspects of development and how best to make the HDI relevant for local conditions is an outcome of this enquiry. Most importantly, it must be appreciated that the HDI was never meant to be a complete and universal measure of development. It was meant rather as an "instrument of public communication", that could supplant income as the measure of development. It has succeeded in doing so.[10] At the same time, many of the objections regarding the HDI are a relic of the year 1990: what to include in the HDI was limited by the data available in 1990 to make possible cross-country comparisons. With vast improvement in data collection and data access since then, it is reasonable to assume that the HDI will be modified accordingly, provided this happens for all countries (this is already happening in the country-level *Human Development Reports* where data allows). But better data is only part of the solution, as there will also need to be international consensus about what dimensions to include (for example, discrimination or biodiversity) and how to define and measure selected dimensions by considering cultural and ideological differences. Nevertheless, while the HDI remains as relevant today as it was in 1990 to provide a snapshot of human development, it is only through the lens of the many complementary indices and tables of the HDRs that the depth of the HDI can be appreciated.

Global HDI Measurement[11]

The HDI was developed as a basic measure of the ability to live a long and healthy life, acquire knowledge, and obtain a decent standard of living. The global HDI

is constructed using a two tier approach; first, sub-indices for the three dimensions (health, knowledge, and income) are calculated by standardizing indicators (one each for health and income, and two for knowledge); second, the geometric mean of these sub-indices is calculated. To allow cross-country comparability, each indicator is normalised as per the minimum ("natural zeroes") and maximum ("aspirational targets") achievements possible.[12] The global HDI uses 'life expectancy at birth in years' for health dimension; and 'purchasing power parity adjusted Gross National Income (GNI) per capita in constant 2011 dollars' for income dimension. Whereas, it captures educational achievements through two indicators. The 'mean years of education of adults' is used to capture the level of knowledge in a country, while 'expected years of schooling for school-age children' is taken as a proxy for access to knowledge.[13] The former is given by the lifetime education of adults aged 25 years and above, while the latter is the number of years a child is expected to spend in school based on current enrolment rates. The knowledge sub-index is the average of these two components after normalizing them with the minimum and maximum goalposts. The other two sub-indices are similarly computed by applying the respective goalposts. Finally, the HDI is computed as the geometric mean of these three sub-indices.

Globally, the overall computational methodology, components and analytical weights (assigned to the components) have changed since 1990. Initially, the calculation method was changed in 2010 from an arithmetic to a geometric mean. This change was made, firstly, to overcome the fact that underachievement in one dimension could be linearly offset by a gain in another; and secondly, because the geometric mean allows for an equal percentage change in any sub-index to have the same impact on the HDI.[14] This was essential because the capability approach considers all freedoms as fundamentally important: the HDI measures development as the

freedom to have a healthy and knowledgeable life with a decent standard of living, and not one or the other. Second, changes were also made to the knowledge index in both the selection of sub-components, and their weighting scheme.

Construction of National HDI

Pakistan previously computed a national HDI in 2003, and has now done so for 2017. The HDI for 2017 Pakistan National Human Development Report (NHDR 2017) was computed at the district level using six waves of the *Pakistan Social and Living Standard Measurement* (PSLM) survey for all districts in the four provinces, Azad Jammu & Kashmir, and Gilgit-Baltistan. For FATA's HDI, data from the *FATA Development Indicators Household Survey 2013-14* was used. The methodology employed to compute the national HDI in this report is different from both the global HDI and the national HDI computed in 2003 due to the unavailability of district-level data.

Two changes were made in the global HDI methodology. Firstly, for health dimension 'life expectancy' was replaced by two indicators, 'child immunisation rates (aged 12 to 23 months)' and 'self-reported satisfaction with healthcare facility'. Second, as district-wise GNI per capita is not reported in Pakistan, the living standard dimension of the national HDI was borrowed from the global MPI reported in the global HDRs. Due to these changes in the indicators, the Pakistan HDI presented in *NHDR 2017* becomes incomparable with the HDI estimates for Pakistan presented in the global *HDR*.

Similarly, the HDI estimates of the *NHDR 2017* are also not comparable with the *NHDR 2003* HDI estimates due to the usage of different indicators for each of the three dimensions. While NHDR 2003 followed the global HDI convention used at that point in time and used the old indicators of education 'enrolment ratio' and 'literacy ratio', *NHDR 2017* followed the revised convention, and used new in-

dicators for education – 'expected years of schooling' and 'mean years of schooling', making use of *PSLM* district data. In addition, there is also a change in one of the two indicators of the health dimension used for the 2003 HDI. The *NHDR 2017* used 'satisfaction with health facility' – instead of 'infant survival ratio' that was used in the *NHDR 2003* as a proxy for quality of healthcare. Data on 'satisfaction with health facility' (in percent) was directly obtained from *PSLM*. Lastly, the HDI presented in the *NHDR 2017* used a different living standard index to capture the true living conditions of Pakistani people, as measured by their access to clean water, clean fuel, electricity, adequate sanitation, roof quality and basic household assets.

Human Development Index in Pakistan

Comparisons of HDI are used to determine whether countries have been successful in increasing the capabilities (freedoms) of their people as compared to other countries, regions, or the past. Perhaps more importantly, they allow a contrast between differences in capabilities within countries, pointing to underlying inequalities that have granted some groups more freedom and opportunities than others. In this section, the focus is on how Pakistan performed in 2015, both nationally and provincially. District-level HDIs are then used to shed light on intra-provincial human development across provinces to help assess progress both in 2015, as well as over the decade spanning 2005 to 2015. For this reason, the HDI is calculated at the district level for each of the provinces for six waves (of alternate years) over the last decade: 2005, 2007, 2009, 2011, 2013 and 2015. This is a useful exercise to help compare development trends over time, to assess which districts are converging in terms of human development, and to unveil disparities at the inter- and intra-provincial levels.

The global HDR 2016 ranked Pakistan 147th out of 188 countries, and classified it as a medium human development country.[15] It indicates that Pakistan did not perform well in translating its national income into human development. This can be gauged from a decline of 10 places when the country is ranked in terms of GNI rather than HDI.[16] This is supported by the fact that Pakistan's global HDI rank did not change between 2009 and 2014 according to the global HDI report.[17] Regionally, Pakistan scored below the South Asian regional HDI average of 0.621 as well. In contrast, the regional counterparts in South Asia – Sri Lanka, India, and Bangladesh – did relatively better, with HDI figures of, 0.766, 0.624 and 0.579 respectively. These HDI placed them at a higher rank than Pakistan at the 73rd, 131st and 139th place in the world development rankings, respectively.

On the other hand, according to the NHDR 2017, Pakistan stands at 0.681 HDI in 2015 which places it at a medium level of human development based on the classification adopted by this report. This figure differs from the global HDR 2016 figure of 0.538 calculated for Pakistan HDI due to the use of different methodology and data.[18] Although, both national and global HDRs place Pakistan in the medium human development category in 2015, they still are not comparable due to different cut-off points used for defining the medium human development. For NHDR 2017, medium human development category is from 0.600 to 0.699 and for global HDI it is from 0.550 to 0.699. In addition, while global HDI shows that Pakistan's HDI was stagnant between 2009 and 2015, NHDR 2017 shows a gradual improvement in the human development from 0.600 in 2009 to 0.681 for the same time period.

Level of Human Development in Pakistan

The 2017 national HDI presents a richer and deeper analysis of the progress that Pakistan has made in achieving human de-

velopment over the last decade. The report takes a closer look at the country, including its districts, regions – Azad Jammu and Kashmir [AJ&K], Gilgit-Baltistan [GB] and Federally Administered Tribal Areas [FATA]), – as well as the four provinces - Balochistan, Khyber Pakhtunkhwa (KP), Punjab and Sindh. Further, the report looks at dimensions of the HDI at the provincial and district levels to identify which of the three dimensions are responsible for keeping HDI low across provinces, regions, and districts.

Among regions and provinces, AJ&K has the highest HDI of 0.734, surpassing Punjab with an HDI of 0.732; followed by Sindh and KP- 0.640 and 0.628 respectively. FATA has the lowest HDI in Pakistan at 0.216, followed by Balochistan and GB with HDI scores of 0.421 and 0.523 respectively. These variations reflect significant disparities between regions and provinces reflecting inequality in human development across Pakistan (figure 1). Especially in FATA, Gilgit-Baltistan, and Balochistan, development is well below the national level. FATA fares particularly badly, with a very low level of development that is one third of the national level. This may be attributed to the conflict witnessed in this region since 2008, which has destroyed not only livelihoods and physical infrastructure, but also disrupted a more fundamental sense of belonging and social cohesion by replacing it with fear and uncertainty. Given that there has been a return of some of the temporarily displaced persons (TDPs) to their homes in 2015, it is possible that some semblance of normalcy may return to FATA.[19]

The level of human development varies tremendously between provinces. Shedding more light on intra-provincial disparities in development, figure 2 shows that Punjab is the most developed, with least disparities in terms of HDIs. KP and Sindh experience the largest disparity in terms of district HDIs among the provinces. In KP, there is no district in the category of high HDI. The HDI for Quetta is 0.664 which is the only outlier in Balochistan and fall-

ing in the medium human development category, whereas the next highest ranked district of Balochistan is Pishin, with an HDI of 0.482 falling closer to other districts. However, even in the presence of such a huge difference, the interquartile range (the length of the box) for district HDIs of Balochistan are lower than both KP and Sindh. This is because there is lower variation in district HDIs in Balochistan as most districts fall in the low to very low level of human development.

A deeper analysis of the HDIs reveal important and more useful differences in terms of HDI scores and population of the districts. This is reflected in figure 3 (pg 7) that warns against the tendency to generalise across provinces based on overall levels of development: For example, Sindh and KP are both categorised as having a medium level of human development (HDI Sindh 0.640, HDI KP 0.628). However, majority of the districts in KP outperform those in Sindh, even though the provincial HDI of Sindh is slightly better than that of KP. This discrepancy owes to the fact that almost 40 percent of Sindh's population resides in Karachi and Hyderabad, the most developed districts in Sindh. But in terms of district performance, KP's median value of district HDIs is 0.10 points greater than that of Sindh. While KP has the highest share of districts belonging to the medium category (44 percent), most of the districts in Sindh fall in the low medium level of development (42 percent). This implies that in Sindh, although a greater number of people enjoy higher levels of HDI as compared to KP, KP experiences a better situation in terms of administrative bodies (districts).

Spatial distribution of HDI across district

The discussion above has mainly alluded to the differences in provincial levels of development. Further district-level analysis would enable us to identify precisely which pockets of provinces are doing well and which are lagging behind with low levels

Level of human development in Pakistan, 2015

FIGURE **2**

Snapshot of human development in 2015

HUMAN DEVELOPMENT INDEX (HDI)	
High HDI	0.800 or more
High Medium HDI	0.700 - 0.799
Medium HDI	0.600 - 0.699
Low Medium HDI	0.450 - 0.599
Low HDI	0.300 - 0.449
Very Low HDI	0.299 or less

Source: UNDP calculations based on micro data of PSLM survey for the years 2014/15.

Different clusters of districts falling in the bottom three categories of development (shown in the red, orange and yellow colours), highlight that a lot of work is needed to improve the life choices and opportunities for the millions of people living in underdeveloped areas, in order to achieve a level of development that is both more uniform and acceptable. As evident, development is understandably not the same across Balochistan and Punjab, as may be seen from their diverging HDIs for 2015. At the same time, a closer analysis of KP and Sindh reveals that despite falling within the same HDI development bracket, a divergent development experience emerges for individuals living in either province.

From the district-wise disaggregation on map 1, it appears striking that there are small pockets of high levels of human development in a country otherwise consisting of low medium and medium levels of development. Northern and Eastern districts of Punjab have the highest level of development. In western Punjab, the three neighbouring districts of Rajanpur, Dera Ghazi Khan, and Muzaffargarh are the least developed – nevertheless falling under the category of low medium HDI – and do worse than other districts in the province. Southern/south-eastern Punjab is slightly better off than the west, but again underperforms with respect to the strong central and eastern districts of Punjab. Balochistan's performance on the district HDI is remarkably poor. The highest performing district is Quetta, and is the only district of the province falling under the category of medium HDI. All but three districts in Balochistan fall in the low or very low HDI category. In Balochistan, the only outlier on the upper side of the HDI is Quetta, and 12 out of 28 districts fall under the category of very low HDI. Awaran (which has the lowest HDI in the country of 0.173) and Washuk in south-eastern Balochistan, along with Harnai, Dera Bugti, and Kharan in the center, have very low levels of development, with HDIs of less than 0.30. The worst performing districts

of development. For this report, 114 district-level HDIs are calculated for 2015.[20] These district-wise HDIs are mapped for 2015 in Map 1 (pg 8). Different levels of HDI are reflected through different colour ranges on the map that highlight that inequality in development is not across provinces only, but across districts as well.

in both KP and Sindh are similar in terms of development (Tharparkar in Sindh with an HDI of 0.227 and Kohistan in KP with an HDI of 0.229), but as mentioned above, the distribution of districts in Sindh is heavily skewed towards the low to low medium levels of development. Whereas in KP, there is no district in the high HDI category. The top three districts of Abbottabad, Peshawar, and Haripur are belong to the high medium HDI group. Northern KP has the most under-developed districts of Tor Garh, Kohistan and Upper Dir. These districts suffer severe deprivation as compared to other KP districts. Development is also poor in southern KP especially in districts of Dera Ismail Khan, Tank, and Hangu where since 2010, conflict has severely affected health, education and living standards. Southern Sindh – apart from Karachi and Hyderabad which fall in the categories of high and high medium HDI, respectively – is home to the bottom three districts of Sindh namely, Tharparkar, Umerkot, and Sujawal. Among these bottom districts, Tharparkar is experiencing severe deprivation; the relative difference between Tharparkar and even the other worst performing districts of Sindh is significant.

It is no surprise that those small pockets coincide with hotbeds of economic activity -Karachi and Hyderabad in Sindh; the small-scale manufacturing sectors of central and eastern Punjab (Sargodha, Faisalabad, Sialkot, Gujrat and Gujranwala); the flourishing markets of Lahore, Quetta and Peshawar; the trading city of Rawalpindi in north Punjab; the transit city of Abbottabad in northern KP; as well as Islamabad that too, has a high level of development. Although extremely rich in minerals, Balochistan is largely undeveloped, as are south-eastern and western Punjab. It is hoped that Balochistan – as the proposed economic hub of the China-Pakistan Economic Corridor (CPEC) – will benefit from much-needed infrastructure and investment to improve its economy, providing the means to fund more social development projects.[21]

Development level of districts making up the provincial HDIs, 2015 (in percentages)
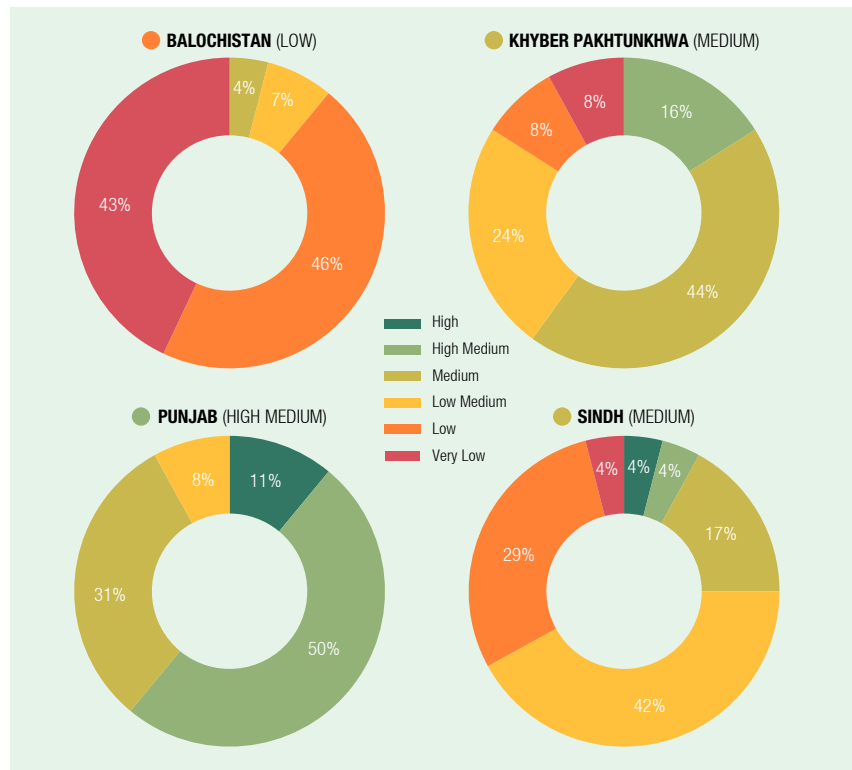
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15.

HDI Trend Pakistan

The national HDI has consistently improved since 2005, and Pakistan has transitioned from a low medium level of development to the medium level. The gradual rise in national HDI over the last decade mirrors provincial performance, as shown below (figure 4, pg 9).

Inter-provincial comparison of decade-wise trends reveal that Balochistan has had moderate success in increasing its HDI, but at nowhere near the pace and magnitude for Punjab, especially since 2011. On the other hand, KP and Sindh have performed similarly over time. It is interesting to note that while Punjab moved from a low medium to a high medium level of development, Balochistan has been unable to transition, and has remained on the outskirts of development. KP and Sindh have also made strides in improving their development levels over the last decade, as

MAP **1**

Pakistan Human Development Index (2015 data)

HUMAN DEVELOPMENT INDEX (HDI)

High HDI		0.800 or more
High Medium HDI		0.700 - 0.799
Medium HDI		0.600 - 0.699
Low Medium HDI		0.450 - 0.599
Low HDI		0.300 - 0.449
Very Low HDI		0.299 or less
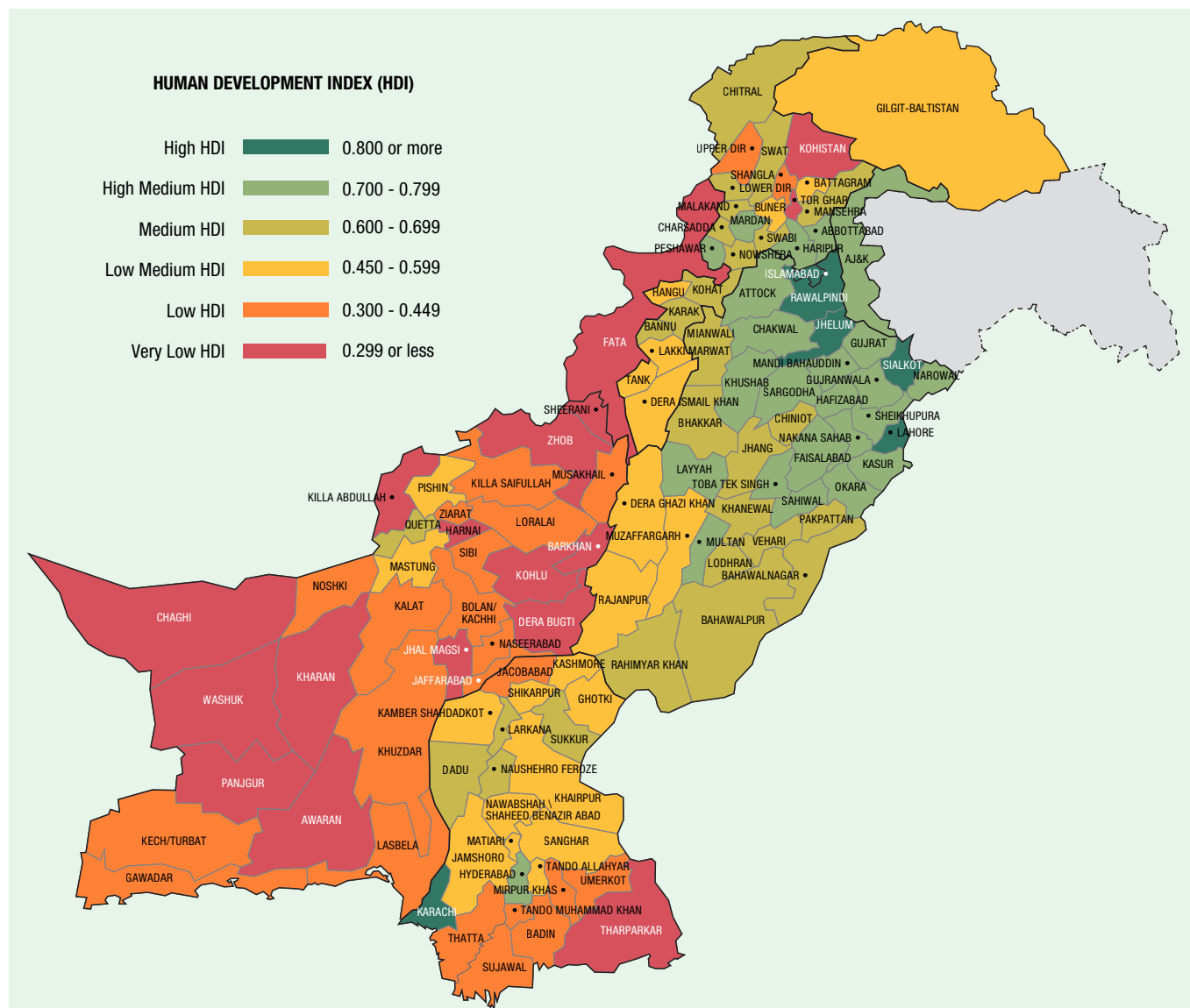
Note: Map is based on the data presented in table 2 of the Statistical Annex. Due to unavailability of the PSLM 2014/15 data for Gilgit-Baltistan, Azad Jammu & Kashmir, Panjgur and Turbat, most recent available data is used instead.

shown by their transition to the medium level of development. The change is especially pronounced for KP, which moved from a low to a low medium level of development between 2005 and 2009. The case for Sindh has been more gradual, and gains have not been enormous, as Sindh has moved from the higher end of the low medium level of development to the medium category.

Conducting the same analysis for AJ&K and GB (data limitations prevent an anal-ysis of FATA) for 2007, 2011 and 2013, reveals that the HDI for Gilgit-Baltistan and Azad Jammu and Kashmir was almost the same in 2007. However, the HDI for AJ&K improved considerably between 2007 and 2011, probably on account of recovery from the 2005 earthquake, while the HDI for Gilgit-Baltistan has improved more modestly from 2007 to 2013 (figure 5).

Taking a closer look at the district-HDI scores over the last decade (2005-15) in-

dicate that Killa Saifullah in Balochistan, Malakand and Chitral in KP, and Dadu in Sindh have shown the highest increase in HDI scores over the last decade (figure 6). As evident from the figure below, a number of districts in KP overall have witnessed an improvement in development levels as well: out of the ten top performing districts, four belong to KP, three to Punjab, and two to Sindh.

While, the highest HDI growth rate was recorded for a district in Balochistan (Killa Saifullah), it must be noted that this was largely due to the extremely low levels of initial HDI in that district of Balochistan. In absolute terms, Killa Saifullah still belongs to the low HDI category. Progress in terms of development in the initial stages is often of an exponential nature, whereas at the later stages it becomes harder to even make smaller gains. By looking at the HDI scores alone, the levels of development achieved after a decade continues to be so low that these top performing districts of Balochistan still are not able to make the transition to a medium level of development. The worst performing districts in Balochistan witnessed a decrease in their HDI scores in the period under consideration. However, the decade-wise HDI performance in districts of Balochistan is not as bad as it is for the corresponding worst performing districts of Sindh (figure 7, pg 11).

Districts from Sindh have experienced the greatest stagnation in terms of HDI scores, as six of the ten worst performing districts belong to Sindh, and the remaining four districts belong to Balochistan. Again, this is an essential reminder that human development is about enriching the lives of people: while Sindh belongs to the medium category of human development, four districts in Sindh have witnessed an actual decline in HDI scores. This is worrisome, as these districts all belonged to the low/ low medium HDI category to begin with.

HDI Ranking Trends in Pakistan

Neither KP nor Punjab have any districts in the worst decade-wise performers in terms

HDI over the years in provinces, 2005-15
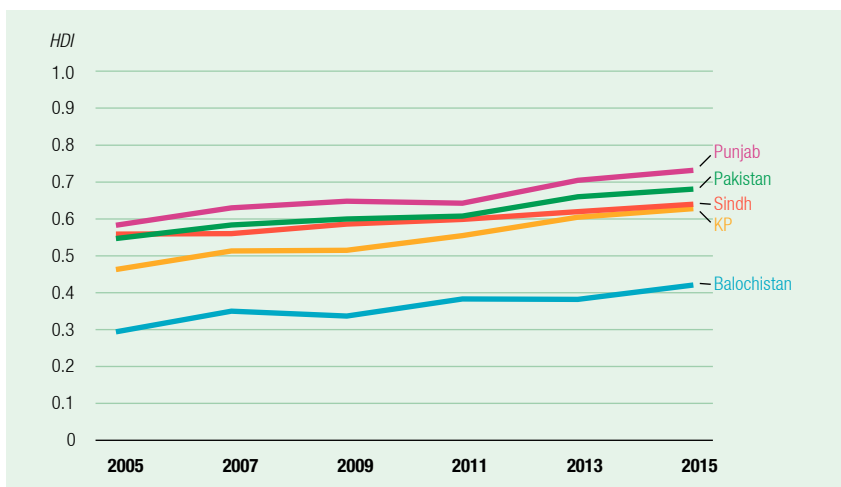
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15.

HDI over the years in AJ&K and GB—2005-15

Source: UNDP calculations based on micro data of FDIHS for the year 2012/13.

of HDI scores. Furthermore, none of the districts in KP or Punjab have experienced a decline in their HDI score in the last decade. This is not, however, to suggest that district-HDI rankings have not fallen in KP or Punjab. Specifically, over the last decade, about 41 and 54 percent of districts in Punjab and KP respectively have suffered a fall in their HDI rankings (figure 8, pg 12). In fact, we see that while the decline in district HDI rankings may not have been the sharpest in these provinces, district-wise development rankings have been

FIGURE **6**

Top ten performing districts by HDI growth, 2005-15
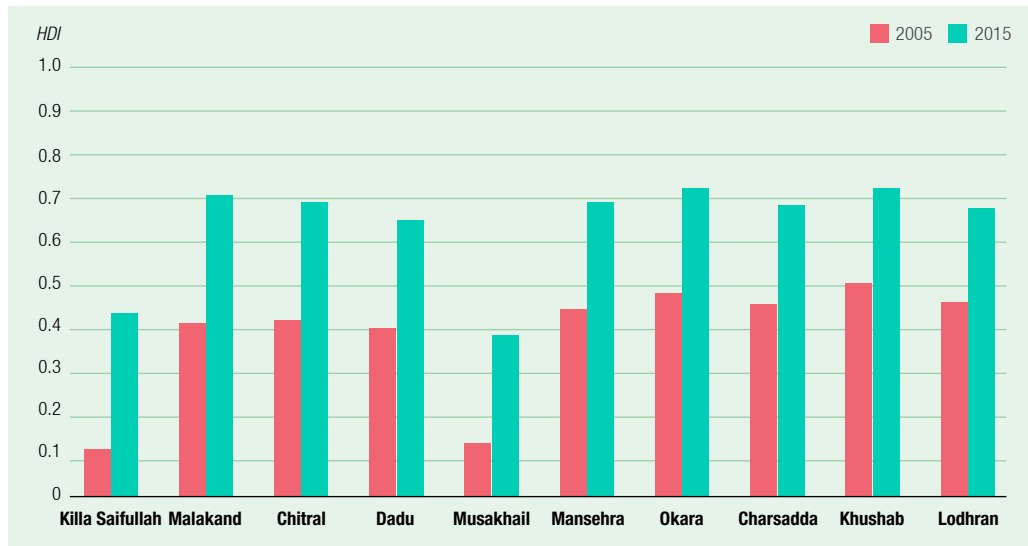
Source: UNDP calculations based on micro data of PSLM survey for the years 2004/05 and 2014/15.

uneven at best, with a substantial number of districts lying to the left of the origin, indicating a decline in development levels. It is worth noting however, that the magnitude of the gains made by KP in districts that have seen improvements in their HDI rank, is much higher than districts making similar gains in Punjab. This is due to the difficulty in improving HDI beyond a certain point, as development levels observed in those districts of Punjab are comparatively higher. Any further improvement in HDI would require considerable efforts in improving opportunites and conditions in one or even all three dimensions of HDI.

In KP, Malakand is the top performing district of KP in the last decade, with an increase in HDI rank of 33 places (it ranked 32nd nationally in the medium level of development). in Punjab, the most improved district in terms of rank over ten years is Mandi Bahauddin with an increase of 21 rank places. Nevertheless, Mandi Bahauddin was ranked 23rd nationally in 2015 in the high medium category. On the other hand, the situation in Sindh is quite bleak in terms of movement on the HDI ladder in the last decade – 14 out of 16 districts, for which decade-old data is available, have experienced a fall in their HDI rankings,

with 10 of these districts having suffered a fall of 10 or more places.

From a district-wise perspective, historically under-developed districts such as Bahawalnagar in Punjab have not seen improvement over the last decade; its ranking fell by 21 places, marking the largest decline for Punjab. Even in recent years, the district experienced a fall of eight places from 2013 to 2015. Similarly, Mianwali suffered a loss of 18 places in the last decade, with a recent loss of 14 places in the last couple of years. Okara, Khushab, and Mandi Bahuddin are the best performers in Punjab, gaining at least 15 places on HDI rankings. In KP, Chitral, Mansehra, and Charsadda have made development gains in the last decade, while Hangu, Lower Dir, Kohistan, Swabi, Upper Dir, and Dera Ismail Khan have suffered a fall of 10 or more places over the same time.

In Balochistan, 20 out of 24 districts, for which decade-old data is available, suffered a fall in their rankings (figure 9, pg 13). Quetta suffered the largest decline – 30 places in the last decade – although the loss in the HDI score is a mere 0.013 points. This implies that even the most developed district in Balochistan could not maintain the pace of development ex-

FIGURE **7**

Bottom ten performing districts by HDI growth, 2005-15
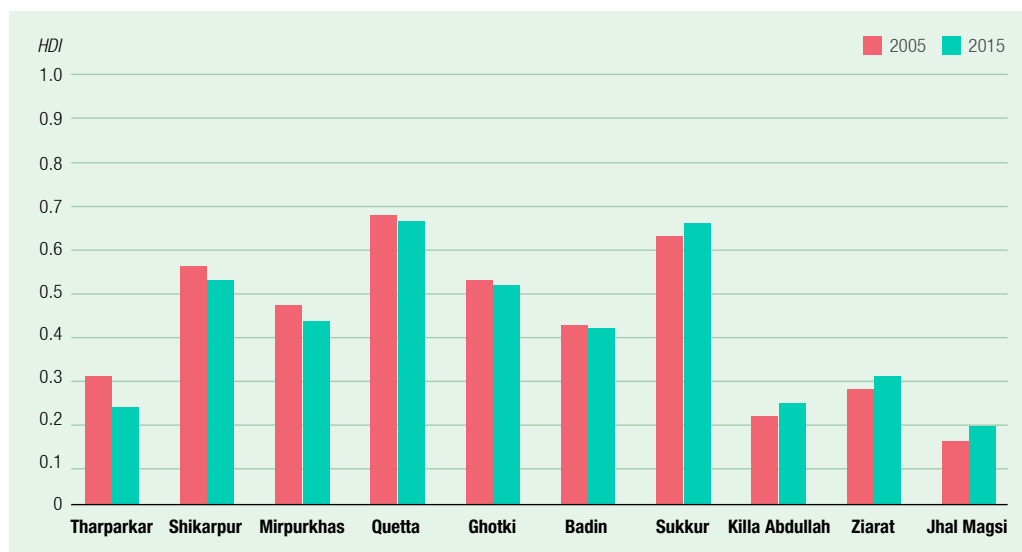
Source: UNDP calculations based on micro data of PSLM survey for the years 2004/05 and 2014/15.

perienced by other districts. But the reason why Sindh accounts for 60 percent of the overall worst perfoming districts as discussed above, is because the declines in HDI rankings are much larger for Sindh than Balochistan. For example, Shikarpur in Sindh saw a staggering fall of 46 places between 2005 and 2015 and is in the low medium level of development in 2015.

Lessons for Human Development in Pakistan

The HDI is largely used as a policy development tool that enables governments to identify low development pockets in the country; determine the HDI dimensions (education, health, and standard of living) that are lagging behind others; and to direct resources towards fostering development in low development areas by enhancing opportunities available to individuals in one or more of the lagging HDI dimensions. The HDI, henceforth, is particularly instructive for Pakistan, as the overall measure of human development masks important inter- and intra-provincial disparities. These disparities are result of unequal distribution of opportunities for attaining

education, health or a better standard of living; which restricts individual's capacity to improve their well-being.

Overcoming these deficits requires an analysis of the three dimensions of human development – namely education, health and living standards to identify which area needs more attention than others – so that meaningful policies can be put forth to allocate funds and to implement the right interventions. Firstly, the contribution to development by each of the individual dimensions is assessed to identify gaps across and within provinces. Second, the sub-components of the three dimensions are used to investigate the depth of that gap in terms of particular weaknesses. This analysis helps to create a more nuanced debate about human deprivations that vary substantially across the country. Finally, time trends are observed to identify problematic disparities that have remained particularly resistant to policy interventions over time. This analysis of HDI dimensions, their sub-components and overall trends enables us to identify triggers and outcomes of low human development across different provinces – high infant morbidity on account of low immunization rates, dissatisfaction with ex-

FIGURE **8**

Charting development—Khyber Pakhtunkhwa and Punjab, change in HDI rankings between 2005-15, 2013-15
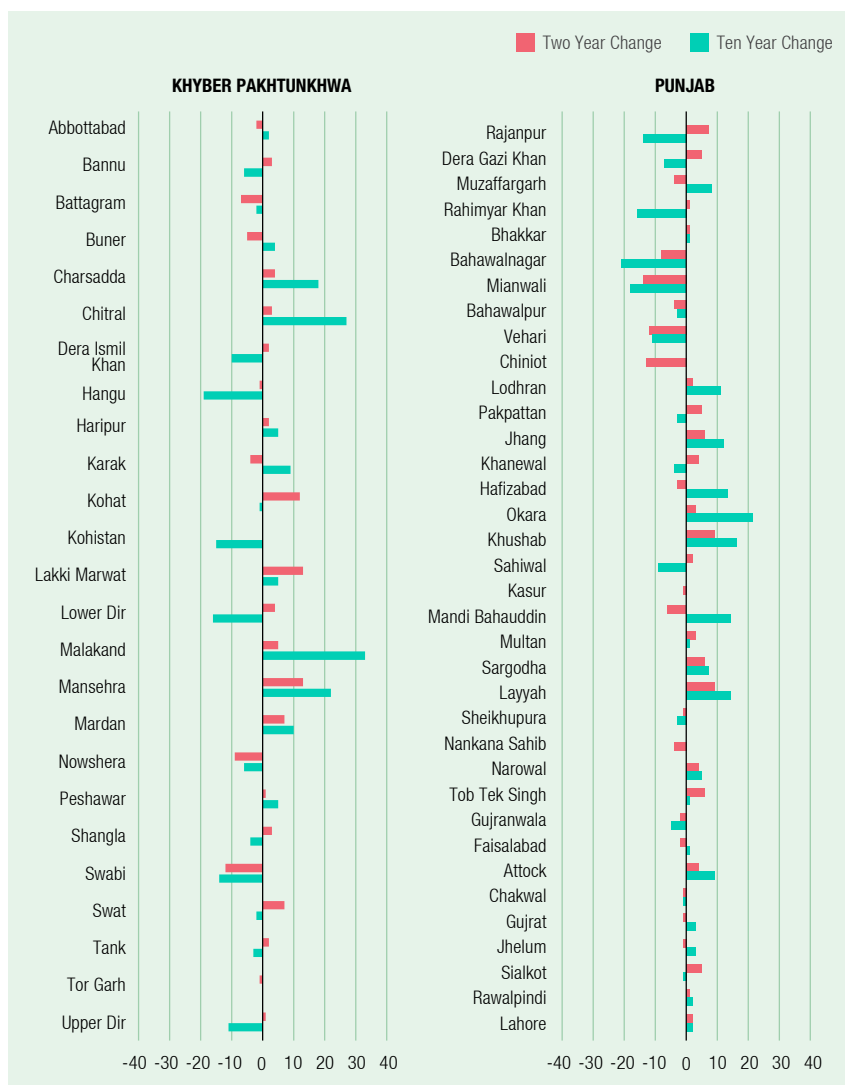
■ Two Year Change ■ Ten Year Change

KHYBER PAKHTUNKHWA / PUNJAB

Note: Due to unavailability of data for the year 2005, decade-wise changes are not computed for the districts of Chiniot and Nankana Sahib from Punjab, and Tor Ghar from KP.
Source: UNDP calculations based on micro data of PSLM survey for the years 2004/05, 2012/13 and 2014/15.

isting healthcare facilities, low enrolment rates leading to low education and hence limited employment options, as well as a lack of proper sanitation and shelter that lowers the overall quality of life for some of the most under-developed people in the country. The report serves to identify root deprivations, but it is beyond its scope to delve into underlying causes. The identification and subsequent discussion could help in targeting policy areas that could earn the highest social returns for government intervention programs.

Development in Pakistan: A closer look

According to the classification of the NHDR 2017, Pakistan has an overall HDI of 0.681 and falls in the category of medium human development. However, as indicated in earlier, the quality of life is far from equal at the regional and provincial level. For understanding which of the dimensions of HDI – health, education or standard of living – are contributing to this variation, it is essential to study the dimensional indices and their sub-components as well. The sub-components are normalised with regards to minimum and maximum goalposts, ranging from 0 to 1. The average of normalized sub-component belonging to a particular dimension are then taken to calculate the dimensional sub-indices. Similar to HDI, a higher dimension index score is better. In the following section, the education index (EI), the health index (HI) and the living standard index (LSI) and their sub-components are analysed in detail for the provincial and district-levels to identify which dimension of the HDI is the weakest.

Education

Education is critical in helping individuals to not only lead knowledgeable and creative lives but also to improve their overall well-being. However, unfortunately in Pakistan, education remains the weakest link. In 2015, the education index (EI) for Pakistan was 0.538, as compared to the health index which was 0.788, and the living standard index that was 0.745. Among regions and provinces, the EI is highest for AJ&K (0.65) categorized in the high medium category, followed by Punjab at 0.57 categorized as the medium EI. On the other hand, FATA and Balochistan are at the bottom, falling in the low EI group. While KP EI scores 0.49 hence falling in the low medium category, the EI for Sindh scores 0.53 which is almost the same as the country's education Index and falls in the medi-

um category (figure 10).

The repercussions of low education manifest themselves in high maternal morbidity, high fertility rates, child malnutrition, lack of employment opportunities, and poor life skills that translate to weak bargaining power not only in the economy, but more broadly in society. It would be apt to say that Pakistan falls within the low development category globally on account of its inability to invest in quality education. Education can drastically change the growth and development trajectory of a country, as demonstrated by the East Asian countries during the 1990s. Pakistan, which was at the same level of economic and human development as South Korea in 1960, has been unable to increase the human capital of its people in the same way as South Korea. The subsequent divergence in economic and development growth paths is, and will continue to be, apparent, unless Pakistan targets the education sector on an emergency basis.

This holds true for inter-provincial district level analysis as well. Overall, it appears that Punjab is performing relatively better in education, with a third of districts falling in the high or high medium level. The districts in the West and South of Punjab – Rajanpur, Muzaffargarh, Dera Ghazi Khan and Rahimyar Khan – are at the bottom, falling in the low EI category. The top districts in Punjab are situated in the north and east of the province. Whereas, Balochistan is worse, as only 2 out of 28 districts namely, Quetta and Mastung, demonstrate a decent (medium) level of education, and the remaining 26 districts are doing very poorly. In Sindh, more than 58 percent (14 out of 24) of districts fall under the category of low or very low education index, whereas, only Karachi falls in the high category. Although the district-level situation in KP is not very encouraging, it is relatively better than Sindh. In KP, Abbottabad and Haripur are the top performers, falling in the category of high medium, whereas Kohistan and Tor Garh are the bottom two districts with a very low education index (figure 11, pg 15).

Charting development—Sindh and Balochistan, change in HDI rankings between 2005-15, 2013-15

Note: Due to unavailability of data for the year 2005, decade-wise changes are not computed for the districts of *Harnai, Washuk, Kohlu, Dera Bugti, Sherani and Noshki from Balochistan, and Jamshoro, Matiari, Tando Allahyar, Kashmore, Kamber Shahdadkot, Tando Muhammad Khan and Umerkot from Sindh*. Districts of Ketch/Turbat and Panjgur were not covered in the recent PSLM survey, the most recent available data is used to make a comparison with the 2005 figures.
Source: UNDP calculations based on micro data of PSLM survey for the years 2004/05, 2012/13 and 2014/15.

Education over time

To look at trends in education outcomes over time, the education index has been calculated at the district level for each year starting from 2005 up to 2015. It appears that during the last decade, all the districts in Pakistan have shown slow progress in education, except for two districts in Balochistan, namely Ziarat and Chaghi, and three in Sindh, namely Shikarpur, Ghotki,

FIGURE **10**
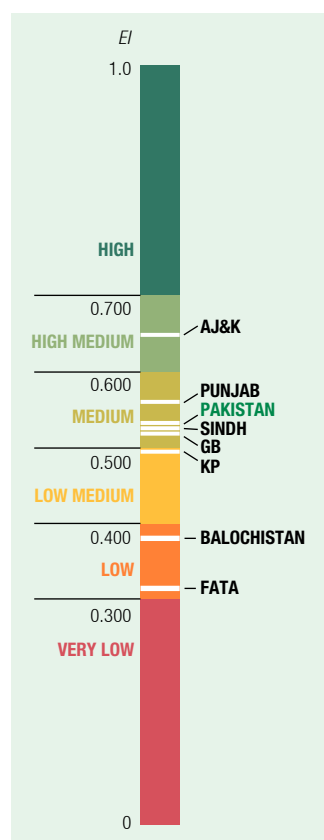
Note: For Gilgit-Baltistan and Azad Jammu & Kashmir, due to unavailability of PSLM microdata for the year 2014/15, data for the year 2012/13 is used instead. For FATA, calculations are based on the FDIHS 2013/14 micro data.
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15, and the FDIHS 2013/14.

and Badin.

Education index: A closer look

Given that education remains the weakest link in the development ladder for Pakistan, and has been so for the last decade at least, it is instructive to look at the sub-components of education index as well. The sub-components of education index comprise of the expected years of schooling and mean years of schooling that are recorded at the district level. The average of the normalised values of these sub-components are used to calculate the education index. The expected years of schooling (EYS) measures the number of years of education a child can be expected to receive (if current enrolment trends persist) with reference to the maximum number of years possible. The mean years of schooling (MYS) measures the average education level, based on the educational attainments of people aged 25 years and older.[22] The EYS captures the current enrolment of the school-age population, comprising the young cohort of Pakistan, while the MYS encapsulates the educational attainment of those who are 25 or above (the older cohorts). The older cohort is more likely to have finished (completed or forced to abandon) their education. In a way, the education index consists of two distinct indicators related to two different age cohorts. Moreover, as mentioned earlier, the EYS broadly captures access to education, while the MYS considers average education levels.[23]

If current enrolment trends persist, children in Pakistan can expect 9.4 years of schooling, while the average educational attainment of the 25 years and above cohort was 4.5 years (figure 12, pg 16). The education sub-indices are particularly low for FATA: the average child can expect to receive 6.7 years of schooling. The average attainment is even lower, as the MYS is only 1.8 years of schooling. The EYS for AJ&K is 12.2 years, the highest in the country. The average years of schooling of the older cohort is 4.8 years, the second

highest in Pakistan. Whereas, for GB, the average educational attainment is 3.4 years of schooling.

Amongst the provinces, Balochistan is the worst in terms of the MYS (2.6) and EYS (7.6), in 2015. While for KP, EYS is 9.7 years and the MYS is quite low at 3.3 years. Similarly, while Sindh performs quite well on the MYS with a score of 5.1 years surpassing Punjab, the EYS of Sindh is relatively low (8.3 years). Punjab performs better than other provinces with the EYS of 4.6 years and MYS of 10.1 years (figure 12, pg 16).

Health

Pakistan falls in the medium category with a health index of 0.79 for 2015. However, provincial, regional, and district health indices show disparities across the country. Health outcomes in FATA are extremely poor, and fall in the very low category, while Balochistan is second from the bottom and falls in the low category (figure 13, pg 16). Punjab is the best performer and falls in the high medium category, while AJ&K, Sindh, and KP are placed at the medium level of development.

At the provincial level, Balochistan and KP face the largest degree of inequality in health, while health outcomes in Punjab are relatively balanced (figure 14, pg 17). In Balochistan, 16 out of 28 districts fall in the very low or low health category, whereas only one district – Kalat – makes it to the high HI category. In KP, six out of 25 districts are characterised as having very low or low health outcomes. Specifically, the districts of Tor Garh, Kohistan, and Shangla are at the bottom. On the other hand, in KP the top three districts, falling in the high HI category, are Charsadda, Peshawar and Mardan. In Punjab, only one district – Bhakkar – falls below the category of medium health, whereas 29 out of 36 districts lie in the high or high medium health category. It is worth noting that while KP and Sindh have almost the same HI at the provincial level, the performance of districts in Sindh is worse than

KP. None of the districts in Sindh lie in the category of high HI, while only two – Karachi and Matiari – are classified as having high medium health outcomes. Whereas, KP has three districts in high HI category and four in high medium HI category.

Health over time

Looking at the health index over time for the last ten years shows that a substantial number of districts have experienced a decline in health outcomes throughout Pakistan. In Balochistan, more than 50 percent of districts – 12 out of 22 – for which decade-old data is available, including Quetta, have expereinced a decline in their health index. The highest achiever in terms of health is Killa Saifullah, which according to recent data, falls under the medium health category. The situation in KP is also not that encouraging, where the HI of 10 out of 24 districts has declined over this time. Same is true for 11 out of 34 districts in Punjab. In Sindh, only 6 out of 16 districts demonstrated an improvement in their HI. Broadly speaking, at the provincial level, two out of every five districts in Balochistan, Sindh and KP have recorded a decline in their health outcomes over the last decade. Zhob, Kharan and Jhal Magsi (Balochistan), Bahawalnagar and Sahiwal (Punjab), Mirpurkhas and Tharparkar (Sindh), and Battagram and Dera Ismail Khan (KP) are some of the districts that have done particularly poorl on HI over the last decade.

Health index: A closer look

The two sub-components of the health index are constructed using district-level data from the PSLM on immunization rates (in percent) and satisfaction with health facility (in percent). The immunization rate captures the relative strength of the public health system (in the absence of district-level life expectancy), while satisfaction with health facility is estimated by self-reported responses to why healthcare facilities were not used (see Technical

FIGURE 11

Boxplot for district-level education index, 2015

EDUCATION INDEX (EI)	
High EI	0.700 or more
High Medium EI	0.600 - 0.699
Medium EI	0.500 - 0.599
Low Medium EI	0.400 - 0.499
Low EI	0.300 - 0.399
Very Low EI	0.299 or less

Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15.

Notes for details).

In 2015, while 18 percent of children under the age of 24 months were not fully immunized in Pakistan, one person in four was not satisfied with the quality of healthcare (figure 15, pg 17). The first may be taken as a broad indicator of public health and government reach, and the latter of access to a quality health facility. For

FIGURE **12**

Decomposing education index into indicators by provinces and regions, 2015
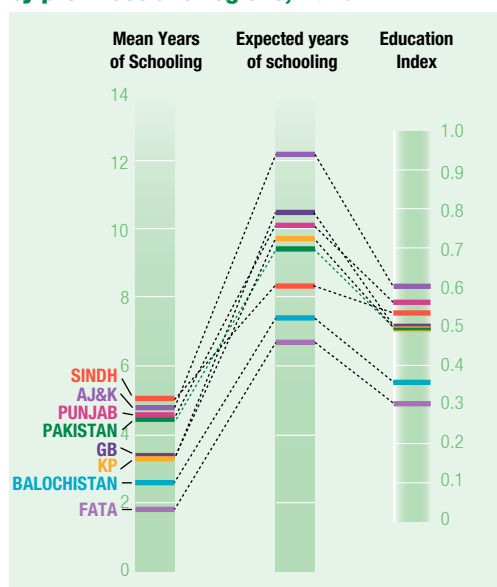
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15, and the FDIHS 2013/14.

FIGURE **13**

Health Index in Pakistan, 2015
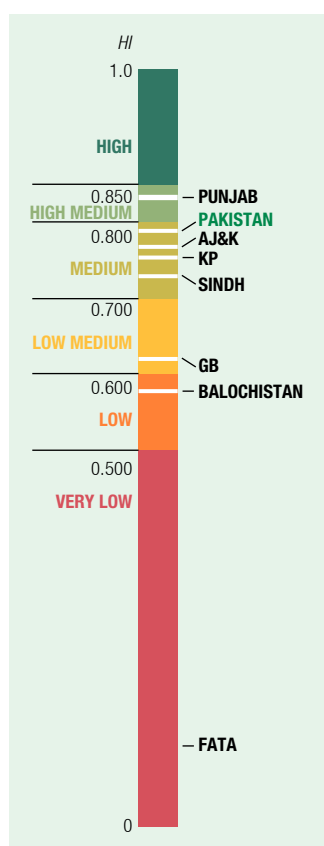
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15, and the FDIHS 2013/14.

the country in general, the values of health sub-component seem to suggest that access to quality healthcare represents a bigger gap relative to public health and outreach.

Among the provinces and regions, FATA is at the bottom. In fact, the low health index for FATA is due to almost negligible access to quality healthcare – only 7.5 percent of people are satisfied with healthcare facilities, with an alarmingly low rate of fully immunized children at 15.7 percent. Whereas, GB and AJ&K have a better health index due to greater access to health facility – 51.4 percent and 66.3 percent respectively – and higher immunization rate – 73.1 percent and 86.7 percent respectively.

In Balochistan, immunization rates are very low, with every second and child not fully immunized. Access, although less of an issue than immunization, is nevertheless poor as every third person in Balochistan is not satisfied with the quality of healthcare available. Access to quality healthcare is not up to the mark in other provinces as well, as overall almost around 25 percent of people reported dissatisfaction with existing facilities. Immunization rates are

relatively better in Punjab, yet one in every ten children is not fully immunized. Immunization is particularly weak in KP and Sindh, where around one-fourth of children did not get full immunization (figure 15).

Living standards

The concept of the living standard index of the national HDI was borrowed from the Global MPI methodology given in the Global HDRs. It uses the same six sub-components (except for replacing floor quality with roof/wall quality) to measure the living standards of Pakistanis at the district level. Households which fall under a minimum threshold for at least three of the sub-components are classified as deprived. To calculate the standard of living, the number of people living in non-deprived households was then used for each district (see Technical Notes for details). In 2015, people living in Pakistan enjoyed a medium standard of living in terms of access to clean fuel, clean water, improved sanitation, electricity, permanent dwelling, and any form of household asset. However, there are considerable outliers, with FATA at 0.28 and Balochistan at 0.34 having the maximum number of people living in sub-standard conditions (figure 16, pg 18).

Among the provinces, districts in Punjab exhibit the least disparities in terms of the LSI Whereas, Sindh experiences the greatest variation followed by KP and Balochistan, as is evident from the interquartile range (figure 17, pg 19).

At the district level, Balochistan experiences the greatest deprivation in terms of the standard of living index. Out of 28 districts, 17 fall under the category of very low, 10 in the low, and only one – Quetta, which is far ahead of other parts of Balochistan – falls under the category of high medium LSI. Pishin, Sibi, Noshki and Lasbela are among those districts that are performing relatively better in the province. This is undoubtedly due to lack of infrastructure facilities (piped water, sanitation, and

electricity), semi-permanent dwellings, low livestock, and lack of household assets. Sindh, the province with the highest variation in this index, has the most districts (18 out of 24) in the low or low medium living standard categories. Most of the districts that fall in the category of low living standards are situated in southern Sindh, except for Jacobabad situated next to Balochistan in northern Sindh. Tharparkar is the most deprived district in Sindh, and as the only district in the very low category, it lags far behind the other districts in the province. In Sindh, Karachi is at the top, categorised as having a high living standard, followed by Hyderabad in the high medium living standard category.

In KP, the most deprived districts in terms of living standards are Kohistan and Tor Ghar. Most of the districts in KP – 16 out of 25 – fall in the category of low medium or medium living standards. Haripur, Abbottabad, Peshawar and Nowshera are at the top in KP. Punjab exhibits the least disparities in the living standard index. Out of 36 districts, only one – Rajanpur – is in the low category, followed by Dera Ghazi Khan and Muzaffargarh in the low medi-

Decomposing health index into indicators by provinces and regions, 2015
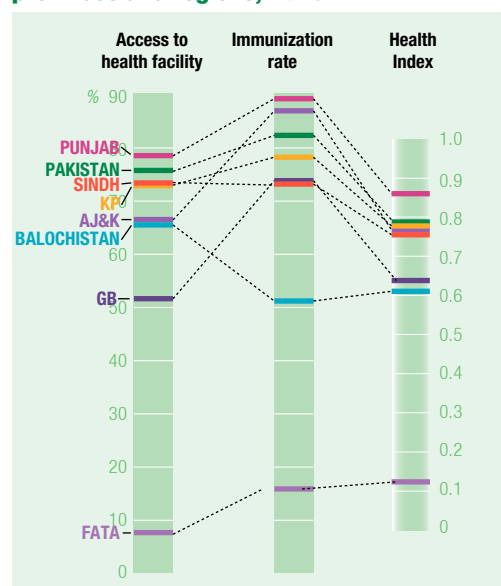
Source: UNDP calculations based on micro data of PSLM survey for the years 2012/13 and 2014/15, and the FDIHS 2013/14.

Boxplot for district-level health index, 2015

HEALTH INDEX (HI)	
High HI	0.850 or more
High Medium HI	0.800 - 0.849
Medium HI	0.700 - 0.799
Low Medium HI	0.600 - 0.699
Low HI	0.500 - 0.599
Very Low HI	0.499 or less
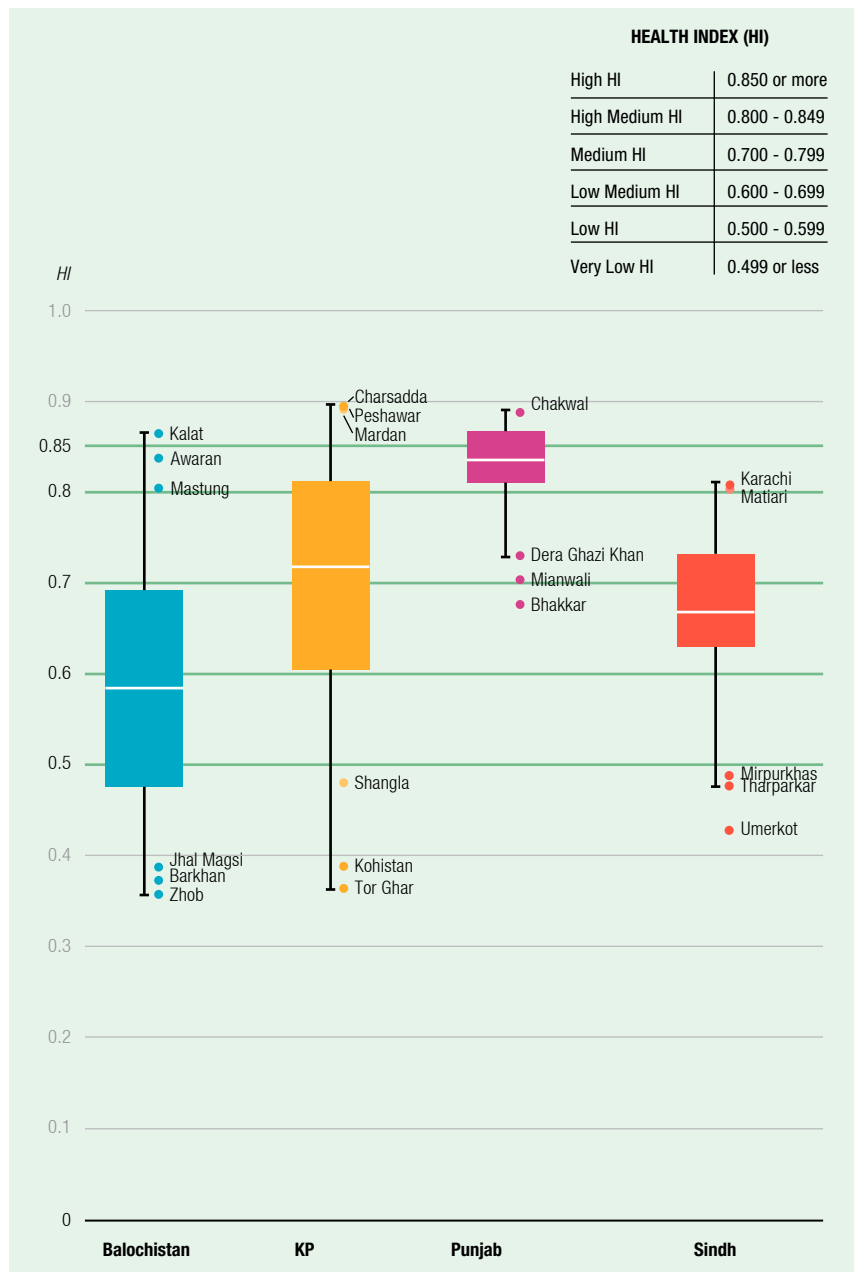
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15.

um category. These districts share their boundaries and are situated in the west of Punjab. The top six districts falling in the category of high living standards belong to either eastern or northern Punjab.

Living standards over time

During the last decade, every district in Pa-

FIGURE **16**

Living standards Index in Pakistan, 2015
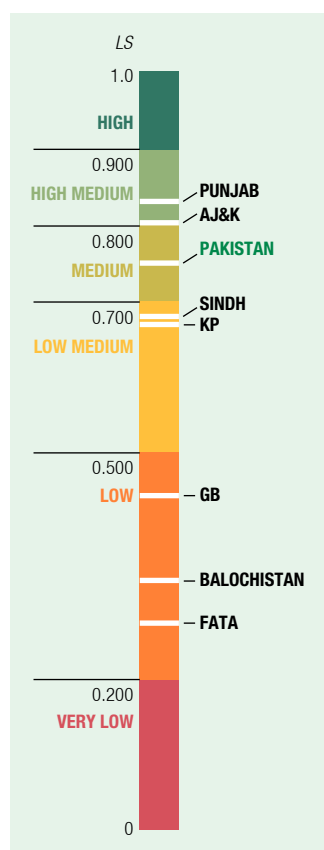
LS

1.0	
HIGH	
0.900	
HIGH MEDIUM	PUNJAB
	AJ&K
0.800	PAKISTAN
MEDIUM	
0.700	SINDH
	KP
LOW MEDIUM	
0.500	
LOW	GB
	BALOCHISTAN
	FATA
0.200	
VERY LOW	
0	

Note: For Gilgit-Baltistan and Azad Jammu & Kashmir, due to unavailability of PSLM microdata for the year 2014/15, data for the year 2012/13 is used instead. For FATA, calculations are based on the FDIHS 2013/14 micro data.
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15, and the FDIHS 2013/14.

kistan has experienced an increase in their living standard index except for Tharparkar, whose living standard index has fallen by 50 percent in 2015 as compared to 2005. Although, the living standard of all districts in Balochistan has improved during the last decade, in most of the districts this improvement has been very small. While the situation is quite encouraging in KP, the same is not true for Sindh, where the majority of districts have recorded only a marginal increase in living standards. The main achievers in Sindh include Larkana, Dadu, Karachi, Naushehro Feroz, and Hyderabad. In Punjab, there has been considerable progress in terms of living standards across the province. Nevertheless, the least developed district – Rajanpur – has exhibited the lowest progress in living standards over the last decade. The three top achievers in Punjab are Khushab, Okara, and Layyah. Bhakkar is another success story as it has moved from a low to a medium standard of living.

It is worth noting that apart from Quetta, the gulf between the districts of Balochistan narrows considerably. While there has been improvement in the last decade, the standard of living remains extremely low in Balochistan. Apart from Quetta, the remaining 28 districts for which data is available are characterised by unacceptably low living standards.

On the other hand, there have been significant improvements in KP: almost two out of every three districts have acquired a medium/low medium standard of living over the last ten years. Indeed, the district with the biggest improvement in living standards in the country – Malakand – also belongs to KP. Other than the four districts of Kohistan, Upper and lower Dir, and Tank, all districts have shown substantial progress.

Conclusion

The HDI measures the progress a country has made in translating its wealth into prosperity for its people. This implies that two countries may be equally wealthy, but might have very different levels of development and vice versa. Many countries with comparable national per capita incomes have different levels of success in sharing this income with the population at large. Inequalities in income distort the income shares of the population, and erode gains made through economic growth. But the human development approach is about the quality of the lives that people lead, as opposed to the incomes they may command. The two are deeply inter-connected, but the ability 'to be' and 'to do' what one values is so much more than just command over commodities. Moreover, there is little evidence of a link between national incomes and expenditure on health and education,[24] suggesting that Gross Domestic Product (GDP) and other measures of national income are inadequate indicators of human development.

Across regions and provinces in Pakistan, it appears that relatively lower levels of education are hampering Pakistan's overall efforts in achieving development. The data reveals that FATA falls in the low or very low category for all dimensions in 2015; health is the biggest concern in FATA, highlighting just how under-developed the region is. Similarly, Balochistan performs worst among the provinces in all three dimensions, and never crosses the low threshold; however, surprisingly it is performing relatively better in the health dimension as compared to its other dimensions. Further in-depth research is required to understand this anomaly.

On the other hand, in Punjab, none of the indices go below the medium level. The education index is relatively much poorer in Punjab as compared to health or living standards, lowering Punjab's HDI considerably. Yet, Punjab's EI is the best among the provinces. As mentioned above, low levels of education are hampering the human development performance of all provinces. Broadly speaking then, while the abysmal levels of all three dimensions are responsible for the low HDI in Balochistan, in the remaining three provinces, it is education which is to blame. This sug-

gests an immediate target area for the government to intervene; however, to better understand exactly which component of education is causing low education values, a disaggregated view is required.

Furthermore, disparities in living standards are maximum, followed by education and health. Sindh exhibits highest levels of disparities in terms of living standards. At the district level, Balochistan experiences the greatest deprivation in terms of the standard of living index, while Quetta significantly outperforms all other districts with a huge margin – yet falling only in the high medium category. Health outcomes are also diverse, but less so, as the Education Index holds the maximum value.

A disaggregated analysis of development in Pakistan has suggested that while 2015 was a year of improvement for many districts, the absolute level of under-development in Balochistan is distressing. This is due to extremely low levels of average educational attainments, low immunization rates and high dissatisfaction with health facilities. Perhaps the greatest contributor to Balochistan's low HDI is living standards, with two out of three people living in sub-standard conditions, under multiple deprivations. In fact, some of the most significant gaps in development have stemmed from dissatisfaction with existing healthcare facilities and perhaps, most importantly, critically low enrolment rates that result in distressingly poor educational attainments for children and adults alike over the last decade. This translates into a vicious cycle of poor human capital and consequent fewer employment opportunities lowering the overall quality of life; which again results in little investment in human capital. This inter-generational cycle reinforces the deprivations of some of the most under-developed people in the country. Undoubtedly, the absence of public goods such as water, electricity, proper sanitation, and road networks, also creates overlapping deprivations, feeding into high morbidity, low education, and poor economic mobility.

While it is beyond the scope of the re-

FIGURE **17**

Living standards index by districts, 2015

LIVING STANDARDS INDEX (LSI)	
High HI	0.900 or more
High Medium HI	0.800 - 0.899
Medium HI	0.700 - 0.799
Low Medium HI	0.500 - 0.699
Low HI	0.200 - 0.499
Very Low HI	0.199 or less
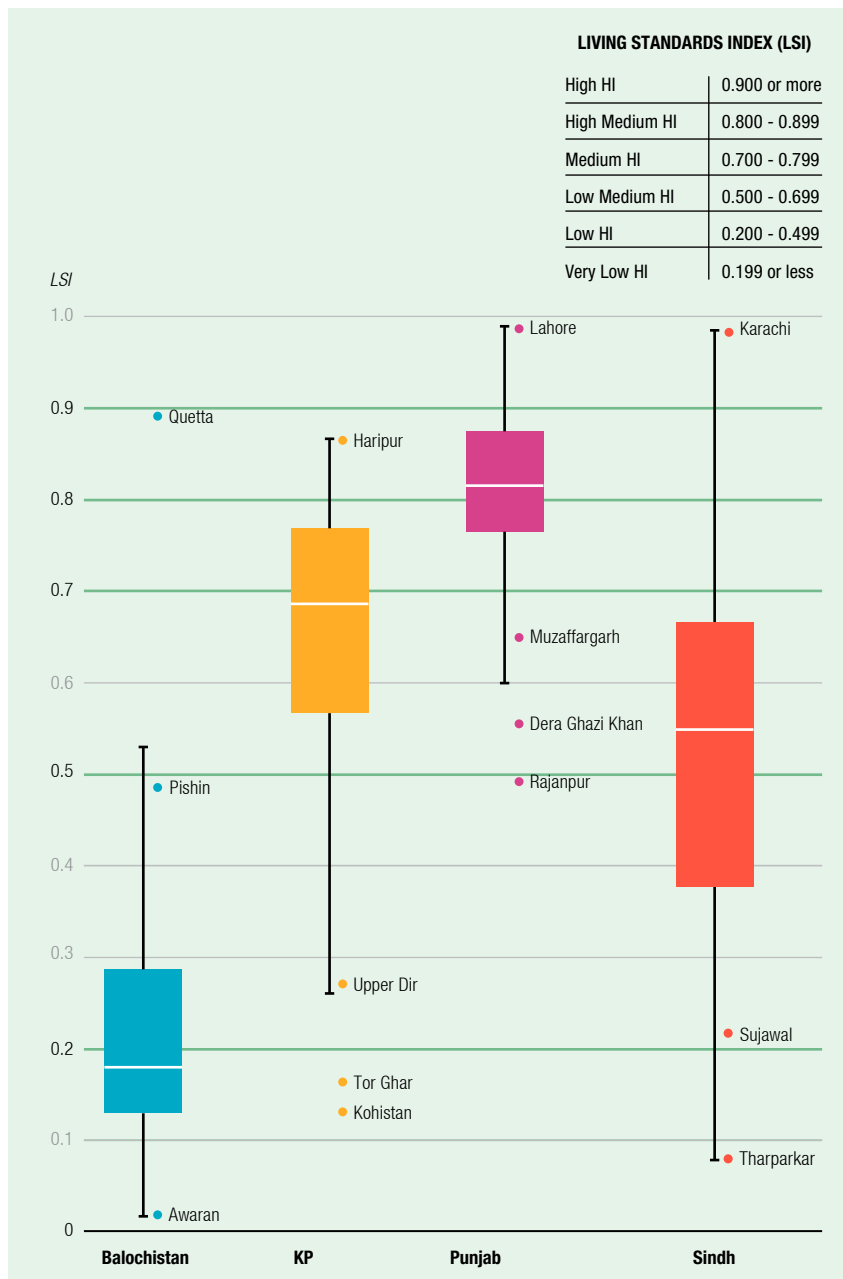
Source: UNDP calculations based on micro data of PSLM survey for the year 2014/15.

port to delve into underlying causes aside from identification, the discussion in the report – analysis of national HDI and its dimensions, as well as overall time trends enables the identification of triggers and outcomes of low human development across different provinces, especially those that have remained particularly resistant to policy interventions. In addition, it may

serve as a useful starting point as it broadly identifies which dimension(s) must be tackled and where, as well as whether such interventions should be multi-pronged or specific. More importantly, the sub-indices of the three dimensions also provide a built-in assessment mechanism to chart the progress that Pakistan must make in order to improve the lives of its people.

Readers' guide

The 3 annex tables provide an overview of the key aspects of human development in Pakistan. Table 1 contains the district-wise Human Development Index (HDI) for 2015 at the sub-index level, while Table 1A looks at district-wise HDI values for 2015 disaggregated at the sub-index component level. Table 2 presents a picture of human development in Pakistan over the last decade, across six time-periods – 2005, 2007, 2009, 2011, 2013, and 2015. Table 3 presents the Multidimensional Poverty Index (MPI) at the district level. All these tables are estimated by the NHDR team at UNDP Pakistan. The next set of tables provide a broader set of indicators related to human development.

Sources and definitions

UNDP Pakistan uses primary files and estimates from various national surveys with mandate, resources and expertise. Definitions of indicators and data sources are given at the end of each table, with the full source details in the *Statistical references.*

Methodology

The Pakistan NHDR 2017 includes the HDI and the MPI. The methodology used to compute these indices is provided in the Technical notes 1-4.

Comparisons over time: Six waves— 2004/05 to 2014/15—of the Pakistan Standard of Living Measurement (PSLM) survey were used for comparing the HDI values and rankings at the district level.

Human Development classification

HDI classifications are based on HDI fixed cut-off points. The cut-off points and HDI classification are as follows: less than and equal to 0.299 for very low human development; 0.300-0.499 for low human development; 0.500-0.599 for low medium human development; 0.600-0.699 for medium human development; 0.700-0.799 for high medium human development; and 0.800 or greater for high human development.

Symbols

The most recent year is mentioned for the data if the survey was conducted across two years. The following symbols are used in the tables:

..   Not available
0   Nil or negligible

Statistical tables

The first seven tables relate to the four composite human development indices and their components—the HDI and MPI.

Table 1, Human Development Index and its sub-indices, provides districts' HDI, sub-index values and ranking in 2015. The table also presents the 2013 HDI values at the district level, along with the change in rank between 2013 and 2015.

Table 1a, Human Development Index and its components, rearranges the districts by provinces rather than by district HDI values in 2015, and reports the component values of the sub-indices.

Table 2, Human Development Index trends, 2005-2015, presents the HDI values across six waves, allowing a comparison of HDI scores.

Table 3, Multidimensional Poverty Index and its components, captures the multiple deprivations in education, health and living standards. The MPI encompasses both the incidence of non-income poverty (a headcount of those who experience multidimensional poverty), and the intensity, or average share of deprivations experienced by poor at a point in time. To tailor the MPI for Pakistan,

some modifications in the global MPI were proposed. In the Pakistani MPI, 15 indicators are used for the national measure, rather than the 10 used in the global measure.

1 Human Development Index and its Components

HDI rank	Province/Region[a]	Human Development Index (HDI) Value 2015[b]	Immunisation rate (%) 2015[b]	Satisfaction with health facility (%) 2015[b]	Expected years of schooling (years) 2015[b]	Mean years of schooling (years) 2015[b]	Living Standard (%) 2015[b]	Human Development Index (HDI) Value 2013[b]	Change in rank 2013-2015
HIGH HUMAN DEVELOPMENT									
1	Lahore	Punjab	0.877	89.5	85.8	12.2	7.5	98.9	0.858	2
2	Islamabad	Islamabad Capital Territory	0.875	85.2	77.7	12.6	8.2	99.1	0.891	-1
3	Rawalpindi	Punjab	0.871	92.4	84.5	12.7	7.4	94.0	0.826	1
4	Karachi	Sindh	0.854	80.2	82.5	11.8	7.7	98.5	0.867	-2
5	Sialkot	Punjab	0.834	93.7	80.6	12.3	5.9	94.6	0.770	5
6	Jhelum	Punjab	0.829	98.0	73.2	12.8	6.1	90.6	0.811	-1
HIGH MEDIUM HUMAN DEVELOPMENT									
7	Gujrat	Punjab	0.795	92.5	71.7	12.3	5.3	90.8	0.792	-1
8	Chakwal	Punjab	0.792	96.2	81.5	11.9	4.9	87.2	0.788	-1
9	Attock	Punjab	0.786	96.7	75.8	11.9	4.7	88.4	0.762	4
10	Faisalabad	Punjab	0.782	88.2	84.5	10.8	5.2	89.4	0.775	-2
11	Gujranwala	Punjab	0.769	90.9	65.8	11.5	5.2	90.0	0.774	-2
12	Toba Tek Singh	Punjab	0.763	91.3	75.4	11.2	4.6	88.2	0.720	6
13	Abbottabad	Khyber Pakhtunkhwa	0.761	94.3	70.7	12.0	4.8	83.7	0.768	-2
14	Peshawar	Khyber Pakhtunkhwa	0.756	94.8	83.5	10.3	4.8	82.6	0.761	1
15	Narowal	Punjab	0.748	98.6	64.5	11.6	4.6	83.5	0.706	4
16	Nankana Sahib	Punjab	0.740	95.7	77.9	11.1	4.8	76.5	0.762	-4
17	Sheikhupura	Punjab	0.738	86.4	75.2	10.8	4.3	86.1	0.760	-1
18	Haripur	Khyber Pakhtunkhwa	0.732	82.1	60.2	11.9	4.8	86.6	0.702	2
19	Layyah	Punjab	0.729	89.4	86.7	10.4	3.8	82.4	0.682	9
20	Sargodha	Punjab	0.728	90.8	70.9	10.6	4.3	83.7	0.692	6
21	Multan	Punjab	0.718	92.2	81.4	8.9	4.3	83.3	0.693	3
22	Hyderabad	Sindh	0.716	84.5	73.6	8.5	5.4	84.5	0.762	-8
23	Mandi Bahauddin	Punjab	0.716	91.6	73.0	11.4	3.9	77.5	0.738	-6
24	Kasur	Punjab	0.714	86.3	74.4	10.9	3.7	82.7	0.695	-1
25	Sahiwal	Punjab	0.710	91.1	62.3	10.2	4.0	86.2	0.691	2
26	Khushab	Punjab	0.706	90.6	78.6	10.4	3.7	78.4	0.650	9
27	Okara	Punjab	0.705	90.5	75.9	9.7	3.5	84.3	0.667	3
28	Hafizabad	Punjab	0.705	96.7	69.7	10.5	3.7	78.6	0.693	-3
29	Mardan	Khyber Pakhtunkhwa	0.703	90.4	87.9	10.4	3.3	76.8	0.647	7
MEDIUM HUMAN DEVELOPMENT									
30	Khanewal	Punjab	0.699	95.1	81.1	9.0	3.6	80.4	0.651	4
31	Nowshera	Khyber Pakhtunkhwa	0.697	84.4	80.4	10.3	3.2	81.6	0.696	-9
32	Malakand	Khyber Pakhtunkhwa	0.690	94.8	59.7	11.7	3.7	73.6	0.640	5
33	Jhang	Punjab	0.682	89.1	77.5	9.6	3.6	75.9	0.636	6
34	Mansehra	Khyber Pakhtunkhwa	0.676	77.3	66.0	10.8	3.8	78.1	0.609	13
35	Chitral	Khyber Pakhtunkhwa	0.674	97.8	64.1	11.1	3.6	69.1	0.637	3
36	Charsadda	Khyber Pakhtunkhwa	0.666	98.5	80.4	9.7	2.9	70.5	0.635	4
37	Naushehro Feroze	Sindh	0.665	70.7	69.7	9.8	5.1	72.2	0.594	11
38	Quetta	Balochistan	0.664	64.6	53.8	10.2	4.2	89.7	0.702	-17
39	Pakpattan	Punjab	0.660	93.9	69.2	9.1	2.9	78.2	0.629	5
40	Sukkur	Sindh	0.659	79.6	73.5	8.0	4.8	73.5	0.622	5
41	Lodhran	Punjab	0.659	94.8	79.7	8.2	3.1	76.9	0.629	2
42	Chiniot	Punjab	0.657	90.4	82.4	9.0	3.0	72.4	0.677	-13
43	Vehari	Punjab	0.655	92.5	79.2	8.8	2.8	75.7	0.661	-12
44	Swabi	Khyber Pakhtunkhwa	0.654	87.1	63.9	10.4	2.7	76.9	0.657	-12
45	Kohat	Khyber Pakhtunkhwa	0.650	83.5	79.2	9.9	3.3	68.1	0.560	12
46	Bahawalpur	Punjab	0.645	83.5	86.4	7.7	3.1	77.5	0.629	-4
47	Mianwali	Punjab	0.645	89.8	50.5	9.9	3.7	74.5	0.655	-14
48	Dadu	Sindh	0.632	82.9	49.0	9.3	5.0	68.5	0.591	1
49	Bahawalnagar	Punjab	0.630	78.7	71.9	8.8	3.0	75.5	0.635	-8
50	Bhakkar	Punjab	0.628	86.8	49.2	9.5	3.2	76.6	0.587	1

TABLE 1   Human Development Index and its components | **23**

1 Human Development Index and its Components

HDI rank	Province/Region[a]	Human Development Index (HDI) Value 2015[b]	Immunisation rate (%) 2015[b]	Satisfaction with health facility (%) 2015[b]	Expected years of schooling (years) 2015[b]	Mean years of schooling (years) 2015[b]	Living Standard (%) 2015[b]	Human Development Index (HDI) Value 2013[b]	Change in rank 2013-2015
51	Rahimyar Khan	Punjab	0.625	83.4	85.3	7.2	2.9	75.2	0.585	1
52	Swat	Khyber Pakhtunkhwa	0.618	88.8	70.9	9.6	2.8	64.3	0.551	7
53	Larkana	Sindh	0.618	70.2	60.5	8.4	4.2	74.0	0.581	0
54	Karak	Khyber Pakhtunkhwa	0.615	62.7	58.8	10.4	4.2	68.5	0.588	-4
55	Bannu	Khyber Pakhtunkhwa	0.613	57.4	66.6	9.4	4.0	72.7	0.551	3
56	Lower Dir	Khyber Pakhtunkhwa	0.600	84.1	58.7	10.9	2.8	59.8	0.549	4
LOW MEDIUM HUMAN DEVELOPMENT										
57	Hangu	Khyber Pakhtunkhwa	0.594	75.4	73.4	8.7	1.9	72.9	0.561	-1
58	Muzaffargarh	Punjab	0.584	88.2	73.5	7.7	2.5	64.9	0.564	-4
59	Lakki Marwat	Khyber Pakhtunkhwa	0.577	49.2	70.3	9.5	3.9	62.8	0.489	13
60	Jamshoro	Sindh	0.572	81.7	55.7	8.0	3.0	65.8	0.529	4
61	Nawabshah/ Shaheed Benazir Abad	Sindh	0.572	76.1	67.7	7.7	3.4	60.9	0.503	9
62	Matiari	Sindh	0.569	86.6	75.6	7.0	3.6	54.7	0.562	-7
63	Khairpur	Sindh	0.556	79.7	49.3	8.2	3.6	58.3	0.528	3
64	Dera Ghazi Khan	Punjab	0.535	74.8	69.9	7.5	2.6	55.4	0.504	5
65	Tando Allahyar	Sindh	0.528	84.8	69.5	6.2	2.8	54.8	0.526	2
66	Buner	Khyber Pakhtunkhwa	0.528	78.0	83.0	8.9	1.5	49.4	0.543	-5
67	Shikarpur	Sindh	0.520	64.5	75.9	6.2	3.2	54.8	0.529	-2
68	Ghotki	Sindh	0.514	62.0	75.8	5.7	2.9	59.4	0.537	-6
69	Rajanpur	Punjab	0.506	90.7	65.2	7.1	2.0	48.9	0.481	7
70	Battagram	Khyber Pakhtunkhwa	0.505	51.1	56.0	7.9	1.8	68.0	0.532	-7
71	Dera Ismail Khan	Khyber Pakhtunkhwa	0.496	64.5	56.2	7.6	3.0	50.1	0.489	2
72	Sanghar	Sindh	0.491	65.2	61.9	6.7	3.2	48.9	0.524	-4
73	Pishin	Balochistan	0.482	49.5	67.8	7.6	2.7	48.9	0.425	10
74	Kashmore	Sindh	0.471	73.3	81.5	5.3	2.4	45.6	0.426	7
75	Mastung	Balochistan	0.459	75.3	85.0	9.1	4.0	23.9	0.485	-1
76	Tank	Khyber Pakhtunkhwa	0.459	66.1	70.1	7.8	2.8	35.4	0.449	2
77	Kamber Shahdadkot	Sindh	0.456	61.8	62.2	6.2	2.3	47.5	0.483	-2
LOW HUMAN DEVELOPMENT										
78	Gawadar	Balochistan	0.443	51.4	74.0	10.6	2.7	28.2	0.442	1
79	Noshki	Balochistan	0.441	52.7	63.5	8.2	2.3	37.9	0.395	7
80	Sibi	Balochistan	0.441	60.9	38.3	6.6	3.5	43.7	0.618	-34
81	Jacobabad	Sindh	0.440	65.0	68.5	5.9	2.5	39.5	0.494	-10
82	Shangla	Khyber Pakhtunkhwa	0.438	48.7	47.4	6.7	1.7	56.5	0.411	3
83	Mirpurkhas	Sindh	0.430	63.9	31.7	6.6	3.5	42.0	0.426	-1
84	Killa Saifullah	Balochistan	0.422	50.0	100.0	6.6	2.5	29.0	0.194	23
85	Lasbela	Balochistan	0.416	49.1	65.4	7.1	2.6	34.1	0.413	-1
86	Khuzdar	Balochistan	0.412	60.5	90.3	8.3	2.6	22.7	0.361	3
87	Badin	Sindh	0.412	73.1	60.2	5.8	2.9	31.1	0.330	10
88	Kalat	Balochistan	0.405	83.5	89.0	9.1	3.1	16.9	0.343	7
89	Loralai	Balochistan	0.381	44.5	99.9	8.7	2.9	17.6	0.361	1
90	Thatta	Sindh	0.377	50.6	74.1	5.9	2.5	26.8	0.314	8
91	Tando Muhammad Khan	Sindh	0.377	62.5	63.6	4.7	2.3	31.4	0.456	-14
92	Upper Dir	Khyber Pakhtunkhwa	0.375	77.4	31.5	8.1	1.8	27.2	0.351	1
93	Musakhail	Balochistan	0.368	38.3	97.9	9.1	2.6	16.8	0.125	18
94	Jaffarabad	Balochistan	0.345	44.1	51.1	5.7	2.0	29.7	0.358	-3
95	Bolan/Kachhi	Balochistan	0.345	59.0	62.8	6.4	2.6	19.5	0.332	1
96	Sujawal	Sindh	0.326	47.7	61.3	5.4	2.4	21.2	..	..
97	Umerkot	Sindh	0.322	67.1	18.0	6.3	2.3	24.4	0.390	-10
98	Naseerabad	Balochistan	0.311	29.8	78.2	5.1	1.7	21.9	0.282	3
99	Ziarat	Balochistan	0.301	33.2	67.3	7.4	2.0	15.6	0.437	-19

TABLE

1

HDI rank		Province/Region[a]	Human Development Index (HDI) Value 2015[b]	Immunisation rate (%) 2015[b]	Satisfaction with health facility (%) 2015[b]	Expected years of schooling (years) 2015[b]	Mean years of schooling (years) 2015[b]	Living Standard (%) 2015[b]	Human Development Index (HDI) Value 2013[b]	Change in rank 2013-2015
VERY LOW HUMAN DEVELOPMENT										
100	Zhob	Balochistan	0.295	65.9	5.5	8.5	2.0	18.8	0.362	-12
101	Sherani	Balochistan	0.295	55.3	88.6	4.9	2.1	13.3	0.347	-7
102	Kharan	Balochistan	0.290	61.3	24.7	7.2	2.1	16.6	0.291	-3
103	Dera Bugti	Balochistan	0.271	31.6	59.0	4.3	2.1	17.7	0.145	7
104	Kohlu	Balochistan	0.267	30.8	93.8	6.5	2.0	9.6	0.091	10
105	Tor Ghar	Khyber Pakhtunkhwa	0.240	3.0	69.6	6.1	0.9	15.4	0.217	-1
106	Killa Abdullah	Balochistan	0.238	29.6	74.6	4.8	1.1	12.0	0.200	0
107	Barkhan	Balochistan	0.237	67.6	5.7	6.8	1.2	12.7	0.213	-2
108	Kohistan	Khyber Pakhtunkhwa	0.229	21.9	56.9	5.5	1.3	12.5	0.172	0
109	Tharparkar	Sindh	0.227	38.1	57.0	6.4	2.3	7.5	0.257	-6
110	Chaghi	Balochistan	0.210	29.5	65.3	4.3	1.6	8.6	0.165	-1
111	Washuk	Balochistan	0.188	48.8	71.9	4.8	1.4	4.8	0.101	2
112	Harnai	Balochistan	0.184	34.0	58.2	5.2	1.4	5.5	0.260	-10
113	Jhal Magsi	Balochistan	0.183	43.9	32.9	5.5	1.7	6.0	0.286	-13
114	Awaran	Balochistan	0.173	85.2	83.3	5.9	2.5	1.9	0.111	-2
..	Kech/Turbat[c]	Balochistan	..	..	..	..	..	..	..	..
..	Panjgur[c]	Balochistan	..	..	..	..	..	..	..	..
	Azad Jammu & Kashmir	High Medium Human Development	0.734	86.7	66.3	12.2	4.8	80.0	0.726	
	Federally Administered Tribal Areas (FATA)	Very low Human Development	0.216	15.7	7.5	6.7	1.8	27.7	..	
	Gilgit-Baltistan	Low Medium Human Development	0.523	73.1	51.4	10.5	3.4	44.2	0.426	
	Balochistan	Low Human Development	0.421	51.0	65.8	7.4	2.6	33.9	0.382	
	Khyber Pakhtunkhwa	Medium Human Development	0.628	78.0	72.7	9.7	3.3	67.1	0.605	
	Punjab	High Medium Human Development	0.732	89.0	78.3	10.1	4.6	83.0	0.705	
	Sindh	Medium Human Development	0.640	73.0	73.2	8.3	5.1	67.6	0.620	
	Pakistan	**Medium Human Development**	**0.681**	**82.1**	**75.5**	**9.4**	**4.5**	**74.5**	**0.661**	

NOTES

a   For districts, their respective provinces and territories are mentioned. For regions and provinces, levels of human devleopment are identified.

b   Calculations are based on PSLM district level microdata for the year 2014/15. For Azad Jammu & Kashmir and Gilgit-Baltistan, due to unavailability of PSLM microdata for the year 2014/15, data for the years 2012/13 and 2010/11 are used. For FATA, calculations are based on the FDIHS 2013/14 microdata.

Districts of Kech/Turbat and Panjgur were dropped from the scope of the PSLM survey 2014/15.

DEFINITIONS

Human Development Index (HDI)

A composite index measuring average achievement in three basic dimensions of human development -- a long and healhy life, knowledge and a decent standard of living. See Technical Note 1(this report) for details on how the HDI is calculated.

Immunisation Rate

Percentage of fully immunized children between the age of 12 and 23 months based on record and recall.

Satisfaction with Health Facility:

A household is regarded as deprived in 'satisfaction with health facility' if any of the household members did not use health care facility because it is costly, it does not suit, lacks tools or not enough facilities, or if any of the household member is not satisfied with the health facility.

Expected Years of Schooling

Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life.

Mean Years of Schooling

Average number of years of education received by people ages 25 and older, calculated from education attainment levels using official durations of each level.

Living Standard

A composite index based on six household indicators related to access and quality of public services, household infrastructure and assets' ownership. It is based on methodology proposed from the Multidimensional Poverty Index (MPI). See Technical Notes 1 and 4 for details.

MAIN DATA SOURCES

Columns 1-7: UNDP calucalultions are based on micro data of PSLM survey for the years 2010/11, 2012/13 and 2014/15, and the FDIHS 2013/14.

Column 8: Calculated based on data in coloumns 1 and 7.

TABLE 1   Human Development Index and its components | 25

1A Human Development Index and its Components

HDI rank		Human Development Index (HDI) Value 2015[a]	Immunisation rate (%) 2015[a]	Satisfaction with health facility (%) 2015[a]	Expected years of schooling (years) 2015[a]	Mean years of schooling (years) 2015[a]	Living Standard (%) 2015[a]	Human Development Index (HDI) Value 2013[a]	Change in rank 2013-2015	Human Development Status
BALOCHISTAN										
114	Awaran	0.173	85.2	83.3	5.9	2.5	1.9	0.111	-2	Very low Human Development
107	Barkhan	0.237	67.6	5.7	6.8	1.2	12.7	0.213	-2	Very low Human Development
95	Bolan/Kachhi	0.345	59.0	62.8	6.4	2.6	19.5	0.332	1	Low Human Development
110	Chaghi	0.210	29.5	65.3	4.3	1.6	8.6	0.165	-1	Very low Human Development
103	Dera Bugti	0.271	31.6	59.0	4.3	2.1	17.7	0.145	7	Very low Human Development
78	Gawadar	0.443	51.4	74.0	10.6	2.7	28.2	0.442	1	Low Human Development
112	Harnai	0.184	34.0	58.2	5.2	1.4	5.5	0.260	-10	Very low Human Development
94	Jaffarabad	0.345	44.1	51.1	5.7	2.0	29.7	0.358	-3	Low Human Development
113	Jhal Magsi	0.183	43.9	32.9	5.5	1.7	6.0	0.286	-13	Very low Human Development
88	Kalat	0.405	83.5	89.0	9.1	3.1	16.9	0.343	7	Low Human Development
..	Kech/Turbat[b]	..	..	..	..	..	..		..	..
102	Kharan	0.290	61.3	24.7	7.2	2.1	16.6	0.291	-3	Very low Human Development
86	Khuzdar	0.412	60.5	90.3	8.3	2.6	22.7	0.361	3	Low Human Development
106	Killa Abdullah	0.238	29.6	74.6	4.8	1.1	12.0	0.200	0	Very low Human Development
84	Killa Saifullah	0.422	50.0	100.0	6.6	2.5	29.0	0.194	23	Low Human Development
104	Kohlu	0.267	30.8	93.8	6.5	2.0	9.6	0.091	10	Very low Human Development
85	Lasbela	0.416	49.1	65.4	7.1	2.6	34.1	0.413	-1	Low Human Development
89	Loralai	0.381	44.5	99.9	8.7	2.9	17.6	0.361	1	Low Human Development
75	Mastung	0.459	75.3	85.0	9.1	4.0	23.9	0.485	-1	Low Medium Human Development
93	Musakhail	0.368	38.3	97.9	9.1	2.6	16.8	0.125	18	Low Human Development
98	Naseerabad	0.311	29.8	78.2	5.1	1.7	21.9	0.282	3	Low Human Development
79	Noshki	0.441	52.7	63.5	8.2	2.3	37.9	0.395	7	Low Human Development
..	Panjgur[b]	..	..	..	..	..	..		..	..
73	Pishin	0.482	49.5	67.8	7.6	2.7	48.9	0.425	10	Low Medium Human Development
38	Quetta	0.664	64.6	53.8	10.2	4.2	89.7	0.702	-17	Medium Human Development
101	Sherani	0.295	55.3	88.6	4.9	2.1	13.3	0.347	-7	Very low Human Development
80	Sibi	0.441	60.9	38.3	6.6	3.5	43.7	0.618	-34	Low Human Development
111	Washuk	0.188	48.8	71.9	4.8	1.4	4.8	0.101	2	Very low Human Development
100	Zhob	0.295	65.9	5.5	8.5	2.0	18.8	0.362	-12	Very low Human Development
99	Ziarat	0.301	33.2	67.3	7.4	2.0	15.6	0.437	-19	Low Human Development
ISLAMABAD CAPITAL TERRITORY										
2	Islamabad	0.875	85.2	77.7	12.6	8.2	99.1	0.891	-1	High Human Development
KHYBER PAKHTUNKHWA										
13	Abbottabad	0.761	94.3	70.7	12.0	4.8	83.7	0.768	-2	High Medium Human Development
55	Bannu	0.613	57.4	66.6	9.4	4.0	72.7	0.551	3	Medium Human Development
70	Battagram	0.505	51.1	56.0	7.9	1.8	68.0	0.532	-7	Low Medium Human Development
66	Buner	0.528	78.0	83.0	8.9	1.5	49.4	0.543	-5	Low Medium Human Development
36	Charsadda	0.666	98.5	80.4	9.7	2.9	70.5	0.635	4	Medium Human Development
35	Chitral	0.674	97.8	64.1	11.1	3.6	69.1	0.637	3	Medium Human Development
71	Dera Ismail Khan	0.496	64.5	56.2	7.6	3.0	50.1	0.489	2	Low Medium Human Development
57	Hangu	0.594	75.4	73.4	8.7	1.9	72.9	0.561	-1	Low Medium Human Development
18	Haripur	0.732	82.1	60.2	11.9	4.8	86.6	0.702	2	High Medium Human Development
54	Karak	0.615	62.7	58.8	10.4	4.2	68.5	0.588	-4	Medium Human Development
45	Kohat	0.650	83.5	79.2	9.9	3.3	68.1	0.560	12	Medium Human Development
108	Kohistan	0.229	21.9	56.9	5.5	1.3	12.5	0.172	0	Very low Human Development
59	Lakki Marwat	0.577	49.2	70.3	9.5	3.9	62.8	0.489	13	Low Medium Human Development
56	Lower Dir	0.600	84.1	58.7	10.9	2.8	59.8	0.549	4	Medium Human Development
32	Malakand	0.690	94.8	59.7	11.7	3.7	73.6	0.640	5	Medium Human Development
34	Mansehra	0.676	77.3	66.0	10.8	3.8	78.1	0.609	13	Medium Human Development
29	Mardan	0.703	90.4	87.9	10.4	3.3	76.8	0.647	7	High Medium Human Development
31	Nowshera	0.697	84.4	80.4	10.3	3.2	81.6	0.696	-9	Medium Human Development

HDI rank		Human Development Index (HDI) value 2015[a]	Immunisation rate (%) 2015[a]	Satisfaction with health facility (%) 2015[a]	Expected years of schooling (years) 2015[a]	Mean years of schooling (years) 2015[a]	Living Standard (%) 2015[a]	Human Development Index (HDI) Value 2013[a]	Change in rank 2013-2015	Human Development Status
KHYBER PAKHTUNKHWA										
14	Peshawar	0.756	94.8	83.5	10.3	4.8	82.6	0.761	1	High Medium Human Development
82	Shangla	0.438	48.7	47.4	6.7	1.7	56.5	0.411	3	Low Human Development
44	Swabi	0.654	87.1	63.9	10.4	2.7	76.9	0.657	-12	Medium Human Development
52	Swat	0.618	88.8	70.9	9.6	2.8	64.3	0.551	7	Medium Human Development
76	Tank	0.459	66.1	70.1	7.8	2.8	35.4	0.449	2	Low Medium Human Development
105	Tor Ghar	0.240	3.0	69.6	6.1	0.9	15.4	0.217	-1	Very low Human Development
92	Upper Dir	0.375	77.4	31.5	8.1	1.8	27.2	0.351	1	Low Human Development
PUNJAB										
9	Attock	0.786	96.7	75.8	11.9	4.7	88.4	0.762	4	High Medium Human Development
49	Bahawalnagar	0.630	78.7	71.9	8.8	3.0	75.5	0.635	-8	Medium Human Development
46	Bahawalpur	0.645	83.5	86.4	7.7	3.1	77.5	0.629	-4	Medium Human Development
50	Bhakkar	0.628	86.8	49.2	9.5	3.2	76.6	0.587	1	Medium Human Development
8	Chakwal	0.792	96.2	81.5	11.9	4.9	87.2	0.788	-1	High Medium Human Development
42	Chiniot	0.657	90.4	82.4	9.0	3.0	72.4	0.677	-13	Medium Human Development
64	Dera Ghazi Khan	0.535	74.8	69.9	7.5	2.6	55.4	0.504	5	Low Medium Human Development
10	Faisalabad	0.782	88.2	84.5	10.8	5.2	89.4	0.775	-2	High Medium Human Development
11	Gujranwala	0.769	90.9	65.8	11.5	5.2	90.0	0.774	-2	High Medium Human Development
7	Gujrat	0.795	92.5	71.7	12.3	5.3	90.8	0.792	-1	High Medium Human Development
28	Hafizabad	0.705	96.7	69.7	10.5	3.7	78.6	0.693	-3	High Medium Human Development
33	Jhang	0.682	89.1	77.5	9.6	3.6	75.9	0.636	6	Medium Human Development
6	Jhelum	0.829	98.0	73.2	12.8	6.1	90.6	0.811	-1	High Human Development
24	Kasur	0.714	86.3	74.4	10.9	3.7	82.7	0.695	-1	High Medium Human Development
30	Khanewal	0.699	95.1	81.1	9.0	3.6	80.4	0.651	4	Medium Human Development
26	Khushab	0.706	90.6	78.6	10.4	3.7	78.4	0.650	9	High Medium Human Development
1	Lahore	0.877	89.5	85.8	12.2	7.5	98.9	0.858	2	High Human Development
19	Layyah	0.729	89.4	86.7	10.4	3.8	82.4	0.682	9	High Medium Human Development
41	Lodhran	0.659	94.8	79.7	8.2	3.1	76.9	0.629	2	Medium Human Development
23	Mandi Bahauddin	0.716	91.6	73.0	11.4	3.9	77.5	0.738	-6	High Medium Human Development
47	Mianwali	0.645	89.8	50.5	9.9	3.7	74.5	0.655	-14	Medium Human Development
21	Multan	0.718	92.2	81.4	8.9	4.3	83.3	0.693	3	High Medium Human Development
58	Muzaffargarh	0.584	88.2	73.5	7.7	2.5	64.9	0.564	-4	Low Medium Human Development
16	Nankana Sahib	0.740	95.7	77.9	11.1	4.8	76.5	0.762	-4	High Medium Human Development
15	Narowal	0.748	98.6	64.5	11.6	4.6	83.5	0.706	4	High Medium Human Development
27	Okara	0.705	90.5	75.9	9.7	3.5	84.3	0.667	3	High Medium Human Development
39	Pakpattan	0.660	93.9	69.2	9.1	2.9	78.2	0.629	5	Medium Human Development
51	Rahimyar Khan	0.625	83.4	85.3	7.2	2.9	75.2	0.585	1	Medium Human Development
69	Rajanpur	0.506	90.7	65.2	7.1	2.0	48.9	0.481	7	Low Medium Human Development
3	Rawalpindi	0.871	92.4	84.5	12.7	7.4	94.0	0.826	1	High Human Development
25	Sahiwal	0.710	91.1	62.3	10.2	4.0	86.2	0.691	2	High Medium Human Development
20	Sargodha	0.728	90.8	70.9	10.6	4.3	83.7	0.692	6	High Medium Human Development
17	Sheikhupura	0.738	86.4	75.2	10.8	4.3	86.1	0.760	-1	High Medium Human Development
5	Sialkot	0.834	93.7	80.6	12.3	5.9	94.6	0.770	5	High Human Development
12	Toba Tek Singh	0.763	91.3	75.4	11.2	4.6	88.2	0.720	6	High Medium Human Development
43	Vehari	0.655	92.5	79.2	8.8	2.8	75.7	0.661	-12	Medium Human Development
SINDH										
87	Badin	0.412	73.1	60.2	5.8	2.9	31.1	0.330	10	Low Human Development
48	Dadu	0.632	82.9	49.0	9.3	5.0	68.5	0.591	1	Medium Human Development
68	Ghotki	0.514	62.0	75.8	5.7	2.9	59.4	0.537	-6	Low Medium Human Development
22	Hyderabad	0.716	84.5	73.6	8.5	5.4	84.5	0.762	-8	High Medium Human Development
81	Jacobabad	0.440	65.0	68.5	5.9	2.5	39.5	0.494	-10	Low Human Development
60	Jamshoro	0.572	81.7	55.7	8.0	3.0	65.8	0.529	4	Low Medium Human Development

1A Human Development Index and its Components

HDI rank		Human Development Index (HDI) Value 2015[a]	Immunisation rate (%) 2015[a]	Satisfaction with health facility (%) 2015[a]	Expected years of schooling (years) 2015[a]	Mean years of schooling (years) 2015[a]	Living Standard (%) 2015[a]	Human Development Index (HDI) Value 2013[a]	Change in rank 2013-2015	Human Development Status
77	Kamber Shahdadkot	0.456	61.8	62.2	6.2	2.3	47.5	0.483	-2	Low Medium Human Development
4	Karachi	0.854	80.2	82.5	11.8	7.7	98.5	0.867	-2	High Human Development
74	Kashmore	0.471	73.3	81.5	5.3	2.4	45.6	0.426	7	Low Medium Human Development
63	Khairpur	0.556	79.7	49.3	8.2	3.6	58.3	0.528	3	Low Medium Human Development
53	Larkana	0.618	70.2	60.5	8.4	4.2	74.0	0.581	0	Medium Human Development
62	Matiari	0.569	86.6	75.6	7.0	3.6	54.7	0.562	-7	Low Medium Human Development
83	Mirpurkhas	0.430	63.9	31.7	6.6	3.5	42.0	0.426	-1	Low Human Development
37	Naushehro Feroze	0.665	70.7	69.7	9.8	5.1	72.2	0.594	11	Medium Human Development
61	Nawabshah/ Shaheed Benazir Abad	0.572	76.1	67.7	7.7	3.4	60.9	0.503	9	Low Medium Human Development
72	Sanghar	0.491	65.2	61.9	6.7	3.2	48.9	0.524	-4	Low Medium Human Development
67	Shikarpur	0.520	64.5	75.9	6.2	3.2	54.8	0.529	-2	Low Medium Human Development
96	Sujawal	0.326	47.7	61.3	5.4	2.4	21.2	..	..	Low Human Development
40	Sukkur	0.659	79.6	73.5	8.0	4.8	73.5	0.622	5	Medium Human Development
65	Tando Allahyar	0.528	84.8	69.5	6.2	2.8	54.8	0.526	2	Low Medium Human Development
91	Tando Muhammad Khan	0.377	62.5	63.6	4.7	2.3	31.4	0.456	-14	Low Human Development
109	Tharparkar	0.227	38.1	57.0	6.4	2.3	7.5	0.257	-6	Very low Human Development
90	Thatta	0.377	50.6	74.1	5.9	2.5	26.8	0.314	8	Low Human Development
97	Umerkot	0.322	67.1	18.0	6.3	2.3	24.4	0.390	-10	Low Human Development
	Azad Jammu & Kashmir	0.734	86.7	66.3	12.2	4.8	80.0	0.726		High Medium Human Development
	Federally Administered Tribal Areas (FATA)	0.216	15.7	7.5	6.7	1.8	27.7	--		Very low Human Development
	Gilgit-Baltistan	0.523	73.1	51.4	10.5	3.4	44.2	0.426		Low Medium Human Development
	Balochistan	0.421	51.0	65.8	7.4	2.6	33.9	0.382		Low Human Development
	Khyber Pakhtunkhwa	0.628	78.0	72.7	9.7	3.3	67.1	0.605		Medium Human Development
	Punjab	0.732	89.0	78.3	10.1	4.6	83.0	0.705		High Medium Human Development
	Sindh	0.640	73.0	73.2	8.3	5.1	67.6	0.620		Medium Human Development
	Pakistan	**0.681**	**82.1**	**75.5**	**9.4**	**4.5**	**74.5**	**0.661**		**Medium Human Development**

NOTES

a Calculations are based on PSLM district level microdata for the year 2014/15. For Azad Jammu & Kashmir and Gilgit-Baltistan, due to unavailability of PSLM microdata for the year 2014/15, data for the year 2012/13 is used instead. The changes in HDI scores and ranks for these two regions are calculated using PSLM micro data for the years 2012/13 and 2010/11. For FATA, calculations are based on the FDIHS 2013/14 microdata.

b Districts of Kech/Turbat and Panjgur were dropped from the scope of the PSLM survey 2014/15.

DEFINITIONS

Human Development Index (HDI)
A composite index measuring average achievement in three basic dimensions of human development -- a long and healhy life, knowledge and a decent standard of living. See Technical Note 1(this report) for details on how the HDI is calculated.

Immunisation Rate
Percentage of fully immunized children between the age of 12 and 23 months based on record and recall.

Satisfaction with Health Facility:
A household is regarded as deprived in 'satisfaction with health facility' if any of the household members did not use health care facility because it is costly, it does not suit, lacks tools or not enough facilities, or if any of the household member is not satisfied with the health facility.

Expected Years of Schooling
Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life.

Mean Years of Schooling
Average number of years of education received by people ages 25 and older, calculated from education attainment levels using official durations of each level.

Living Standard
A composite index based on six household indicators related to access and quality of public services, household infrastructure and assets' ownership. It is based on methodology proposed from the Multidimensional Poverty Index (MPI). See Technical Notes 1 and 4 for details.

2 Human Development Index trends, 2005–2015

| HDI rank | Province/Region | Human Development Index (HDI) | | | | | | HDI Rank Change Since | |
| | | | | | | | | Two Year Change | Decade Change |
		2005	2007	2009	2011	2013	2015 [a]	2013-2015	2005-2015 [b]
HIGH HUMAN DEVELOPMENT									
1	Lahore	Punjab	0.811	0.804	0.834	0.824	0.858	0.877	2	2
2	Islamabad	Islamabad Capital Territory	0.820	0.922	0.853	0.849	0.891	0.875	-1	-1
3	Rawalpindi	Punjab	0.716	0.827	0.802	0.791	0.826	0.871	1	2
4	Karachi	Sindh	0.812	0.819	0.852	0.864	0.867	0.854	-2	-2
5	Sialkot	Punjab	0.733	0.702	0.744	0.770	0.770	0.834	5	-1
6	Jhelum	Punjab	0.675	0.738	0.778	0.694	0.811	0.829	-1	3
HIGH MEDIUM HUMAN DEVELOPMENT									
7	Gujrat	Punjab	0.656	0.725	0.745	0.705	0.792	0.795	-1	3
8	Chakwal	Punjab	0.680	0.718	0.754	0.765	0.788	0.792	-1	-1
9	Attock	Punjab	0.584	0.726	0.690	0.612	0.762	0.786	4	9
10	Faisalabad	Punjab	0.644	0.694	0.671	0.710	0.775	0.782	-2	1
11	Gujranwala	Punjab	0.691	0.716	0.741	0.758	0.774	0.769	-2	-5
12	Toba Tek Singh	Punjab	0.616	0.681	0.703	0.697	0.720	0.763	6	1
13	Abbottabad	Khyber Pakhtunkhwa	0.604	0.651	0.692	0.688	0.768	0.761	-2	2
14	Peshawar	Khyber Pakhtunkhwa	0.579	0.607	0.662	0.695	0.761	0.756	1	5
15	Narowal	Punjab	0.560	0.592	0.611	0.673	0.706	0.748	4	5
16	Nankana Sahib	Punjab	..	..	0.696	0.679	0.762	0.740	-4	..
17	Sheikhupura	Punjab	0.611	0.663	0.721	0.713	0.760	0.738	-1	-3
18	Haripur	Khyber Pakhtunkhwa	0.552	0.603	0.684	0.731	0.702	0.732	2	5
19	Layyah	Punjab	0.520	0.594	0.567	0.571	0.682	0.729	9	14
20	Sargodha	Punjab	0.542	0.578	0.599	0.602	0.692	0.728	6	7
21	Multan	Punjab	0.555	0.572	0.609	0.634	0.693	0.718	3	1
22	Hyderabad	Sindh	0.587	0.641	0.760	0.746	0.762	0.716	-8	-5
23	Mandi Bahauddin	Punjab	0.511	0.652	0.666	0.655	0.738	0.716	-6	14
24	Kasur	Punjab	0.550	0.599	0.660	0.633	0.695	0.714	-1	0
25	Sahiwal	Punjab	0.593	0.626	0.624	0.617	0.691	0.710	2	-9
26	Khushab	Punjab	0.489	0.598	0.618	0.630	0.650	0.706	9	16
27	Okara	Punjab	0.466	0.513	0.617	0.607	0.667	0.705	3	21
28	Hafizabad	Punjab	0.494	0.563	0.611	0.658	0.693	0.705	-3	13
29	Mardan	Khyber Pakhtunkhwa	0.501	0.565	0.583	0.580	0.647	0.703	7	10
MEDIUM HUMAN DEVELOPMENT									
30	Khanewal	Punjab	0.543	0.538	0.600	0.569	0.651	0.699	4	-4
31	Nowshera	Khyber Pakhtunkhwa	0.544	0.647	0.643	0.610	0.696	0.697	-9	-6
32	Malakand	Khyber Pakhtunkhwa	0.396	0.488	0.532	0.576	0.640	0.690	5	33
33	Jhang	Punjab	0.472	0.516	0.586	0.545	0.636	0.682	6	12
34	Mansehra	Khyber Pakhtunkhwa	0.429	0.495	0.570	0.580	0.609	0.676	13	22
35	Chitral	Khyber Pakhtunkhwa	0.404	0.431	0.386	0.515	0.637	0.674	3	27
36	Charsadda	Khyber Pakhtunkhwa	0.441	0.507	0.520	0.580	0.635	0.666	4	18
37	Naushehro Feroze	Sindh	0.513	0.555	0.680	0.506	0.594	0.665	11	-3
38	Quetta	Balochistan	0.677	0.685	0.724	0.767	0.702	0.664	-17	-30
39	Pakpattan	Punjab	0.512	0.539	0.559	0.481	0.629	0.660	5	-3
40	Sukkur	Sindh	0.629	0.564	0.563	0.576	0.622	0.659	5	-28
41	Lodhran	Punjab	0.445	0.477	0.545	0.500	0.629	0.659	2	11
42	Chiniot	Punjab	..	..	..	0.555	0.677	0.657	-13	..
43	Vehari	Punjab	0.522	0.558	0.625	0.535	0.661	0.655	-12	-11
44	Swabi	Khyber Pakhtunkhwa	0.526	0.511	0.566	0.632	0.657	0.654	-12	-14
45	Kohat	Khyber Pakhtunkhwa	0.482	0.547	0.566	0.549	0.560	0.650	12	-1
46	Bahawalpur	Punjab	0.488	0.550	0.577	0.531	0.629	0.645	-4	-3
47	Mianwali	Punjab	0.530	0.577	0.568	0.560	0.655	0.645	-14	-18
48	Dadu	Sindh	0.385	0.418	0.574	0.539	0.591	0.632	1	19
49	Bahawalnagar	Punjab	0.542	0.553	0.565	0.547	0.635	0.630	-8	-21
50	Bhakkar	Punjab	0.451	0.495	0.462	0.490	0.587	0.628	1	1

TABLE 2 Human Development Index trends, 2005–2015 | 29

2 Human Development Index trends, 2005–2015

| HDI rank | Province/Region | Human Development Index (HDI) | | | | | | HDI Rank Change Since | |
		2005	2007	2009	2011	2013	2015 [a]	Two Year Change 2013-2015	Decade Change 2005-2015 [b]
51 Rahimyar Khan	Punjab	0.513	0.512	0.540	0.547	0.585	0.625	1	-16
52 Swat	Khyber Pakhtunkhwa	0.454	0.576	0.449	0.520	0.551	0.618	7	-2
53 Larkana	Sindh	0.413	0.465	0.597	0.516	0.581	0.618	0	6
54 Karak	Khyber Pakhtunkhwa	0.401	0.475	0.474	0.404	0.588	0.615	-4	9
55 Bannu	Khyber Pakhtunkhwa	0.456	0.498	0.522	0.530	0.551	0.613	3	-6
56 Lower Dir	Khyber Pakhtunkhwa	0.499	0.443	0.428	0.598	0.549	0.600	4	-16
LOW MEDIUM HUMAN DEVELOPMENT									
57 Hangu	Khyber Pakhtunkhwa	0.505	0.512	0.535	0.519	0.561	0.594	-1	-19
58 Muzaffargarh	Punjab	0.391	0.380	0.500	0.421	0.564	0.584	-4	8
59 Lakki Marwat	Khyber Pakhtunkhwa	0.397	0.403	0.440	0.426	0.489	0.577	13	5
60 Jamshoro	Sindh	..	..	0.442	0.470	0.529	0.572	4	..
61 Nawabshah/ Shaheed Benazir Abad	Sindh	0.441	0.414	0.437	0.474	0.503	0.572	9	-8
62 Matiari	Sindh	..	..	0.563	0.519	0.562	0.569	-7	..
63 Khairpur	Sindh	0.470	0.468	0.535	0.474	0.528	0.556	3	-17
64 Dera Ghazi Khan	Punjab	0.425	0.491	0.414	0.417	0.504	0.535	5	-7
65 Tando Allahyar	Sindh	..	..	0.546	0.471	0.526	0.528	2	..
66 Buner	Khyber Pakhtunkhwa	0.354	0.473	0.515	0.437	0.543	0.528	-5	4
67 Shikarpur	Sindh	0.559	0.398	0.520	0.475	0.529	0.520	-2	-46
68 Ghotki	Sindh	0.526	0.408	0.470	0.486	0.537	0.514	-6	-37
69 Rajanpur	Punjab	0.441	0.348	0.347	0.399	0.481	0.506	7	-14
70 Battagram	Khyber Pakhtunkhwa	0.380	0.401	0.553	0.576	0.532	0.505	-7	-2
71 Dera Ismail Khan	Khyber Pakhtunkhwa	0.405	0.354	0.414	0.374	0.489	0.496	2	-10
72 Sanghar	Sindh	0.406	0.425	0.477	0.454	0.524	0.491	-4	-12
73 Pishin	Balochistan	0.277	0.300	0.407	0.583	0.425	0.482	10	9
74 Kashmore	Sindh	..	..	0.431	0.415	0.426	0.471	7	..
75 Mastung	Balochistan	0.328	0.442	0.277	0.435	0.485	0.459	-1	-1
76 Tank	Khyber Pakhtunkhwa	0.332	0.346	0.370	0.361	0.449	0.459	2	-3
77 Kamber Shahdadkot	Sindh	..	..	0.458	0.439	0.483	0.456	-2	..
LOW HUMAN DEVELOPMENT									
78 Gawadar	Balochistan	0.365	0.391	0.471	0.386	0.442	0.443	1	-9
79 Noshki	Balochistan	..	..	0.325	0.284	0.395	0.441	7	..
80 Sibi	Balochistan	0.340	0.339	0.412	0.633	0.618	0.441	-34	-8
81 Jacobabad	Sindh	0.347	0.243	0.378	0.330	0.494	0.440	-10	-10
82 Shangla	Khyber Pakhtunkhwa	0.301	0.366	0.377	0.437	0.411	0.438	3	-4
83 Mirpurkhas	Sindh	0.467	0.413	0.451	0.515	0.426	0.430	-1	-36
84 Killa Saifullah	Balochistan	0.108	0.204	0.227	0.270	0.194	0.422	23	14
85 Lasbela	Balochistan	0.287	0.313	0.336	0.336	0.413	0.416	-1	-6
86 Khuzdar	Balochistan	0.218	0.255	0.214	0.342	0.361	0.412	3	0
87 Badin	Sindh	0.419	0.286	0.361	0.341	0.330	0.412	10	-29
88 Kalat	Balochistan	0.220	0.333	0.250	0.301	0.343	0.405	7	-3
89 Loralai	Balochistan	0.218	0.245	0.229	0.229	0.361	0.381	1	-2
90 Thatta	Sindh	0.302	0.268	0.374	0.335	0.314	0.377	8	-14
91 Tando Muhammad Khan	Sindh	..	..	0.435	0.351	0.456	0.377	-14	..
92 Upper Dir	Khyber Pakhtunkhwa	0.280	0.297	0.340	0.417	0.351	0.375	1	-11
93 Musakhail	Balochistan	0.121	0.167	0.106	0.030	0.125	0.368	18	4
94 Jaffarabad	Balochistan	0.301	0.281	0.334	0.249	0.358	0.345	-3	-17
95 Bolan/Kachhi	Balochistan	0.280	0.236	0.174	0.367	0.332	0.345	1	-15
96 Sujawal	Sindh	..	..	..	..	..	0.326	..	..
97 Umerkot	Sindh	..	..	..	0.409	0.390	0.322	-10	..
98 Naseerabad	Balochistan	0.208	0.153	0.245	0.237	0.282	0.311	3	-10
99 Ziarat	Balochistan	0.269	0.283	0.265	0.409	0.437	0.301	-19	-16

TABLE

2

| | | Human Development Index (HDI) | | | | | | HDI Rank Change Since | |
| | | | | | | | | Two Year Change | Decade Change |
HDI rank	Province/Region	2005	2007	2009	2011	2013	2015 [a]	2013-2015	2005-2015 [b]
VERY LOW HUMAN DEVELOPMENT									
100	Zhob	Balochistan	0.204	0.316	0.366	0.318	0.362	0.295	-12	-10
101	Sherani	Balochistan	..	..	..	0.246	0.347	0.295	-7	..
102	Kharan	Balochistan	0.142	0.223	0.225	0.266	0.291	0.290	-3	-6
103	Dera Bugti	Balochistan	..	0.126	0.183	0.069	0.145	0.271	7	..
104	Kohlu	Balochistan	..	0.179	0.142	0.202	0.091	0.267	10	..
105	Tor Ghar	Khyber Pakhtunkhwa	..	..	..	..	0.217	0.240	-1	..
106	Killa Abdullah	Balochistan	0.206	0.153	0.228	0.414	0.200	0.238	0	-17
107	Barkhan	Balochistan	0.172	0.260	0.226	0.208	0.213	0.237	-2	-15
108	Kohistan	Khyber Pakhtunkhwa	0.155	0.168	0.188	0.137	0.172	0.229	0	-15
109	Tharparkar	Sindh	0.303	0.164	0.185	0.203	0.257	0.227	-6	-34
110	Chaghi	Balochistan	0.143	0.201	0.158	0.187	0.165	0.210	-1	-15
111	Washuk	Balochistan	..	..	0.099	0.135	0.101	0.188	2	..
112	Harnai	Balochistan	..	..	..	0.211	0.260	0.184	-10	..
113	Jhal Magsi	Balochistan	0.149	0.180	0.182	0.153	0.286	0.183	-13	-19
114	Awaran	Balochistan	0.067	0.000	0.240	0.127	0.111	0.173	-2	-15
..	Kech/Turbat	Balochistan	0.196	0.274	0.321	0.273	0.357	..	..	-1
..	Panjgur	Balochistan	0.239	0.157	0.334	0.225	..	..	..	-23
	Azad Jammu & Kashmir		..	0.459	..	0.726	0.734	..		
	Federally Administered Tribal Areas (FATA)		..	..	..	..	..	0.216		
	Gilgit-Baltistan		..	0.406	..	0.426	0.523	..		
	Balochistan		0.294	0.350	0.337	0.383	0.382	0.421		
	Khyber Pakhtunkhwa		0.463	0.513	0.515	0.555	0.605	0.628		
	Punjab		0.583	0.630	0.648	0.643	0.705	0.732		
	Sindh		0.559	0.560	0.586	0.599	0.620	0.640		
	Pakistan		**0.547**	**0.584**	**0.600**	**0.608**	**0.660**	**0.681**		

NOTES

a Calculations are based on different waves of PSLM survey at district level. For FATA calculations are based on the FDIHS 2013/14 microdata.

b Calculations are based on PSLM microdata for the years 2012/13 and 2004/05 due to unavailability of the latest data for Ketch/Turbat. For Panjgur, PSLM microdata for the years 2010/11 and 2004/05 are used due to unavailability of data for the recent surveys.

MAIN DATA SOURCES

Columns 1-6: UNDP calculations based on micro data of PSLM survey for the years 2004/05, 2006/07, 2008/09, 2010/11, 2012/13, and 2014/15, and FDIHS 2013/14.

Column 7: Calculated based on columns 5 and 6.

Column 8: Calculated based on columns 1 and 6.

TABLE 2 Human Development Index trends, 2005–2015 | **31**

3 Multidimensional Poverty Index and its components

	Multidimensional Poverty Index (MPI) Value	Population in multidimensional poverty (%)		Contribution of deprivation to overall poverty (%)		
	Pakistan National MPI specifications 2015[a]	Incidence - Headcount (H) 2015[b]	Intensity (A) 2015[b]	Education 2015[b]	Health 2015[b]	Living Standards 2015[b]
BALOCHISTAN						
Awaran	0.415	77.2	53.8	38.4	18.1	43.5
Barkhan	0.627	93.6	67.0	39.9	30.4	29.7
Bolan/Kachhi	0.414	73.1	56.7	40.9	20.3	38.8
Chaghi	0.546	89.2	61.2	40.6	16.2	43.3
Dera Bugti	0.499	88.4	56.4	48.4	11.5	40.2
Gawadar	0.293	60.8	48.2	43.7	25.2	31.1
Harnai	0.633	94.2	67.2	38.2	28.9	32.9
Jaffarabad	0.404	75.0	53.8	45.1	21.3	33.6
Jhal Magsi	0.528	89.7	58.9	44.1	20.1	35.8
Kalat	0.275	57.1	48.1	36.5	24.5	38.9
Kech/Turbat[e]	..	..	..	..	..	..
Kharan	0.454	78.4	57.9	40.6	27.8	31.6
Khuzdar	0.285	57.5	49.6	42.5	14.5	43.0
Killa Abdullah	0.641	96.9	66.2	41.7	31.1	27.3
Killa Saifullah	0.386	79.3	48.7	47.8	28.1	24.1
Kohlu	0.503	86.8	58.0	42.0	19.3	38.7
Lasbela	0.395	68.1	58.0	38.8	22.1	39.0
Loralai	0.320	68.5	46.7	45.1	11.6	43.3
Mastung	0.302	62.0	48.7	35.2	23.8	41.1
Musakhail	0.351	66.9	52.4	43.8	17.0	39.2
Naseerabad	0.413	77.0	53.6	48.0	15.6	36.4
Noshki	0.316	64.0	49.4	47.9	23.6	28.5
Panjgur[e]	..	..	..	..	..	..
Pishin	0.453	82.2	55.1	40.6	35.0	24.3
Quetta	0.213	46.3	46.0	47.6	33.3	19.1
Sherani	0.526	90.6	58.1	38.8	21.4	39.8
Sibi	0.324	57.5	56.3	45.4	16.6	38.0
Washuk	0.466	81.9	56.9	41.6	18.7	39.7
Zhob	0.514	82.8	62.1	43.0	30.1	26.9
Ziarat	0.575	90.3	63.7	35.8	33.5	30.7
ISLAMABAD CAPITAL TERRITORY						
Islamabad	0.013	3.1	43.2	52.6	23.9	23.4
KHYBER PAKHTUNKHWA						
Abbottabad	0.149	32.9	45.4	34.5	32.7	32.8
Bannu	0.289	58.6	49.2	43.5	30.9	25.6
Battagram	0.422	75.2	56.1	41.2	30.3	28.5
Buner	0.373	71.6	52.0	41.0	26.4	32.6
Charsadda	0.213	44.6	47.8	43.2	25.1	31.7
Chitral	0.194	43.3	44.9	37.6	28.3	34.0
Dera Ismail Khan	0.362	65.6	55.2	42.4	27.3	30.3
Hangu	0.271	55.8	48.5	46.9	24.2	28.9
Haripur	0.110	24.7	44.5	35.8	33.9	30.3
Karak	0.253	50.3	50.3	34.2	35.1	30.8
Kohat	0.238	47.5	50.0	41.4	29.3	29.3
Kohistan	0.581	95.8	60.6	41.9	24.1	34.1
Lakki Marwat	0.320	62.7	51.0	38.0	33.0	29.0
Lower Dir	0.194	41.6	46.7	43.9	23.7	32.4
Malakand	0.171	37.1	46.1	39.9	29.8	30.3
Mansehra	0.204	40.7	50.1	34.6	29.9	35.5
Mardan	0.153	33.8	45.3	43.9	26.8	29.3
Nowshera	0.168	37.4	44.9	44.7	29.5	25.8

TABLE

3

	Multidimensional Poverty Index (MPI) Value	Population in multidimensional poverty (%)		Contribution of deprivation to overall poverty (%)		
	Pakistan National MPI specifications 2015[a]	Incidence - Headcount (H) 2015[b]	Intensity (A) 2015[b]	Education 2015[b]	Health 2015[b]	Living Standards 2015[b]
KHYBER PAKHTUNKHWA						
Peshawar	0.148	31.5	46.8	46.8	24.8	28.4
Shangla	0.438	80.2	54.6	46.8	23.4	29.8
Swabi	0.210	43.8	48.0	40.8	28.8	30.5
Swat	0.271	55.0	49.3	37.9	32.8	29.4
Tank	0.385	71.1	54.2	43.8	24.2	32.0
Tor Ghar	0.571	92.0	62.1	39.7	29.9	30.3
Upper Dir	0.443	76.4	58.0	41.2	29.3	29.6
PUNJAB						
Attock	0.041	9.9	41.1	49.2	12.8	38.0
Bahawalnagar	0.244	50.1	48.7	42.9	27.3	29.8
Bahawalpur	0.273	53.0	51.5	43.4	28.3	28.2
Bhakkar	0.255	51.7	49.3	39.1	31.9	29.0
Chakwal	0.056	12.9	43.6	38.3	28.6	33.1
Chiniot	0.199	42.1	47.4	45.5	23.0	31.5
Dera Ghazi Khan	0.351	63.7	55.1	43.2	25.9	30.9
Faisalabad	0.086	19.4	44.5	45.8	22.2	32.0
Gujranwala	0.064	14.0	45.6	46.0	26.5	27.6
Gujrat	0.078	18.4	42.1	32.6	39.3	28.1
Hafizabad	0.152	32.3	47.0	40.6	32.1	27.4
Jhang	0.196	41.6	47.2	41.1	25.7	33.2
Jhelum	0.035	8.5	40.7	48.6	16.7	34.8
Kasur	0.095	21.9	43.6	49.6	15.2	35.2
Khanewal	0.189	39.9	47.4	43.7	25.6	30.7
Khushab	0.200	40.4	49.7	38.8	32.0	29.3
Lahore	0.017	4.3	38.8	65.6	11.7	22.6
Layyah	0.214	45.6	46.9	35.7	34.0	30.3
Lodhran	0.230	46.8	49.2	44.1	23.9	32.1
Mandi Bahauddin	0.147	31.5	46.7	37.4	35.3	27.3
Mianwali	0.239	46.9	50.8	37.7	32.5	29.8
Multan	0.173	35.7	48.5	44.6	24.8	30.6
Muzaffargarh	0.338	64.8	52.1	41.7	27.0	31.4
Nankana Sahib	0.110	24.6	44.6	45.6	19.4	35.0
Narowal	0.118	26.6	44.3	34.2	37.0	28.8
Okara	0.185	39.5	47.0	42.0	29.1	28.9
Pakpattan	0.189	42.6	44.4	46.7	19.4	34.0
Rahimyar Khan	0.289	56.8	50.8	45.6	25.1	29.3
Rajanpur	0.357	64.4	55.4	44.3	22.2	33.6
Rawalpindi	0.032	7.5	43.0	44.9	24.0	31.2
Sahiwal	0.140	30.8	45.6	44.8	22.9	32.3
Sargodha	0.166	35.4	46.8	38.1	32.8	29.2
Sheikhupura	0.093	21.4	43.5	46.8	22.2	30.9
Sialkot	0.059	14.0	41.8	31.7	41.2	27.1
Toba Tek Singh	0.107	23.8	45.0	44.4	25.8	29.8
Vehari	0.200	41.9	47.6	45.0	22.3	32.7
SINDH						
Badin	0.433	74.8	57.9	37.5	24.6	37.9
Dadu	0.247	51.4	48.0	33.1	35.4	31.5
Ghotki	0.356	67.3	52.9	50.1	19.7	30.2
Hyderabad	0.129	25.7	50.2	48.8	20.1	31.1
Jacobabad	0.391	71.3	54.8	47.0	17.8	35.2
Jamshoro	0.297	55.6	53.3	40.4	25.2	34.4

TABLE 3   Multidimensional Poverty Index and its components | **33**

3 Multidimensional Poverty Index and its components

	Multidimensional Poverty Index (MPI) Value	Population in multidimensional poverty (%)		Contribution of deprivation to overall poverty (%)		
	Pakistan National MPI specifications 2015 ª	Incidence - Headcount (H) 2015 ᵇ	Intensity (A) 2015 ᵇ	Education 2015 ᵇ	Health 2015 ᵇ	Living Standards 2015 ᵇ
Kamber Shahdadkot	0.383	72.0	53.2	43.4	24.8	31.9
Karachi	0.019	4.5	42.4	57.5	12.4	30.2
Kashmore	0.431	74.9	57.6	47.2	23.8	29.0
Khairpur	0.261	51.6	50.7	45.5	21.3	33.2
Larkana	0.194	42.0	46.3	48.5	20.6	31.0
Matiari	0.324	62.1	52.2	41.9	22.9	35.3
Mirpurkhas	0.401	68.9	58.2	39.5	25.6	34.9
Naushehro Feroze	0.214	45.0	47.5	37.5	31.6	30.9
Nawabshah/ Shaheed Benazir Abad	0.314	59.3	53.0	42.4	28.3	29.4
Sanghar	0.386	66.8	57.7	40.1	27.2	32.7
Shikarpur	0.324	60.1	54.0	46.9	20.7	32.4
Sujawal	0.447	82.0	54.5	41.2	14.9	43.9
Sukkur	0.197	39.5	50.0	53.3	14.4	32.3
Tando Allahyar	0.366	67.3	54.4	42.8	23.8	33.3
Tando Muhammad Khan	0.455	78.4	58.1	40.4	24.4	35.1
Tharparkar	0.481	87.0	55.2	38.8	18.0	43.2
Thatta	0.437	78.5	55.6	38.7	19.9	41.5
Umerkot	0.504	84.7	59.5	38.3	25.3	36.5
Azad Jammu & Kashmir	0.115	24.9	46.3	36.3	24.6	39.1
Federally Administered Tribal Areas (FATA)	0.337	73.7	45.8	52.6	15.3	32.1
Gilgit-Baltistan	0.209	43.4	48.3	46.7	17.7	35.6
Balochistan	0.394	71.2	55.3	42.9	24.5	32.6
Khyber Pakhtunkhwa	0.250	49.2	50.7	41.5	28.2	30.3
Punjab	0.152	31.4	48.4	43.0	26.5	30.5
Sindh	0.231	43.1	53.5	43.0	22.9	34.1
Pakistan	**0.197**	**38.8**	**50.9**	**42.8**	**25.7**	**31.5**

NOTES

a The Pakistan national MPI specifications refer to modified methodology as compared to the global MPI specifications. See Technical note 4 for details.

b Calculations are based on PSLM district level microdata for the year 2014/15. For Azad Jammu & Kashmir and Gilgit-Baltistan, due to unavailability of PSLM microdata for the year 2014/15, data for the year 2012/13 is used instead. For FATA, calculations are based on the FDIHS 2013/14 microdata.

c Districts of Kech/Turbat and Panjgur were dropped from the scope of the PSLM survey 2014/15.

DEFINITIONS

Multidimensional Poverty Index (MPI)
A measure identifying poor while considering the intensity of deprivations they suffer.

Incidence or Headcount (H)
The percentage of people who are multidimensionally poor.

Intensity of Poverty (A)
Average percentage of deprivation experienced by people in multidimensional poverty.

MAIN DATA SOURCE
Columns 1-6: Government of Pakistan (2016)

Technical note 1
Human Development Index

The Human Development Index (HDI) is a tool to measure achievements in three dimensions of human development: education, health and standard of living. Each dimension of the HDI is further divided into indicators. The HDI is calculated following a two-step procedure: first, sub-indices for the three dimensions are calculated by standardizing indicators for each dimension; second, the geometric mean of these standardized indicators is calculated. The Education Index for Pakistan is calculated by following the same methodology adopted in the global HDI. However, as there is no data available at the district level, we devised a new methodology for the other two indices. Table 1 presents a summary of the methodology used for the global HDI, that is compared with HDIs in the national HDRs from 2017 and 2003.

Following the current global HDI methodology, the Education Index is calculated using mean years of schooling and expected years of schooling at the district level from the 2014/15 *Pakistan Social and Living Standards Measurement (PSLM)* data. The P*akistan NHDR 2003,* however, used literacy rate and enrolment ratio as education indicators in accordance with the global HDI methodology used at that time.

We could not calculate life expectancy, as there is no data available for mortality in Pakistan. Instead, the Health Index is constructed using two indicators: *immunisation rates* and *satisfaction with health facility*. The for-

mer indicator, taken directly from the *PSLM data*, is an appropriate proxy for the overall strength of the government's public health system. *Immunisation rate* is the percentage of the children aged 12 to 23 months who have been fully immunised. The *satisfaction with health facility* defines households that lack access to quality healthcare facility if any of the household members had responded that he/she did not use a healthcare facility because: it was costly, it did not suit, it lacked equipment/did not have enough facilities, or if any of the household members were not satisfied with the health facility. Both indicators are available at the district level and are taken from the 2014/15 *PSLM data*. The maximum and minimum goalpost for both indicators are set at 100 and 0, respectively.

Calculation of the Real GDP per capita in Purchasing Power Parity in US Dollars (PPP$) requires data on GDP per capita. This data is available at the national and provincial levels, but not at the district level in Pakistan. Therefore, in the 2003 NHDR for Pakistan, the cash value of crop output and the manufacturing value-added at the district level were used as a proxy for real GDP per capita. For the Pakistan NHDR 2017, however, we used the living standards dimension from the **Multidimensional Poverty Index (MPI)** as a proxy for the standard of living dimension of the HDI. Compared to the 2003 Pakistan HDI, the living standards dimension has been used due to the unavailability of recent district level man-

TABLE **1**

HDI dimensions, indicators and data sources

	Indicators used for HDI in global HDR	Indicators used for HDI in Pakistan HDR 2017	Indicators used for HDI in Pakistan HDr 2003
Education	Mean years of schooling	Mean years of schooling	Literacy ratio
	Expected years of schooling	Expected years of schooling	Enrolment ratio
Health	Life expectancy	Immunisation rate	Immunisation rate
		Satisfaction with health facility	Infant survival ratio
Standard of living	GNI per capita (PPP $)	*Living standards from the Multidimensional Poverty Index:* Electricity Drinking water Sanitation Infrastructure Household fuel Household assets	District–wise GDP per capita (PPP$): based on cash value of crop output and the manufacturing value–added at the district level

ufacturing data, since the latest manufacturing census data is available for 2005-06. Second, cash value of agriculture crop output and manufacturing value may not be representative of the total GDP. Finally, in an undocumented economy like Pakistan, any macro level indicator may not be regarded as a true measure of economic output, since a significant proportion of economic activities are informal.

For the standard of living dimension the Global MPI methodology, which considers six indicators, as reported in the Global HDR 2015 was followed completely with one exception. Instead of using the *type of household floor*, because of data unavailability; *material for household walls and roof* was used. Houses without finished walls[25] or finished roofs[26] were considered deprived. If the house was deprived in three or more facilities/indicators, we regarded the household as deprived, and calculated the percentage of people not living in substandard living conditions. The range or 'goalposts' for the standard of living are 100 per cent for a maximum level and 0 per cent for no standard of living.

Standard of living from MPI:

A household is deprived if:

1. *Electricity:* did not have access to electricity.
2. *Drinking water:* did not have access to improved drinking water source.
3. *Sanitation:* did not have access to improved sanitation or if improved, it was shared.
4. *Cooking fuel:* had access to used 'dirty' cooking fuel (dung, wood or charcoal).
5. *Infrastructure:* was without a finished roof or fin

ished walls.

6. *Assets:* did not have any of the assets related to information access (radio, TV, telephone), did not have any of the assets related to mobility (bike, motor bike, car, tractor); or did not have any of the assets related to livelihood (refrigerator, arable land, live stock).

If a household is deprived in three or more MPI Standard of Living indicators, it is identified as deprived.

Steps to calculate the Human Development Index for Pakistan at the district level

Following the methodology of the global HDIs, the following two steps have been employed to calculate the HDI.

Step 1: Calculating the dimension of indices

Minimum and maximum goal posts for immunization rate and satisfaction with health facility are set at 0 and 100 to capture the maximum variation among the districts of Pakistan.

For education, the minimum goal post is set at 0. The maximum goal post for expected years of schooling is set at 15, based on the estimated maximum value of 13.5 for Islamabad. Similarly, the maximum goal post for mean years of schooling is set at 10 based on the estimated value of 9.1.

The minimum and maximum goal post for the living standard dimension, borrowed from the multidimensional poverty index, is set at 0 and 100, respectively.

TABLE **2**

Summary of dimensions, indicators and goal posts

Dimensions	Indicators	Minimum	Maximum
Health	Immunisation rate	0	100
	Satisfaction with health facility	0	100
Education	Mean years of schooling	0	10
	Expected years of schooling	0	15
Standard of living	*Living standards from the Multidimensional Poverty Index:* Electricity Drinking water Sanitation Infrastructure Household fuel Household assets	0	100

After defining the minimum and maximum goal posts, the dimension indices are calculated as follows:

$$\text{Dimension index} = \frac{(\text{actual value} - \text{minimum value})}{(\text{maximum value} - \text{minimum vaue})} \quad (1)$$

For the health and education dimensions, equation (1) is calculated first for each component, and then the health and education indices are calculated by taking the arithmetic mean of the two resulting component indices. For the living standard index, the percentage of people living in non-deprived households is used.

Step 2: Aggregating the dimensional indices to produce the Human Development Index

The geometric mean of the dimensional indices is calculated to construct the HDI:

HDI = (I_Health . I_Education . I_Living Standard)$^{1/3}$

Example: Quetta

Indicators	Value
Immunisation rate	64.6
Satisfaction with health facility	53.8
Expected years of schooling	10.2
Mean years of schooling	4.2
Living standards from the Multidimensional Poverty Index: *Electricity* *Drinking water* *Sanitation* *Infrastructure* *Household fuel* *Household assets*	89.7

$$\textit{Immunisation index} = \frac{64.6 - 0}{100 - 0} = 0.65$$

$$\textit{Satisfaction with health facility index} = \frac{53.8 - 0}{100 - 0} = 0.54$$

$$\textit{Health index} = \frac{0.65 + 0.54}{2} = 0.59$$

$$\textit{Expected years of schooling index} = \frac{10.2 - 0}{15 - 0} = 0.68$$

$$\textit{Mean years of schooling index} = \frac{4.2 - 0}{10 - 0} = 0.42$$

$$\textit{Education index} = \frac{0.68 + 0.42}{2} = 0.55$$

$$\textit{Living standard index} = \frac{89.7 - 0}{100 - 0} = 0.90$$

$$\textit{Human Development Index} = (0.59 \cdot 0.55 \cdot 0.90)^{1/3} = 0.664$$

Technical note 2
Multidimensional Poverty index

The Multidimensional Poverty Index (MPI) identifies multiple deprivations experienced at the same time at the household level in education, health and standard of living. The methodology for the Pakistan MPI is adopted from Alkire and Santos (2010, 2014), whereas indicators are selected through provincial and regional consultations with different federal and provincial government ministries, academia, and research organizations.

Methodology

Building on the global MPI, the three dimensions of education, health and standard of living are retained in the Pakistan MPI[1]. A total of 15 indicators are used to construct the MPI for Pakistan: three for education, four for health, and eight for standard of living. Unlike the global MPI, however, not all the indicators within each dimension are equally weighted in Pakistan's national MPI. Indicators, cut-off values, and weights are given below.

Dimensions	Indicators	Deprivation cut-off	Weights (%)
Education	Years of schooling	Deprived if no man OR no woman in the household above 10 years of age has completed five years of schooling	16.67
	Child school attendance	Deprived if any school–aged child is not attending school (between 6 and 11 years of age)	12.5
	Educational quality	Deprived if any child is not going to school because of quality issues (not enough teachers, schools are far away, too costly, no male/female teacher, sub–standard schools), or is attending school but remains dissatisfied with service	4.17
Health	Access to health facilities/clinics/ Basic Health Units (BHU)	Deprived if health facilities are not used at all, or are only used occasionally, because of access constraints (too far away, too costly, unsuitable, lack of tools/staff, not enough facilities)	16.67
	Immunisation	Deprived if any child under the age of five is not fully immunised according to the vaccinations calendar (households with no children under five are considered non–deprived)	5.56
	Ante–natal care	Deprived if any woman in the household who has given birth in the last three years did not receive ante–natal check–ups (households with no woman who has given birth are considered non–deprived)	5.56
	Assisted delivery	Deprived if any woman in the household has given birth in the last three years and was attended by untrained personnel (family member, friend, traditional birth attendant, etc.) or in an inappropriate facility (home, other) (households with no woman who has given birth are considered non–deprived)	5.56

Dimensions	Indicators	Deprivation cut-off	Weights (%)
Standard of living	Water	Deprived if the household has no access to an improved source of water according to SDG standards, considering distance (less than a 30-minute return trip): tap water, hand pump, motor pump, protected well, mineral water	4.76
	Sanitation	Deprived if the household has no access to adequate sanitation according to SDG standards: flush system (sewerage, septic tank and drain), privy seat	4.76
	Walls	Deprived if the household has unimproved walls (mud, uncooked/mud bricks, wood/bamboo, other)	2.38
	Overcrowding	Deprived if the household is overcrowded (four or more people per room)	2.38
	Electricity	Deprived if the household has no access to electricity	4.76
	Cooking fuel	Deprived if the household uses solid cooking fuels for cooking (wood, dung cakes, crop residue, coal/charcoal, other)	4.76
	Assets	Deprived if the household does not have more than two small assets (radio, TV, iron, fan, sewing machine, video cassette player, chair, telephone, watch, air cooler, bicycle) OR no large asset (refrigerator, air conditioner, tractor, computer, motorcycle), AND has no car.	4.76
	Land and livestock (only for rural areas)	Deprived if the household is deprived in land AND deprived in livestock, i.e.: a) Deprived in land: the household has less than 2.25 acres of non–irrigated land AND less than 1.125 acres of irrigated land b) Deprived in livestock: the household has less than 2 cattle, fewer than 3 sheep/goats, fewer than 5 chickens AND no animal for transportation (urban households are considered non–deprived)	4.76

A person is categorized as poor in two stages. In stage one, she is classified as deprived or non-deprived in each indicator, based on the cut-off value. A deprived person receives a score of 1, whereas a non-deprived person gets a score of 0. In the second step, the weighted deprivation scores for each indicator are obtained by multiplying the scores with the weights of each indicator, and are summed to obtain the household deprivation score. A cut-off of 33.3 percent is used to identify a household as poor. If the weighted deprivation score is equal to or greater than 33.3 percent, that household is categorized as poor. Households which are deprived in less than one third of the indicators are considered non-poor. The headcount ratio, H, is the percentage of multi-dimensionally poor people in the population. The average deprivation score for the multi-dimensionally poor is denoted as intensity, A. The MPI is the product of H and A.

$$MPI = H \times A$$

Hypothetical example for calculating the living standard index

	Households			
	1	**2**	**3**	**4**
Household size	**3**	**6**	**8**	**7**
Education				
No man OR no woman in the household above 10 years of age has completed five years of schooling	0	1	1	1
At least one school–aged child is not attending school (between 6 and 11 years of age)	0	0	0	1
At least one child is not going to school because of quality issues	0	0	0	1
Health				
Health facilities are not used at all, or are only used once in a while, because of access constraints (too far away, too costly, unsuitable, lack of tools/staff, not enough facilities)	0	0	0	1
At least one child under the age of five is not fully immunised according to the vaccinations calendar (households with no children under five are considered non–deprived)	0	1	0	1
At least one woman in the household who has given birth in the last three years did not receive ante–natal check–ups (households with no woman who has given birth are considered non–deprived)	0	0	1	1
At least one woman in the household has given birth in the last three years attended by untrained personnel (family member, friend, traditional birth attendant, etc.) or in an inappropriate facility (home, other) (households with no woman who has given birth are considered non–deprived)	0	0	0	1
Living conditions				
Household has no access to an improved source of water according to SDG standards, considering distance (less than a 30 minutes return trip): tap water, hand pump, motor pump, protected well, mineral water	1	1	0	0
Household has no access to adequate sanitation according to SDG standards: flush system (sewerage, septic tank and drain), privy seat	0	0	0	1
Household has unimproved walls (mud, uncooked/mud bricks, wood/bamboo, other)	1	1	1	0
Household is overcrowded (four or more people per room)	1	1	0	0
Deprived if the household has no access to electricity	1	1	0	0
Household uses solid cooking fuels for cooking (wood, dung cakes, crop residue, coal/charcoal, other)	1	1	0	1
Household does not have more than two small assets (radio, TV, iron, fan, sewing machine, video cassette player, chair, telephone, watch, air cooler, bicycle) OR no large asset (refrigerator, air conditioner, tractor, computer, motorcycle), AND has no car.	1	1	0	1
Household is deprived in land AND deprived in livestock, i.e.: a) Deprived in land: the household has less than 2.25 acres of non–irrigated land AND less than 1.125 acres of irrigated land b) Deprived in livestock: the household has less than 2 cattle, fewer than 3 sheep/goats, fewer than 5 chickens AND no animal for transportation (urban households are considered non–deprived)	0	1	1	0
Household deprivation score, c (sum of each deprivation multiplied by its weight)	23.8%	50.8%	29.4%	81%
Is the household poor? (c>=33.3 percent)	No	Yes	No	Yes

Weighted deprivations in household 1:

$$(1 \times 4.76) + (1 \times 2.38) + (1 \times 2.38) + (1 \times 4.76) + (1 \times 4.76) + (1 \times 4.76) = 28.6\%$$

$$\textit{Headcount (H)} = \left(\frac{0+6+0+7}{3+6+8+7} \right) = 0.542$$

(54.2 per cent of people are multidimensionally poor)

$$\textit{Intensity of poverty (A)} = \left(\frac{(50.8 \times 6) + (81 \times 7)}{6 + 7} \right) = 67.0\%$$

(The average poor person is deprived in 67.1 per cent of the weighted indicators)

$$MPI = H \times A = 0.542 \times 0.671 = 0.363$$

Contribution of deprivation in

Education

$$\text{Contribution}_1 = \left(\frac{16.67 \times (6 + 7) + 12.5 \times 7 + 4.17 \times 7}{3 + 6 + 8 + 7} \right) / 36.3 = 38.3\%$$

Health

$$\text{Contribution}_2 = \left(\frac{5.56 \times 6 + 16.67 \times 7 + 5.56 \times (7 \times 3)}{3 + 6 + 8 + 7} \right) / 36.3 = 30.6\%$$

Living Standards

$$\text{Contribution}_3 = \left(\frac{4.76 \times (6 \times 5) + 2.38 \times (6 \times 2) + 4.76 \times (7 \times 3)}{3 + 6 + 8 + 7} \right) / 36.3 = 31.1\%$$

[1]Government of Pakistan, 2016.

Data sources

For this report, multiple sources of data are used. For constructing the **Human Development Index (HDI),** the *Pakistan Social and Living Standards Measurement (PSLM) survey 2014/15* is used for all parts of the country, except the Federally Administered Tribal Areas (FATA). To compute the HDI for FATA, the *FATA Development Indicators Household Survey (FDIHS) 2013/14* is used. The unit of analysis for the HDI is the district. For comparison over time, six waves of the *PSLM* survey are used— 2004/05, 2006/07, 2008/09, 2010/11, 2012/13, and 2014/15. The HDI is not computed at the district level for Azad Jammu & Kashmir (AJK), FATA, and Gilgit-Baltistan (GB), which are considered separate regions due to the unavailability of district-level data.

Regions

Islamabad
Islamabad Capital Territory

Azad Jammu & Kashmir
All districts of Azad Jammu & Kashmir

Gilgit-Baltistan (GB)
All districts of Gilgit–Baltistan

Federally Administered Tribal Areas (FATA)
All agencies and frontier regions

Northern Khyber Pakhtunkhwa
Buner, Kohistan, Malakand, Shangla, Chitral, Battagram, Swat, Mansehra, Abbotabad, Lower Dir, Haripur, Upper Dir, Tor Ghar

Southern Khyber Pakhtunkhwa
Kohat, Karak, Bannu, Hangu, Lakki Marwat, Dera Ismail Khan, Tank

Central Khyber Pakhtunkhwa
Peshawar, Nowshera, Mardan, Swabi, Charsadda

Northern Punjab
Attock, Jhelum, Chakwal, Rawalpindi

Western Punjab
Mianwali, Bhakhar, Dera Gazi Khan, Layyah, Rajanpur, Muzaffargarh

Eastern Punjab
Hafizabad, Narowal, Sheikhupura, Nankana Sahib, Gujrat, Kasur, Mandi Bahauddin, Gujranwala, Sialkot, Lahore

Central Punjab
Sargodha, Khushab, Faisalabad, Jhang, Toba Tek Singh, Okara, Chiniot

Southeast Punjab
Bahawalnagar, Bahawalpur, Sahiwal, Lodhran, Rahimyar Khan, Vehari, Multan, Khanewal, Pakpattan

Northern Balochistan
Quetta, Killa Abdullah, Killa Saifullah, Musakhail, Barkhan, Ziarat, Pishin, Loralai, Zhob, Kohlu, Dera Bugti, Sibi, Sherani, Kohlu, Harnai

Southeast Balochistan
Awaran, Lasbela, Kech/Turbat, Panjgur, Gawadar, Khuzdar, Washuk

Central Balochistan
Lehri, Bolan/Kachhi, Jhal Magsi, Naseerabad, Jaffarabad, Chaghi, Mastung, Kalat, Kharan, Noshki

Eastern Sindh
Sukkur, Khairpur, Nawabshah, Tharparkar, Naushehro Feroz, Ghotki, Umerkot, Mirpurkhas, Sanghar, Mitiari, Tando Allahyar, Tando Muhammad Khan

Western Sindh
Jamshoro, Dadu, Kashmore, Jacobabad, Kamber Shahdadkot, Thatta, Badin, Shikarpur

Karachi, Hyderabad
Karachi, Hyderabad

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Notes

1   UNDP 2016b.
2   UNDP 1990.
3   Sen 1999.
4   UNDP 1990.
5   UNDP 2017a.
6   Nussbaum 2003.
7   Indeed, the GDP was famously said to measure all the things in a country except those that really matter as quoted by John F. Kennedy, at speech in University of Kansas, 1968.
8   Fukuda-Parr 2000.
9   Specifically, income is a "surrogate for all other dimensions of human development not reflected in a long and healthy life". Read more in Technical Note 1.

10   Fukuda-Parr and Kumar 2005.
11   For a more detailed and technical discussion of this section, see Technical Note 1.
12   UNDP 2016b.
13   UNDP 2015.
14   UNDP 2017b.
15   The HDI cut-offs used (and their corresponding classifications) are arbitrary and should be referred to with caution.
16   UNDP 2016a.
17   Ibid.
18   The cut-offs used in the global HDI computations are different than the ones used for this report. The global HDI cut-offs are as follows: Low—less than 0.550, Medium—between 0.550 and 0.699, High—between 0.700 and 0.799, and Very High—greater than 0.800.
19   Government of Pakistan 2015a.
20   The province-wise breakup of districts is as follows: Balochistan: 28 (out of a potential 30), KPK: 25, Islamabad Capital Territory: 1, Punjab: 36, and Sindh: 24. No disaggregation is possible for AJ&K, GB or FATA due to data constraints.
21   ISSI 2016.
22   The maximum number of years an individual may be expected to stay in education as per existing enrolment trends in Pakistan is 15 years, and the corresponding maximum for average schooling is 10. Maximum goalposts are based on district-wise mean and expected years of schooling. The lower cut-off is 0. For more details on how the sub-indices are constructed, see Technical Note 2.
23   UNDP 2015.
24   Nussbaum 2003.
25   Walls built with stones, blocks or bricks.
26   Roofs made with iron sheets, t-iron, bricks, and reinforced brick cement.