# 4. Housing, Water supply & Sanitation

### 4.1 Introduction

Most of the households in Pakistan do not have access to adequate potable water. Many also lack toilets and adequate sanitation systems. The Government aims to expand access to clean drinking water and to improve sanitation particularly in rural areas. The main Government strategy in water supply is to improve the performance and operation of local water supply systems by promoting community responsibility for the management and maintenance of systems. To improve the sanitation the government is promoting the construction of household latrines, the construction of open surface drains with street pavements and providing hygiene education.

In this chapter, information is presented on housing, electricity, gas, water supplies and sanitation.

### 4.2 Housing:

In overall Pakistan, 86 percent of households in 2010-11 reported that they have own dwelling units as compared to 87 percent in 2008-09 (Table 4.1). This percentage is higher in rural areas (91 percent) as compared to (76 percent) in urban areas. At provincial level trends are more or less similar, Punjab at 86 percent (88 Percent in 2008-09), Sindh at 84 percent (86 Percent in 2008-09), Khyber Pakhtunkhwa at 87 percent (88 Percent in 2008-09) and Balochistan at 89 percent (87 Percent in 2008-09) (Table 4.1). Balochistan have the highest proportion of households (89 percent) that have own dwelling units as compared to other provinces. In Islamabad (Federal Capital), 36 percent (41 percent in 2008-09) households live in rented or subsidized rented units and 55 percent (49 percent in 2008-09) of households have their own housing units. In all other districts in the country people predominantly live in their own housing units. Rajanpur with 98 percent in Punjab, Mitiari and Tharparker with 98.5 percent in Sindh, Chitral with 99 percent in Khyber Pakhtunkhwa and Ketch\Turbat with 99.6 percent in Balochistan are the districts where people predominantly live in their own housing units. On the other hand, the districts at the bottom are Lahore (71 percent) in Punjab, Mir Pur Khas (69 percent) in Sindh, Peshawar (72 percent) in Khyber Pakhtunkhwa, and Dera Bugti (60 percent) in Balochistan.

Table 4.2 shows percentage distribution of households for material used for "Roof". In overall Pakistan Wood/ Bamboo 36 percent (41 percent in 2008-09) is predominantly used as material for Roof construction. This percentage is higher in rural areas (48 percent) as compared to only (13 percent) in urban areas. An important point here is that in year 2008-09, some people were reporting TR/Garder in RCC/RBC and some were including it in the category Sheet/Iron. And similarly some districts i.e. Sargodha, Bhakhar, Khushab and Mianwali previously reported Garder-Bala in Wood/Bamboo. But for the year 2010-11, the field enumerators were specifically instructed to include TR/Garder & Garder-Bala in the category "Others" and were asked

to specify. Therefore, a marked increase will be observed in the category "Others". In provinces, Punjab is at 31 percent (38 Percent in 2008-09), Sindh at 32 percent (36 Percent in 2008-09), Khyber Pakhtunkhwa at 51 percent (55 Percent in 2008-09) and Balochistan remained stable (73 percent) (Table 4.2). The use of Wood/Bamboo as material used for roof is highest in Balochistan (73 percent) as compared to other provinces. D.G Khan with 71 percent in Punjab, Tharparkar with 80 percent in Sindh, Kohistan with 88 percent in Khyber Pakhtunkhwa and Musa Khel with 97 percent in Balochistan are highest districts using Wood/Bamboo as material used for roof. Whereas Islamabad with 4.5 percent in Punjab, Karachi with 1.3 percent in Sindh, Haripur with 22 percent in Khyber Pakhtunkhwa and Sibbi with 43 percent in Balochistan are lowest districts using Wood/Bamboo as material used for roof. Layyah with 46 percent, Dadu 48 percent, Batagram 53 percent and Ziarat with 26 percent are top ranked districts using sheet/iron as material for roof construction. Bahawalnager with 86 percent, Ghotki 56 percent, Tank 32 percent and Sibbi with 35 percent are top ranked districts using "other" as material for roof construction.

Similarly, Table 4.3 shows percentage distribution of households for material used for the construction of "Walls". In overall Pakistan, Burnt Bricks/Blocks have been used in 72 percent housing unit in 2010-11 (same in 2008-09). This percentage is higher in urban areas (95 percent) as compared to (61 percent) in rural areas. At provincial level, Punjab is at 83 percent (82 Percent in 2008-09), Sindh at 66 percent (67 Percent in 2008-09), Khyber Pakhtunkhwa at 54 percent (50 Percent in 2008-09) and Balochistan at 23 percent (22 percent in 2008-09) (Table 4.3). The use of Burnt Bricks/Blocks in Balochistan is considerably low as compared to other provinces except Quetta, Gawadar and urban Sibbi. Lahore with 99 percent in Punjab, Karachi with 98 percent in Sindh, Peshawar with 77 percent in Khyber Pakhtunkhwa and Quetta with 74 percent in Balochistan are the top districts using Burnt Bricks/Blocks as material for walls. Whereas D. G. Khan & Rajanpur with 36 percent in Punjab, Tharparker with 16 percent in Sindh, Chitral & Kohistan with 4 percent in Khyber Pakhtunkhwa and Harnai with 1 percent in Balochistan are the lowest ranked districts using Burnt Bricks/Blocks as material used for walls.

## 4.3 Electricity & Gas:

Table 4.5 shows that 91 percent (same in 2008-09) of households were using electricity as a fuel for lighting. This percentage is higher in urban areas (98 percent) as compared to (88 percent) in rural areas. At provincial level, Punjab remained same (93 percent), Sindh at 90 percent (87 Percent in 2008-09), Khyber Pakhtunkhwa at 93 percent (94 Percent in 2008-09) and Balochistan at 72 percent (73 percent in 2008-09) (Table 4.5). Punjab and Khyber Pakhtunkhwa with 93 percent have highest number of households having electricity connections as compared to other provinces. Narowal with 100 percent in Punjab, Larkana with 99 percent in Sindh, Batagram with 100 percent in Khyber Pakhtunkhwa and Qilla Abdullah with 98 percent in Balochistan have the highest number of households with electricity connections. Whereas, Rajanpur with 61 percent in Punjab, Tharparker with 46 percent in Sindh, Kohistan with 57 percent in Khyber

Pakhtunkhwa and Dera Bugti with 9 percent in Balochistan have the lowest number of households with electricity connections. In rural areas of Rajanpur and Tharparker 44 percent of the households whereas in Chaghi 67 percent of the households are using Gas/Oil as fuel for lighting. Dera Bugti has the highest percentage where 35 percent of households use Candles for lighting.

Table 4.6 indicates that the vast majority (65 percent) of households are using wood/charcoal or other as fuel for cooking in overall Pakistan. This percentage is higher in rural areas (89 percent) as compared to only (17 percent) in urban areas. Overall 41 percent households in Punjab (46 percent in 2008-09), 45 percent in Sindh (47 Percent in 2008-09), 76 percent in Khyber Pakhtunkhwa (81 Percent in 2008-09) and 66 percent in Balochistan (78 percent in 2008-09) are using wood/charcoal as fuel for cooking (Table 4.6). At national level 35 percent of households are using gas as fuel for cooking as compared to 31 percent in 2008-09, whereas only 11 percent households in rural areas are using gas as fuel for cooking as compared to 83 percent in urban areas. Lahore with 87 percent in Punjab, Karachi with 96 percent in Sindh, Peshawar with 70 percent in Khyber Pakhtunkhwa and Quetta with 94 percent in Balochistan have the highest number of households using Gas/Oil for cooking. Whereas, only one percent of the households in Bhakhar in Punjab, Umer Kot in Sindh, Chitral & Bonair in Khyber Pakhtunkhwa and Barkhan & Musa Khel in Balochistan are using Gas/Oil as fuel for cooking. Karachi followed by Quetta, are the two top districts in the country with 96 percent and 94 percent having gas connections, respectively. Layyah, Upper Dir, Shangla, D.I Khan, Batagram, Kohistan, Nushki, Kharan, Barkhan, Musa Khel and Sherani are the districts where 98 percent of the households do not have gas connections.

## 4.4 Sources of Drinking Water

32 percent of households in overall Pakistan are using piped water as main source of drinking water (Table 4.7). This percentage is higher in urban areas (58 percent) than in rural areas (19 percent). At provincial level, Punjab is at 24 percent (28 percent 2008-09), Sindh remained same (43 Percent), Khyber Pakhtunkhwa at 45 percent (50 Percent in 2008-09) and Balochistan at 35 percent (38 percent in 2008-09). Lahore with 80 percent in Punjab, Karachi with 85 percent in Sindh, Batagram with 81 percent in Khyber Pakhtunkhwa and Quetta with 95 percent in the Balochistan are the districts within provinces which have highest number of households with piped water facility as main source of drinking water. Whereas, Jhang and Muzaffar Garh with 1 percent in Punjab, Larkana with 3 percent in Sindh, Kohistan with 8 percent in Khyber Pakhtunkhwa and Washuk & Dera Bugti with 4 percent in the Balochistan are the districts within provinces which have lowest number of households with piped water facility as main source of drinking water. The main source of drinking water in rural Pakistan is hand pump (38) percent). Hand pumps and motor pumps together contribute 55 percent as compared to 54 percent in 2008-09. In urban areas hand pumps and motor pumps usage has increased to 35 percent in 2010-11 as compared to 33 percent in 2008-09. Moreover, the percentage of households depending upon poor sources of water i.e. dug well, stream, river, pond or canal, either remained unchanged or slightly decreased. Jhang with 32 percent, Tharparker with 86 percent, Kohistan with 92 percent and Sherani with 100 percent are the districts where the usage of Dug well, river, canal or stream as source of drinking water is higher than other districts.

Khyber Pakhtunkhwa has the best water supply amongst the provinces in terms of tap water but on the other hand its 30 percent population depend on dug well, river, canal or stream. The vast majority of the rural population of Punjab has either hand pump or water from a motor pump and only 7 per cent of the rural population depend on a dug well river, canal or stream as a source of drinking water. In Khyber Pakhtunkhwa 35 percent of the rural population, depend on water from a dug well, river, canal, stream.

### 4.5 Toilets

In Pakistan as a whole unavailability to toilet facility has declined, 18 percent households do not have any toilet facility as compared to 22 percent in 2008-09 (Table 4.8). This varies greatly between urban and rural areas i.e. 2 percent of urban households have reported no toilet facility as compared to 27 percent of rural households. Overall Punjab has the highest percentage of households reporting no toilet i.e. 23 percent while Sindh has the lowest percentage .i.e. 8 percent. In rural Punjab high percentage of rural households (with the exception of rural Islamabad (3 percent), Gujranwala (7 percent), and Sialkot (9 percent)) are without any toilet facility. In other provinces situation is not as worse as of Punjab but still many districts do not have toilet facility for rural population. In rural areas Rajanpur with 78 percent in Punjab, Thatta & Tharparker with 43 percent in Sindh, Kohistan with 66 percent in Khyber Pakhtunkhwa and Loralai with 63 percent in Balochistan are the districts with the highest percentage of households without any toilet facility.

At Provincial level, 72 percent of households in Punjab (69 percent in 2008-09), 62 percent in Sindh (60 Percent in 2008-09), 62 percent in Khyber Pakhtunkhwa (56 Percent in 2008-09) and 31 percent in Balochistan (24 percent in 2008-09) are using flush toilet facility.96 percent of households in urban areas in 2010-11 are using flush toilet facility as compared to 95 percent in 2008-09. This percentage is highest in Punjab (97 percent) and lowest in Balochistan (84 percent). The top ranked districts in urban areas within the province having flush toilet facility are Sheikhupura with 97 percent in Punjab, Karachi with 99 percent in Sindh, Lower Dir, and Abbottabad & Bannu with 99 percent in Khyber Pakhtunkhwa, and Quetta with 98 percent in Balochistan. The lowest ranked districts in urban areas within the province having flush toilet facility are Narowal with 68 percent in Punjab, Khairpur with 71 percent in Sindh, Upper Dir with 73 percent in Khyber Pakhtunkhwa, and Jhal Magsi with 47 percent in Balochistan.