GOVERNMENT OF PAKISTAN
MINISTRY OF WATER AND POWER

ANNUAL FLOOD REPORT 2012

Rajanpur (Punjab)

Jacobabad (Sindh)

Sukkur (Sindh)

Naseerabad (Balochistan)

Pictures of 2012-Floods

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FOREWARD

Pakistan is a country of diverse ecosystems. The floods of various magnitudes since 1950 to 2012 affected vast areas in the four provinces including Gilgit-Baltistan, FATA & Azad Jammu & Kashmir. Flood damages are caused mainly due to riverine flooding and flash floods in secondary and tertiary rivers including hill torrents, besides cyclone & urban flooding.

Pakistan suffers every year from flooding caused by massive monsoon rains that sweep across the country late in the summer which causes rivers and streams to overflow. 2012-monsoon rains have once again inundated huge areas of Southern Punjab, Sindh and Northeastern parts of Balochistan province. Heavy rainfall led to flash floods in hilly areas. The worst affected districts due to torrential rains during monsoon season 2012 were Districts Sialkot, Rajanpur, Dera Ghazi Khan of Punjab, Districts Kashmore, Jacobabad, Shikarpur in Sindh, Districts Nasirabad and Jaffarabad, Killa Saifullah, Jhal Magsi and Loralai in Balochistan. There have been significant casualties, loss of shelter and livelihood, and also damage to public and private infrastructure such as roads and bridges.

The country has faced three consecutive flood events. The floods of 2010 was the worst ever riverine floods in the history of the country, which affected about 20 million population, 1985 people lost their lives, 1,608,184 houses were damaged/destroyed, 17,553 villages were affected and a total area of 160,000 Sq.km was affected. In the recent years, vulnerabilities of urban flooding have increased. 2011-Rains/Floods affected an area of 26,305 Sq.km, population of about 9.20 million, claiming more than 500 lives, damaging 1.357 million houses and devastated standing crops on about 1.90 million acres. Similarly, the torrential rains during monsoon season-2012 affected population of about 4.85 million (about 14,159 villages), about 571 people lost their lives besides cropped area of about 1.172 million acres were affected.

There is a dire need to adopt modern techniques for better flood management that improves the functioning of the river basin as a whole, recognizing that floods have beneficial impacts and can never be fully controlled. Such an approach seeks to maximize the net benefits from the use of floodplains and to minimize loss of life, subordinating flood loss reduction to the overall goal of maximizing the efficient use of the floodplain. Therefore integrated flood management is a process that promotes an integrated, rather than fragmented, approach to flood management. It integrates land and water resources development in a river basin, within the context of integrated water resources management with a view to maximizing the efficient use of floodplains and to minimize loss of life.

In Pakistan, floods are generally caused by the heavy concentrated rainfall in the catchment areas of main rivers during the monsoon season, which are often augmented by snowmelt. Pakistan has suffered a cumulative financial loss of more than US$ 39.055

billion during the past 65 years. During the period 1950 to 2012, around 11,239 people lost their lives, some 180,234 villages damaged/ destroyed and a total area of 599,459 Sq.km was affected due to 20 major flood events.

Keeping in view of recent challenges including climate change, the government is planning to formulate a Comprehensive Flood Management Plan for next 10 years, based on integrated and innovative approaches. The discharge capacity of all those aged structures (Barrages/Bridges), which do not have the adequate flood flows capacity, are being reviewed for remodeling by the respective authorities through coordination of Federal Flood Commission. The existing Flood Forecasting & Warning System of the country is being upgraded and expended by installation of new Weather Radars and expansion of Flood Telemetry Network Stations. All such efforts would help considerably minimizing damages of future floods.

EXECUTIVE SUMMARY

Generally, floods are caused by the heavy concentrated rainfall during the monsoon season, which are sometimes augmented by snowmelt flows in rivers. Occasionally destructive floods are also caused due to Monsoon currents originating in the Bay of Bengal and resultant depressions which often result in heavy downpour in the Himalayan foothills, which is sometime augmented by the weather systems from the Arabian Sea (Seasonal Low) and from the Mediterranean Sea (Westerly Wave).

Prior to 1976, the Provincial Governments were responsible for the planning and execution of flood protection works. Heavy losses sustained to the economy during disastrous floods of 1973 and 1976 were discussed at an Inter-Provincial Conference in 1977 and subsequently in January 1977, it was decided by the Federal Government to establish Federal Flood Commission (FFC) at the Federal Government level for Integrated Flood Management on country wide basis. Since its establishment, FFC has so far prepared and executed three National Flood Protection Plans covering periods from 1978-1988 (NFPP-I), 1988-1998 (NFPP-II) and 1998-2008 (NFPP-III). A total investment of around Rs 27.00 billion (this includes 1988-Flood Damages Restoration Project and 1992-94 Flood Damages Restoration Project costing Rs 1.80 billion and 6.50 billion respectively) has been made for construction of flood protection infrastructure and improvement in Flood Forecasting & Warning System in the past 36 years. Presently, the provinces & federal line agencies are maintaining more than 1410 No. of Spurs and around 6807 Km long flood embankments in various parts of the country.

Keeping in view the level of investments made under the three 10-Year Plans (NFPP I,II&III), and the needs of the provinces, Gilgit-Baltistan & Federally Administered Areas (FATA) & AJK, the National Flood Protection Plan –IV was prepared and submitted to Ministry of Water and Power in November 2006, for approval of the Competent Authority. However, the same could not be approved in time due to low priority given to Flood Sector as result of drought like conditions over the country during that period and funding constraints. Keeping in view the large scale damages occurred during past three consecutive floods in country, the need for investment in flood sector has gained importance. It was therefore decided to update the draft National Flood Protection Plan-IV (NFPP-IV) keeping in view the lessons learnt from 2010-floods. For that purpose TORs for consultancy services were prepared in consultation with Provinces & Federal Line Agencies. PMPIU of Ministry of Water & Power in consultation with Federal Flood Commission has initiated working on engagement of consultants through Water sector Capacity Building Project. Signing of contract with the selected consulting firm/consortium is expected in February 2013. The plan is likely to be finalized within the period of 14 months.

Pakistan has suffered a cumulative financial loss of more than US$ 38 billion during the past 65 years. Around 11,239 people lost their lives, some 180,234 villages damaged/ destroyed and a total area of 599,459 Sq.km was affected due to the 20 major flood

events. The 2010-Floods were worst flooding in the past about 80 years in the region. Rains/Floods of 2011-monsoon season were of small scale, which mainly affected the Sindh Province, especially southeastern parts of the province, northeastern Balochistan, and southern Punjab, whereas the torrential rains during monsoon season 2012 affected Khyber Pakhtunkhwa, Upper Sindh, Southern Punjab and Northeastern Balochistan.

Federal Flood Commission is responsible for integrated planning for flood management at the national level and arranges financial resources for the implementation of new flood protection projects on country wide basis. Presently, funds are allocated under PSDP for execution of urgent nature flood projects through Normal/Emergent Flood Programme. The four Provinces, Gilgit-Baltistan, FATA and AJ&K submit their flood protection schemes, which are technically scrutinized by the Federal Flood Commission and submitted to Ministry of Water & Power for approval of DDWP/ CDWP. Flood Communication Cell of Federal Flood Commission remains operational on round-the-clock basis for the entire flood season (1st July to 15th October) each year. The rainfall and rivers flow data including major reservoirs water levels data is obtained from Flood Forecasting Division, Lahore, WAPDA and other concerned organizations and transmitted to all concerned agencies through Daily Flood Situation Report.

2012-Floods

The torrential rains started in first week of September 2012 in Khyber Pakhtunkhwa, Upper Sindh, Southern Punjab and Northeastern Balochistan of Pakistan. Heavy rainfall led to flash floods in hilly areas, and rising water levels in hill torrents/ flood flows generating nullahs. The Southern Punjab i.e. Districts Dera Ghazi Khan and Rajanpur, upper Sindh (Districts Jacobabad, Shikarpur, Khashmore, Larkana, Sukkur, Qambar-Shahdadkot, Dadu and Badin), and Northeastern Balochistan (Districts Jaffarabad, Naseerabad, Jhal Magsi, Loralai and Qila Saifullah) were badly affected. The 2012 rains/floods affected a total population of about 4.85 million (0.887 million in Punjab, 3.174 million in Sindh, & 0.788 million in Balochistan provinces, affecting 14,159 villages, claiming about 571 lives, damaging 636,438 houses & cropped area of about 1.172 million acres.

Way Forward

Keeping view the lessons learnt during past three consecutive years of flooding and rapid climate change, it is felt that all urgent nature new flood projects as well as O&M works of flood protection infrastructure are completed on priority basis before start of Flood Season 2013. The encroachments in flood plains and waterways/ drains may be removed by the Provincial Irrigation Departments and Federal Line Agencies with the help of Districts Administration in order to enhance the discharge capacity of rivers/drains and minimize the loss of human lives and damages to the property in future floods. In tackling the causes and consequences of monsoon-triggered floods, the government, its international partners and civil society actors will have to adopt measures that go beyond traditional humanitarian assistance.

Acknowledgement

The preparation and distribution of Annual Flood Report of Federal Flood Commission commenced from 1998 with a view to compile essential information on yearly basis for documentation of the yearly flood events, flood flow data, lessons learnt from those yearly events, and for exploring the needs for future protective measures.

The 2012 Annual Flood Report contains inter-alia, information about historical floods in Pakistan, flood management works, functions of FFC & other related Provincial and Federal Government organizations, flood warning dissemination system and flood preparedness activities carried out during flood season. The report specifically focuses on unprecedented rains/floods of 2012, which caused extensive damages to private as well as public infrastructure in Southern Punjab, Sindh & Balochistan Provinces.

Services of following officers are greatly acknowledged who contributed in a dedicated manner for the preparation of 2012-Annual Flood Report of Federal Flood Commission:

Sr. #	**Name**	**Designation**	**Role**
1.	Mr. Asjad Imtiaz Ali	Chief Engineering Advisor/Chairman Federal Flood Commission	Supervisory
2.	Mr. Alamgir Khan	Chief Engineer (Floods)	Contributory
3.	Mr. Ather Hameed	Principal River Engineer	Contributory
4.	Mr. Ashok Kumar	Superintending Engineering (Floods)	Contributory
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MECHANICS OF FLOODS

1. MECHANICS OF FLOODS

1.1 Flood Problem in Perspective

Floods constitute one of the world's most serious environmental hazards. Four thousand years of recorded history tells of man's repeated failure to evade the destructiveness of floods. In spite of many years of experience and highly developed scientific techniques, floods even now continue to play havoc almost in every part of this planet.

Losses from floods annually destroy about million acres of crops land and affect hundred thousands of people with a monetary loss in billion of rupees. Major direct flood damages in Pakistan are to agricultural crops, urban and rural abadies, besides, other private & public utilities. It is generally recognized that complete prevention from floods is humanly impossible, but protection from flood is feasible and is a vital necessity. By proper planning, means can be devised to harness the fury of floods to safeguard human life and property. Devoid their destructive power, floods can be used in the service and the welfare of a community.

1.2 Floods in Pakistan

The floods in rivers are generally caused by heavy concentrated rainfall in the catchments, during the monsoon season, which is sometimes augmented by snow melt flows. Monsoon currents originating in the Bay of Bengal and resultant depressions often result in heavy downpour in the Himalayan foothills, which occasionally generate destructive floods in the main rivers and their major tributaries. Sometimes exceptionally high flood flows in major rivers are generated due to formation of temporary natural dams by landslide or glacier movement and their subsequent collapse.

Flooding of the Indus River and its tributaries represents the greatest hazard in Pakistan. Floods occur normally in summer season (July - October). Therefore, damages to agriculture are mainly to the standing Kharif crops. However, in some cases the inundated lands do not dry up in time and ultimately affecting sowing Rabi crops.

The major rivers (Indus, Jhelum, Chenab, Ravi, Sutlej) and secondary rivers (Kabul, Swat etc.) cause flood losses by inundating areas along their banks, by damaging irrigation and communication facilities across or adjacent to the rivers, and by erosion of land along the river banks. In the upper part of the Indus Basin, floodwater spilling over the high banks of the rivers generally returns to the river. However, in the lower part of Indus River (Sindh Province), which is flowing at a higher elevation than adjoining lands, spills water do not return to the main river channel. This largely extends the extent and period of inundation resulting in more damages. Although flood protection by embankments has been provided almost along the entire length in the Sindh Province and many locations in the upper parts of the country, however, sometimes, the bund breaches occurred (LMB Taunsa Barrage & Tori Bund events during 2010-Monsoon Season) or overtopped. Such breaches often cause greater damages than would have occurred without the bunds because of their unexpected nature and intensification of land use following the provision of flood protection.

The existing flood flows discharging capacity of important structures (Barrages and Rail or Road Bridges) on the Indus, Chenab and Ravi has been found to be inadequate. During exceptionally high floods stage this results in afflux on the upstream side, which sometimes results in breaches in the flood embankments. At times, the flood

embankments have to be breached at pre-selected locations to save the main structures (RMB Jinnah Barrage during Monsoon Season 2010).

1.3 Flood Control Objective & Need

Flood management planning in Pakistan is being carried out to essentially cover the following three specific objectives:

- To reduce or eliminate damages to existing properties;
- To prevent future increase in damages; and
- To mitigate the residual hazard.

Flood control planning for Pakistan is a complex problem and calls for great ingenuity and experience on the part of the planners. The nature of problems varies in each of the four provinces and federally administered areas due to varying physiographic, climatic, demographic, and socio-economic conditions. Even the characteristics of catchment areas of various rivers differ from each other. Flood problems relating to various provinces are given as under:

Punjab

In Punjab, the flood protection marginal bunds have been generally constructed either to protect Headworks and other irrigation structures, or to safeguard certain towns, villages & adjoining agricultural lands. Due to general topography of the area sloping towards the south-west, pre-determined breaching sections have been provided in the right marginal bunds for operation for safety of Headworks/ barrages in case of exceptional high flood flows i.e. likely to exceed the designed level. In order to protect areas from erosion, spurs have been constructed in critical reaches. These spurs have protected vast areas and in some cases even large tracks of eroded lands have been reclaimed.

Sindh

The Indus River flows on a ridge in Sindh Province and generally, surrounding areas (outside the flood embankments) are lower than the river bed; hence, water once leaving the Indus River does not return back to the main channel. Escaped water thus causes greater damage to widespread areas, and it persists for a longer period even after flood peaks are over (Refer Tori Bund, Moolchand Shah Bund breaches during 2010-Monsoon Season). Moreover, Sindh is situated on a receiving end of drainage of all the rivers and if flood protection measures adopted in the upper reaches are not properly planned, severe damages are likely to occur in the Province. In most of the reaches, a double line of flood embankments has been constructed on both sides of the river from Guddu to few kilometers short of Arabian Sea. These embankments have been further compartmentalized to contain widespread inundation.

Khyber Pakhtunkhwa

In Khyber Pakhtunkhwa, the floods are mainly due to flash flood flows in secondary rivers (Kabul, Swat, Punjkora, Kurrum etc.) and major hill torrents/flood flow generating nullahs having steep bed slopes, which greatly increase flood velocity and severely erode the banks. In Khyber Pakhtunkhwa, mostly short spurs have been constructed to save the areas from erosion. A battery of about 40 spurs having considerable shank length and a

Marginal Bund have been constructed along the right bank of Indus River downstream Chashma Barrage i.e. Chashma Right Bank for protection of D.I. Khan City and adjoining area from devastating flood flows of Indus River. A large number of spurs and flood embankments in critical locations have also been constructed along Kabul, Swat, Panjkora, Kurrum rivers and other flood flows generating nullahs/hill torrents.

Balochistan

Due to peculiar physiographic and climatic characterizes in Balochistan, mostly the flood protection walls/embankments & short spurs have been constructed for protection of orchards, agricultural lands and abadies. Some bunds have also been constructed to serve as a flood diversion/ abatement measures. Similar nature flood protection measures have been undertaken in Gilgit Baltistan, FATA and AJK for protection of abadies and adjoining agricultural lands from checking the erosive action of rivers/flood flows generating nullahs.

1.4 Flood Protection Facilities & Irrigation Network of Pakistan

Five main rivers, namely, the Indus, Jhelum, Chenab, Ravi and Sutlej flow through the country's plains. The Indus (including the Kabul, Swat and Panjkora tributaries) Jhelum and Chenab are known as the **western rivers**, and the Ravi, Beas, and Sutlej known as the **eastern rivers**. Supplemented by a number of secondary rivers and streams, these rivers supply water to the entire Indus Basin Irrigation System. The rivers have their origin in the higher altitudes and derive their flows mainly from snowmelt and monsoon rains. The catchment area of Indus is most unique in the sense that it contains seven (7) of the world's highest-ranking peaks, after Mount Everest. These include **K-2 (28,253 feet), Nanga Parbat (26,660 feet), Rakaposhi (25,552 feet)** etc. Likewise, barring the polar areas, seven (7) glaciers situated in the Indus catchment, **namely Siachin, Hispar, Biafo, Batura, Baltoro, Barpu and Hopper** are amongst the largest in the world.

The Irrigation System of Pakistan is the largest integrated irrigation network in the world, serving around 45 million acres of contiguous cultivated land. The system is fed by the waters of the Indus River and its tributaries. The irrigation network of Pakistan mainly comprises of 3 major reservoirs (Tarbela, Mangla & Chashma), 19 Barrages, 12 inter-river link canals, 45 independent irrigation canal commands and 143 medium dams (having height 15 meters and above).

The major storage reservoirs include Tarbela (existing Live Storage Capacity = 6.557 MAF against original storage capacity of 9.70 MAF), Chashma (existing Live Storage Capacity = 0.263 MAF against original storage capacity of 0.70 MAF) on River Indus and Mangla with existing Live Storage Capacity = 7.392 MAF (this includes the additional storage capacity of 2.88 MAF after Mangla Dam Raising allowing Maximum Conservation Level of 1242 feet) against original storage capacity of 5.34 MAF on River Jhelum. The schematic diagram of Indus Basin Irrigation System is given at **Figure-1.**

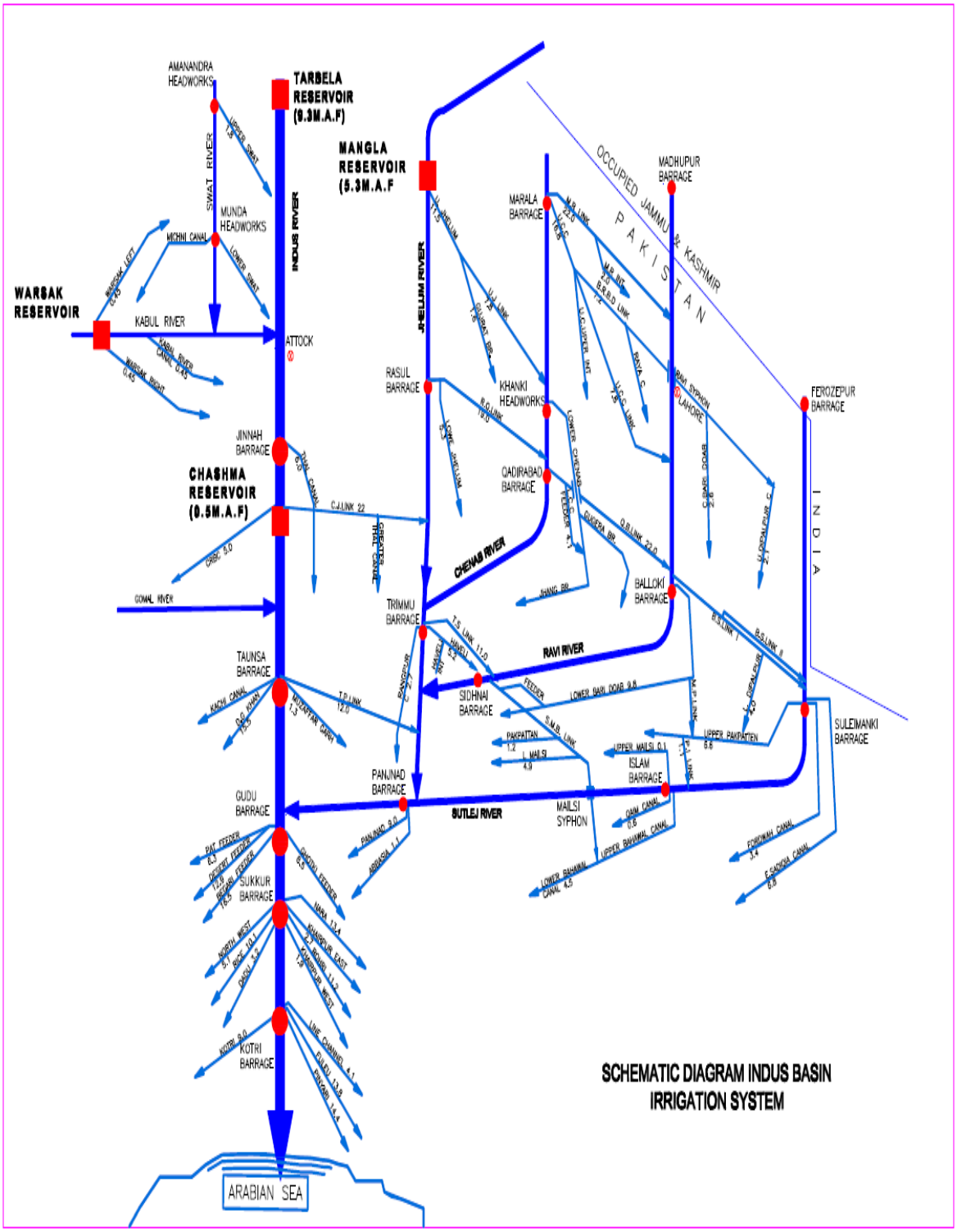

Figure 1: Schematic Diagram of Indus Basin Irrigation System

Diversion of river waters into off-taking canals is made through barrages, which are gated diversion weirs. The main canals in turn deliver water to branch canals, distributaries and minors. The watercourses get their share of water through outlets in the irrigation channels. Distribution of water from a watercourse is made through a time-schedule called "warabandi".

Average annual surface water availability is 138.44 MAF whereas the annual canal withdrawal is 97.08 MAF. Water availability at farm gate is 106 MAF comprising 62 MAF of surface water and 44 MAF of groundwater. Supplemented by an annual

groundwater withdrawal of some 44 MAF, the average depth of water available at the farm gate is 3.07 feet per acre. Approximately three (03) million individual farms with an average size of about 12 acres benefit from this system. Indus River System Authority (IRSA), created in consequence of 1991 Water Accord between the provinces, makes the inter-provincial water allocations.

The existing flood management strategy includes flood flows regulation by three major reservoirs (Tarbela, Chashma on Indus & Mangla on Jhelum), flood forecasting & early warning, protection of important infrastructure, and urban/rural areas by flood embankments and spurs etc. located along the rivers banks, besides other non-structural interventions including rescue and relief measures in case of flooding situation. The Provincial Irrigation Departments (PIDs) maintain about 6,807 km of flood protection embankments and around 1410 spurs along main and other rivers. Province-wise break up of existing flood protection facilities is given as under.

Table-1
EXISTING FLOOD PROTECTION INFRASTRUCTURE

Name of Province	Embankments (K.M)	Spurs (No.)
Punjab	3,334	496
Sindh	2,424	46
Khyber Pakhtunkhwa	352	186
Balochistan	697	682
Total	**6,807**	**1,410**

1.5 Impact of Global Warming/ Climate Change

Frequent and intense floods and storms are the disasters mainly caused by global warming with increasing forced displacement as an extremely likely consequence. According to climate change experts, these disasters happen more or less simultaneously as the result of a global climate pattern. According to the experts from World Climate Research Programme and the World Meteorological Organization (WMO), the climate change was clear evidence and major contributing factor in "unprecedented sequence of extreme weather in Pakistan" in months of July and August 2010. Scientists from Intergovernmental Panel on Climate Change (IPCC) warn that man-caused climate changes can contribute to those disasters happening more frequently.

In 2007 report, a UN scientific body of the IPCC concluded that "it is very likely that hot extremes, heat waves and heavy precipitation events will continue to become more frequent." IPCC also warns; "the floods of the kind that hit Pakistan in 2010 may become more frequent and more intense in the future in the same region and other parts of the world".

Considerable increase in frequency and intensity of extreme weather events, erratic monsoon rains, floods, droughts and rising sea level are indicators of Pakistan's vulnerability to drastic climate change which could be addressed through measures suggested in national policy on climate change and implementation of Integrated Flood Management Plan-IV. The meteorologists and environmental experts have also indicated possible impacts of the climate change which included decrease in crop yields up to 30

percent, decrease of fresh water availability ranging between 12pc to 20pc by 2050 in South Asia particularly in river basins.

The continuous flow of energy from the sun reaches the earth as visible light, out of which 30 per cent immediately scattered back into space, 70 per cent penetrates the atmosphere to heat up the surface. This energy is emitted from the earth into the atmosphere as infrared light, while some of this infrared radiation is absorbed by components in the atmosphere so called greenhouse gases. These greenhouse gases can re-emit this energy in all directions, as result of this; earth is kept some 30°C warmer than without these GHGs, which is essential for life on earth. Dr. Qamar-uz-Zaman Chaudhry, Ex-Director General, Pakistan Meteorological Department and Adviser to Government of Pakistan on climate change, who is also the Vice President of World Meteorological Organization-Asia Region, has pointed out that earth is de-glaciating since 1979. Due to de-glaciating more than 20 per cent of the Polar Ice Cap has melted. Regarding some projections of future climate change, he has predicted that sea level will rise ranging between 7 inches and 2 feet in the 21st century. Dr. Chaudhry was of the view that global climate change is the most dangerous and difficult environmental problem humans have ever created but there is possibility individuals, private organizations and governments can do to reduce the danger.

Talking about Pakistan's vulnerability to climate change, Dr. Qamar-uz-Zaman Chaudhry said that the considerable increase in frequency and intensity of extreme weather events, erratic monsoon rains causing frequent and intense floods and drought are the impacts of the climate change in the country. He further said that the projected recession of (Hindukash) glaciers threatening water inflows into Indus River System, besides increased temperature leading to reduced agricultural productivity and increased intrusion of saline water into Indus delta due to sea-level rise are Pakistan's vulnerability to climate change. He cautioned that these threats may lead Pakistan to water scarcity and food insecurity in future. Other possible impacts of the climate change may lead in decrease of forest productivity, reduced forest area, unfavorable conditions for biodiversity and changes in species composition and higher flood and drought risks in the country.

There is dire need to ensure that climate change is mainstreamed in the economically and socially vulnerable sectors of the economy and to steer Pakistan towards climate resilient development. Therefore, local rain water harvesting measures and conservation, reduction in irrigation losses and use of efficient irrigation techniques, increase of water storage capacity as well as identification of new dam sites have been suggested as adaptation, besides steps for protection of surface and ground water degradation, recycling of waste water, protection of catchments and reservoirs and rational ground water exploitation for integrated water resources development and better flood management in the country.

1.6 Historical Flood Events in Pakistan

Since its creation, Pakistan has faced 20 severe flood event i.e. 1950, 1955, 1956, 1957, 1959, 1973, 1975, 1976, 1977, 1978, 19981, 1983, 1984, 1988, 1992, 1994, 1995, the worst ever floods of 2010 and torrential rains during 2011 & 2012 in Sindh, Northeastern Balochistan and Southern Punjab. The floods of various magnitudes since 1950 to 2012 affected vast areas in the four provinces including Gilgit-Baltistan, FATA & Azad Jammu & Kashmir. Flood damages are caused mainly due to riverine flooding in main rivers and flash floods in secondary and tertiary rivers including hill torrents, besides cyclone & urban flooding. The unprecedented floods of 2010 were the worst ever riverine floods in the history of the country in which about 1985 people lost their lives, 1,608,184 houses

were damaged/ destroyed, 17,553 villages were affected and a total area of 160,000 Sq.km was affected.

In the recent years, vulnerabilities of urban flooding have increased. The Sindh province, particularly southeastern parts of the province was severely affected due to unprecedented rains and inadequate drainage facilities during Monsoon Season-2011. During 2012 rains/floods, about 571 people lost their lives, 636,438 houses were damaged/ destroyed, 14,159 villages were affected and a total area of 4,746 Sq.km was affected. The historical flood events experienced in the past and their damages are given in the **Table-2**.

Table-2
Historical Flood Events experienced in Pakistan

Sr. No.	Year	Direct losses (US$ million)		Lost lives (No)	Affected villages (No)	Flooded area (Sq-km)
		@ 1US$= PKR 40	@ 1US$=PKR 96			
1	1950	227	545	2,190	10,000	17,920
2	1955	176	422	679	6,945	20,480
3	1956	148	355	160	11,609	74,406
4	1957	140	336	83	4,498	16,003
5	1959	109	262	88	3,902	10,424
6	1973	2,388	5,731	474	9,719	41,472
7	1975	318	763	126	8,628	34,931
8	1976	1,621	3,890	425	18,390	81,920
9	1977	157	377	848	2,185	4,657
10	1978	1,036	2,486	393	9,199	30,597
11	1981	139	334	82	2,071	4,191
12	1983	63	151	39	643	1,882
13	1984	35	84	42	251	1,093
14	1988	399	958	508	100	6,144
15	1992	1,400	3,360	1,008	13,208	38,758
16	1994	392	941	431	1,622	5,568
17	1995	175	420	591	6,852	16,686
18	2010	10,000 @ 1US$= PKR 86	11,163	1,985	17,553	160,000
19	2011	3730* @ 1US$= PKR 94	3,809	516	38,700	27,581
20	**2012**	**2640**** @ 1US$= PKR 95	**2,668**	**571**	**14,159**	**4,746**
Total		**8,923**	**39,055**	**11,239**	**180,234**	**599,459**

** Economic Survey of Pakistan 2011-12*
*** NDMA (article at http://www.claimsjournal.com/news/international/2012/10/05/214891.htm)*

1.7 Integrated Approach in Flood Management

Integrated flood management advocates the importance of study of river morphology in context of floods, bank erosion and lateral shifting of the rivers etc. It includes carry out morphological study of various river sub-system, viz. the existing erratic behavior of these rivers manifested in frequent changes in the river course, lateral migration of these river courses to a large distance, heavy over bank spilling due to inadequate channel capacity, frequent carving of secondary or new channels, rising of the river beds, frequent attack on river bank and embankments etc. all summed as the problem of "floods". Hence it calls for a paradigm shift from the traditional, fragmented and localized approach, and encourages

the use of the resources of a river basin as a whole, employing strategies to maintain or augment the productivity of floodplains, while at the same time providing protective measures against losses due to flooding.

In the past, floods were considered as a hydrological reality; only structural and non-structural measures were adopted to deal with this phenomenon, but now well-being of the people of the flood prone areas, their economic growth; and social urgency for alleviating poverty prevailing in these floods affected areas, are over riding concerns. Enough hard work is required to address these concerns from both national and regional perspectives. The regional approach is of particular significance as activities undertaken in one region may affect, positively or negatively, the extent of floods in the other regions, particularly the downstream ones.

There is a need for an approach to flood management that improves the functioning of the river basin as a whole, recognizing that floods have beneficial impacts and can never be fully controlled. Such an approach seeks to maximize the net benefits from the use of floodplains and to minimize loss of life, subordinating flood loss reduction to the overall goal of maximizing the efficient use of the floodplain. Therefore integrated flood management is a process that promotes an integrated, rather than fragmented, approach to flood management. It integrates land and water resources development in a river basin, within the context of integrated water resources management with a view to maximizing the efficient use of floodplains and to minimizing loss of life.

Integrated flood management plans should include drought management, and should take measures to maximize the positive aspects of floods such as by retaining a portion of flood flows for use of agriculture development. Urban flood plans must manage both storm-water quantity and the effects of storm water on water quality. Flood management needs to recognize, understand and account for linkages between upstream and downstream in order to realize synergies in improving river basin performance. Land-use planning and water management should be combined in one synthesized plan with a certain common field, such as the mapping of flood hazards and risks, to enable the sharing of information between land-use planning and water management authorities.

FEDERAL FLOOD COMMISSION

2. FEDERAL FLOOD COMMISSION

2.1 Historic Background

After creation of Pakistan in August 1947, a Central Engineering Authority was established to manage the issues of water, power and allied engineering matters at national level. It was re-designated as Chief Engineering Advisor's Office after the establishment of Water & Power Development Authority (WAPDA) in 1959.

Prior to 1976, the Provincial Governments were responsible for the planning and execution of flood protection works. Disastrous floods of 1973 and 1976 caused heavy loss of life and property and it was felt that the existing flood protection facilities and planning were inadequate to provide effective protective measures for the country. Heavy losses to the economy were discussed at the Inter-Provincial Conference held in January 1977 wherein it was decided to establish Federal Flood Commission (FFC) for integrated flood management on country wide-basis.

2.2 Functions of Federal Flood Commission

The functions under the charter of duties of FFC, as given in para-2 of Resolution, dated 4th January, 1977, are as under:

i. Preparation of National Flood Protection Plans (NFPPs);

ii. Approval of flood control schemes prepared by Provincial Governments and concerned Federal Agencies;

iii. Review of flood damages to flood protection infrastructure and review of plans for restoration and reconstruction works;

iv. Measures for improvements in Flood Forecasting and Warning System;

v. Standardization of designs and specifications for Flood Protection Works;

vi. Evaluation and monitoring relating to progress of implementation of the National Flood Protection Plans (NFPPs);

vii. Preparation of a research program for Flood Control and Protection; and

viii. Recommendations regarding principles of regulation of reservoirs for flood control.

The provincial governments and federal line agencies undertake the implementation of the National Flood Protection Plans (NFPPs). The Federal Government, however, provides the resources for meeting the capital costs of projects under NFPPs.

2.3 Achievements of FFC

Since its establishment in 1977, FFC has so far executed three 10-Years National Flood Protection Plans covering periods from 1978-1988 (NFPP-I), 1988-1998 (NFPP-II) and 1998-2008 (NFPP-III). Brief details of projects executed under the three 10-Years Plans are given as under:

National Flood Protection Plan-I (NFPP-I) (1978-88):

Details of flood protection schemes executed through various programme/projects are given as under;

Normal/ Emergent Flood Programme:

- Expenditure incurred: Rs 1,729.75 million
- No. of flood protection schemes completed in the four Provinces, AJ&K, FATA & NA (now G-B): 311
- Source of Funding: 100% by GOP

Under NFPP-I, emphasis was mainly given on the implementation of structural measures (construction of flood protection structures). Pakistan Meteorological Department (PMD) and WAPDA carried out improvements/expansion in existing Flood Telemetry Network and Flood Forecasting & Warning System.

National Flood Protection Plan-II (NFPP-II) (1988-98):

Details of flood protection schemes/activities carried out through various programme/projects are given as under;

Normal/ Emergent Flood Programme:

- Expenditure incurred Rs 805.33 million
- No. of Schemes executed 170
- Source of funding 100% by GOP

Flood Protection Sector Project-I (FPSP-I):

- Expenditure incurred Rs 4,735.29 million
- No. of flood protection schemes executed 256
- Co-financed by GOP & ADB ADB= 80%
GOP = 20%

Under NFPP-II, the following activities were undertaken for improvement of Country's existing Flood Forecasting & Warning System through Flood Sector Protection Project (FPSP-I), which was jointly funded by ADB and GOP.

- Procurement & installation of Meteor-burst Telecommunication System (Phase-I) including one Master Station and 24 remote sensing stations.

- Installation of 10-CM Quantitative Precipitation Measurement (QPM) Weather Radar at Flood Forecasting Division (FFD) Lahore.

- Pre-feasibilities studies for four Barrages i.e. Sulemanki, Baloki, Trimmu & Panjnad for increasing their design discharge capacity to carry increased flood flows in view of 1992 floods.

- Preparation of Flood Plain Maps of Indus River (5-Reaches i.e. Chashma-Taunsa, Taunsa-Guddu, Guddu-Sukkur, Sukkur-Kotri & Kotri-Seas Reach).

Prime Minister's River Management Programme 1994-1996

- Expenditure incurred — Rs. 613.384 million
- No. of schemes executed (in Sindh & Punjab) — 10
- Source of Funding — 100% by GOP

1988-Flood Damage Restoration Project

- Expenditure incurred — Rs. 1,874 million
- No. of structures restored (in Sindh & Punjab) — 2,028
- Source of Funding — 90% by IDA & ADB, 10% by GOP

1992-Flood Damage Restoration Project

- Expenditure incurred — Rs. 6,888.36 million
- No. of structures restored (in Sindh & Punjab) — 1,980
- Source of Funding — 80% by IDA, ADB & KfW 20% by GOP

National Flood Protection Plan-III (NFPP-III) (1998-2008):

Details of flood protection schemes/activities carried out through various programme/projects are given as under;

Normal/Emergent Flood Program:

- Expenditure incurred — Rs 4,192.35 million
- No. of flood protection schemes executed in four Provinces, AJ&K, FATA, ICT and Northern Areas (Now Gilgit-Baltistan) — 362
- Source of Funding — 100% by GOP

Special Grant through President/ Chief Executive Directive (2000-2002)

- Expenditure incurred — Rs. 92.80 million
- No. of schemes executed (in Sindh & Punjab) — 21
- Source of Funding — 100% by GOP

Flood Protection Sector Project-II (FPSP-II):

- Expenditure incurred — Rs 4,165 million
- No. of Flood Protection Schemes executed — 101
- Source of Funding — 80% by ADB, 20% by GOP
- Flood Forecasting & Warning System — Rs 432.123 million

The major activities undertaken for improvement of country's existing Flood Forecasting & Warning System include;

- Procurement & installation of 24 No. HF-Radio Sets.
- Procurement & installation of 20 additional remote sensing stations under existing Meteor-burst Telecommunication System (Phase-II);
- Upgradation of 10 CM Quantitative Precipitation Measurement Weather Radar procured under FPSP-I in the premises of FFD, Lahore;
- Upgradation of 5.36 CM Sialkot Weather Radar into 10 CM Quantitative Precipitation Measurement Weather Radar;
- Procurement & installation of a 10 CM Quantitative Precipitation Measurement Weather Radar at Mangla;
- Development of initial/1st version of Computer Based Flood Early Warning System (FEWS) through NESPAK, PMD & Delft Hydraulics;
- Expansion of Flood Plain Mapping activity covering major tributaries of River Indus i.e. Rivers Jhelum, Chenab, Ravi & Sutlej.
- Bathymetric Survey and flow managements of Indus River and its major tributaries (Sutlej, Ravi, Chenab and Jhelum) for improvements in the discharge rating curves and to collect data for FEWS Model & Flood Plain Mapping activities.

Establishment of Flood Forecasting & Warning System for Lai Nullah Basin (Islamabad &Rawalpindi):

- Expenditure incurred: Rs 348 million
- Source of Funding;
  - *Japanese Grand –in-Aid* Rs 337 million
  - *GOP share* Rs 11.00 million
- Facilities provided include:
  - Two No. Telemetry rainfall gauging stations at Golra, Islamabad and Bokra, Islamabad;

- Two No. water level gauging stations at Kattarian Bridge, Rawalpindi and Gawalmandi Bridge, Rawalpindi;
- Master control station in PMD, Islamabad;
- Two monitoring stations at FFC and TMA/Rescue-1122-Rawalpindi respectively;
- Executive Warning Control room in Rawalpindi Fire Brigade , and
- Nine (9) No. warning posts at various locations.

2.4 National Flood Protection Plan -IV and its Updation

Keeping in view the level of investments made under the three 10-Year Plans i.e. (NFPP I, II & III), need and execution capability of the Provinces/Federal Line Agencies, the National Flood Protection Plan –IV worth Rs 30.00 billion was prepared in consultation with PIDs & Federal Line Agencies for execution of flood protection infrastructure (Civil Works) and procurement/installation of Flood Forecasting & Warning System equipment. The Plan was submitted to Ministry of Water and Power in November 2006, for approval of the Competent Authority. However, the same could not be approved due to low priority given to flood sector as result of drought like conditions over the country and funding constraints.

After experiencing 2010 floods in country, the need for investment in flood sector has gained importance. Therefore, the draft National Flood Protection Plan-IV (NFPP-IV) was reviewed in a high level meeting held on May 21, 2011 under the Chairmanship of Chief Engineering Adviser/ Chairman, Federal Flood Commission and it was decided that FFC will engage consultants for review and updation of draft NFPP-IV. For that purpose TORs for consultancy services were prepared in consultation with Provinces & Federal Line Agencies. PMPIU of Ministry of Water & Power in consultation with Federal Flood Commission has initiated working on engagement of consultants through Water sector Capacity Building Project. Signing of contract with the selected consulting firm/consortium is expected in February 2013. The plan is likely to be finalized within the period of 14 months.

Presently, the urgent nature flood protection works are being undertaken through GOP funded Normal/Emergent Flood Programme under PSDP on yearly basis, which are planned and executed by the Provinces and Federal Administered Areas.

2.5 Summary of GOP Investment on Flood Protection Works

The summary of federal investment on flood protection works since 1978 to June 2012 is given in **Table 3**.

Table 3

Summary of Federal Investment on Flood Protection Works

Serial #	Flood Plans/ Programs	Location	No. of schemes	Expenditure (Rs Million)
1.	NFPP-I (1978-88)	Countrywide	311	1,729.75
2.	NFPP-II (1988-98)			
i.	Normal/Emergent Flood Programme	Countrywide	170	805.33
ii.	First Flood Protection Sector Project (FPSP-I)	Four Provinces	256	4,735.29
iii.	Prime Minister's River Management Programme (1994-96)	Province of Punjab & Sindh	10	613.38
3.	NFPP-III (1998-2008)			
i.	Normal/Emergent Flood Programme	Countrywide	362	4,192.35
ii.	Second Flood Protection Sector Project FPSP-II (1998-2007)	Four Provinces	101	4,165.00
iii.	Special Grant through President/ Chief Executive Directive (2000-2002)	Gilgit-Baltistan	21	92.80
iv.	Lai Nullah Flood Forecasting & Warning System *through Japanese Grant*	Distt. Rawalpindi (Punjab Province)	-	348.00
v.	Normal/Emergent Flood Programme (2008-12)	All over the country	110	1737.48
	Sub Total-I (NFPP-I, NFPP-II and NFPP-III**)**		**1341**	**18419.38**
4.	Flood Damage Restoration Projects			
i.	1988-Flood Damage Restoration Project	Four Provinces	2028	1,874.00
ii.	1992-Flood Damage Restoration Project	Countrywide	1980	6,888.36
		Sub Total-II	**4008**	**8,762.36**
		Grand Total	**5,349**	**27,181.74**

FLOOD MANAGEMENT MECHANISM

3. FLOOD MANAGEMENT MECHANISM

3.1 Organizations involved and responsibilities

Flood management is a multifunctional process involving a number of organizations. The Government Organizations which play major role in the flood management are the Provincial Irrigation Departments (PIDs), WAPDA, Provincial Relief Organizations, Pak Army, PCIW, Emergency Relief Cell (ERC) of the Cabinet Division, Federal Flood Commission (FFC), Flood Forecasting Division (FFD) and National Disaster Management Authority (NDMA)/ Provincial Disaster Management Authorities (PDMAs) and the District Administration. Functions of these organizations are briefly described hereinafter.

3.1.1 Provincial Irrigation Departments:

The Provincial Irrigation Departments (PIDs) play a front line role in flood management and mitigation. Major flood related functions include:

i. Operation of Barrages and measurement of discharges at specific sites (Barrages/Headworks) on rivers, canals and nullahs;

ii. Planning, design, construction and maintenance of flood protection and River training works;

iii. O&M/running of data communication network to provide the river flow data to FFD, Lahore;

iv. Establishment & Operation of Flood Warning Centre during the monsoon season each year to share and ensure timely dissemination of the flood forecasts/warnings to concerned quarters;

v. Close coordination with FFD, Lahore for the issuance of flood forecasts/warnings;

vi. Preparation & implementation of the flood fighting plans for monsoon season every year.

3.1.2 WAPDA

WAPDA is actively involved in the flood forecasting process as it provides water levels of major reservoirs (Tarbela, Chashma & Mangla), river flows and rainfall data collected through Flood Telemetric System/Gauged sites in the catchment areas of major rivers. The system is supplemented by meteor-burst communication system. WAPDA supports another hydrometric data measurement and transmission system through its Surface Water Hydrology Project.

WAPDA's Flood Telemetric Network is directly linked with FFD, Lahore. WAPDA provides hydrometric flood data and water levels, inflows/ outflows of Tarbela, Chashma and Mangla reservoirs to FFD, Lahore, FFC and other concerned organizations. Coordination between FFD Lahore and WAPDA has considerably improved after the 1992-flood disaster. Regular meetings in the office of General Manager (Planning & Design) are held during flood season and necessary instructions are issued to Tarbela and Mangla Dam Flood Management Committees.

3.1.3 Provincial Relief Organizations/ Provincial Disaster Management Authorities:

Ultimate aim of flood warnings is to reduce the loss of life and damages to property of the community living in the flood prone areas. Provincial Relief Organizations (now Provincial Disaster Management Authorities) are responsible for disaster preparedness, preparation of emergency response plan, rescue and relief measures and rehabilitation plan and its approval from Provincial Government before implementation; examine the vulnerability of different parts of the province to different disasters and specify prevention or mitigation measures; lay down guidelines for preparation of disaster management plans by the Provincial Department and District Authorities; evaluate preparedness at governmental & non-governmental levels to respond to disaster and enhance preparedness; coordinate response in the event of disaster; give directions to DDMA's regarding actions to be taken in response to disaster; and promote general education, awareness and community training etc. pertaining to all disasters including floods. Relief functions at the District and Tehsil/Union Council level are now performed through the District Disaster Management Authorities, who coordinate with the other departments to execute the disaster management functions at the district level.

3.1.4 Pak Army:

Pak Army's Corps of Engineers under the command and control of Engineer-in-Chief (E-N-C) is charged with the responsibility to provide necessary help to the civil authorities to carry out the rescue and relief operations during and after the floods. It is the responsibility of the Provincial Governments to provide all the support equipment (boats, life jackets, vehicles, tents etc) to Pak Army for such operations.

Pakistan Army's flood related functions encompass all the three phases of flood operations from the pre-flood to post flood phases including the important flood phase. Pre-flood phase is the flood preparatory phase during which the adequacy and the serviceability of the flood fighting equipment is ensured. Pre-flood meeting are held at the Engineer-in-Chief to coordinate activities with other organizations/agencies in providing the required support to the Pak Army.

Pre-flood inspections of the flood protection structures are also carried out by the respective Commander Corps of Engineers alongwith concerned officers of Provincial Irrigation Departments for their respective areas to ensure that the flood protection structures (bunds, barrages, spurs etc.) are in satisfactory state of maintenance. Deficiencies, if any, are brought to the notice of PIDs. Availability of sufficient stock of explosives is ensured at pre-determined breaching sections to activate the breaching sections, whenever required.

An officer of the 4 Corps Engineers is placed on duty in the Flood Warning Centre, Lahore, to keep a close watch on the flood situation. All flood forecasts and warnings are communicated to the CC Engineers 4 Corps in time, which are transmitted to the D.G. Engineers and all other CC Corps of the Engineers. In the event of floods, units of the Pak Army move out to their respective areas of responsibility and carry out the relief and rescue operations in coordination with the respective civil administration. A post flood meeting is held under the chairmanship of Engineer-in-Chief/ D.G. Engineers to discuss the performance of all the flood related agencies with the view to bring about the necessary improvement in future.

3.1.5 Pakistan Commissioner for Indus Waters (PCIW)

Pakistan has a unique flood-forecasting problem in the sense that major part of the flood generating in upper catchments of Rivers Sutlej, Ravi, Jhelum and Chenab lie across the border in India/ held Kashmir. A number of water storage reservoirs have been constructed over Eastern Rivers (Chenab, Ravi and Sutlej) across the border. As a result, the free flood flow conditions are disrupted making the operation of the rainfall/runoff model extremely difficult. The situation underlines the need for the acquisition of rivers flow data from across the border in respect of important sites over the rivers in India/held Kashmir. Consequently, an agreement had been signed between the two countries in 1989 through their respective Commissioners for Indus Waters, which includes provision to share rivers flows data with India such rivers flow and rain data as is considered important for flood forecasting in Pakistan. A number of river flow stations are specified for this purpose.

The Pakistan Commissioner for Indus Waters receives the data normally once in a day. The data is then passed on to the FFD, Lahore for preparation and issuance of Flood forecast to concerned organizations. Frequency of data reception is increased to six hourly and even to hourly in case of severe flood situation. Pakistan Commissioner for Indus Waters is thus responsible to provide to the Chief Meteorologist, FFD, Lahore, the much-needed data obtained from India for use in the flood forecasting models to ensure accurate forecasts for Rivers Sutlej, Ravi, Jhelum & Chenab. Pakistan Commissioner for Indus Waters is the only forum through which any clarification or further information can be obtained from India with regard to flood flows data or the flood control structures in India.

3.1.6 Emergency Relief Cell (ERC), Cabinet Division

Emergency Relief Cell (ERC) exists under the Cabinet Division and is controlled by the Cabinet Division. The Cell is headed by the Director General. The main functions of the Emergency Relief Cell include:

- Planning and assessment of relief requirements for major disasters;
- Stock piling of basic need items during emergency such as dry ration, tents, blankets etc;
- Establishing emergency fund upon declaration of any part of the country as calamity affected; and
- Maintaining contact with UNO and its related organizations, besides other international aid giving agencies.

3.1.7 FFC and its Role in Flood Management/Mitigation

Since its establishment in 1977, FFC has prepared three National Flood Protection Plans i.e. NFPP-I, II&III and implemented through PIDs & Federal Line Agencies. The Plans envisaged both structural as well as the non-structural measures. Structural measures include construction of flood embankments, spurs and river training works, whereas non-structural measures mainly pertain to establishment of a modernized Flood Forecasting & Warning System to provide timely and reliable weather/flood information to the organizations dealing with flood management and general public as well. The major step towards this end is installation of 10 CM QPM Doppler Weather Radar one each at FFD, Lahore and Mangla, besides up-gradation of Weather Radar at Sialkot to afford the

acquisition of the much needed rainfall data of Rivers Sutlej, Beas, Ravi, Chenab and Jhelum upper catchments lying across the border. The other important step is the development of improved flood forecasting models i.e. Flood Early Warning System Model (FEWS Model) for FFD, Lahore. Improvement in measurement and transmission of the hydrometric data based upon the meteor-burst a physically based model accounting for the hydro dynamical changes in the flood wave. The model calls for the survey of the channel geometry to determine the channel parameters at suitable intervals of the channel length. It has, therefore, built-in discharge/elevation relationship, which should readily yield the flood levels at any point along the channels. This is of great advantage in the area of flood warning since it allows the estimation of the areas of inundation along the channel. In turn Flood inundation maps (Flood Plain Mapping) have been prepared to facilitate the identification of the villages and other public & private property and installation, which may likely to inundate at certain flood flow stage, so as to make them safe against that magnitude of floods. All that can be determined on the basis of Hydrodynamic model. The existing Flood Telemetry and Meteorburst Communication Systems of WAPDA have also been considerably improved and expanded by installation of one Master Station and 24 remote sensing stations under FPSP-I and 20 additional remote sensing stations alongwith 24 No. HF-Radio Sets under FPSP-II.

A large number of flood protection works, i.e. 6803 km of embankments and 1410 spurs have so far been executed through Provincial Irrigation Departments and Federal Line Agencies through financial and technical support provided by GOP and foreign donor agencies.

Establishment of Flood Communication Cell during Flood Season

During flood season, each year, Flood Communication Cell of Federal Flood Commission remains in operation on round-the-clock basis for the entire flood season (1st July to 15th October) and Daily Flood Situation Report (containing rainfall, river flows, reservoirs water levels and weather situation for the country) and is issued to all concerned.

The main objective of the Flood Communication Cell is to obtain information from the Flood Forecasting Division (FFD), Lahore, WAPDA, Provincial Irrigation Departments (PID's) and other Flood Warning Centers set up in the Provincial Headquarters besides flood flows data of Eastern Rivers through PCIW. The duty staff (for round-the-clock collection of data), alongwith one officer remains available during all working days as well as Sundays and National Holidays for collection of necessary data for compilation and dissemination to all concerned organizations.

Chairman FFC also sends reports to the President and the Prime Minister Secretariat as and when the situation demands. A Daily Flood Situation Report on Weather & River Discharges as received from FFD, Lahore is prepared and issued to concerned Government officials on daily basis during the flood season every year containing the following:

i. Actual rivers flood flows position of major rivers at RIM stations and other important control points in a tabular form;
ii. Prevailing weather system situation;
iii. Concise forecast relating to the movement of various weather systems and river flow condition for the next 24 hours including likely inundation /flooding of nullahs etc. as received from PMD/FFD, Lahore;

iv. Damage details in the event of flood emergency in a certain area. In case of exceptionally High Flood Stage/emergency situation, special advisory on Weather & Rivers flood flows position is issued on six hourly basis.

3.1.8 Flood Forecasting Division (FFD), Lahore

FFD, Lahore, of the Pakistan Meteorological Department plays a pivotal role in the flood forecasting & warning process. Hydro meteorological data from the various national and international sources is received in this Division, which is then analyzed to produce flood forecasts and warnings and disseminated to various Federal/Provincial organizations and print/electronic media. The operations of this Division are backed by the following components.

a) Extra-Ordinary Rainfall and Discharge Measurement System

This system is operating under the administration of WAPDA. For this purpose, Rim stations have been setup by WAPDA in catchment areas of river INDUS at " Kachura" which measures the snow melting and inflow through the station. The instruments are installed at Bishma, Ogi, Phulra, Tarbela and Daggar which read the flow rate and take into account the rain element. All these information are collected by WAPDA and passed on to the National Flood Forecasting Bureau (NFFB) Lahore through its 36 telemetry centers. The second type of discharge data of canals is collected by the Irrigation Department through its own network; utilizing police department facilities, data is passed on to NFFB Lahore.

b) Quantitative Precipitation Measurement (QPM) Radar.

This radar, with the wavelength of 5.3 CM is installed at Sialkot. It detects the position of clouds and precipitation within the radius of 230 Kilometers. This radar also covers 17 catchment areas of rivers. Another Doppler radar is installed at Lahore which provides quantitative and three dimensional precipitation data in catchment areas of main reservoirs.

c) Computer Centre

After the data have been received from the concerned quarters, it is feeded into the computers which are installed at NFFB Lahore. The data is processed after every six (6) hours and based on the analysis, flood forecast report is produced daily for the concerned agencies.

3.1.9 National Disaster Management Authority (NDMA)

Government of Pakistan had embarked upon establishing appropriate policy to minimize risks and vulnerabilities and passed NDMA ordinance 2006. National Disaster Management Authority (NDMA) has been established to serve as the focal point and coordinating body to facilitate implementation of disaster risk management strategies. This necessitates NDMA to directly interact/ communicate with all stakeholders, including Ministries, Divisions, and Departments in relaxation to normal communication channel.

NDMA is an expedient to provide for an effective national disaster management system and for matters connected therewith and incidental thereto. As per National Disaster management Authority Act-2010, the main functions of NDMA are as under:

i. Act as implementing, coordinating and monitoring body for disaster management;

ii. Prepare the National Plan to be approved by the National Disaster Management Commission;

iii. Implement, coordinate and monitor the implementation of the national policy;

iv. Lay down guidelines for preparing Disaster Management Plans by different ministries or departments and the provincial authorities;

v. Provide necessary technical assistance to the provincial government and provincial authorities for preparing their Disaster Management Plans in accordance with the guidelines laid down by the National Disaster Management Commission;

vi. Coordinate response in the event of any threatening disaster situation or disaster;

vii. Lay down guidelines for or give directions to the concerned ministries or provincial governments and provincial authorities regarding measures to be taken by them to response to any threatening disaster situation or disaster;

viii. For any specific purpose or for general assistance requisition the services of any person and such person shall be co-opted as member and exercise such power as conferred upon him by the authority inn writing;

ix. Promote general education and awareness in relation to disaster management;

x. Perform such other functions as the National Disaster Management Commission may require to perform.

3.2 Flood Warning Dissemination System:

Monsoon Season normally starts each year in 1st week of July and ends in last week of September. Sometimes, it prolongs upto mid October. However, the Flood Warning Centers of all flood forecasting & warning related agencies start functioning from 15th June every year for data collection and keep continue upto 15th October. During this period effective interaction and communication between various floods related provincial as well as federal departments/agencies is maintained on round-the-clock basis in order to counter any eventuality due to monsoon rains/floods.

The earlier weaknesses in the flood warning dissemination system called for the following remedial actions: -

i. Police communication system (for the reception of flood data and the dissemination of flood forecasts/warnings) be replaced with some advanced automatic data communication system. However, until such a system becomes available, the police operators posted on flood duties be given some training to enable detection of simple data errors and also to understand the urgency and importance of timely communication of data and flood forecast.

ii. Dissemination of the flood/warning at least to the important recipients be done by the Flood Forecasting Centre to ensure timely dissemination under the overall supervision of the Chief Meteorologist, FFD, Lahore.

iii. Some mechanism to ensure proper coordination between the various departments/agencies involved in the flood mitigation/management process be established. This may be done by an authority having the full legal jurisdiction over all the concerned agencies.

The problems and the possible remedies were frequently discussed in flood meetings at Provincial and Federal Government levels. As a result of such efforts the earlier flood warning dissemination system underwent gradual changes as reflected in the system currently in vogue. Salient features of current flood warning dissemination system are as follows:

i. Pre-flood familiarization training has been started since the last few years to acquaint the newly inducted people of Irrigation and WAPDA with the commonly used hydromet terms.

ii. Flood Forecasting Bureau, Lahore has been re-designated as the Flood Forecasting Division, Lahore.

iii. FFD, Lahore has taken in hand the dissemination of flood forecasts/warnings to considerably large number of recipients dealing with the flood mitigation process, over and above the dissemination being done by FWC.

iv. Press briefings/issuance of Press Release has been started by Pakistan Meteorological Department/ FFD, Lahore as a regular feature to ensure correct and authentic flood and weather information to the public. Such briefings are arranged through the representative of the Punjab Information Department on duty at the FWC, only when the flood situation is or likely to become serious enough to call for such briefings.

The significant improvement has been made in the dissemination system since the time that it was initially started. Most of the weaknesses, as stated above have considerably improved. A much better coordination now exists with WAPDA as regular meetings or verbal advice is given by Chief Meteorologist, FFD, Lahore, to General Manager (Planning & Coordination) WAPDA.

The existing dissemination process has been reviewed and lists of the recipients of flood information have been streamlined. Basically, there are two types of flood information required to be provided for use by the appropriate recipients i.e. (i) the flood forecasts and (ii) the flood data. The flood forecasts are disseminated by FFD, Lahore/FWC, whereas the flood data is disseminated by the FWC itself.

3.3 Pre-Flood Preparedness Meetings:

A number of pre-flood meetings are organized annually by the concerned flood management organizations, i.e. Pak Army, NDMA, and Ministry of Water & Power/FFC to review the status of preparedness and Flood Fighting Plans/arrangements of concerned organizations. The following pre-flood meetings were held in 2012:

i. Pak Army Pre-Flood Coordination Conference was held on June 05, 2012 at Engineers Directorate, GHQ Rawalpindi, which was attended by the Commanders of concerned Army formations, FFC, NDMA, PMD, WAPDA etc. The Flood Preparedness Plans were reviewed;

ii. NDMA organized a meeting on state of disaster preparedness for Monsoon 2012 on July 02, 2012 to assess preparedness, response and recovery capacity of Federal and Provincial Departments;

iii. 47th Annual/ Pre-Flood Meeting of Federal Flood Commission was organized on August 06, 2012, under the Chairmanship of Honourable Federal Minister for Water & Power, to review the status of preparedness of concerned Federal/Provincial Government organizations and arrangements made for safe passage of Flood Season-2012. The directions given to PIDs/ Federal Line Agencies, WAPDA, PMD & NDMA are given as under:

a) Provinces/Federal Line Agencies will mobilize all resources in order to ensure completion of all complete/ongoing 2010-Flood Damages Restoration Works related to Flood Protection infrastructure before 30th June 2012.

b) Ministry of Water & Power will take up the matter with Planning Commission for seeking financial assistance for completion of 34 No. ongoing/incomplete restoration works of Balochistan including other 2010-FDR Works pending for want of funds.

c) Ministry of Water & Power will review the portfolio of WAPDA's Water Sector Projects in consultation with WAPDA & Planning Commission to check the possibility of re-appropriation of funds from slow moving projects for completion of rehabilitant works of RBOD-I & III and Flood Telemetry Stations damaged during Flood Season 2010.

d) Provincial Irrigation Department/ Federal Line Agencies will strictly follow the implementation schedule duly approved by Federal Government/ECNEC for execution of flood protection schemes under Normal/Emergent Flood Programme.

FLOODS-2012

4. MONSOON SEASON 2012

4.1 Seasonal Rainfall Forecast for Monsoon Season 2012 issued by PMD

The contents of the seasonal rainfall forecast for Monsoon Season 2012 issued by PMD on June 13, 2012, are as under:

i. Summer monsoon season in Pakistan starts normally in July and persists until the end of September. PMD issues Pakistan's monsoon outlook every year before the onset of the monsoon season which gives an idea of country-wide total amount of precipitation expected throughout the season. Main objective of that outlook is the better flood management during monsoon season.

ii. Last winter and spring were cooler and wetter than normal; consequently yielding heavier snow accumulation over the northern mountains. Snow melt rate is lower than normal due to generally below normal temperatures in Northern parts of the country and frequent passage of Westerlies in May and June. It is envisaged that the snowmelt contribution to riverine flooding will be minimal.

iii. EI-Nino is likely to develop in August which has negative impact on Pakistan summer monsoon, in general. Likewise heavier than normal winter snow is a signal of weaker monsoon. Nevertheless, the western disturbance will continue affecting northern half of Pakistan and its interactions with monsoon current may produce heavy downpours in parts of the country at times.

iv. It is noteworthy to mention that the seasonal predictions of the south Asian monsoon 2012 made by different Regional Climate Outlook Fora are contradictory giving slightly above normal to below normal rainfall over the region.

Monsoon Outlook

Based on analysis of local, regional and global general circulation of atmosphere and incorporating the previous winter and spring behavior, the outlook for monsoon season 2012 was as under:

"There is a strong likelihood that total amount of precipitation in Pakistan during monsoon season 2012 (July-September) will be +5-15% of the long term average. However, erratic spread of monsoon on temporal and spatial scale is likely to be prevalent feature; as such the possibility of very heavy localized rainfall, at times resulting in flash flooding, may not be ruled out. Further, such localized rainfall event may cause localized flash flooding over the hill torrents of the Suleman Range and Rod-Kohi in Rajanpur, D.I. Khan and D.G. Khan."

Note: Normal/ average monsoon rainfall (July-September) for Pakistan is 137.5 mm.

4.2 Hydro-Metrological Causes of 2012-Rains/ Floods

The catchment areas of main rivers of the country did not receive heavy precipitation during the Monsoon Season 2012, as such none of major rivers attained danger flood level. Hence, no flooding in major rivers was observed. Monsoon rains started across Pakistan in the third week of August 2012 which affected Khyber Pakhtunkhwa (KP), Gilgit Baltistan (GB) and Azad Jammu and Kashmir (AJK).

Second spell of monsoon rains started over southern parts of the country in first week of September 2012. The torrential rains on 9th and 10th September hit the upper parts of Sindh (Districts Kashmore, Jacobabad & Shikarpur), Northeastern Balochistan (Districts Nasirabad, Jaffarabad, Killa Saifullah, Jhal Magsi and Loralai) and Southern Punjab (Districts Rajanpur & Dera Ghazi Khan). The unprecedented rains and flash floods flows of hill torrents emerging from Kirther and Koh-e-Suleman hill ranges led to flooding. The worst affected districts were Rajanpur, Dera Ghazi Khan (Punjab), Kashmore, Jacobabad, Shikarpur (Sindh), Nasirabad and Jaffarabad, Killa Saifullah, Jhal Magsi and Loralai (Balochistan). Significant casualties, loss of lives, shelter & livelihood, besides damages to public and private infrastructure such as irrigation network, flood protection infrastructures, roads and bridges were also reported.

Initially, Pakistan Meteorological Department predicted below normal rainfall in the country during monsoon season 2012 and mostly invigorating shortage of storage of water for irrigation and water supplies. But by 1st September, Pakistan Meteorological Department issued emergency weather advisories stating that an extremely low pressure Monsoon system, developed over the Bay of Bengal will enter the country and cause widespread heavy rainfall across Southern Punjab, Southern Khyber Pakhtunkhwa, eastern Balochistan and Sindh. The low pressure system entered in the country on 3rd September and lashed these areas with heavy rainfall. That system prevailed till 12th September 2012 and caused record rainfall in upper parts of Sindh, Southern Punjab and Northeastern Balochistan. Rainfall recorded by PMD is given in the following table.

Table 4
Heavy rainfall recorded during September 2012

Name of the City	Province	Rainfall (mm)	Period
Chhor	Sindh	137	05.09.2012 to 09.09.2012
Jacobabad	Sindh	481*	-do-
Khanpur	Punjab	291*	-do-
Larkana	Sindh	239	-do-
Rahim Yar Khan	Punjab	236	-do-
Shorkot	Punjab	152*	-do-
Sukkur	Sindh	206	-do-
Dera Ghazi Khan and Okara	Punjab	96mm	09.09.2012
Bahawalnagar and Sahiwal	Punjab	79mm	09.09.2012
Noorpur Thal	Punjab	66mm	09.09.2012
Toba Tek Singh	Punjab	65mm	09.09.2012
Bahawalpur city	Punjab	45mm	09.09.2012
Jhang	Punjab	35mm	09.09.2012
Multan	Punjab	27mm	09.09.2012
Faisalabad	Punjab	25mm	09.09.2012
Nawabshah	Sindh	24mm	09.09.2012
Bhakkar	Punjab	20 mm	09.09.2012
Chakwal and Dera Ismail Khan	Punjab and KPK	17 mm	09.09.2012
Parachinar and Mandi Bahauddin	FATA and Punjab	16mm	09.09.2012
Thatta	Sindh	15mm	09.09.2012
Joharabad and Rawalakot	Punjab and AJ&K	14mm	09.09.2012
Kotli	AJ&K	12mm	09.09.2012

* Indicates new record. Source: PMD

4.3 Floods/Rains 2012

The month of September is usually remembered as the month in which the monsoon starts to withdraw from the sub-continent. Heavy rainfall in September is quite uncommon in the western sub-continent especially Pakistan where usually the intensity of rains start to weaken during the first half of September. However, since last two years i.e. 2010 and 2011, the country has observed widespread rainfall in this month including the dry areas like the southern Punjab. September 2012 also joined the same rank as widespread monsoon rainfall hit southern part of the province of Punjab.

The torrential rains started in first week of September 2012 in Khyber Pakhtunkhwa (D.I. Khan), Upper Sindh, Southern Punjab and Northeastern Balochistan of Pakistan. Heavy rainfall led to flash floods in hilly areas, and rising water levels in hill torrents/ flood flows generating nullahs. The Southern Punjab i.e. Districts Dera Ghazi Khan and Rajanpur, upper Sindh (Districts Jacobabad, Shikarpur, Khashmore, Larkana, Sukkur, Qambar-Shahdadkot, Dadu and Badin), and Northeastern Balochistan (Districts Jaffarabad, Naseerabad, Jhal Magsi, Loralai and Qila Saifullah) were badly affected.

Flash floods triggered by heavy rains caused widespread destruction across vast areas of the country, leaving over 100 people dead in upper Sindh, wreaking devastation in Dera Ghazi Khan and Rajanpur areas of Punjab province and leaving five districts of eastern Balochistan cut off from the rest of the country. The poor communities which were still struggling and recovering from 2010 and 2011 floods were again affected by torrential rain, flood flows of hill torrents and canal breaches. The floods/ rains-2012 affected population of about 4.85 million (Punjab: 0.887 million, Sindh: 3.174 million & Balochistan: 0.788 million), affecting 14,159 villages, claiming about 571 lives, damaging 636,438 houses & cropped area of about 1.172 million acres.

4.4 Highest ever recorded flood peaks during major flood events

Highest ever recorded flood peaks during major flood events at various control points of Indus Basin are given in **Table 5**.

Table-5
Major Flood Events & Historic Flood Peaks Recorded in Major Rivers

Dam/ Barrage Site	Designed Capacity	Highest Recorded		1973 Peak Date	1976 Peak Date	1988 Peak Date	1992 Peak Date	2010 Peak^ Date	2011-Peak^ Date	2012-Peak^ Date
		Year	Flow (Cfs)							
Indus River										
Tarbela Reservoir	1,500,000	1929	8,75,000	420,000 July 1973	304,000 3.8.76	450,000 4.8.88	500,000 10.9.92	833,000 30.7.10	272,200 28.6.11	295,000 4.8.12
Jinnah Barrage	950,000	1942	950,000	564,000 20.7.73	862,000 2.8.76	605,000 2.8.88	849,245 10.9.92	937,453* 30.7.10	293,900 26.7.11	285,300 18.7.12
Chashma Barrage	950,000	1958	950,000	510,000 22.7.73	787,000 3.8.76	580,000 3.8.88	668,000 11.8.92	1,036,673 1.8.10	356,500 28.7.11	298,300 8.7.12
Taunsa Barrage	1,000,000	1958	789,000	568,000 29.7.73	675,000 7.8.76	560,000 28.7.88	655,000 14.9.92	959,991 2.8.10	249,200 31.8.11	243,400 10.9.12
Guddu Barrage	1,100,000	1976	1,199,672	1,084,000 18.8.73	1,199,672 15.8.76	1,163,000 30.7.88	1,087,000 18.9.92	1,148,738* 8.8.10	272,300 3.9.11	236,100 12.9.12
Sukkur Barrage	900,000	1976	1,161,000	1,077,000 21.8.73	1,161,000 16.8.76	1,119,000 31.7.88	1,068,000 20.9.92	1,130,995* 10.8.10	260,800 6.9.11	214,800 14.9.12
Kotri Barrage	875,000	1956	980,000	786,000 Aug 1973	765,000 Aug 1976	648,290 11.8.88	689,300 30.9.92	964,900 27.8.10	261,400 14.9.11	166,000 21.9.12
Jhelum River										
Mangla Reservoir	1,230,000	1929	1,100,000	2,20,000 9.8.73	480,060 3.8.76	425,515 16.7.88	1,030,000 10.9.92	344,400 30.7.10	141,300 16.9.11	1150,00 18.9.12
Rasul Barrage	8,50,000	1929	1,000,000	2,70,000 9.8.73	2,69,000 4.8.76	261,664 17.7.88	952,170 10.9.92	263,796 30.7.10	105,800 17.9.11	42500 4.8.12
Chenab River										
Marala Barrage	1,100,000	1957	1,100,000	770,000 9.8.73	549,000 1.8.76	751,000 25.9.88	845,000 10.9.92	314,378 6.8.10	150,400 16.9.11	183,200 4.8.12
Khanki Barrage	8,00,000	1957	1,066,000	1,000,000 10.8.73	615,000 2.8.76	864,000 26.9.88	910,500 10.9.92	334,437 7.8.10	171,400 17.9.11	194,800 4.8.12
Qadirabad Barrage	9,00,000	1992	9,48,530	854,000 10.8.73	629,000 2.8.76	892,000 26.9.88	948,530 11.9.92	329,483 7.8.10	171,000 17.9.11	194,800 5.8.12
Trimmu Barrage	6,50,000	1959	9,43,000	753,000 12.8.73	706,000 10.8.76	584,000 19.7.88	888,000 14.9.92	328,926 11.8.10	132,900 20.9.11	87,800 7.8.12
Panjnad Headworks	7,00,000	1992	7,44,152	803,000 17.8.73	710,000 12.8.76	507,000 27.7.88	744,152 18.08.92	310,117 13.8.10	151,300 24.9.11	65,600 17.9.12
Ravi River										
Jassar	-	1988	5,82,000	228,000 10.8.73	170,000 9.8.76	582,000 25.9.88	149,000 11.9.92	195,000 23.8.10	27,700 19.9.11	30,500 26.8.12
Shahdara	-	1988	5,76,000	237,380 11.8.73	170,000 10.8.76	576,000 27.9.88	63,000 12.9.92	41,900 21.8.10	43,000 14.8.11	40,800 22.8.12
Balloki Barrage	2,25,000	1988	3,99,000	2,44,000 13.8.73	234,000 11.8.76	399,000 28.9.88	112,157 13.9.92	69,900 23.8.10	72,100 15.8.11	60,800 23.8.12
Sidhnai Barrage	1,75,000	1988	3,30,000	2,10,000 18.8.73	244,000 15.8.76	330,000 2.10.88	95,500 16.9.92	27,600 28.7.10	30,300 19.8.11	28,600 14.9.12
Sutlej River										
Suleimanki Headworks	3,25,000	1955	5,98,872	177,000 15.8.73	119,000 6.9.76	399,000 30.9.88	197,000 3.9.92	58,300 30.9.10	82,000 29.8.11	21,700 30.8.12
Islam Headworks	3,00,000	1955	4,93,000	166,000 17.8.73	111,000 8.9.76	306,000 4.10.88	183,000 7.9.92	31,500 20.9.10	49,600 3.9.11	14,200 13.9.12

* It does not include flood flows passed through breaches occurred in LMB Guddu Barrage; ** It does not include flood flows passed through breaches occurred in Tori Flood Bund. ^ Based on the Inflows experienced upstream of the Dam/ Barrage site.

4.5 Country-Wide Losses/ Damages due to 2012 Rains/ Floods

The 2012-rains/floods affected cropped area of about 1.172 million acres affecting 14,159 villages, claiming about 571 lives, fully damaging 425,683 houses and 394,268 houses partially and a population of about 4.85 million has been affected. Province wise detail of losses/damages is given in **Table-6**.

Table-6
COUNTRY-WIDE LOSSES/DAMAGES DUE TO RAIN/FLOOD 2012

Province/ Region	Persons Died	Persons Injured	Persons Affected	Houses Damaged		Villages Affected	Cropped Area Affected (Acres)	Cattle Heads Perished
				Partially	Fully			
Punjab	63*	272	887,345	16440	9116	1512	473,998	898
Sindh	283	2421	3,174,716	188,935	232,723	11,894	245,459	2029
Khyber Pakhtunkhwa	38	36	NR	4293	105	NR	NR	NR
Balochistan	156	146	787,780	183,513	183,513	753	452,588	9194
FATA	NR	NR	NR	NR	NR	NR	NR	NR
Gilgit-Baltistan	NR	NR	NR	70	NR	NR	NR	NR
AJ & K	31	32	NR	1017	226	NR	NR	NR
G. Total	**571**	**2,907**	**4,849,841**	**394,268**	**425,683**	**14,159**	**1,172,045**	**12,121**

Source: NDMA
NR: Not Reported
* including 3 in Islamabad

4.6 2012-Rains/Flood Damages Need Assessment

Balochistan Irrigation Department reported that Canal Irrigation System in Nasirabad/Jaffarabad and Jhal Magsi Districts was severely damaged from devastative floods of monsoon 2012 causing heavy destruction to the standing crops and livestock including other immovable properties. For immediate restoration of Pat feeder and Rabi Canal System being the life line of the area, remedial measures to close the breaches were started on emergent basis to restrict flood water from entering into the command area and other localities besides causing series inundation. Moreover, the flood water containing mud, sand and silt particles when entered in the Canals caused deposition of thick layers of silt in the bed. Resultantly, the canals have almost lost their designed discharge capacity making impossible to regulate design discharges and demand of irrigation as well as drinking water until complete rehabilitation of the entire system.

After receding of flood water, survey was conducted by the field formations of PID Balochistan and nine (09) short term flood damage restoration works were prepared under the Stage-I and processed with Provincial Planning & Development Department, Government of Balochistan for approval and arrangement of funds. The list of these short term measures/ works is given in **Table 7** below.

Table-7
Post 2012-Rains/ Flood Damage Restoration Works in Balochistan (Stage-I)

S #	Name of Scheme	Estimate Cost (Rs. Million)	Status
i.	Restoration of flood damages 2012 to Pat feeder canal system, Uch and Manuthi canals (Emergency Works).	700.215	PC-I approved. Work award is in progress.
ii.	Restoration of flood damages 2012 to Khan Wah, Shah Wah, and Reconstruction of flood protection bund around Rojhan Jamali, Kashmirkot and Taj Pur villages in Jaffarabad.	150.00	PC-I approved by PDWP.
iii.	Restoration of flood damages 2012 to drainage system in Naseerabad Division (Flood Emergency Works).	610.472	PC-I approved by PDWP.
iv.	Protection of the command area, canal/drainage and road infrastructures included various villages and Tail portion of the distribution network of Pat feeder Canal.	60.00	PC-I approved by PDWP.
v.	Restoration of flood damages 2012 of Khirther Canal system (Emergency Works).	408.00	PC-I approved by PDWP.
vi.	Restoration of flood damages 2012 to Channel/structures in district Jhal Magsi (Emergency Works).	152.512	PC-I approved by PDWP.
vii.	Rehabilitation/restoration of flood damages to Irrigation infrastructures in Killa Saifullah	271.873	PC-I approved by PDWP.
viii.	Flood protection of agricultural land and abadies on both banks of Loralai river.	377.903	PC-I approved by PDWP.
ix.	Rehabilitation/restoration of flood damages to Irrigation infrastructures in Loralai District.	59.00	PC-I approved by PDWP.
	Total Rs.	**2789.975**	

PID, Balochistan has informed that an amount of Rs. 700 million has been released as bridge financing by Planning & Development Department, Government of Balochistan for immediate restoration of breaches of canal systems (Pat feeder, Rabi, Uch, Manuthi canals and distributaries). The status of closing the canal breaches is given in **Table 8**.

Table 8
Status of Restoration of Canal Breaches occurred due to 2012-Rains/ Floods in Balochistan

Canal/Drainage System	Length (KM)	No. of Breaches	No. of Breaches plugged
Main Pat feeder Canal	172	56	48
Distribution Network of Pat feeder	280	175	175
Rabi Canal	47	70	60
Uch Canal	52	35	35
Manuthi Canal	23	25	23
Main Khirther Canal	54	-	-
Distribution network of Khirther Canal	185	25	05
Drainage network	1754	1675	-
Irrigation Channel in Jhal Magsi.	418	287	-
Total	**2985**	**2348**	**346**

Though all the breaches of Main Pat feeder Canal (except few in Baroon area and 3 Kms reach of Rabi Canal) have been plugged and water supply for partial irrigation and drinking water purposes have been resorted allowing discharge of 2,500 cusecs in the canal but strengthening work on closing breaches of other canal systems is in progress. However, to strengthen the canal and drainage system for its designed capacity and full-fledged irrigation, funds are direly needed to (i) run the canal for its designed capacity of 6,700 cusecs during upcoming Kharif season and (ii) immediate restoration of mostly submerged drainage system so as to safely drain out the surplus water/ flood water from the command area. Requirement of funds is indicated in **Table 9** & **Table 10** below:

Table 9
Post 2012-Rains/ Flood Damage Restoration Need for Irrigation Supplies of Rabi Crop Season in Balochistan (Stage-II)

Canal/Drainage System	Amount (M Rs.)
Patfeeder Canal System	800.00
Rabi Canal	100.00
Uch & Manuthi Canal	100.00
Khirther Canal	300.00
Drainage System	200.00
Irrigation System in Jhal Magsi	350.00
Total Rs.	**1850.00**

Table 10
Post 2012-Rains/ Flood Damage Restoration-Need for complete Strengthening and Rehabilitation of Main Canals in Balochistan (Stage-III)

Canal/Drainage System	Amount (M Rs.)
Pat Feeder Canal System	1100.00
Rabi Canal	110.00
Uch & Manuthi Canal	200.00
Khirther Canal	900.00
Drainage System	2800.00
Total Rs.	**5110.00**

PRE-FLOOD MAJOR ACTIVITIES AND THOSE CARRIED OUT DURING MONSOON SEASON 2012

5. ACTIVITIES PERFORMED DURING 2012-FLOOD SEASON

The following specific activities were performed/ supervised by Federal Flood Commission for better flood management during 2012-Flood Season;

i. Federal Flood Commission, Ministry Water Power organized Post Flood Meeting on December 19, 2011 under the chairmanship of Honourable Federal Minister for Water & Power, wherein necessary directions were issued to the flood management related organizations in order to have better preparedness for 2012 monsoon season.

ii. All Priority-I (2010 & 2011 Flood Damages Restoration Works) related to Irrigation, Drainage and Flood Protection Infrastructure were completed by the executing agencies prior to start of Monsoon Season 2012.

iii. The inspection of Flood Embankment/ Spurs etc. were carried out by the Provincial Irrigation Departments and all necessary O&M works were completed before the start of Monsoon Season 2012.

iv. The Flood Fighting Plans were prepared by the Provincial Irrigation Departments (PIDs) and necessary stone reserve stock at vulnerable reaches were arranged by PIDs.

v. WAPDA and Pakistan Meteorological Department also carried out all essential O&M Works and Flood Forecasting & Warning System equipments were made fully functional prior to start of Monsoon Season 2012.

vi. Provincial Irrigation Departments/ Federal Line Agencies were advised to ensure strict vigilance and round the clock patrolling of flood embankments along major & other rivers, especially vulnerable locations as identified during pre-monsoon season inspections in order to ensure safe passage of flood flows of Monsoon Season 2012.

vii. A High Level Flood Management Committee having representation from FFC, NDMA, WAPDA, PMD, PCIW, IRSA and Engineer Directorate, GHQ, Rawalpindi was constituted for the Monsoon Season 2012 as done in the previous Monsoon Season (2011). The main objectives of the Committee were to oversee and ensure proper operation of Tarbela, Chashma and Mangla reservoirs during Monsoon Season 2012, besides, coordination for Flood Forecasting & Management activities and advise necessary precautionary measures so as to save human lives and damages to property.

viii. The de-silting work in critical reaches (in Rawalpindi City) was carried out by WASA, Rawalpindi prior to start of Monsoon Season 2012.

ix. The impounding water level of Mangla Dam Project has been raised from 1210 feet (Max. Conservation Level of last year) to 1242 feet for Monsoon Season 2012 onward, which has enhanced the flood mitigation role of the dam project upto great extent, besides additional water storage of 2.90 MAF and 12% more electricity i.e. 644 Gwh per annum would be made available.

x. SOPs of Tarbela Dam Project are to be revisited for enhancing its role in mitigating future floods. The World Bank has agreed in principle for funding the proposed "Study for reviewing the SOPs/ filling criteria of Tarbela Dam" under the project titled "Tarbela – 4th Extension Hydropower Project".

xi. The 47th Annual Meeting of Federal Flood Commission) was organized on **6th August, 2012** under the chairmanship of Federal Minister for Water & Power**,** wherein status of implementation of decisions taken in the Post Flood Meeting of FFC held on 19th December, 2011 and the arrangements made by the Flood Management related organizations (at Federal & Provincial Government level) for safe passage of Monsoon Season-2012 were reviewed. Necessary directions were issued to all concerned organizations for better flood management in order to save human lives and avoid damages to private & public property.

xii. PCIW was advised for making necessary arrangements for obtaining river flow data of "Eastern Rivers i.e. Ravi, Sutlej & Bias" from Indian counterpart and its dissemination well in time to all concerned organizations for taking further action at their end.

xiii. FFC initiated working on "Integrated Flood Management Study/ National Flood Protection Plan-IV" after consultative meetings with all stakeholders. The Consultants are being engaged for preparation of Comprehensive Flood Management Plan (NFPP-IV) for next ten years. The consultants are likely to be on board in January/February 2013. The study is likely to be completed in next financial year.

xiv. The Flood Communication Cell (FCC) established in FFC worked on round the clock basis from June 15, 2012 till 15th October 2012 (end of Monsoon Season). The Flood Communication Cell collected rainfall data and weather information from Flood Forecasting Division (FFD), Lahore and other Flood Warning Centers set up in the Provincial Headquarters, besides, data relating to river discharges at RIM Stations and other important control points including flood flows data of Eastern Rivers through PCIW and transmitted to concerned organizations for taking necessary steps at their end.

xv. The Flood Warning Centers were established by the Provincial Irrigation Departments at Provincial Headquarters. Flood Warning Centers worked on round the clock basis, and remained operational till end of Monsoon Season 2012.

5.1 Establishment of Flood Communication Cell

The Flood Communication Cell of Federal Flood Commission started functioning from 15th June 2012 on round-the-clock basis and communicated river flow data to all provinces and concerned agencies on daily basis in normal/low flood stage and 6-hourly basis in case of danger flood levels in main rivers. Based on PMD's Weather Forecasts and Advisories, FFC also issued Daily Flood/Weather Situation Reports to all concerned agencies through its Flood Communication Cell during the entire flood season-2012.

5.2 Post Flood Meeting of FFC

The Post Flood meeting of Federal Flood Commission was held on December 19, 2011 under the Chairmanship of Honourable Federal Minister for Water & Power in the

Committee Room of Ministry of Water and Power, A-Block Pak. Secretariat, Islamabad. The Honourable Federal Minister for Water & Power stressed the representatives of Provincial Irrigation Department and Federal Line Agencies for utmost efforts for early completion of urgent nature restoration/rehabilitation works and strictly follow up of schedule of implementation of Normal/Emergent Flood Programme, which was approved by ECNEC in 2004 so that proposed works could be completed well before the start of Monsoon Season 2012. The following decisions were taken in the meeting;

(i) Ministry of Water & Power will write D.O letter to Chief Secretary, Government of Balochistan for allocation of requisite funds out of Provincial ADP/resources for completion of ongoing urgent nature restoration/rehabilitation works of Irrigation, Drainage & Flood Protection Infrastructure.

(ii) Ministry of Water & Power will write D. O. Letters to Chief Secretaries of the four Provinces, Gilgit-Baltistan, FATA & AJK for organizing coordination meetings of all concerned organizations (PDMAs, DDMAs, Districts Administration, WASA etc.) before start of monsoon season every year without waiting for emergency occurrence for drawing SOPs in consultation with FFC, NDMA & other related organizations.

(iii) Ministry of Water & Power will write D.O letter to Secretary Ministry of Kashmir Affairs & Gilgit-Baltistan and SAFRON for submission of advance copy of PC-I of Water Sector Projects of Federal Line Agencies directly to Ministry of Water & Power for saving time and expediting approval process of the projects from CDWP/ECNEC.

(iv) Ministry of Water & Power will review the portfolio of WAPDA's Water Sector projects for looking possibility of re-appropriation of funds from slow moving projects to urgently needed restoration works & Flood Telemetry and Drainage projects.

(v) Ministry of Water & Power will approach Ministry of SAFRON for expediting the pending PC-I costing Rs 795.00 million of FATA regarding rehabilitation of damaged Irrigation & Flood Protection Infrastructure during 2010- Floods.

(vi) PIDs/Federal Line Agencies will complete all ongoing urgent nature/Mid-Term Restoration/Rehabilitation Works of Irrigation, Drainage & Flood Protection Infrastructure before March 31, 2012.

(vii) SIDA/PID, Sindh will carry out field surveys and prepare restoration plan for Irrigation, Drainage & Flood Protection Infrastructure damaged due to 2011-Rain/Floods.

(viii) Provincial Irrigation Departments & Federal Line Agencies will carry out field surveys for checking the status of all flood embankments/flood protection structures and all essential O & M works (not included in 2010-Restoration/Rehabilitation Works) must be completed well before the start of Monsoon Season 2012.

(ix) National Highway Authority will expedite approval process of Breaching Section of Muhammad Wala Bridge across River Chenab near Multan in consultation with PID, Punjab, Pak. Army, NDMA, FFC, PDMA & District Administration

and convey approval of Competent Authority to FFC & other concerned organization by/before December 28, 2011.

(x) Federal Flood Commission will conduct inquiry for coordination failure among PID, Punjab, NHA and other concerned organizations at planning & design stage of Muhammad Wala Bridge and report will be submitted to Ministry of Water & Power and Planning Commission for taking further action in the matter.

(xi) National Highway Authority will involve Provincial Irrigation Departments, at planning & design stage of all future bridges projects. The Raising of flood embankments, if needed as a result of construction of such bridges would be the responsibility of National Highway Authority so as to avoid situation like in case of Muhammad Wala Bridge across River Chenab.

(xii) PID, Punjab/executing agency will speed up progress on implementation of project namely "Raising & Strengthening Akbar & Nawab Pur Flood Bunds, in District Multan, Estimated Cost Rs 162.633 Million", in order to complete the project within next two months (**End February 2012**).

(xiii) Planning Commission will process the PC-I costing Rs 3.141billion jointly prepared by PID, Punjab, C&W Department and Pakistan Railway for strengthening and increasing the flood flows discharge capacity of existing Shahdara Railway Bridge on top priority basis and will included in the agenda of next meeting of CDWP.

(xiv) PIDs/Federal Line Agencies will collaborate with their concerned Districts Administrations for making utmost efforts to remove the encroachments from Flood Plains. The compliance report in this respect would be submitted to FFC and other concerned organization well before the start of Monsoon Season 2012.

(xv) PIDs/Federal Line Agencies will_strictly follow the ECNEC approved schedule for Normal/Emergent Flood Programme so that urgent nature flood protection schemes could be executed well before the start of monsoon season each year and allocated funds fully utilized.

5.3 Pre-Flood Meeting of Federal Flood Commission

Prior to start of Monsoon Season (1st July to 15th October) every year, Federal Flood Commission (FFC) holds meetings to review the flood fighting arrangements made by Federal/Provincial organizations in case of flood situation during coming flood season. 47th Annual/ Pre-Flood Meeting of Federal Flood Commission was organized on August 06, 2012, under the Chairmanship of Honourable Federal Minister for Water & Power, to review the status of preparedness of concerned Federal/ Provincial Government organizations and arrangements made for safe passage of Flood Season-2012. The following directions were issued to PIDs/ Federal Line Agencies, WAPDA, PMD & NDMA:

i. Provinces/Federal Line Agencies will mobilize all resources in order to ensure completion of all complete/ongoing 2010-Flood Damages Restoration Works related to Flood Protection infrastructure before 30th June 2012.

ii. Ministry of Water & Power will take up the matter with Planning Commission for seeking financial assistance for completion of 34 No. ongoing/incomplete restoration works of Balochistan including other 2010-FDR Works pending for want of funds.

iii. Ministry of Water & Power will review the portfolio of WAPDA's Water Sector Projects in consultation with WAPDA & Planning Commission to check the possibility of re-appropriation of funds from slow moving projects for completion of rehabilitant works of RBOD-I & III and Flood Telemetry Stations damaged during Flood Season 2010.

iv. Provincial Irrigation Department/ Federal Line Agencies will strictly follow the implementation schedule duly approved by Federal Government/ECNEC for execution of flood protection schemes under Normal/Emergent Flood Programme.

Appendix-I

MAJOR RIVERS FLOW DATA DURING MONSOON SEASON 2012

DATE	TIME (Hrs)	INDUS			Kabul	INDUS						
		TARBELA			Nowshera	KALABAGH		CHASHMA			TAUNSA	
		Reservoir Level (Ft.)	U/S (Cfs)	D/S (Cfs)	Flow (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
1-Jul-12	600	1399.54	136800	155000	64000	187400	179800	647.40	226000	213000	192500	167300
2-Jul-12	600	1399.07	152900	155000	71400	207300	199700	647.40	218600	213000	192100	166900
3-Jul-12	600	1400.08	162700	155000	74700	218200	210700	647.20	226300	223000	194100	168700
4-Jul-12	600	1403.15	196000	155000	78500	210300	202800	646.90	228500	223000	194100	168700
5-Jul-12	600	1407.85	222300	160000	86000	218000	210700	646.80	232000	223000	202400	177100
6-Jul-12	600	1413.35	244300	170000	92000	245900	237900	646.60	244000	235000	204300	178800
7-Jul-12	600	1419.55	254600	170000	92000	248700	240700	646.90	251900	235000	204300	178800
8-Jul-12	600	1425.15	249000	170000	100700	232900	224600	647.50	261400	237900	210800	184500
9-Jul-12	600	1430.45	245200	170000	93300	254000	245700	647.50	276700	261700	224200	196400
10-Jul-12	600	1434.95	236300	170000	91700	249100	240800	647.20	270100	255000	238800	211000
11-Jul-12	600	1438.22	218300	170000	81000	259600	251300	647.00	275300	258200	232200	204400
12-Jul-12	600	1441.70	212700	160000	79500	259500	251200	647.20	270800	246300	230600	202700
13-Jul-12	600	1445.54	219600	160000	83300	260900	252600	647.20	268300	247500	229100	200800
14-Jul-12	600	1449.20	216800	160000	79700	259500	251200	646.00	256200	252800	222100	194300
15-Jul-12	600	1452.55	227100	160000	74700	260900	252600	646.00	274300	253500	219300	191500
16-Jul-12	600	1455.10	214800	160000	74600	259300	251000	646.00	265300	245000	243100	215300
17-Jul-12	600	1456.83	197400	160000	67300	260500	252200	646.10	260800	238000	230700	202900
18-Jul-12	600	1457.98	185200	160000	66300	259800	251500	645.90	260100	238000	217900	190100
19-Jul-12	600	1458.54	177400	164700	61200	260500	252200	645.30	256000	238000	208700	182400
20-Jul-12	600	1458.62	182900	180400	60300	259800	251500	644.60	255500	238000	204100	178400
21-Jul-12	600	1459.44	188200	170000	56900	259800	257500	645.10	260700	230000	207900	181700
22-Jul-12	600	1459.66	175000	170000	52500	198100	189800	646.00	263900	230000	208200	181900
23-Jul-12	600	1459.50	167200	170000	52500	204800	196500	645.10	243100	230000	202000	176600
24-Jul-12	600	1459.35	172700	175000	47700	190300	182000	644.00	241800	230000	197000	172100
25-Jul-12	600	1459.29	189000	189800	51300	246600	238300	643.10	244500	230000	198100	173200
26-Jul-12	600	1460.21	210500	190200	53200	246000	237700	644.40	266900	230000	199700	174600
27-Jul-12	600	1461.73	214200	180000	55000	247400	239100	645.70	264800	230000	201200	175900
28-Jul-12	600	1462.80	204200	180000	53000	226600	218300	646.30	264500	238000	196900	172100
29-Jul-12	600	1463.14	188200	180000	43200	221700	213400	645.70	251200	238000	201700	176200
30-Jul-12	600	1463.20	182200	180000	41800	227100	218800	645.20	255100	238000	201700	176200
31-Jul-12	600	1464.25	203900	180000	43200	221600	213300	644.60	254300	238000	206300	178600

INDUS						JHELUM				
GUDDU		SUKKAR		KOTRI		MANGLA			RASUL	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
131900	96100	80100	29200	16800	-	1116.15	44400	40000	35900	23600
135900	99000	83600	30900	17600	-	1116.45	46000	40000	35900	23600
139800	102700	86200	32600	19100	-	1117.30	46900	35000	35900	23000
139900	102800	88300	34200	20300	-	1118.20	48000	35000	39800	27500
139500	102400	90000	35200	21100	-	1119.70	49900	30000	32000	19700
141100	104100	90000	35200	22900	-	1121.80	56400	25000	24200	11900
142600	105500	90000	35200	23800	-	1123.60	49000	20000	12300	-
145100	107700	91000	35900	25800	-	1126.00	56900	20000	18300	5300
152700	114300	93200	37100	27900	-	1128.00	49500	20000	18100	5300
154300	115700	98300	40000	31200	-	1130.10	47300	15000	15200	5300
159300	120400	101300	41800	33100	-	1132.15	47500	15000	9500	-
170900	131600	104700	44800	33600	-	1134.20	47500	15000	14800	5300
178200	138500	107000	46800	34000	-	1134.05	44300	15000	9700	-
182700	143000	113100	52700	34400	-	1137.85	43500	15000	9700	-
184100	144000	116000	56000	41900	8100	1139.40	39500	15000	9300	-
185100	148000	120400	60000	40100	5300	1140.95	41400	15000	9300	-
179000	140400	127100	66600	45300	9500	1142.15	36300	15000	9300	-
181500	141900	127100	66600	44100	8000	1143.40	37200	15000	9300	-
182400	142300	120000	60700	44400	6900	1144.15	38300	25000	21600	5300
176300	136300	121400	61200	44500	6500	1144.95	39200	25000	24600	5300
163900	125900	121400	61200	42400	5600	1146.25	38100	15000	14300	-
156600	117600	115700	55400	43100	6200	1147.35	34500	15000	10300	-
156600	117400	111800	51500	43200	6200	1148.35	32800	15000	10300	-
160900	121900	108300	48200	43800	6200	1149.35	32800	15000	8300	-
157300	118300	105100	46600	44100	5500	1150.45	35500	15000	9300	-
152900	114200	105000	45800	43000	3900	1151.45	35000	15000	12600	-
152900	114200	104900	45700	42400	3200	1152.50	36000	15000	9500	-
152900	114200	103000	44200	42200	3100	1153.35	32000	15000	9300	-
154000	115200	103000	44300	41700	2600	1154.00	28000	15000	9300	-
154800	116200	103100	44400	41200	2100	1154.55	26000	15000	11300	-
156200	117600	103100	44400	41200	2000	1155.55	35000	15000	11300	-

CHENAB								RAVI			
MARALA		QADIRABAD		TRIMMU		PANJAND		BALLOKI		SIDHNAI	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
45800	15300	18000	-	22800	5900	9900	-	30300	-	13800	-
57400	26600	18000	-	19200	2300	10200	-	30300	-	13800	-
61500	30400	27200	5500	16500	-	11000	-	30300	-	13800	-
69400	37900	35400	13400	15500	-	13000	600	31200	-	12000	-
94300	62500	47100	25100	21500	4600	11700	-	32900	2400	12000	-
81100	49000	56200	34200	23200	6000	10900	-	32900	2400	13800	-
62900	30400	47100	25100	20300	3000	10700	-	33600	3100	14000	-
76500	43600	39300	30900	23500	5900	9200	-	34300	3700	14000	-
71400	38300	60000	38000	34700	17600	9000	-	34300	3700	14500	-
61100	27600	47100	25100	31000	13700	9300	-	35600	4900	13000	-
66700	32900	30400	22000	27600	10000	10400	-	35600	5000	14000	-
67000	32900	38000	16000	36000	18400	10300	-	35600	4900	15000	-
72700	38300	45800	23800	30800	13200	12100	-	35000	4300	15000	-
73000	38300	41900	19900	28600	11000	12600	-	36300	5700	15000	-
62600	27600	45800	23800	26100	8500	16600	3300	35400	5000	15300	-
52200	16900	22000	-	28700	11100	12700	-	37500	6900	15700	700
50900	15300	21000	-	33700	16100	14800	1200	38100	7500	16000	700
54800	19100	14500	-	27100	9700	15600	2100	36400	5700	16100	700
62400	26600	14800	-	23200	5800	13500	-	32500	1800	16900	1300
73800	37900	40600	18600	23200	5800	13500	-	31400	600	17900	2300
62600	26600	47100	25100	23200	5800	13500	-	35100	4300	17700	2700
55100	19100	22000	-	23200	5800	14400	900	37200	6400	16500	1000
58800	22800	20500	-	21900	4500	13600	-	35700	4900	14800	-
70200	34200	24800	2800	25800	8400	14400	800	34000	3100	15000	-
70200	34200	38000	1600	30800	13400	12900	-	34600	3700	16500	1000
70200	34200	43300	21800	21900	4500	12500	-	37000	6100	16900	1300
80500	45500	48400	26400	18900	1500	11300	-	37600	6700	16600	1000
62400	26600	38900	30500	20400	3000	10900	-	39500	8600	15600	-
62600	26600	21500	13100	20400	3000	12900	-	39500	8600	15900	300
73900	37900	25800	17400	26900	9500	12900	-	38200	7200	17600	2000
81500	45500	43300	21300	33400	16000	11900	-	37600	6700	17600	2300

SUTLEJ				LINKS/ CANAL				SKARDU	
SULEMANKI		ISLAM		C.J	CRBC	Q.B	T.P	Temperature ^{0} C	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Max	Min
16000	2600	1700	-	1000	4600	18000		26.1	13.9
16000	2600	1800	-	1000	4600	18000		29.4	14.4
16000	2600	2300	-	1000	4600	21800		32.8	16.1
16000	2600	1800	-	5900	4600	22000		32.2	15.6
16000	2600	1800	-	6000	4600	22000		33.3	19.4
16000	2600	1800	-	7200	4600	22000		30	16.1
16200	2700	2600	-	8000	4700	22000		32.8	18.1
16200	2700	2500	-	8000	4800	22000		30	17.2
16200	2700	2500	-	10200	4800	22000		29.4	16.7
16200	3100	2000	-	15900	4800	22000		27.8	15
17100	3900	1800	-	16000	4800	22000		29.4	15.6
16600	3400	2600	-	16000	4800	22000		32.2	16.1
16600	3400	2600	-	16000	4800	22000		32.8	16.7
16600	5500	2600	-	16000	4800	22000		28.3	16.7
16600	4300	2600	-	16000	4800	22000		22.8	17.8
16600	5300	2900	-	16000	4300	22000		23.9	18.3
16600	5300	2900	-	17300	4100	21000		25.6	18.3
16600	3800	2600	-	20500	4100	14500		29.4	16.7
16000	3000	3800	1000	20600	4300	14800		29.4	15.6
16000	3000	4000	1000	20600	4600	22000		26.7	15.6
16000	3000	3000	-	20500	4800	22000		25.6	13.9
15100	2000	3000	-	18700	4800	22000		26.7	15.6
15000	2200	2900	-	18700	4800	20500		30	16.7
15100	2200	2200	-	18700	4900	22000		32.8	19.4
15300	2200	2400	-	18700	4900	22000		27.8	21.1
15400	2200	2100	-	18700	4900	22500		25.6	16.1
15600	2400	2100	-	15400	4900	22000		26.1	18.9
15600	2400	3100	-	14000	4900	22000		27.8	17.2
15600	2400	1200	-	15900	4900	22000		29.4	17.8
15600	2400	1400	-	18000	4900	22000		32.2	16.1
16000	3500	1600	-	18000	4900	22000		33.3	17.8

DATE	TIME	INDUS			Kabul	INDUS						
		TARBELA			Nowshera	KALABAGH		CHASHMA			TAUNSA	
		Reservoir Level (Ft.)	U/S (Cfs)	D/S (Cfs)	Flow (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
1-Aug-12	600	1466.09	221100	180000	49300	232800	224500	644.70	244000	223000	210500	182400
2-Aug-12	600	1468.49	233500	180000	45800	221200	212900	645.50	249800	223000	206700	179000
3-Aug-12	600	1472.13	261900	180000	48900	226600	218300	646.00	246600	223000	198800	174700
4-Aug-12	600	1477.05	281600	170000	48900	220800	212500	646.40	246400	223000	190700	167600
5-Aug-12	600	1482.43	284000	160000	54500	221000	212700	647.00	253600	229000	193700	170200
6-Aug-12	600	1488.43	281000	140000	57600	226700	218400	647.00	243600	232200	208100	182900
7-Aug-12	600	1492.56	239800	140000	47900	220300	212000	647.00	253600	246300	210600	185200
8-Aug-12	600	1494.74	193800	140000	39500	209300	201000	646.90	229900	223000	220000	193400
9-Aug-12	600	1495.00	167000	160000	35900	202900	194600	645.30	215800	223000	204000	178800
10-Aug-12	600	1494.98	161100	160000	33100	213900	205600	644.40	222100	213000	191400	166400
11-Aug-12	600	1495.00	161100	160000	33800	197900	189600	644.30	219800	200000	188200	162400
12-Aug-12	600	1494.72	153900	160000	36600	202900	194600	644.90	227300	200000	188400	163400
13-Aug-12	600	1494.23	148800	160000	33300	197900	189600	645.50	227700	200000	179700	156300
14-Aug-12	600	1493.64	146300	160000	33500	209300	201000	644.60	225900	215000	172300	150300
15-Aug-12	600	1493.25	151200	160000	30700	197900	189600	642.60	215700	215000	171900	150200
16-Aug-12	600	1492.40	153200	173200	27900	203700	195400	642.00	224100	208900	190100	167100
17-Aug-12	600	1491.30	153900	180000	26800	189900	181600	642.00	230200	211800	193800	170100
18-Aug-12	600	1490.32	156900	180000	29300	195700	187400	644.00	251200	215000	184100	161500
19-Aug-12	600	1489.68	165400	180000	29300	204200	196700	644.80	240100	215000	183100	160600
20-Aug-12	600	1490.68	189700	165000	28600	204200	196700	645.50	238300	215000	181100	158800
21-Aug-12	600	1493.40	216600	150000	34200	189500	182000	646.20	230600	210000	181100	158500
22-Aug-12	600	1497.57	242400	140000	38300	196900	189400	646.40	210700	200000	183800	160900
23-Aug-12	600	1502.30	256000	140000	42800	253500	245500	646.40	206700	200000	179100	156300
24-Aug-12	600	1507.87	257200	120000	53600	213800	205800	648.00	216100	182400	178700	158700
25-Aug-12	600	1514.02	264900	110000	48100	196700	188700	648.00	221800	215000	170400	150900
26-Aug-12	600	1519.94	261100	110000	48600	188000	180000	648.00	197800	191000	181700	161000
27-Aug-12	600	1525.56	259400	110000	45800	181900	173900	648.00	186800	180000	177700	162500
28-Aug-12	600	1530.24	234800	110000	41800	169400	161400	648.00	209200	202700	170800	155800
29-Aug-12	600	1533.88	216000	114700	43500	179300	172300	648.00	188500	182200	162000	146800
30-Aug-12	600	1535.88	193500	137600	37200	181300	174300	648.00	188600	182400	170800	154800
31-Aug-12	600	1537.88	180900	125000	36800	171800	164300	648.00	188800	182600	158600	143300

INDUS						JHELUM				
GUDDU		SUKKAR		KOTRI		MANGLA			RASUL	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
156400	118200	104500	45100	40700	2000	1156.55	35000	15000	11300	-
158200	119900	105300	45700	40700	2000	1157.35	31000	15000	11300	-
158200	119900	106200	46300	40700	2000	1158.15	31000	15000	8800	-
157700	119900	106200	46300	41300	2400	1159.65	44900	15000	9300	-
157700	119900	106200	46300	40900	2400	1162.15	69000	15000	41200	31400
155200	117500	106200	46300	40700	1900	1163.05	31700	12000	9100	-
152600	117500	105600	45700	40800	1900	1163.65	25100	12000	5100	-
157100	120800	105600	45700	40600	1600	1164.00	22700	15000	7700	-
165700	128400	106100	46300	40600	1600	1164.40	23700	15000	9300	-
165700	128400	109100	49200	40800	1600	1165.10	30300	15000	9300	-
171700	134400	113700	53900	41200	2000	1165.50	23800	15000	9300	-
175900	138800	116000	56100	41200	2000	1166.15	29200	15000	9300	-
175900	138800	121700	61800	41200	2000	1166.40	20500	15000	7300	-
168600	132500	121700	61800	43200	4000	1166.80	26800	18000	14300	-
152500	116400	115900	56000	44300	5100	1167.10	24600	18000	14300	-
148200	112400	105000	45200	44300	5100	1168.05	35800	15000	14300	-
138000	102000	99100	41000	44300	5100	1168.35	21600	15000	10300	-
140300	105100	93400	36100	44300	5100	1168.75	23800	15000	10300	-
161500	127200	93400	36100	44000	5100	1169.05	21600	15000	10000	-
161900	127200	108500	49500	43500	4800	1169.65	26100	13000	10000	-
154000	120500	110100	51000	42400	4000	1171.20	49200	13000	10000	-
154100	120500	110100	51000	41900	3200	1173.00	60600	13000	7000	-
151700	117200	108800	49500	41500	2700	1175.30	63000	13000	10700	-
147400	110800	101500	42100	41300	2400	1176.20	33400	12000	8500	-
159100	122600	101500	42100	41300	2400	1177.00	31000	12000	9300	-
154200	118600	101600	42100	41300	2400	1177.65	27400	12000	14300	-
149200	114900	110500	51000	42400	4000	1178.70	37000	12000	14300	-
146100	111500	106600	47200	42800	4800	1179.30	26300	12000	11800	-
174900	148700	102900	44500	43400	7300	1179.90	26300	12000	9300	-
175800	150800	119700	63400	38200	11400	1180.40	29900	12000	9300	-
172600	148700	134800	81900	36200	13700	1181.20	33100	12000	9300	-

CHENAB								RAVI			
MARALA		QADIR ABAD		TRIMMU		PANJAND		BALLOKI		SIDHNAI	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
90300	54300	54900	32900	23900	6500	9900	-	39500	8600	17900	2600
98000	62000	107100	85100	20900	4500	9900	-	39200	7300	17200	2000
95700	59700	71600	49600	19400	3000	10800	-	40700	8800	17300	2000
106100	70100	71600	49600	27700	11300	12000	-	40700	8800	16900	1700
150300	116200	194800	180800	53300	37200	12900	-	46400	14500	17300	2000
77500	43600	85900	74700	39800	24700	12900	-	49000	17100	18600	3300
61600	27600	34500	25800	82800	67700	10900	-	51000	19900	18900	3600
56300	22800	24800	16000	61300	47200	10900	-	49600	17700	20300	5000
60600	26600	27400	5400	35600	21500	17700	4100	47600	15700	20100	4800
56800	22800	35400	13300	18300	4200	29300	15700	46300	14300	21200	5900
56800	22800	24800	2800	16600	1500	38700	25000	44100	12200	21200	5900
53100	19100	19600	11200	17600	1500	29000	15300	45500	13600	22100	6900
53100	19100	18000	-	25000	9900	27300	13600	44100	12200	21100	5900
64400	30400	22800	2800	22700	7600	23800	10100	42300	10400	20800	5600
64400	30400	32700	10700	20900	5800	20900	7200	42300	10400	20700	5600
83000	49000	51000	2900	19500	4400	13700	-	42300	10400	20700	8800
66900	32900	51000	2900	17400	3600	15600	2100	42400	12200	22800	15600
61600	27600	35300	13300	17400	5600	15500	2600	44200	12900	19800	12600
67900	32900	43200	21200	30200	18400	16200	3100	44200	12900	16600	6000
84000	49000	50900	28900	34800	23000	16300	3100	44100	12900	16600	6000
89300	54300	74100	52100	26300	14500	20200	7100	44100	12900	18700	7500
89300	54300	79600	57600	24100	12300	18300	5100	46900	15700	18700	7500
126800	91800	110800	88800	38000	26200	22700	9300	54500	23000	17800	5000
89300	54300	70200	61600	51500	39700	27800	14400	60800	29300	19200	7500
83700	59700	70800	62200	52600	40800	22800	9300	58500	27000	20000	7500
91500	71500	129700	107700	62700	51900	20700	7300	53700	22100	21100	8100
69100	49000	78400	69900	38200	27400	23800	10300	42900	11300	21300	8100
91700	71500	64100	42100	45100	34300	28800	15400	45500	13900	21400	8100
69300	49000	69900	47900	62800	52200	39700	26300	42900	11300	23800	10600
58700	38300	46900	24900	46700	36100	39700	26300	37400	5800	18900	5700
59400	32900	40500	18500	36700	24100	43200	29700	36600	5000	18300	4900

SUTLEJ				LINKS/CANAL				SKARDU	
SULEMANKI		ISLAM		C.J	CRBC	Q.B	T.P	Temperature ^{0} C	
D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Max	Min
16100	3400	2100	-	15100	4900	22000		35.6	21.7
15600	2400	1600	-	13000	4900	22000		33.3	22.2
15600	2400	2100	-	13000	4900	22000		27.8	18
16400	3400	2100	-	13000	4900	22000		29.4	22.8
16600	3800	2600	-	11500	4900	14000		25.6	12.2
16500	3800	2800	-	6600	4900	11200		25.6	13.3
17400	4400	2600	-	2400	4900	22000		26.7	13.3
17400	4500	2600	-	3400	4900	22000		24.4	19.4
17400	4500	2600	-	8400	4900	22000		28.3	16.1
17600	4500	2600	-	14100	4900	22000		28.9	20
15500	2400	2600	-	16000	4900	22000		27.8	18.3
17500	5900	3600	1000	16000	4900	22000		22.2	17.8
16800	4000	3500	700	16000	4900	18000		25.6	16.7
16900	4000	2600	-	16000	4900	20000		24.4	15.6
16800	4000	2600	-	16000	4900	22000		25	21.1
16800	4000	4200	4200	16000	4900	22000		26.1	19.4
16900	5100	3600	3600	13600	4900	22000		23.9	16.7
16700	5100	3500	2500	12000	4700	22000		27.8	18.9
16400	4400	3500	1200	12000	4600	22000		31.1	19.4
16200	4500	3500	1200	10800	4600	22000		33.3	19.4
16700	4900	3900	1600	7500	4600	22000		32.2	18.9
16700	5700	4000	1700	3400	4600	22000		32.8	18.3
16700	4800	4700	2300	2000	4700	22000		33.3	15
16800	4800	4700	2800	2000	4800	22000		33.9	17.8
18100	6400	4700	2300	2000	4800	22000		29.4	18.3
17400	5500	4800	2300	2000	4800	22000		29.4	18.3
17600	5500	5300	2800	2000	4800	22000		25.6	16.1
17500	5700	5300	2600	2000	4500	22000		28.9	16.1
19300	7700	5400	2700	2000	4300	22000		28.9	21.1
21300	9900	5600	3000	2000	4200	22000		26.1	17.2
19800	7900	5700	3000	2000	4200	22000		27.2	16.7

DATE	TIME	INDUS			Kabul	INDUS						
		TARBELA			Nowshera	KALABAGH		CHASHMA			TAUNSA	
		Reservoir Level (Ft.)	U/S (Cfs)	D/S (Cfs)	Flow (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
1-Sep-12	**600**	1539.38	173900	131900	34200	167300	159800	647.80	182500	180000	157800	142300
2-Sep-12	600	1540.40	175200	146100	34600	186200	178700	647.60	178700	175000	157200	141800
3-Sep-12	600	1541.40	173100	143700	37600	174800	167300	647.40	184600	175000	161000	146000
4-Sep-12	600	1542.40	183900	154500	38400	226500	218700	647.50	200000	181000	157300	135000
5-Sep-12	600	1543.40	188900	159600	36600	198800	191300	647.80	218500	190000	151400	130500
6-Sep-12	600	1544.40	195400	166100	37000	193600	186100	648.00	222500	195300	166000	140100
7-Sep-12	600	1545.40	185800	156500	50000	188900	181400	648.00	215900	193000	184300	161800
8-Sep-12	600	1546.40	169100	139500	43400	233000	225500	648.00	230200	207600	178200	156700
9-Sep-12	600	1547.40	200400	171100	46500	217700	210200	648.00	227800	205400	210600	191600
10-Sep-12	600	1548.40	186900	157600	43300	217300	211300	648.00	215600	193600	243400	235400
11-Sep-12	600	1549.40	154100	124700	37000	181900	177600	648.00	248300	226800	204700	201700
12-Sep-12	600	1550.00	155800	138000	38000	196600	192600	648.00	201400	182800	180400	176400
13-Sep-12	600	1550.00	157400	156900	35200	199900	195200	648.00	181400	164900	206700	202600
14-Sep-12	600	1550.00	144300	143800	33700	183400	177900	648.00	199600	183100	164300	160300
15-Sep-12	600	1550.00	155300	154800	36500	179200	172700	648.00	214200	197700	154200	154200
16-Sep-12	600	1550.00	148400	147800	37400	188800	183600	648.00	198100	181600	168000	168000
17-Sep-12	600	1550.00	145600	145000	38000	200500	195800	648.00	229000	212500	176000	176000
18-Sep-12	600	1550.00	142400	141900	41400	173500	168800	648.00	204200	187800	181500	181500
19-Sep-12	600	1550.00	136000	135800	43600	207200	202300	648.00	202100	185800	180400	180400
20-Sep-12	600	1550.00	114300	113800	37400	174100	168400	648.00	214000	197700	175100	175100
21-Sep-12	600	1550.00	98600	98100	30700	154000	148300	648.00	200800	186100	179200	179200
22-Sep-12	600	1550.00	81100	80600	28700	116700	111000	648.00	162900	151000	174200	174200
23-Sep-12	600	1550.00	77100	76700	27600	97800	92100	647.70	119300	113000	152600	151600
24-Sep-12	600	1550.00	71100	70500	24500	105500	99500	648.00	121000	103400	130600	129600
25-Sep-12	600	1550.00	68600	67900	23200	92200	85900	648.00	122100	109800	99500	98500
26-Sep-12	600	1550.00	64800	64100	20500	87000	80700	647.30	83400	82000	84900	83400
27-Sep-12	600	1550.00	61000	60400	20000	73300	66300	646.90	92000	79000	90500	88000
28-Sep-12	600	1549.60	58900	70000	17300	69700	61900	645.80	82700	79000	72100	64200
29-Sep-12	600	1548.60	61700	90000	17000	78500	71500	644.40	90800	89000	72100	65800
30-Sep-12	600	1547.37	55100	90000	15500	106700	99700	643.00	92200	89000	72100	66400

INDUS						JHELUM				
GUDDU		SUKKAR		KOTRI		MANGLA			RASUL	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
163500	135000	137100	81900	39900	16800	1181.65	23900	12000	12300	-
162600	130500	130000	74600	40900	15000	1182.05	22600	12000	7300	-
148000	113700	112900	56100	39400	8500	1182.70	29200	12000	7300	-
149500	117900	106700	51700	41100	7700	1183.10	22600	12000	9300	-
147900	117900	106900	56100	50100	19900	1183.65	26500	12000	11300	-
141000	133400	115600	93100	59100	44700	1184.40	31800	12000	9300	-
125900	121300	118800	106300	57400	48100	1185.45	39700	12000	10300	-
125900	121300	118500	110500	56100	43100	1186.40	35100	10000	10300	-
126700	123600	112300	106400	55000	48200	1187.65	41000	8100	4300	-
160300	160300	121600	121600	63800	58100	1188.95	42300	8000	3800	-
230300	230300	146800	146800	73100	65800	1190.25	42800	8000	3800	-
230300	23300	194300	194300	96400	88000	1191.45	42200	8000	4000	-
236000	236000	210000	210000	102900	93000	1192.55	39400	8000	4200	-
212300	212300	214800	210000	103900	94900	1193.65	39400	8000	4200	-
206200	206200	214800	207400	106100	96100	1194.75	39400	8000	4300	-
194600	194600	200200	183500	125300	111300	1195.70	35100	8000	8300	-
182200	182200	190200	171800	143100	124700	1196.55	32300	8000	8300	-
188400	188400	184300	157000	156000	133100	1198.70	69400	8000	6900	-
200200	200200	182100	150800	161300	136800	1201.70	97900	8000	9200	5300
200200	200200	183700	150200	165300	136800	1203.15	55300	8000	3900	-
194100	194100	186800	152500	165500	138800	1204.15	41000	8000	3900	-
182200	182200	186600	150200	161200	133100	1205.05	37700	8000	3900	-
176400	176400	181200	142800	153100	124700	1205.85	34400	8000	7200	-
176400	176400	169600	130600	144400	115300	1206.25	33200	20000	10200	-
152300	152300	169600	131200	135600	105800	1206.40	33000	28000	18200	-
128300	128300	160400	121900	127100	96600	1206.40	28000	28000	25500	5300
121900	121900	149300	112000	126000	96600	1206.40	28000	28000	33100	11900
113300	113300	127800	88100	122100	93200	1206.25	28000	33000	33800	12100
107100	107100	111100	69600	116800	87600	1206.05	26400	33000	27600	5400
82800	82800	103100	60400	113800	84300	1205.70	21400	33000	34800	12200

CHENAB								RAVI			
MARALA		QADIR ABAD		TRIMMU		PANJAND		BALLOKI		SIDHNAI	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
62200	30400	35300	13300	33200	18600	46400	33000	34900	3100	17400	3800
57200	22800	32700	10700	24100	8000	46400	33000	35500	3700	17000	3100
64800	30400	23500	1500	18300	2200	37900	24400	38700	6800	18400	4400
61000	26600	31400	9400	16100	-	32000	18500	39700	8100	16500	2300
64800	30400	31400	9400	17600	1500	28000	14500	39800	8100	16300	1900
61000	26600	31400	9300	16100	-	15800	3100	43400	11600	20000	7000
64800	30400	27400	5400	33300	17300	16900	4100	45700	14100	20300	6800
60600	30400	36500	18500	34800	19800	14900	2100	48500	16900	23100	10200
73200	43600	36500	18500	31600	19900	12200	4100	47400	18400	23300	18800
73200	43600	46900	28900	34400	28600	24300	24300	42800	22800	26100	26100
62500	32900	60600	50600	36500	30700	28600	28600	42800	28300	22400	22400
52200	27600	29100	19100	40000	32000	39700	39700	39400	24400	22400	22400
51000	22800	17800	7800	46200	38000	47900	47900	34500	15500	24700	24700
67100	38300	27900	17900	49400	43000	47900	47900	30900	8400	26600	24600
72400	43600	35400	25400	34800	28400	58000	58000	29100	6600	28400	22400
56300	27600	42900	32900	28400	22000	60000	60000	31800	8400	24900	17700
57300	30400	21600	11600	32000	26500	60000	60000	37000	14500	19400	12900
54200	30400	31700	21700	39200	33700	65600	65600	37800	17800	19300	12800
92900	86100	129900	119900	42200	36700	51400	51100	43200	23200	17700	10200
58000	49000	81800	75800	36200	30200	49800	49600	47600	26600	19800	10300
48500	38300	48300	42300	57300	51300	43900	41700	31800	9300	22100	11600
32500	22200	35700	29700	71100	65100	45700	42400	23400	-	23900	12900
31200	7700	24300	18300	51500	41800	43400	37700	18600	-	24000	12900
26800	4000	8500	-	41900	31700	47600	39800	15800	-	19200	7100
23800	4000	12800	-	32300	17300	40700	31400	19300	-	12600	-
21800	4000	17000	-	23900	8500	58700	48900	24100	-	14400	2000
21500	4000	18000	-	15400	Nil	55800	45800	28100	3600	13700	1000
19200	6900	17000	-	15400	-	41800	31800	26200	1200	14300	1300
20300	7700	17500	-	20000	4600	21600	11000	25000	-	15600	2600
18500	5900	21500	1500	20100	4500	13700	3000	24000	-	15900	2600

SUTLEJ				LINKS/CANAL				SKARDU	
SULEMANKI		ISLAM		C.J	CRBC	Q.B	T.P	Temperature ^{0} C	
D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Max	Min
18200	6600	6200	3400	2000	4200	22000		27.8	16.7
18200	6600	8500	5600	3300	4200	22000		28.9	16.1
16100	4300	9300	6400	9200	4200	22000		28.3	16.1
16300	4300	8500	5600	12900	4200	22000		27.7	15.6
16400	4300	6400	3500	19100	3700	22000		28.9	17.8
15900	4100	4100	1700	20000	3400	22000		25	15.6
16600	4800	3900	1000	20000	2900	22000		26.7	16.7
16800	4800	3500	1000	20000	2600	18000		24.4	15.6
17500	10900	4200	4200	20000	2300	18000		22.2	15.6
17900	16900	4900	4900	20000	2000	18000		20	15.6
16200	15000	6400	6400	20000	1500	10000		16.7	12.8
11100	8700	9900	9900	17200	1500	10000		22.8	15
11900	8500	13900	12700	15000	1500	10000		26.1	15.6
11800	6400	12800	11300	15000	1500	10000		25.6	15.6
12200	5000	10600	8800	15000	1500	10000		23.9	15
12500	6000	9100	7200	15000	1500	10000		26.7	13.9
14500	10900	9100	8100	15000	1500	10000		25.6	13.3
15400	10700	9100	8100	15000	1400	10000		20	12.2
15400	10700	7200	7200	15000	1300	10000		17.8	11.1
18400	10700	9600	7200	15000	1300	6000		16.1	10
17100	7600	9600	7200	13100	1600	6000		19.4	10
20600	10200	10600	8100	10000	1900	6000		19.4	10.6
21000	10200	10700	8100	10000	1900	6000		20.6	11.1
21500	10600	9900	7200	10000	2100	8500		18.9	10.6
9000	-	9100	6400	10000	2300	12800		19.4	10
9200	-	5000	2300	12100	2300	17000		21.7	14.4
12000	2200	2800	-	17700	2300	18000		22.2	11.7
12000	2200	2800	-	16100	2300	17000		25.6	8.9
12000	2200	2000	-	15000	2400	17500		19.4	9.4
12000	2200	1800	-	15000	2500	20000		18.3	11.1

DATE	TIME	INDUS			Kabul	INDUS						
		TARBELA			Nowshera	KALABAGH		CHASHMA			TAUNSA	
		Reservoir Level (Ft.)	U/S (Cfs)	D/S (Cfs)	Flow (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
1-Oct-12	**600**	1546.12	54500	90000	15900	87000	79500	645.30	120700	79000	80600	66100
2-Oct-12	600	1545.22	54600	80000	14300	104400	96900	645.10	96800	83000	80600	66100
3-Oct-12	600	1544.20	51100	80000	14200	96700	89200	646.20	111300	83000	72500	57800
4-Oct-12	600	1543.22	52400	80000	13800	81800	74300	646.00	95700	83000	70800	53800
5-Oct-12	600	1542.20	51200	80000	12600	86400	78900	646.00	98500	83000	70800	53300
6-Oct-12	600	1541.22	47400	75000	11000	96500	89000	645.80	91200	78000	74600	56600
7-Oct-12	600	1540.15	44900	75000	10200	86000	78500	645.30	87700	78000	72200	54800
8-Oct-12	600	1539.11	46800	75000	10800	82100	74600	644.60	85800	78000	73900	56100
9-Oct-12	600	1538.03	45900	75000	11000	80400	72900	643.40	77100	74000	75100	53100
10-Oct-12	600	1536.90	44500	75000	10500	75900	68400	642.90	77900	74000	70900	48800
11-Oct-12	600	1535.74	43600	75000	9800	81700	75200	641.30	79100	73000	72300	51800
12-Oct-12	600	1534.39	43300	80000	11400	76600	70600	640.90	80300	73000	72300	51800
13-Oct-12	600	1532.96	41000	80000	11200	78400	72400	640.90	83600	73000	69800	49700
14-Oct-12	600	1531.88	40800	70000	10800	85100	79100	641.90	83200	64000	68400	48700
15-Oct-12	600	1530.66	36800	70800	10800	85500	79500	642.80	83000	64000	67300	49800
16-Oct-12	600	1529.96	41200	60000	10300	72300	66300	643.00	68900	57000	61500	51000
17-Oct-12	600	1529.16	39500	60000	12600	71200	65200	643.20	68600	57000	59700	48600
18-Oct-12	600	1528.33	38600	60000	12600	77200	71200	642.90	63500	57000	61500	50800
19-Oct-12	600	1527.48	38100	60000	11000	74600	68600	642.60	63000	57000	56500	46600
20-Oct-12	600	1526.59	37000	60000	12300	72300	66300	642.40	63400	55000	55900	46100
21-Oct-12	600	1525.69	36700	60000	11400	73900	68400	642.40	62400	55000	55700	46000
22-Oct-12	600	1524.83	37800	60000	12400	63000	57500	642.30	61500	52000	55700	46000
23-Oct-12	600	1523.88	35400	60000	12900	64400	58900	643.60	72000	52000	54300	47400
24-Oct-12	600	1522.91	34900	60000	12300	65800	60300	643.90	62300	52000	54300	47400
25-Oct-12	600	1521.86	32800	60000	11400	73600	68100	644.10	61400	47000	54300	50200
26-Oct-12	600	1520.92	32700	57700	11800	89700	84200	644.80	61600	47000	51300	47400
27-Oct-12	600	1519.95	31900	57700	11400	76200	70700	645.50	62000	47000	51300	47400
28-Oct-12	600	1519.13	32700	53000	11900	70900	65400	645.60	55300	47000	51300	47400
29-Oct-12	600	1518.26	31400	53000	11000	56300	50800	645.60	54100	47000	48700	45000
30-Oct-12	600	1517.36	30800	53000	11200	53200	47700	645.30	50600	47000	48700	45000
31-Oct-12	600	1516.43	29900	53000	8600	52000	46500	645.60	57600	47000	48700	44600

INDUS						JHELUM				
GUDDU		SUKKAR		KOTRI		MANGLA			RASUL	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	Reservoir Level (Ft)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
73800	73800	84300	38400	102700	75000	1205.40	23100	33000	31300	8200
71900	71300	76100	28900	87900	59900	1205.05	21400	33000	31400	8200
69600	69600	69800	22600	69600	42100	1204.65	19800	33000	23200	-
69000	69000	69100	20100	59100	31600	1204.20	18100	33000	23200	-
69000	69000	64900	18400	49000	21300	1203.75	18100	33000	28600	5400
64600	63100	64100	19200	42100	13600	1203.25	16500	33000	31400	8200
59500	58000	63400	18500	37400	8300	1202.75	16500	33000	31400	8200
55000	53500	62400	18200	33200	4000	1202.25	16500	33000	31400	8200
53500	51500	59800	18100	30800	2300	1201.75	17000	33000	22200	-
52000	48400	54700	15600	26700	-	1201.20	15900	33000	30300	8100
52000	47900	51700	13200	19300	-	1200.60	14400	33000	28600	5400
52000	47900	50300	13300	16100	-	1199.95	12900	33000	23200	-
52000	47900	49800	13400	15900	-	1199.35	15900	33000	23200	-
49200	45700	48000	11600	15600	-	1198.75	15900	33000	28600	5400
49200	45700	48000	11600	14500	-	1198.10	14500	33000	28600	5400
48000	44500	47700	12100	13300	-	1197.45	14500	33000	21200	-
48000	44500	46900	20100	11300	-	1196.80	14500	33000	21200	-
48000	44500	45600	15500	11200	-	1196.15	14500	33000	33300	12100
48000	43900	44300	14700	11000	-	1195.50	12500	31000	26600	5400
48000	43900	44300	17000	9700	-	1194.90	13900	31000	26600	5400
48000	43900	44100	19600	9600	-	1194.35	14300	30000	25400	5400
48000	43900	44000	18600	9900	-	1193.80	14300	30000	25400	5400
48000	43900	42600	17100	10100	-	1193.25	12300	28000	30000	12100
48000	43900	42700	17100	12000	-	1192.80	14200	27000	17000	-
48000	43900	42700	17400	12800	-	1192.35	14200	27000	17000	-
48000	43900	42300	17500	13600	-	1191.80	11300	27000	22400	5400
48000	43900	42000	17900	15500	-	1191.20	9900	27000	29200	12200
48000	43900	41600	17600	14600	-	1190.60	9900	27000	17000	-
48000	43900	42000	17300	14300	-	1190.05	11300	27000	17000	-
48000	43900	42000	17300	14300	-	1189.45	11100	27000	17000	-
47200	43200	42000	16900	14100	-	1188.85	11200	27000	28200	12200

CHENAB								RAVI			
MARALA		QADIR ABAD		TRIMMU		PANJAND		BALLOKI		SIDHNAI	
U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	D/S (Cfs)
18800	5900	22000	--	19700	3100	10700	-	24000	-	15000	1700
20400	7600	19000	-	18200	1600	10700	-	24000	-	14800	1300
18500	5700	19000	-	21200	4600	9900	-	20000	-	13800	300
16900	4000	21300	-	20200	3100	10700	-	20000	-	13800	300
17900	5000	21500	-	18000	1600	13100	2100	20800	-	14100	300
16900	4000	19000	-	18000	1600	11100	-	21500	-	13800	-
16900	4000	19000	-	19700	3100	11100	-	19500	-	13800	-
17700	5000	20000	-	15800	-	11100	-	19500	-	13300	-
16700	4000	19500	-	16200	-	11000	-	20000	-	13000	-
12800	4000	19500	-	15000	-	10900	-	20000	-	13300	-
11800	3000	19500	-	15400	-	9700	-	19000	-	12300	-
11200	3000	19500	-	15400	-	10200	-	16500	-	12600	-
11200	3000	19500	-	13200	-	10200	-	17700	-	12300	-
10700	3000	19500	-	11800	-	9900	-	18000	-	10100	-
11000	3000	19500	-	11800	-	8600	-	18000	-	9800	-
13800	5100	19500	-	12800	-	9400	-	17500	-	11200	300
14400	6600	19000	-	10600	-	9700	-	19100	-	10800	-
10800	3000	20300	-	12600	-	9200	-	19700	-	11300	-
13000	5100	21000	-	11200	-	8600	-	20000	-	11100	-
10400	3000	18000	-	10900	-	8900	-	21000	-	10400	-
10100	4200	18000	-	11400	-	8900	-	17800	-	10100	-
10900	5100	17000	-	10600	-	8600	-	18600	-	10500	-
12700	6800	20000	-	10500	-	8700	-	16500	-	10400	-
9200	3000	17000	-	9800	-	9000	-	16500	-	9500	-
9700	3000	17000	-	9600	-	9300	-	16500	-	9300	-
9200	3000	17000	-	10000	-	8600	-	15500	-	9800	-
8700	3000	17000	-	9600	-	7800	-	15500	-	9300	300
8200	3000	16000	-	8800	-	5800	-	15500	-	9000	-
8200	3000	16000	-	9400	-	5800	-	15000	-	8600	-
8500	3000	16000	-	9400	-	5900	-	14500	-	9000	-
8500	3000	16000	-	9200	-	6000	-	14500	-	9300	-

SUTLEJ				LINKS/CANAL				SKARDU	
SULEMANKI		ISLAM		C.J	CRBC	Q.B	T.P	Temperature ^{0} C	
D/S (Cfs)	U/S (Cfs)	D/S (Cfs)	U/S (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Flow (Cfs)	Max	Min
12000	2200	2500	-	15000	2500	22000		21.7	14.4
11600	1800	2500	-	13300	2800	19000		22.2	9.4
11600	1800	1800	-	12000	3200	19000		22.8	10
9400	-	1400	-	12000	3500	21300		22.2	8.9
9400	-	1700	-	12000	3500	21500		18.3	8.9
9800	-	1200	-	12000	3500	19000		18.9	10.6
10400	600	1000		12000	3500	19000		18.3	9.4
9800	-	500	-	12000	3500	20000		18.3	9.4
9500	-	600	-	12000	3500	19500		21.1	10.6
9800	-	600	-	12000	3500	19500		19.4	8.9
9800	-	600	-	10500	3500	19500		22.2	10.6
9800	-	600	-	7100	3500	19500		20.6	10
9300	-	600	-	7000	3500	19500		18.9	7.8
8700	-	600	-	7000	3500	19500		16.7	6.4
8700	-	600	-	7000	3500	19500		16.1	5.6
7800	-	600	-	6400	3600	19500		17.8	9.6
10100	-	500	-	6000	3600	19000		15	8.3
11600	-	500	-	6000	3500	20300		15	6.7
11800	900	500	-	5400	3400	21000		15.6	6.1
12000	900	500	-	4900	3400	18000		15	6.7
12800	3100	1300	-	4000	3400	18000		15.6	6.7
10500	1000	1500	-	4000	3400	17000		13.9	5.6
9500	1000	1500	-	4000	3400	20000		15.6	2.8
8000	1000	1500	-	4000	3300	17000		14.4	3.3
8000	1000	1900	-	4000	3300	17000		12.8	1.7
8200	1000	1800	-	4000	3100	17000		13.3	1.1
8200	1000	1300	-	4000	3100	17000		13.3	1.1
8200	1000	1000	-	4000	3100	16000		15	0.6
8200	1000	1000	-	4000	3100	16000		14.4	0
8200	1000	1000	-	4000	3100	16000		15	0.6
7900	1000	Nil	-	4000	3100	16000		15	0.6

Appendix-II

MONTHLY RAINFALL DATA OF YEAR 2012

RAINFALL (MM) STATEMENT FOR THE MONTH OF JANUARY-2012

Stations		Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)																																
Province/Agency		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-01-12	Monthly Normal
1	BAHAVALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8.8
2	BAHAVALPUR CIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.2	7.3
3	BAHAVALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	*
4	BHAKKAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*
5	CHAKWAL	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	*
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	*
7	FAISALABAD	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1	11.0
8	ISLAMABAD A/P	0	0	0	0	0	0	20	0	0	0	0	0	0	0	21	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60.6"	59.2
9	ISB. DHAMIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	*
10	ISB. SD. PUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	*
11	ISB.SH.ABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	*
12	ISLAMABAD ZP	0	0	0	0	0	0	19	0	0	0	0	0	0	0	16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.5	59.6
13	JHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
14	JOHARABAD	0	0	0	0	0	0	11	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	*
15	JHELUM	0	0	0	0	0	0	27	0	0	0	0	0	0	0	18	11	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	64.4"	37.4
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	3.8
17	KAMRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	*
18	LAHORE A/P	0	0	0	0	0	0	4	0	0	0	0	0	0	0	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	22.4
19	LAHORE PBO	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.1	22.9
20	LHR. SHAHI QILLA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	*
21	LHR. MISRI SHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	*
22	LHR. UPPER MALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	*
23	LHR. SHAHDARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1	*
24	MANDI-BAHU-DIN	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	44	*
25	MIANWALI	0	0	0	0	0	1	4	0	0	0	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	16.2
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.2	8.2
27	MANGLA	0	0	0	0	4	0	21	2	0	0	0	0	0	0	13	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	*
28	MURREE	0	0	0	0	8	0	21	0	0	0	0	0	0	0	15	19	0	0	4	1	1	0	15	0	0	0	0	0	0	0	0	84.3	155.4
29	NOORPUR THAL	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	*
30	OKARA	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.1	*
31	RAHIM YAR KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1.2	*
32	GUJRANWALA CAN	0	0	0	0	0	0	7	0	0	0	0	0	0	0	3	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32.2	*
33	SAHIWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	*
34	SARGODHA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3	13.0

35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	7.3
36	SIALKOT CANTT	0	0	0	0	0	0	10	0	0	0	0	0	0	0	13	36	4	0	0	0	0	0	0	0	0	0	0	0	0	0	63.1"	41.8
37	SIALKOT A/P	0	0	0	0	0	1	6	0	0	0	0	0	0	0	13	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58.2	"
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	"
GILGIT BALTISTAN / AZAD KASHMIR																																	
39	ASTORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44.4
40	BUNJI	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5.6
41	CHILAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	11.3
42	GARHI DOPATTA	0	0	0	0	3	2	6	0	0	0	0	0	0	0	9	24	0	0	4	0	0	0	0	0	0	0	0	0	0	0	48	109.6
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	4.1
44	GUPIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18"	4.5
45	KOTLI	0	0	0	0	1	3	52	0	0	0	0	0	0	0	19	35	0	0	18	0	0	0	1	0	0	0	0	0	0	0	129.2"	79.0
46	MUZAFFARABAD	0	0	0	0	7	7	10	0	0	0	0	0	0	0	13	15	0	0	2	0	0	0	4	5	0	0	0	0	0	0	63	105.9
47	RAWALAKOT	0	0	0	0	11	7	23	0	0	0	0	0	0	0	17	36	15	0	13	1	0	0	5	0	0	0	0	0	0	0	128.1	"
48	BABUSAR TOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
49	HUNZA	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	"
50	PATTAN	0	0	0	0	8	21	*	1	0	0	0	0	0	0	9	17	0	0	0	0	0	0	15	5	0	0	0	0	0	0	76	"
51	SKARDU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7.2	32.2
KHYBER PAKHTUNKHWA																																	
52	BALAKOT	0	0	0	0	7	3	6	0	0	0	0	0	0	0	9	23	0	0	0	0	0	0	2	5	0	0	1	0	0	0	56	103.5
53	BANNU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	19	"
54	CHERAT	0	0	0	0	0	0	9	0	0	0	0	0	0	0	11	8	0	0	0	0	0	0	6	0	0	0	0	0	0	0	34	40.0
55	CHITRAL	0	0	0	0	5	2	2	1	0	0	0	0	0	0	3	14	0	0	0	0	0	0	7	2	0	1	0	0	0	1	37	42.2
56	D.I.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	"
57	DIR	0	0	0	2	13	19	25	0	0	0	0	0	0	0	12	24	0	0	0	3	0	0	29	9	0	0	0	0	0	0	136"	123.4
58	LOWER DIR	0	0	0	0	8	10	29	0	0	0	0	0	0	0	7	16	0	0	0	0	0	0	12	5	0	0	0	0	0	0	87	"
59	DROSH	0	0	0	0	3	1	4	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	16	1	0	0	2	0	0	0	31	48.6
60	KAKUL	0	0	0	0	3	0	1	0	0	0	0	0	0	0	1	17	0	0	1	0	0	0	0	2	0	1	0	0	0	0	26	73.4
61	KALAM	0	0	0	0	16	20	2	0	0	0	0	0	0	0	12	26	0	0	0	0	0	0	16	5	0	4	8	0	0	4	109	"
62	KOHAT	0	0	0	0	0	3	12	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	25.2"	24.7
63	MALAM JABBA	0	0	0	1	30	26	14	2	0	0	0	0	0	0	15	29	0	0	9	0	0	2	20	0	0	1	1	0	0	0	150	"
64	MIRKHANI	0	0	0	0	4	3	6	0	0	0	0	0	0	0	3	8	0	0	0	0	0	0	2	0	0	0	0	0	0	0	26.1	"
65	PARACHINAR	0	0	0	0	5	8	12	0	0	0	0	0	0	0	14	22	0	0	0	0	0	7	12	0	0	0	0	0	0	0	80"	47.6

66	PESHAWAR A/P	0	0	0	0	2	5	25	0	0	0	0	0	0	0	10	7	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	51.1"	30.8
67	PESHAWAR CITY	0	0	0	0	0	0	30	0	0	0	0	0	0	0	5	4	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	42.3	*
68	RISALPUR	0	0	0	0	2	1	22	0	0	0	0	0	0	0	12	13	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	53"	35.4
69	SAIDU SHARIF	0	0	0	0	6	9	20	0	0	0	0	0	0	0	6	22	0	0	5	1	0	0	5	1	0	0	0	0	0	0	0	75.2	84.6
SINDH																																		
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.8
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0
72	HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7"	2.0
73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	TR	0	0	TR	0	0	0	0	0	1	3.6
74	KARACHI AIRPOR	0	0	0	0	TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR	0	0	TR	0	0	0	0	0	0	10.8
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR	0	0	0	0	0	0	5.0
76	KCHI MASROOR	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	TR	0	0	0	0	0	TR	0	TR	TR	0	0	0	0	0	0	3	*
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
78	NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR	0	0	0	0	0	0	TR	2.8
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.8
81	SUKKUR	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*
82	MOIN-JO-DARO	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR	0	0	0	0	0	1	3.4
83	THATTA	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2.2	*
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
BALOCHISTAN																																		
86	BARKHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4	13.9
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	2	0	0	0	0	0	0	16	17.9
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9	*
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	15	0	0	2	0	0	0	0	0	0	20	21.9
90	KALAT	0	0	0	0	0	0	0	0	0	4	0	0	0	5	3	0	0	0	0	0	12	4	3	3	0	0	0	0	0	0	0	34	38.3
91	KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	3	0	0	6	0	0	0	0	0	0	0	15	22.1
92	LASBELA	0	0	0	0	0	0	0	0	0	0	TR	TR	TR	0	TR	0	0	0	0	0	0	TR	0	0	TR	0	0	0	0	0	0	TR	5.0
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	8.2
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	17"	15.8
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	46"	23.8
96	QUETTA	0	0	0	4	2	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	3	1	0	2	0	0	0	0	0	0	12.1	64.0
97	SAMUNGLI	0	0	0	2	2	0	0	0	0	0	TR	0	0	6	10	TR	0	0	0	0	0	0	6	0	2	0	0	0	0	TR	3	31	*
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	8.7	9.7
99	TURBAT	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	13	4	0	0	0	0	0	0	0	0	18.6	*
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	60	0	10	5	0	0	0	0	0	0	77	19.4
101	ZHOB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20.0
NOTE: ** not available & * above normal																																		

RAINFALL (MM) STATEMENT FOR THE MONTH OF FEBRUARY-2012

Stations		Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)																														
	PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total Since 01-02-12	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.1	13.9
2	BAHAWALPUR CIT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	10.5
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	"
4	BHAKKAR	0	0	1	2	0	0	0	0	0	0	0	7	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	15	"
5	CHAKWAL	0	0	0	3	12	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	23.2	"
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	"
7	FAISALABAD	0	0	0	1	1	0	0	0	0	0	0	2	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	8	19.1
8	ISLAMABAD A/P	0	0	0	9	24	0	0	0	0	0	0	4	7	11	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	57.3	79.7
9	ISB. DHAMIAL	0	0	0	12	36	0	0	0	0	0	0	2	8	28	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	89	"
10	ISB. SD. PUR	0	0	0	7	22	0	0	0	0	0	0	2	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	"
11	ISB.SH.ABAD	0	0	0	*	*	0	0	0	0	0	0	*	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	"
12	ISLAMABAD ZP	0	0	0	6	22	0	0	0	0	0	0	1	7	10	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	48.1	86.3
13	JHANG	0	0	0	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.3	"
14	JOHARABAD	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	7.1	"
15	JHELUM	0	0	0	2	9	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.4	52.8
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.3
17	KAMRA	0	0	0	7	1	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.3	"
18	LAHORE A/P	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.5	33.1
19	LAHORE PBO	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.5	30.3
20	LHR. SHAHI QILLA	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	"
21	LHR. MISRI SHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	"
22	LHR. UPPER MALL	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	"
23	LHR. SHAHDARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	"
24	MANDI-BAHU-DIN	0	0	0	1	12	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.1	"
25	MIANWALI	0	0	0	6	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	12.1	23.9
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	11.1
27	MANGLA	0	0	0	2	10	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	19.2	"
28	MURREE	0	0	0	16	70	0	0	0	0	0	0	4	24	3	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	123.2	166
29	NOORPUR THAL	0	0	0	2	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	10.1	"
30	OKARA	0	0	1	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7.1	"
31	RAHIM YAR KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	"
32	GUJRANWALA CAN	0	0	0	0	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	10.4	"
33	SAHIWAL	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	"
34	SARGODHA	0	0	0	0	6	0	0	0	0	0	0	0	6	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	15.4	23.1

35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.4	12.2
36	SIALKOT CANTT	0	0	0	0	8	0	0	0	0	0	0	3	19	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	32.5	48.5
37	SIALKOT A/P	0	0	0	0	5	0	0	0	0	0	0	2	23	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	32.3	"
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2	"
GILGIT BALTISTAN / AZAD KASHMIR																																
39	ASTORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45.3
40	BUNJI	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	6.2
41	CHILAS	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	9.2	13.1
42	GARHI DOPATTA	0	0	0	25	19	0	0	0	0	0	0	1	11	19	0	0	0	0	0	4	16	0	0	0	0	0	0	0	0	95	131.6
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2.5	6.4
44	GUPIS	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	13	9.9
45	KOTLI	0	0	0	8	22	0	0	0	0	0	0	1	11	14	0	0	0	0	0	0	4	7	1	0	0	0	0	0	0	68.1	95.4
46	MUZAFFARABAD	0	0	0	16	42	1	0	0	0	0	0	2	26	9	0	1	0	0	0	1	5	8	3	0	0	0	0	0	0	114.2	136.1
47	RAWALAKOT	0	0	0	13	38	5	0	0	0	0	0	4	16	22	0	0	0	0	2	4	9	20	13	0	0	0	0	0	0	146	"
48	BABUSAR TOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
49	HUNZA	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6.3	"
50	PATTAN	0	0	0	22	40	0	3	0	0	0	0	3	23	13	5	0	0	0	9	21	43	23	4	0	0	0	0	0	0	209	"
51	SKARDU	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	20	0	1	2	0	0	0	0	0	0	32	27.2
KHYBER PAKHTUNKHWA																																
52	BALAKOT	0	0	0	13	41	0	0	0	0	0	0	7	20	16	0	0	0	0	0	2	21	18	1	0	0	0	0	0	0	139.2	141.4
53	BANNU	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	"
54	CHERAT	0	0	3	6	12	0	0	0	0	0	0	0	21	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	46	63.4
55	CHITRAL	0	0	1	11	13	2	0	0	0	0	0	0	2	1	0	0	1	0	0	4	10	11	0	0	0	0	0	0	0	56	63.8
56	D.I.KHAN	0	0	0	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	9.3	"
57	DIR	0	0	2	24	35	6	0	0	0	0	0	4	46	10	0	0	5	0	10	10	18	10	1	0	0	0	0	0	0	181	171.5
58	LOWER DIR	0	0	0	19	29	3	0	0	0	0	0	1	28	7	0	0	0	0	1	1	4	0	1	0	0	0	0	0	0	94	"
59	DROSH	0	0	0	8	19	8	0	0	0	0	0	0	4	0	0	0	1	0	0	3	3	15	1	0	0	0	0	0	0	62.2	74.4
60	KAKUL	0	0	0	15	32	0	0	0	0	0	0	1	8	5	0	0	0	0	0	1	8	7	0	0	0	0	0	0	0	77	106.7
61	KALAM	0	0	4	13	30	6	1	0	0	0	0	5	20	0	0	0	0	0	5	13	16	10	0	0	0	0	1	0	0	124	"
62	KOHAT	0	0	0	1	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.3	42.1
63	MALAM JABBA	0	0	4	30	27	0	0	0	0	0	0	21	47	23	0	0	0	0	20	9	16	14	0	0	0	0	0	0	0	211	"
64	MIRKHANI	0	0	0	10	13	4	0	0	0	0	0	2	15	4	0	0	0	0	0	29	7	4	0	0	0	0	0	0	0	88.1	"
65	PARACHINAR	0	0	20	31	52	0	0	0	0	0	0	17	25	0	0	0	0	3	44	2	22	5	0	0	0	0	0	0	0	221	76.5
66	PESHAWAR A/P	0	0	3	3	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12.5	47.1
67	PESHAWAR CITY	0	0	1	2	3	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	20.2	"
68	RISALPUR	0	0	0	3	14	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39.7	53.2
69	SAIDU SHARIF	0	0	0	16	15	1	0	0	0	0	0	3	19	11	0	0	0	0	3	2	8	6	0	0	0	0	0	0	0	84	109.1

SINDH																															
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.1**	6.4
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3.5
72	HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	4.3
73	JACOBABAD	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	6.9
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	10.4
75	LARKANA	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	4.5
76	KCHI MASROOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**
78	NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3.3
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.1**	4.6
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	5.9
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.1**	4.3
83	THATTA	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	**
84	DADU	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**
BALOCHISTAN																															
86	BARKHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0.1**	21.2
87	DALBANDIN	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	18.6
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	31
90	KALAT	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	**25**	30
91	KHUZDAR	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	29.9
92	LASBELA	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	10.8
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**	7.6
94	PANJGUR	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**	16.4
95	PASNI	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**	21.5
96	QUETTA	0	0	2	11	0	0	0	0	0	0	0	0	2	0	0	0	0	4	1	2	8	0	0	0	0	0	0	0	**30.1**	49.5
97	SAMUNGLI	0	0	2	2	0	0	0	0	0	0	1	1	3	0	0	0	0	0	0	2	21	0	0	0	0	0	0	0	**32.2**	**
98	SIBBI	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	14.5
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**
100	ORMARA	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**	10
101	ZHOB	0	0	2	2	0	0	0	0	0	0	0	5	0	0	0	0	0	2	0	5	6	0	0	0	0	0	0	0	**22**	25

NOTE: ** not available & * above normal

RAINFALL (MM) STATEMENT FOR THE MONTH OF MARCH-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-03-12	Monthly Normal
PUNJAB																																		
1	BAHAWALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4
2	BAHAWALPUR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	9
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
4	BHAKKAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	5	-
5	CHAKWAL	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	-
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
7	FAISALABAD	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	22
8	ISLAMABAD A/P	0	0	0	0	10	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	5	0	0	0	0	0	20.4	97.1
9	ISB. DHAMIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	-
10	ISB. SD. PUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7	-
11	ISB.SH.ABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	-
12	ISLAMABAD ZP	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	5	0	0	0	0	0	5	0	0	0	0	0	15.6	99.3
13	JHANG	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	5	-
14	JOHARABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	-
15	JHELUM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2.1	68.8
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6
17	KAMRA	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	
18	LAHORE A/P	0	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1	37.8
19	LAHORE PBO	0	0	0	0	4	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.2	38.4
20	LHR. SHAHI QILLA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
21	LHR. MISRI SHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
22	LHR. UPPER MALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
23	LHR. SHAHDARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
24	MANDI-BAHU-DIN	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2.1	-
25	MIANWALI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	57.1
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.6
27	MANGLA	0	0	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	14.2	-
28	MURREE	0	0	0	3	19	1	0	0	1	0	0	0	5	0	0	0	0	0	0	16	0	0	0	0	0	4	2	0	0	0	0	51.1	196.7
29	NOORPUR THAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2.1	-
30	OKARA	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	-
31	RAHIM YAR KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	-
32	GUJRANWALA CAN	0	0	0	0	19	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.1	-
33	SAHIWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	-
34	SARGODHA	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.3	35.1
35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	25.1
36	SIALKOT CANTT	0	0	0	0	5	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.1	53.4
37	SIALKOT A/P	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.2	-
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	-
GILGIT BALTISTAN / AZAD KASHMIR																																		
39	ASTORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	25	12	0	0	0	0	7	2	3	1	0	0	58.2	87.7
40	BUNJI	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	13	0	0	0	0	0	0	0	0	0	0	46	15.5
41	CHILAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	7	0	0	0	0	0	0	0	0	0	0	40.2	33.4
42	GARHI DOPATTA	0	0	0	0	20	3	0	3	0	0	0	0	2	0	0	0	0	0	0	21	10	0	0	0	0	9	20	0	0	0	0	88	190.5
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	3	0	0	0	0	0	0	0	0	0	0	36.7	13.9
44	GUPIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	19	0	0	0	0	0	0	0	0	0	0	44	16.6
45	KOTLI	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	12	127.2
46	MUZAFFARABAD	0	0	0	2	7	3	0	4	0	0	0	0	11	0	0	0	0	0	0	62	1	0	0	0	0	6	3	0	0	0	0	99.2	181.8
47	RAWALAKOT	0	0	0	8	22	0	0	6	7	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	1	0	0	53.2	-
48	BABUSAR TOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
49	HUNZA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4.7	-

50	PATTAN	0	0	0	16	24	2	0	6	0	0	0	2	10	4	0	0	5	0	0	20	1	0	0	0	0	11	3	1	0	0	0	105	*
51	SKARDU	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	2	*	35	11	0	0	0	0	0	*	0	0	0	0	56.2	46.3
KHYBER PAKHTUNKHVA																																		
52	BALAKOT	0	0	0	2	11	3	0	5	0	0	0	0	5	0	0	0	0	0	0	37	1	0	0	0	0	5	*	1	*	0	0	78.1	192.7
53	BANNU	0	0	0	*	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0.3	*
54	CHERAT	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	10	105.1
55	CHITRAL	0	0	0	13	0	1	0	0	0	0	*	7	0	0	0	3	0	6	11	*	0	0	0	0	0	*	0	0	0	0	0	65	110.7
56	D.I.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	*	0	1	0	0	0	1.2	*
57	DIR	0	0	0	0	49	0	3	1	0	0	0	9	17	0	0	0	0	0	0	9	7	0	0	0	0	15	0	0	0	0	0	110	264.4
58	LOWER DIR	0	0	0	3	13	0	0	0	0	0	0	0	*	0	0	0	0	0	0	3	0	0	0	0	0	5	0	0	0	0	0	32	*
59	DROSH	0	0	0	10	*	1	0	3	0	0	*	9	21	0	0	0	3	0	1	12	12	0	0	0	0	1	0	0	0	0	0	81.1	115.6
60	KAKUL	0	0	0	4	3	7	0	1	4	0	0	0	3	0	0	0	0	0	0	69	0	0	0	0	0	14	2	1	0	0	0	108	151.9
61	KALAM	0	0	0	15	10	0	0	1	0	0	0	*	11	0	0	0	2	4	13	43	10	0	0	0	0	29	6	0	0	0	0	152	*
62	KOHAT	0	0	0	0	2	0	0	*	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2	86.1
63	MALAM JABBA	0	0	0	12	10	2	0	2	0	0	2	3	21	0	0	0	0	0	0	*	0	0	0	0	0	11	6	0	0	0	0	77	*
64	MIRKHANI	0	0	0	16	14	2	0	9	0	0	0	20	19	0	0	0	2	0	4	11	5	0	0	0	0	2	0	0	0	0	0	104	*
65	PARACHINAR	0	0	0	40	21	0	0	0	0	0	3	21	31	0	0	0	0	0	0	43	7	0	0	0	0	53	0	23	0	0	0	242	136.6
66	PESHAWAR A/P	0	0	0	0	3	0	0	0	0	0	0	0	6	0	0	0	0	0	0	2	0	0	0	0	0	6	0	0	0	0	0	17	83.3
67	PESHAWAR CITY	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	*	0	0	0	0	0	5	0	0	0	0	0	8.1	*
68	RISALPUR	0	0	0	1	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	9	80.2
69	SAIDU SHARIF	0	0	0	7	*	0	0	0	0	0	0	0	9	0	0	0	0	0	0	10	0	0	0	0	0	*	0	0	0	0	0	42	174.9
SINDH																																		
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	0.7
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	0.3
72	HTDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2.4
73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10.6
74	KARACHI AIRPO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	6.6
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	3.1
76	KCHI MASROOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
78	NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2.4
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	4.1
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	5.3
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	2.4
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	*
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
BALOCHISTAN																																		
86	BARKHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	31.4
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	22.2
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	15.4
90	KALAT	0	0	0	0	0	0	0	0	0	0	*	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.1	32.7
91	KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	6	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	26
92	LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	9.1
93	MOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0.1	7.2
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	17.7
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	21
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	*	0	0	0	0	0	8.1	61.7
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	10	*	0	0	0	0	0	0	0	0	0	0	0	2	*	*	0	*	0	0	12.4	*
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	21.5
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	15.5
101	ZHOB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	7	0	0	0	13	47.6
NOTE: "" not available & * above normal																																		

RAINFALL (MM) STATEMENT FOR THE MONTH OF APRIL-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

Stations / PROVINCE/AGENCY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total Since	Monthly Normal
PUNJAB																																
BAHAWALNAGAR	0	0	0	0	0.1	0	0	0	0.1	0	0	0	2	1	0	0	12	2	0	0	0	0	0	3	0	0	1	1	0	0	22.2	11.5
BAHAWALPUR CITY	0	0	0	0.1	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0.1	t	0	0	0.1	0	0	6	0.1	0	3	0	0	0	17.6	9.3
BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0	4t	0	0	0.1	0.1	0	12	0.1	0	0.1	0	0	0	60.6	*
BHAKKAR	0	0	0	0	0	0	1	0	0	0	0	0	13	0	0	0	0	0	0	7	3	0	1	0	0	1	0	0	0	0	26	*
CHAKWAL	0	0	0	0	0	0	0.4	0	0	2	14	2	0	9	0	0	2	0	0	0	0.1	10	1	0	0	0.1	0	0.2	1	2	43.8	*
D.G.KHAN	0	0	0	0.1	0	0	0	0	0	0	0	0	0	1	0	0	3	9	0.1	0	0	0	0	1	0.1	0	0.1	1	0	0	15.4	*
FAISALABAD	0	0	0	0	0	0	4	0	0	0	3	0	0	19	1	0	0	0	0	0	0	0.1	2	0	9	0.1	1	0.1	0	0	39.3	21.5
ISLAMABAD A/P	0.1	0	0	0	0	0	0	0	0.1	4	1	3	0	0.1	0.1	1	0.1	0	0	3	6	9	2	6	0	0.1	0.1	0	0.1	0.1	35.9	63.1
ISB. DHAMIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	*
ISB. SD. PUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
ISB.SH.ABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
ISLAMABAD ZP	0.1	0.1	0	0	0	0	0	0	0.1	2	1	2	0	0.2	3	1	0.1	0	0	0.2	4	9	1	1	0	0.2	1	0	0.1	0.1	26.2	67
JHANG	0	0	0	0	0	0	0	0	1	0	7	0	0.2	1	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	9.4	*
JOHARABAD	0	0	0	0	0	0	4	0	0	0	0	0	0	0.1	0	0	0	0.4	0	5	11	2	1	0	0	0	0	0	0	1	24.5	*
JHELUM	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	6	2	0	0	0.2	0.1	0.1	3	0	0	0.1	0.1	2	0.4	0	18	36
KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	3	0	0.1	0	0	0	3	0	0	0	0	0	0	22.1	3.1
KAMRA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	*
LAHORE A/P	0	0	0	0	0	0	0.1	0	0	0	t	0	0	9	0	7	t	0	0	0.1	0	0	0	0	0.1	0	0	3	0	2	37.3	23.9
LAHORE PBO	0	0	0.1	0	0	0	0.1	0	0	0	14	0	0.1	9	0	7	6	0	0	0.1	0.1	0	0	0	0	0	0	4	0	10	50.5	22.3
LHR. SHAHI QILLA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
LHR. MISRI SHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
LHR. UPPER MALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
LHR. SHAHDARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
MANDI-BAHU-DIN	0	0	0	0	0	0	0	0	0	1	6	0	0	t	0	0.4	0	0	0	2	0	7	0	0	0	0	0	9	0	3	36.4	*
MIANWALI	0.1	0.1	0.1	0	0	0	0	0	0	2	0.1	0	0.1	0	0	0	0	1	0.1	t	0	6	0	0	0	0	0	0.1	0	0	17.7	30.2
MULTAN	0	0	0	0.1	0	0	0	0	0	0.1	0	0	0	0.1	1	0	2	6	0.3	0	1	2	0	0.1	0.1	0	9	1	0	0	22.8	14.6
MANGLA	0	0	0	0	0	0	0	0	2	2	0	0	0	3	0	6	3	0	0	0	0.1	3	5	0	0	0	0	0	0	13	37.1	*
MURREE	0	0	2	0	0	0	0	0	7	0.1	16	6	4	4	22	11	0	0	0	0.1	34	1	14	1	0	2	0	0	6	0.3	131	131.6
NOORPUR THAL	0	0	0	0	0	0	t	0	1	0	11	0	7	7	0	0	0	4	0	3	0	22	0	0	4	0	0	1	1	0	69	*
OKARA	0	0	1	0	0	0	0	0	0	1	5	0	0	4	0	0	20	0	0	0	0	0	0	0	2	0	0	0	0.1	0	33.1	*
RAHIM YAR KHAN	0	0.1	0	0	0	0	0	0	0	0	0	0	0	5	0.1	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	14.2	*
GUJRANWALA CANTT	0	0	0	0	0	0	0	0	0	0	22	1	0	1	0	1	4	0	0	0.1	0	0	0.1	0	4	0	0	5	0	25	63.2	*
SAHIWAL	0	0	0	0	0	0	0.1	0	3	0.1	0.1	0	0	0	0.1	0	5	0	0	0	0	0	0	0	0.1	0	0	0	0	0	8.5	*
SARGODHA	0	0	0	0	0	0	3	0	0	0	3	0.1	0.1	1	0	0.1	0	0	0.1	3	0	4	0	0	0	0.1	0	3	0	3	20.5	29.5
SHORKOT	0	0	0	0	0	0	0	0	0	0.1	10	0	0	3	0.1	0	0.1	0.1	0	0	0.1	0.1	0	0	0	2	0	0	0	0	15.6	19.2
SIALKOT CANTT	0	0	0	0	0	0	0	0	0	0	53	0	0	17	0	5	0	0	0	0	0	0	0.1	0	0	0	0.1	t	0.1	4	87.3	33
SIALKOT A/P	0	0	0	0	0	0	0	0	0	0	16	0.1	0	10	0	2	0	0	0	0	0	0	t	0	0	0.1	0	7	0.1	0.1	43.4	*
T.T. SINGH	0	0	0	0	0	0	0	0	0	0	11	0	0	16	1	0	1	0	0	0	0	1	0	0	1	0	0.2	0.1	0	0	31.3	*

GILGIT BALTISTAN / AZAD KASHMIR																															
ASTORE	0	0.4	0.4	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	1	79.3
BUNJI	0	0	0	0.1	0	0	0	0	0	0.1	9	5	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	14.5	24
CHILAS	0	0	0	4	0	0	0	0	0.2	0.1	4	2	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1	11.‡	34.1
GARHI DOPATTA	0	2	0	0	0	0	6	0	0	1	36	10	2	2	0	2	0	0	0	6	19	0	10	0	5	20	15	0	30	13	179	117.3
GILGIT	0	0	0.1	0	0	0	0	0	1	0.1	0.4	4	0.1	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0.1	0.1	1	5	12.1	23
GUPIS	0	0	‡	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	‡	33.5
KOTLI	0	0	0	0	0	0	0	0	0	‡	3	1	0	3	0.1	‡	1	0	0	0	21	0	3‡	0	1	0.1	0	0	3	10	97.2	73.7
MUZAFFARABAD	0	1	2	0	0	0.1	1	1	0.4	16	14	27	2	0	0	2	0	0	0	5	26	0	11	0	0	7	10	0.1	10	‡	144	103.3
RAWALAKOT	0	0	0	0	0	0	0	0	2	2	0.1	4	0	0	0	12	0	2	0.1	4	39	0	22	15	0	6	0	7	9	4	12‡	"
BABUSAR TOP	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	0	"
HUNZA	0	0	1	4	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13	25	"
PATTAN	0	0	2	0	0	0	0	0	‡	14	15	1	1	0	0	0	0	0	0	5	0	0	0	0	0	4	5	0	14	15	‡4	"
SKARDU	0	0	0	0	0	0	0	0	0	0	1	0.4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0	0	0	2.5	26
KHYBER PAKHTUNKHWA																															
BALAKOT	0	3	0	0.1	0	0.1	2	0	0.1	4	6	26	5	1	0	3	1	0	0	5	30	0	4	1	2	4	25	0	22	‡	152	119.4
BANNU	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	22	0	0	0	0	0	0	0	0	0	32	"
CHERAT	2	3	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	2	22	0	1	0	0	16	0	0	0	0	55	57.3
CHITRAL	10	0	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	23	7‡.3
D.I.KHAN	0	0.1	1	0	0	0	0	0	0	5	1	0	17	12	0	0	0.1	15	0	14	0	0	0	1	0	5	0	6	0.1	0	77.3	24.1
DIR	6	0	0	0	0	3	0	0	6	5	0	‡	5	4	0	5	0	0	0	4	2‡	15	2	0	0	5	14	1	3	3	117	173.7
LOWER DIR	2	0	0	0	0	0	0	0	4	1	0	0	2	0	0	3	0	0	0	0	26	0	1	0	0	19	14	5	6	6	‡9	"
DROSH	3	1	6	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	‡	0	0	0	0	0.2	1	0	0	0	25.2	99.2
KAKUL	0	2	0	0	0	0	0	0	1	2	42	14	0	0.3	0	1‡	1	0	0	3	17	2	‡	0	6	1‡	43	6	14	11	20‡	112.6
KALAM	3	0	13	0	0	0	0	0	9	0	1	1	1	0	0	4	0	0	0	5	17	0	0	0	0	5	‡	0	1	0	6‡	"
KOHAT	0.1	0	0.1	0	0	0	5	0	5	1	0.1	0	0.1	1	0	0	0	0	0	5	1‡	0.1	2	0	0	0	0	0	1	0	3‡.5	56.3
MALAM JABBA	4	2	0	0	0	0	0	0	3	‡	2	24	13	9	0	0	0	6	0	12	0	13	2	23	0	29	16	3	2‡	11	20‡	"
MIRKHANI	3	‡	5	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	‡	3	0	0	0	0	1	0	0	0	34	"
PARACHINAR	51	70	33	0	0	0	0	0	23	7	9	0	4	3	0	0	0	0	5	2‡	7	40	0	10	16	20	‡	25	0	0	359	96.5
PESHAWAR A/P	3	1	0.1	0	0	0	0.1	0	3	0.1	0	0	0	0	0	0	0	0	0	‡	33	10	3	0	0	5	0.1	0	0.1	0	66.5	50.4
PESHAWAR CITY	2	1	0.1	0	0	0	0.1	0	2	0	0	0	0	0	0	0	0	0	0	‡	0	2	0	0	0	3	0.1	0	0	0	1‡.3	"
RISALPUR	1	0.1	0.1	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0	0	0	2	44	0.1	6	0	0.1	3	5	0	12	0	73.6	46.6
SAIDU SHARIF	2	0.3	0	0	0	0	0	0	2	14	0	2	0	1	0	7	0	0	0	2	0	1	5	3	3	22	13	0.4	14	‡	99.7	11‡.‡
SINDH																															
BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0.1	0	0	0	0	0	4	0	0	0	0	23.1	1.9
CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6
HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	11	5
JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	1	0	0.1	0	0	0	0	0	0	0	0	0	0	1.2	2.1
KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1	3.2
LARKANA	0	0	0	0	0	0	0	0	0	0.1	0	0	0	3	0	0.1	0	0	0	0.1	0	1	0	0	0	0.2	1	0	0	0	5.5	3.5

KCHI MASROOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	5	0	0	0	0	0	0	0	0	0	0	5.1	"
MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2.6
PADIDAN	0	0	0	0	0	0	0	0	0	0	0.1	0	0	11	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	14.1	2.7
ROHRI	0	0	0	0	0	0	0	0	0	0.1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	5.1	2.7
SUKKUR	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.4	"
MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1.5	0	0	0	3.5	0	0	0	0	8	3.2
THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
DADU	0	0	0	0	4	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	5.5	0	10	0	0	0	0	0	0	41.5	"
MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0.2	"
BALOCHISTAN																																
BARKHAN	0	0	2	5	0	0	0	0	0	2	0	0	0	9	3	0	7	50	0	2	18	0	0	8	0.1	0	4	0	0	0	110	37.3
DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0.1	0	0	0.1	0.1	1.6	0	0	0	0	2.1	7.1
GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0.3	"
JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5
KALAT	0	0	0	0	0	0	0	0	0	1.4	0	0	0	0.1	0	0	0	0	7.5	14	0	0	0	0.4	0	0	0	0	0	0	23.7	8.4
KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1.4	0	0	0	1.1	13	0.2	0	7.3	3.7	3.6	0	0	0	0	32.7	17.1
LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	7.6	0	0	0	0	0	0.1	11	0	0	0	0	0	9	2	0	0	0	29.7	7.5
NOKKUNDI	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0.1	0	0	0	0	2	0.2	0	0	0	0	0	0	0	0	0	0	2.4	2.3
PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	11	8.6
PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2
QUETTA	0	0	0	0	0	0	0	0	0	4	0	0	0	0	12	0.1	0	9	6	27	13	7	2	7	0	0	0.1	0	0	0	87.2	22.2
SAMUNGLI	0	0	0	0	0	0	0	0	0.1	6	0	0	0	3	2	0.1	0.1	13	17	28	23	8	0.1	2	0.1	0	1	0.1	0	0	104	"
SIBBI	0	0	0	0	0	0	0	0	0	1.4	0	0	0	0.1	0	0	0	0	7.5	14	0	0	0	0.4	0	0	0	0	0	0	23.7	10
TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ZHOB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	12	0	3	0	0	0	5	8	0	0	0	0	41	31.2
E: "" not available																																

RAINFALL (MM) STATEMENT FOR THE MONTH OF MAY-2012

	Stations	Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)																															
	PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-05-12	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	1	0	0	0	0	0	5	10.2
2	BAHAWALPUR CIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	8.6
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
4	BHAKKAR	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4	*
5	CHAKWAL	0	2	0	0	0	T	0	0	0	3	0	T	0	0	0	0	T	1	0	0	T	0	0	0	0	T	0	0	0	0	0	6.1	*
6	D.G.KHAN	0	0	0	0	0	0	0	T	0	0	T	0	0	0	0	0	T	3	0	0	0	0	0	0	1	0	0	0	0	0	0	4.3	*
7	FAISALABAD	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	T	0	0	0	0	0	4.1	13.8
8	ISLAMABAD A/P	7	T	0	0	0	T	0	T	0	2	2	1	T	0	0	T	T	T	0	0	2	T	0	T	T	T	0	0	0	0	0	15.1	34.1
12	ISLAMABAD ZP	T	T	0	0	0	0	0	T	0	10	5	T	0	0	0	0	1	T	0	0	T	T	0	0	0	3	0	0	0	0	0	19.7	42.2
13	JHANG	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	7	*
14	JOHARABAD	0	0	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	24	*
15	JHELUM	T	13	0	0	0	T	0	0	0	1	0	4	0	0	0	0	1	0	0	1	0	0	0	0	0	T	0	0	0	0	0	20.6	27.3
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4.9
17	KAMRA	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	LAHORE A/P	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1.1	20.8
19	LAHORE PBO	0	0	0	0	0	0	0	0	0	T	0	0	0	0	T	0	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0.4	20.8
24	MANDI-BAHU-DIN	2	3	0	0	0	1	0	0	0	1	0	2	0	0	0	0	1	T	0	0	0	0	0	0	0	T	0	0	0	0	0	10.4	*
25	MIANWALI	T	0	0	0	0	1	0	1	0	15	T	9	1	0	0	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0	27.3	22.1
26	MULTAN	0	0	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	T	0	0	0	0	0	3.2	11.5
27	MANGLA	T	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	T	0	0	0	0	0	2.2	*
28	MURREE	1	7	0	0	0	0	0	T	0	0	12	4	0	0	0	2	2	2	0	0	T	5	T	0	0	6	0	0	0	0	0	41.5	88.2
29	NOORPUR THAL	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	13	*
30	OKARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	*
31	RAHIM YAR KHAN	0	0	0	0	0	0	T	0	0	0	2	0	0	T	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.2	*
32	GUJRANWALA CAN	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	T	0	0	0	0	4.1	*
33	SAHIWAL	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	T	2	0	0	0	0	0	4.1	*
34	SARGODHA	0	0	0	0	0	0	0	0	T	0	0	2	T	0	0	0	0	T	0	0	2	0	0	0	0	T	0	0	0	0	0	4.6	21.1
35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0	0	T	0	0	0	0	0	0.2	11
36	SIALKOT CANTT	0	0	0	0	0	0	0	0	0	T	0	1	0	0	0	1	0	T	0	0	0	0	0	0	0	T	0	0	0	0	0	2.3	25.7
37	SIALKOT A/P	0	0	0	0	0	T	0	0	0	T	0	4	2	0	0	1	0	T	0	0	0	0	0	0	0	T	0	0	0	0	0	7.7	*
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	T	0	0	T	0	0	0	T	T	T	0	0	0	0	1.1	*
	GILGIT BALTISTAN / AZAD KASHMIR																																	
39	ASTORE	0	0	0	0	0	T	0	0	0	0	1	9	2	0	0	5	0	5	0	0	0	4	1	0	0	6	3	0	0	0	0	36.1	73
40	BUNJI	0	0	0	0	0	T	0	0	0	0	T	T	0	0	0	0	0	0	0	0	0	T	T	0	0	T	0	0	0	0	0	1.1	29
41	CHILAS	T	T	0	0	0	2	0	0	0	0	T	1	T	0	0	T	0	T	0	T	4	4	T	0	0	3	2	0	0	0	T	17.6	30.9
42	GARHI DOPATTA	0	0	0	0	0	0	0	0	0	0	8	0	12	0	0	1	1	6	0	0	1	10	0	0	0	5	0	0	0	0	0	44	81
43	GILGIT	T	0	0	0	0	0	0	T	T	0	T	5	2	0	1	3	0	T	1	T	T	2	T	0	0	3	1	0	T	0	0	19.4	24.5
44	GUPIS	0	0	0	0	0	0	0	3	0	0	0	0	10	0	0	0	0	4	0	0	11	6	0	0	0	3	0	0	0	0	1	38	26.4
45	KOTLI	4	T	0	0	0	0	0	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.1	46.8
46	MUZAFFARABAD	8	0	0	0	0	0	0	0	0	1	12	4	8	0	0	0	2	6	1	0	T	3	0	0	0	11	T	0	0	0	0	56.2	76.2
47	RAWALAKOT	2	13	0	0	3	0	T	0	0	T	6	7	T	0	0	4	0	5	0	0	0	5	0	0	0	2	0	0	0	0	0	47.3	*
49	HUNZA	T	0	0	0	0	0	0	T	T	0	T	3	1	0	0	0	0	1	T	0	0	3	4	0	0	2	1	0	0	0	1	17.4	*
50	PATTAN	7	0	0	0	0	3	0	0	0	0	7	T	8	0	3	2	0	10	0	0	1	1	0	0	0	4	0	0	0	0	0	46.1	*
51	SKARDU	0	0	0	0	0	0	0	0	0	0	0	T	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	T	4.2	27
	KHYBER PAKHTUNKHWA																																	
52	BALAKOT	0	1	0	0	0	0	0	0	0	0	9	1	3	0	0	3	4	1	0	0	0	0	0	0	0	21	T	0	0	0	0	43.1	79.8
53	BANNU	1	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	12	*
54	CHERAT	0	0	0	0	0	0	0	1	0	0	1	6	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12	29.9
55	CHITRAL	0	0	0	0	0	0	0	1	0	0	0	3	3	0	0	1	2	0	0	0	8	0	0	0	2	10	0	0	0	0	0	30	47.1
56	D.I.KHAN	2	0	0	0	0	0	0	T	0	T	0	T	2	0	0	0	0	0	0	0	T	T	0	0	T	0	0	0	0	0	0	4.6	17

57	DIR	0	3	0	0	0	0	0	0	0	0	5	0	‡	0	0	13	11	9	0	4	1	0	2	0	0	9	0	0	0	0	0	65	97.1
58	LOWER DIR	0	1	0	0	0	0	0	6	0	0	4	0	0	0	0	2	3	6	0	0	5	0	0	0	0	12	0	0	0	0	0	39	"
59	DROSH	0	1	0	0	0	0	0	2	0	0	0	0	9	0	0	0	0	9	0	0	5	0	0	0	0	22	0	0	0	0	0	48.6	67
60	KAKUL	0	0	0	0	0	0	0	0	0	0	‡	1	13	0	4	5	6	0	0	0	0	0	0	0	0	5	0	0	0	0	0	42	73.8
61	KALAM	0	0	0	0	0	0	0	0	0	0	3	6	5	0	0	10	22	16	0	0	25	3	1	0	0	18	0	0	0	0	3	112	"
62	KOHAT	0	0	0	0	0	0	0	2	0	0	1	3	0	0	0	0	0	‡	0	0	0	0	0	0	0	13	0	0	0	0	0	27.7	35.5
63	MALAM JABBA	6	4	0	0	0	7	0	7	0	4	‡	3	0	0	0	3	23	5	0	0	5	2	0	0	0	7	0	0	0	0	0	84	"
64	MIRKHANI	0	2	0	0	0	0	0	0	0	0	0	0	7	4	0	2	1	7	1	0	6	2	0	0	0	19	0	0	0	0	0	51	"
65	PARACHINAR	0	0	0	0	0	4	6	11	0	3	1	24	0	10	0	4	10	15	17	‡	5	0	0	0	3	4	0	0	0	0	0	125.1	73.5
66	PESHAWAR A/P	0	2	0	0	0	0	0	0	0	0	5	0	‡	0	0	0	2	3	0	0	2	0	3	0	0	26	0	0	0	0	0	51.4	23.8
67	PESHAWAR CITT	0	0	0	0	0	0	0	0	0	0	12	0	4	0	0	0	2	1	0	0	1	0	0	0	0	12	0	0	0	0	0	32.3	"
68	RISALPUR	0	0	0	0	0	0	0	0	0	0	7	2	5	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	0	0	0	22.4	26.2
69	SAIDU SHARIF	1	2	0	0	0	3	0	3	0	2	3	4	0	0	0	1	2	9	0	0	5	0	0	0	0	4	0	0	0	0	0	39	69.1
SINDH																																		
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.2
72	HTDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.6
73	JACOBABAD	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3.1
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	3.7
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
78	NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	1.5
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.4
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	5.2
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	"
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1.7
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	45	"
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
BALOCHISTAN																																		
86	BARKHAN	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	5	20.3
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
90	KALAT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	3.8
91	KHUZDAR	0	0	0	0	0	0	0	1	18	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	1	0	0	0	0	0	0	25	13.2
92	LASBELA	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	18	0	‡	0	0	0	0	0	0	0	0	0	0	0	52.2	17.8
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
94	PANJGUR	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	2.5
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7
96	QUETTA	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5.3
97	SAMUNGLI	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5.1	"
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	"
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
101	ZHOB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	5	16.9
NOTE: "" not available																																		

RAINFALL (MM) STATEMENT FOR THE MONTH OF JUNE-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

Stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total Since 01-06-12	Monthly Normal
PUNJAB																																
BAHAWALNAGAR	0	0	0	0	0	2	0	*	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1	24.7
BAHAWALPUR CIT	0	0	0	0	0	1	*	0	0	0	0	0	5	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	6.2	21.7
BAHAWALPUR A/P	0	0	0	0	0	2	*	0	0	0	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	2.2	*
BHAKKAR	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	22	0	26	*
CHAKWAL	0	*	0	0	0	2	*	*	0	0	0	0	*	0	0	0	0	0	0	0	0	*	*	0	11	*	0	*	0	0	13.3	*
D.G.KHAN	0	0	0	0	0	3	0	7	10	*	0	0	*	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	20.3	*
FAISALABAD	0	0	0	0	0	0	0	0	0	0	*	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	5.1	35
ISLAMABAD A/P	0	0	0	0	0	*	T	*	*	0	0	*	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	*	0	12.5	70.1
ISLAMABAD ZP	0	0	0	0	0	0	4	*	15	0	0	0	*	0	0	0	0	0	*	0	0	0	0	0	0	0	0	5	*	0	24.4	63.8
JHANG	0	0	0	0	0	3	0	0	0	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	14	*
JOHARABAD	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	5	0	11.4	*
JHELUM	0	0	0	0	0	0	1	*	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8.1	57.1
KHANPUR	0	0	0	0	0	2	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	3.4
KAMRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
LAHORE A/P	*	0	0	0	0	0	0	4	0	0	*	0	0	0	0	0	0	*	*	0	0	0	0	0	*	0	0	0	*	0	4.6	47.7
LAHORE PBO	*	0	0	0	0	*	0	11	0	0	*	0	0	0	0	0	0	0	2	0	0	0	0	0	*	0	0	0	0	0	13.4	51.3
MANDI-BAHU-DIN	0	*	0	0	0	1	0	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	20.2	*
MIANWALI	0	0	0	0	0	7	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	17	*	0	*	*	0	26.3	25.5
MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.1
MANGLA	0	2	0	0	0	1	2	2	0	0	*	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	9.1	*
MURREE	0	*	0	0	0	1	0	19	0	0	0	3	1	0	*	0	0	0	0	0	0	0	*	0	0	19	0	6	0	0	49.3	150.7
NOORPUR THAL	0	0	0	0	0	6	0	0	0	0	5	0	T	0	0	0	0	3	0	0	0	0	0	0	19	0	3	0	11	0	55	*
OKARA	*	0	0	0	0	*	0	0	0	0	0	0	*	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2.4	*
RAHIM YAR KHAN	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
GUJRANWALA CAN	*	*	0	0	0	5	0	7	0	0	4	0	0	0	0	0	0	0	3	0	0	0	0	0	*	*	0	0	0	0	19.4	*
SAHIWAL	0	0	0	0	0	0	0	0	*	*	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	*	0	0	0	0	1.3	*
SARGODHA	*	0	0	0	0	*	0	*	0	0	*	0	*	0	0	0	0	0	0	0	0	0	0	0	2	0	*	0	10	0	12.6	23.2
SHORKOT	0	0	0	0	0	1	0	0	1	0	*	0	0	0	0	0	0	*	0	0	0	0	0	0	*	4	0	0	0	0	6.3	23.3
SIALKOT CANTT	0	0	0	0	0	*	*	5	0	0	*	0	0	0	0	0	0	0	0	0	0	0	1	0	*	0	*	2	0	0	8.5	73
SIALKOT A/P	0	0	0	0	0	*	0	10	0	0	*	0	0	0	0	0	0	0	*	0	0	0	0	0	31	0	9	0	0	0	50.3	*
T.T. SINGH	*	*	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	0	*	0	5.5	*
GILGIT BALTISTAN / AZAD KASHMIR																																
ASTORE	11	*	*	0	0	0	*	0	0	0	0	*	0	2	0	0	0	0	0	0	0	0	*	0	11	1	3	0	0	3	31.7	22.7
BUNJI	*	*	0	0	0	0	0	0	0	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2	*	0	0	0	2.7	11.1
CHILAS	4	*	0	0	0	0	0	0	*	*	*	0	0	*	0	0	0	0	0	1	0	0	*	0	*	1	1	0	0	0	7.7	10.3
GARHI DOPATTA	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	20	0	15	0	0	44	118.8
GILGIT	1	0	0	0	0	0	0	*	2	1	0	0	*	0	*	0	0	0	*	1	0	*	0	*	2	*	2	1	0	0	10.7	8.9
GUPIS	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	1	0	19	18.1
KOTLI	0	0	0	0	0	0	*	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	*	0	15	0	0	7	0	0	24.2	91.6
MUZAFFARABAD	3	0	0	0	0	0	12	0	7	0	0	2	0	1	0	0	0	0	0	0	0	0	0	*	0	18	0	*	10	*	53.3	122.1
RAWALAKOT	*	0	0	0	0	0	*	21	4	*	0	16	0	0	0	0	0	0	*	0	0	0	0	0	2	4	0	5	*	0	52.5	**
HUNZA	2	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	*	1	*	0	0	8.5	**
PATTAN	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	1	1	5	1	0	0	12	**
SKARDU	2	0	0	0	0	0	0	0	*	*	1	0	*	1	0	0	0	0	0	0	0	0	0	0	1	*	*	*	0	0	5.6	9.5
KHYBER PAKHTUNKHWA																																
BALAKOT	0	0	0	0	0	0	5	0	2	1	0	*	0	0	0	0	0	0	0	0	0	0	0	*	0	9	0	2	0	0	19.2	98.3
BANNU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	0	0	*	*	0	0.3	*
CHERAT	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	T	0	0	10	19.6
CHITRAL	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2.1	9.4
D.I.KHAN	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	*	0	0	0	0	0	0	*	3	0	0	*	0	5.3	22.2

DIR	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0	0	0	0	4	0	0	0	3	2	6	0	1	0	0	22	50
LOWER DIR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3	*
DROSH	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	6	19.7
KAKUL	0	2	0	0	0	0	10	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	46.1	101.4
KALAM	1	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	14	0	0	0	0	0	1	5	0	0	0	0	24.1	*
KOHAT	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	7.1	20.3
MALAM JABBA	0	0	0	0	0	0	0	0	3	2	0	0	0	14	0	0	0	2	0	0	0	0	0	2	2	27	0	0	42	0	99	*
MIRKHANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
PARACHINAR	0	0	0	0	0	7	0	3	0	0	0	0	2	0	0	2	0	2	2	0	0	0	0	0	0	3	0	3	0	0	34	49.3
PESHAWAR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	12.1
PESHAWAR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
RISALPUR	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	18.4
SAIDU SHARIF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	46.3
SINDH																																
BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9
CHHOR	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	18.4
HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2
JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	6.6
LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.3
MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	*
NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.8
PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7
ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.6
SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6
THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
DADU	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	*
MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
BALOCHISTAN																																
BARKHAN	0	0	0	0	3	1	3	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.1	43
DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9
GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8
KALAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	5.3
KHUZDAR	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	12.6
LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	0	0	0	0	13.3	7.8
MOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
QUETTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5
SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
SIBBI	0	0	0	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.6	5.5
TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
ZHOB	0	0	0	0	0	0	2	15	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	7	7	0	38	14.7

E: "" not available

RAINFALL (MM) STATEMENT FOR THE MONTH OF JULY-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

Stations	PUNJAB	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-07-12	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	0	1	0	0	0	0	29	0	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	37	83.0
2	BAHAWALPUR CIT	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	53.6
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	--
4	BHAKKAR	0	0	0	0	25	0	0	0	0	8	0	1	3	13	0	0	0	28	0	0	0	0	0	0	0	0	0	0	78	--
5	CHAKWAL	0	0	0	1	2	7	0	0	21	7	0	0	2	0	0	0	0	6	0	0	0	0	33	0	0	0	0	0	79.1	--
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34.2	--
7	FAISALABAD	0	0	0	0	46	5	0	0	0	0	29	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	88.1	117.0
8	ISLAMABAD A/P	0	0	0	44	4	0	0	17	46	4	0	4	0	0	0	4	0	0	0	0	0	15	7	0	0	0	0	0	145.1	305.3
12	ISLAMABAD ZP	0	0	0	29	1	0	0	39	48	2	0	13	0	0	0	9	0	0	0	0	0	10	2	0	0	0	0	9	162	343.2
13	JHANG	0	0	0	0	52	1	0	0	0	0	31	0	46	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	131	--
14	JOHARABAD	0	0	0	0	30	4	0	0	8	5	0	0	0	0	0	16	3	61	0	0	0	0	0	0	0	0	0	0	127	--
15	JHELUM	0	0	0	48	0	0	0	51	30	32	0	0	0	0	0	6	0	6	0	0	0	0	36	0	0	0	0	6	215.5	263.2
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	34	25.8
17	KAMRA	0	0	0	2	66	0	0	0	40	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110.1	--
18	LAHORE A/P	0	0	0	0	0	0	0	0	0	0	9	4	0	0	0	0	0	0	0	16	0	20	4	0	0	0	0	0	53.5	217.9
19	LAHORE PBO	0	0	0	0	0	0	0	25	0	0	5	0	0	0	0	0	5	0	0	0	0	0	2	2	0	0	0	0	39.6	212.1
24	MANDI-BAHU-DIN	0	0	0	7	1	0	0	1	12	15	9	0	1	0	0	1	0	1	0	0	0	0	63	0	0	0	0	0	111.1	--
25	MIANWALI	0	0	0	0	12	0	0	0	1	3	0	9	0	0	0	10	0	0	0	0	0	0	8	0	0	0	0	0	43.3	98.5
26	MULTAN	0	0	0	0	15	0	0	0	0	0	0	14	16	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0	52	60.3
27	MANGLA	0	0	0	43	5	0	0	0	25	8	0	0	0	0	0	10	1	7	0	0	0	0	8	0	0	0	0	0	107.3	--
28	MURREE	0	23	0	26	0	0	0	12	6	17	0	4	3	2	0	0	0	2	0	0	0	1	4	0	0	0	7	22	129.2	364.1
29	NOORPUR THAL	0	0	0	0	26	0	0	0	0	0	13	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	--
30	OKARA	0	0	0	0	7	8	0	0	0	0	34	0	7	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	57	--
31	RAHIM YAR KHAN	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	20.1	--
32	GUJRANWALA CAN	0	0	0	16	1	0	0	0	21	1	0	65	0	0	0	0	0	0	0	0	0	0	47	6	0	0	0	0	157.2	--
33	SAHIWAL	0	0	0	0	1	8	0	0	0	0	78	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	98.1	--
34	SARGODHA	0	0	0	0	71	4	0	0	14	3	0	0	0	0	0	10	1	57	0	0	0	0	0	0	0	0	0	0	160.2	108.2
35	SHORKOT	0	0	0	0	0	0	0	0		0	11	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	35.2	103.5
36	SIALKOT CANTT	0	15	0	22	3	0	0	0	0	29	0	0	0	0	0	5	0	0	0	0	0	1	128	1	0	0	34	15	253.5	304.1
37	SIALKOT A/P	0	0	0	21	3	0	0	0	15	5	2	0	0	0	0	15	0	0	0	0	0	0	76	1	0	0	19	0	157.3	--
38	T.T. SINGH	0	0	0	0	37	1	0	0	0	0	66	0	34	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	147	--

GILGIT BALTISTAN	**ASHMIR**																														
39	ASTORE	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	4	0	0	0	0	0	0	10.3	25.5
40	BUNJI	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	0	0	0	0	5.1	18.8
41	CHILAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	14.1
42	GARHI DOPATTA	0	1	11	2	8	4	1	3	1	6	1	9	0	0	0	0	0	0	0	0	0	4	0	6	0	0	0	0	57	265.6
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	16.2
44	GUPIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	5	14.0
45	KOTLI	0	42	0	8	10	0	0	37	18	6	0	13	0	0	0	4	0	0	0	0	0	9	58	0	0	0	12	46	263	285.8
46	MUZAFFARABAD	0	0	1	13	1	26	0	7	0	33	0	6	0	0	0	0	4	0	0	0	0	27	16	7	0	0	5	17	163.4	359.4
47	RAWALAKOT	2	26	16	35	0	31	0	18	3	6	5	1	12	0	0	2	0	0	0	0	0	5	5	0	0	0	0	0	167.1	"
49	HUNZA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2.7	"
50	PATTAN	0	0	0	0	0	0	0	1	0	5	0	0	0	5	0	0	0	0	0	0	0	29	0	0	0	0	0	1	41	"
51	SKARDU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1.4	11.3
KHYBER PAKHTUN																															
52	BALAKOT	0	14	0	0	4	9	0	3	0	21	0	13	8	0	0	0	0	0	0	0	10	0	6	16	0	0	6	7	117	372.0
53	BANNU	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	30.1	"
54	CHERAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	4	93.4
55	CHITRAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.5
56	D.I.KHAN	0	0	0	0	76	0	0	0	0	0	0	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	84.1	60.5
57	DIR	0	0	0	0	3	0	0	0	0	0	0	5	0	6	1	0	3	0	0	0	0	0	7	0	0	0	0	4	29	154.1
58	LOWER DIR	0	0	0	0	6	0	4	0	0	0	0	56	0	0	0	6	0	0	0	0	0	0	0	3	0	0	0	5	80	"
59	DROSH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	7	8	11	0	0	0	0	28.1	22.1
60	KAKUL	0	19	0	11	0	3	0	12	4	30	19	16	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1	17	137	263.6
61	KALAM	0	0	0	0	1	0	7	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	14	"
62	KOHAT	0	0	0	8	0	0	0	0	0	0	0	20	0	0	0	0	0	1	0	0	0	10	0	0	0	0	0	0	39.2	69.6
63	MALAM JABBA	0	9	0	1	10	1	2	3	0	23	0	14	0	37	0	0	0	0	0	0	0	0	0	24	0	0	0	17	141	"
64	MIRKHANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4.1	"
65	PARACHINAR	0	0	10	0	12	0	0	0	0	0	0	0	18	35	0	0	0	10	0	0	0	5	3	7	0	0	0	20	120	99.4
66	PESHAWAR A/P	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	46.1
67	PESHAWAR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	"
68	RISALPUR	0	0	0	0	57	0	0	5	43	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122.4	113.4
69	SAIDU SHARIF	0	7	2	51	0	0	0	9	0	0	0	29	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	26	126.1	152.6

SINDH																															
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	67.6
71	CHHOR	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	79.3
72	HYDERABAD	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.2	45.5
73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	42.8
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	66.2
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69.4
77	MITHI	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	..
78	NAWABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.9
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40.5
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45.5
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44.8
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..
85	MIRPUR KHAS	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	..
BALOCHISTAN																															
86	BARKHAN	0	2	0	0	8	0	32	0	0	0	20	47	4	0	0	0	0	15	0	0	0	2	0	0	4	4	0	0	138.1	109.3
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.5
90	KALAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1
91	KHUZDAR	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4	60.4
92	LASBELA	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	43.2
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0
94	PANJGUR	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	21.2
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.2
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	16	0	0	0	0	0	24	0	0	0	0	42.6	37.3
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.9
101	ZHOB	0	0	4	0	5	0	0	0	0	0	0	4	0	9	0	0	0	0	0	0	0	0	20	0	0	0	0	0	42.1	61.1
NOTE: .. not availa																															

RAINFALL (MM) STATEMENT FOR THE MONTH OF AUGUST-2012

Stations		Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)																																
	PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-08-12	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	0	18	0	0	0	0	0	1	0	0	0	4	5	0	0	0	0	0	0	0	6	0	0	0	1	0	0	35.1	43.1
2	BAHAWALPUR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19	49	0	0	0	0	0	0	0	0	0	0	0	0	0	69.3	42.8
3	BAHAWALPUR A/P	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	2	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	23.1	**
4	BHAKKAR	0	0	0	0	21	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	16	0	0	2	0	0	5	0	0	66	**
5	CHAKWAL	0	0	0	0	97	0	0	0	0	16	2	0	0	0	9	15	0	0	0	0	0	0	2	0	0	6	9	0	0	2	0	158.1	**
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	7.4	**
7	FAISALABAD	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	2	0	0	0	19.3	84.7
8	ISLAMABAD A/P	18	0	0	79	11	0	0	0	9	9	0	0	0	0	0	3	0	0	0	0	127	30	3	26	83	5	1	0	0	0	6	410.3	348.1
12	ISLAMABAD ZP	0	0	0	65	11	0	0	0	50	11	0	0	0	0	0	2	0	0	0	22	1	12	12	18	73	6	0	0	0	0	0	283.5	371.3
13	JHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	**
14	JOHARABAD	0	0	0	0	0	0	0	0	0	0	33	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39.3	**
15	JHELUM	0	0	0	0	67	0	0	0	11	5	0	3	0	25	34	10	0	0	0	0	0	59	17	0	3	6	7	7	0	0	13	267.2	251.6
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	40	0	0	0	0	0	0	0	0	0	0	0	0	0	43	17.4
17	KAMRA	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	2	5	0	1	0	0	0	0	0	0	58	**
18	LAHORE A/P	2	0	0	0	96	0	0	0	0	0	11	4	7	0	54	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	175.4	197.6
19	LAHORE PBO	0	0	0	0	110	0	0	0	0	0	42	1	1	0	9	0	0	19	0	0	0	0	1	0	0	11	0	0	3	0	0	197.6	194.5
24	MANDI-BAHU-DIN	0	0	0	0	70	0	0	0	0	9	8	4	0	34	0	80	0	0	0	0	0	2	60	0	7	35	68	0	0	0	27	404.2	**
25	MIANWALI	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	0	99	1	0	0	174.6	104.5
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	3	0	1	0	0	0	12.4	36.4
27	MANGLA	0	0	0	18	100	0	0	0	32	0	0	19	0	33	5	6	0	0	0	0	19	11	28	0	0	0	5	0	0	0	28	304.3	**
28	MURREE	13	0	23	62	8	0	0	0	50	7	0	0	0	1	1	8	0	0	0	5	112	75	2	6	9	16	0	5	38	4	24	469	335.5
29	NOORPUR THAL	0	0	0	0	17	0	0	0	0	0	24	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	17	8	0	0	81	**
30	OKARA	0	0	0	0	0	1	0	0	0	0	9	2	0	21	0	14	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	48	**
31	RAHIM YAR KHAN	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.3	**
32	GUJRANWALA CANT	0	0	0	0	123	0	0	0	6	39	4	3	0	0	0	0	0	0	0	0	0	0	7	3	15	0	5	0	0	0	33	238.5	**
33	SAHIWAL	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	12	0	0	0	0	0	0	88	0	0	1	0	0	0	0	0	135	**
34	SARGODHA	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	13.1	129.1
35	SHORKOT	0	0	0	0	0	0	0	0	0	0	16	0	0	0	2	18	24	0	0	0	0	0	0	10	0	0	0	1	0	0	0	71.1	58.8
36	SIALKOT CANTT	0	0	0	0	38	3	0	0	19	0	1	0	2	0	18	0	0	0	0	8	8	3	31	0	56	0	0	0	0	0	5	192.2	323.5
37	SIALKOT A/P	0	0	0	0	79	0	0	0	11	0	3	0	0	0	0	0	0	0	0	1	0	0	85	3	34	0	0	0	0	0	43	259.4	**
38	T.T. SINGH	0	0	0	0	1	0	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	0	20.2	**

GILGIT BALTISTAN / AZAD KASHMIR																																	
39	ASTORE	0	0	1	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	2	0	0	0	0	0	0	18.6	28.9
40	BUNJI	0	0	1	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	11.1	21.5
41	CHILAS	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	0	3	0	17.2	16.9
42	GARHI DOPATTA	0	14	12	20	12	0	0	0	5	11	0	23	0	0	0	0	0	0	0	6	15	0	0	0	0	0	0	15	0	0	3	136	235.8
43	GILGIT	0	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	11.9	17
44	GUPIS	0	0	0	0	5	19	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	10	0	0	0	0	0	0	0	0	43	23.8
45	KOTLI	9	2	0	16	45	0	0	0	50	9	0	11	0	20	24	2	0	0	0	0	34	38	1	0	4	42	0	0	1	6	1	315	297.6
46	MUZAFFARABAD	8	45	14	59	0	0	0	0	0	1	0	6	0	0	0	2	0	0	0	160	106	10	4	0	2	37	0	28	0	0	0	482.4	227.4
47	RAVALAKOT	0	0	0	0	26	0	0	0	0	2	0	10	1	0	10	0	2	0	0	0	29	2	12	2	0	14	0	0	4	5	4	123.2	**
49	HUNZA	0	0	0	2	11	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	21.7	**
50	PATTAN	0	0	0	0	9	0	0	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.1	**
51	SKARDU	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	10.6	14.1
KHYBER PAKHTUNKHWA																																	
52	BALAKOT	0	33	0	75	1	0	0	0	0	3	12	0	37	0	0	3	0	0	0	18	38	0	48	0	4	40	0	19	0	0	1	332.4	271.1
53	BANNU	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	48	0	0	0	0	48	0	0	0	99.3	**
54	CHERAT	0	0	0	20	3	0	0	0	0	0	4	0	2	0	0	12	0	0	0	0	0	0	38	0	0	1	0	25	0	0	0	105.1	96.4
55	CHITRAL	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	6.6
56	D.I.KHAN	0	0	0	0	49	0	0	0	0	0	16	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	63	0	0	0	0	134.2	61.7
57	DIR	0	0	0	5	11	0	0	0	0	13	0	0	0	0	0	7	0	0	0	0	10	1	3	0	0	5	2	7	0	0	0	64	156
58	LOWER DIR	0	41	0	29	0	0	0	0	0	2	0	0	6	0	0	0	0	0	0	0	0	0	0	3	62	2	3	0	2	0	0	150	**
59	DROSH	0	0	0	5	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
60	KAKUL	27	0	3	14	0	23	0	0	1	0	28	3	0	0	2	1	1	0	0	0	40	84	2	0	0	16	0	24	7	11	4	291.1	266.5
61	KALAM	0	0	0	13	9	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8	0	6	0	1	0	41	**
62	KOHAT	0	0	0	16	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	32	0	0	0	68.1	111.4
63	MALAM JABBA	0	10	6	4	0	5	3	0	0	7	0	0	5	0	0	0	0	0	0	0	1	5	67	7	11	3	0	11	0	0	0	145	**
64	MIRKHANI	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	**
65	PARACHINAR	0	4	0	7	0	0	5	0	4	20	27	12	7	3	0	17	0	0	0	0	0	0	45	7	2	25	10	26	0	0	0	221	97.4
66	PESHAWAR A/P	0	0	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	10	0	0	2	0	10	0	0	0	27.3	72.6
67	PESHAWAR CITY	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	59	0	0	6	0	21	0	0	0	92.5	**
68	RISALPUR	0	0	0	1	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	17	28	1	0	0	0	1	0	0	0	54.2	125.9
69	SAIDU SHARIF	0	22	0	5	0	0	0	0	0	11	3	0	0	0	0	0	0	0	0	0	1	0	29	0	2	4	0	1	0	0	0	78.3	125.9
SINDH																																	
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	20	31.1	92.5
71	CHHOR	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	5	29.1	69.3
72	HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1.1	63.0

73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	35.4
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7	8.3	60.0
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	31.1
77	MITHI	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	25	**
78	NAVABSHAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14.1	46.3
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	40.5
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	25.1
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	**
82	MOIN-JO-DARO	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	31.0
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	25	34	**
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	20	**
BALOCHISTAN																																		
86	BARKHAN	0	0	0	0	0	0	6	0	0	0	0	0	2	0	0	15	0	0	0	0	0	0	0	5	0	0	0	2	0	0	0	30.2	87.7
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0
88	GAVADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1
90	KALAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.1
91	KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	50	0	0	0	0	0	0	0	51	57.4
92	LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33.3
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.4
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.4
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.2
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
98	SIBBI	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	0	0	0	0	106	37.1
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.6
101	ZHOB	0	0	0	0	12	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	32	0	0	0	0	57	49.7
NOTE: ** not available																																		

RAINFALL (MM) STATEMENT FOR THE MONTH OF SEPTEMBER-2012

Stations		Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)																															
	PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total Since 01-09-12	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	26	0	0	0	0	21	1	0	0	0	0	3	6	37	0	0	0	0	0	0	0	0	0	0	0	0	94	13.4
2	BAHAWALPUR CITY	0	0	0	0	0	1	1	0	64	1	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	74	12.4
3	BAHAWALPUR A/P	0	0	0	0	0	1	3	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39.1	**
4	BHAKKAR	0	0	0	0	56	0	3	0	15	20	0	0	0	0	0	7	54	0	0	0	0	0	0	0	0	0	0	0	0	0	155	**
5	CHAKWAL	15	0	0	2	5	0	0	5	9	5	0	0	0	3	27	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	84.3	**
6	D.G.KHAN	0	0	0	1	8	2	0	5	35	76	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	132.3	**
7	FAISALABAD	0	0	0	0	16	4	7	0	34	11	0	0	0	0	0	1	49	19	0	0	0	0	0	0	0	0	0	0	0	0	141	37.6
8	ISLAMABAD A/P	0	22	55	13	8	0	13	0	10	9	0	0	0	14	0	8	0	30	0	0	0	0	0	0	0	0	0	0	0	0	182.3	112.2
12	ISLAMABAD ZP	0	0	161	6	1	0	6	0	21	8	0	0	0	24	0	2	0	126	0	0	0	0	0	0	0	0	0	0	0	0	355.2	129.1
13	JHANG	0	0	0	0	9	10	28	0	23	26	0	0	0	0	0	18	8	0	0	0	0	0	0	0	0	0	0	0	0	0	122	**
14	JOHARABAD	0	0	0	0	0	0	1	0	4	14	0	0	0	0	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	29	**
15	JHELUM	0	0	0	1	11	14	0	0	6	2	0	0	0	13	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	58.3	74.5
16	KHANPUR	0	0	0	0	0	3	1	6	173	106	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294.1	14.6
17	KAMRA	0	0	59	0	11	0	8	1	0	0	0	0	0	20	0	0	0	6	0	0	0	0	0	0	0	4	0	0	0	0	109.1	**
18	LAHORE A/P	12	0	0	0	1	0	0	0	27	2	0	0	0	0	29	9	40	58	0	0	0	0	0	0	0	0	0	0	0	0	178.2	75.1
19	LAHORE PBO	0	0	1	0	18	15	0	1	25	0	0	0	0	0	11	6	47	76	0	0	0	0	0	0	0	0	0	0	0	0	200.3	65.1
24	MANDI-BAHU-DIN	0	0	45	13	23	0	0	0	13	4	0	0	0	34	7	6	2	25	0	0	0	0	0	0	0	0	0	0	0	0	172.1	**
25	MIANWALI	0	0	0	4	0	0	0	0	2	32	0	0	0	0	11	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	124.4	48.4
26	MULTAN	0	0	0	0	0	20	1	7	77	51	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	158.2	24.9
27	MANGLA	0	0	12	1	3	7	5	0	10	3	0	0	3	14	5	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	118.2	**
28	MURREE	0	0	1	7	45	35	39	0	25	13	0	0	0	19	1	0	0	97	0	0	0	0	0	0	0	0	0	0	0	0	282.3	143.1
29	NOORPUR THAL	0	0	0	0	16	0	3	0	51	15	0	0	21	0	8	54	42	0	0	0	0	0	0	0	0	0	0	0	0	0	210	**
30	OKARA	0	0	0	0	0	1	0	2	95	6	0	0	0	0	0	2	116	2	0	0	0	0	0	0	0	0	0	0	0	0	224	**
31	RAHIM YAR KHAN	0	0	0	0	0	9	0	6	102	32	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	245.1	**
32	GUJRANWALA CANT	0	0	8	7	0	5	9	0	12	3	0	0	0	1	14	41	2	20	0	0	0	0	0	0	0	0	0	0	0	0	122.1	**
33	SAHIWAL	0	0	0	0	0	25	0	0	94	13	0	0	0	0	0	39	45	9	0	0	0	0	0	0	0	0	0	0	0	0	225	**
34	SARGODHA	0	0	0	0	1	15	16	0	25	6	0	0	0	0	0	0	26	15	0	0	0	0	0	0	0	0	0	0	0	0	104	26.3
35	SHORKOT	0	0	0	0	31	0	0	54	70	28	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	190.4	24.6
36	SIALKOT CANTT	0	0	0	0	0	1	13	0	3	0	0	0	0	7	17	0	1	6	1	0	0	0	0	0	0	0	0	0	0	0	49.4	90.7
37	SIALKOT A/P	0	0	0	2	13	0	35	0	2	0	0	0	0	21	8	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	87.3	**
38	T.T. SINGH	0	0	0	0	0	0	51	3	55	14	7	0	0	0	0	26	7	0	0	0	0	0	0	0	0	0	0	0	0	0	163.2	**

GILGIT BALTISTAN / AZAD KASHMIR																																	
39	ASTORE	0	0	0	0	0	6	0	6	3	4	0	0	0	0	3	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	76.8	21.6
40	BUNJI	0	0	7	0	0	10	1	21	1	0	0	0	7	3	0	0	0	23	2	0	0	0	0	0	0	0	0	0	0	0	75.3	10.7
41	CHILAS	0	0	0	0	2	2	0	11	1	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	34.4	7.8
42	GARHI DOPATTA	0	7	0	0	20	34	10	26	3	15	6	0	0	5	0	0	0	60	0	0	0	0	5	0	0	0	0	0	0	0	191	104.3
43	GILGIT	0	0	0	0	0	3	1	24	5	0	0	0	0	0	1	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	49.8	8.4
44	GUPIS	0	0	0	0	0	2	0	2	0	1	0	0	0	0	0	0	0	11	4	0	3	0	0	0	0	0	4	0	0	0	27	11.8
45	KOTLI	0	33	13	1	0	7	9	0	7	5	0	0	0	15	0	16	0	22	0	0	0	0	0	0	0	0	0	0	0	0	128.2	92.1
46	MUZAFFARABAD	0	0	0	0	4	35	18	19	2	12	11	0	0	1	22	0	3	80	0	0	0	0	0	0	0	0	4	0	0	0	211.3	108.1
47	RAWALAKOT	0	0	0	2	1	21	26	1	5	15	0	0	0	2	0	1	0	140	0	0	0	0	0	0	0	0	0	0	0	0	214.2	**
49	HUNZA	0	0	0	0	0	7	1	22	2	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	41.4	**
50	PATTAN	0	0	4	0	0	2	3	24	1	0	0	0	0	7	51	0	14	26	0	0	0	0	11	0	0	9	0	0	0	0	152	**
51	SKARDU	0	0	0	0	0	1	0	0	0	14	2	0	0	0	0	0	0	8	4	0	0	0	0	2	0	0	0	0	0	0	31.8	8.6
KHYBER PAKHTUNKHWA																																	
52	BALAKOT	0	10	0	0	94	58	25	16	4	10	13	0	0	0	14	0	19	55	0	0	0	0	1	0	0	0	0	0	0	0	319	113.2
53	BANNU	0	0	0	4	7	0	21	1	0	2	0	0	0	2	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	44.3	**
54	CHERAT	0	0	0	17	1	3	18	15	0	1	0	0	0	0	0	0	2	73	0	0	0	0	0	0	0	5	0	0	0	0	135	34.5
55	CHITRAL	0	0	0	0	2	0	2	5	0	0	0	0	0	0	0	0	1	23	0	0	0	0	0	0	0	0	12	0	0	0	45	13.3
56	D.I.KHAN	0	0	0	49	17	0	0	0	13	8	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	121.2	20.8
57	DIR	0	13	0	15	5	23	7	8	0	0	15	0	4	3	10	0	15	8	0	0	0	0	0	0	0	14	2	0	0	0	142	90.6
58	LOWER DIR	0	18	0	4	3	21	2	5	0	0	0	0	0	0	35	0	7	5	0	0	0	0	8	0	0	0	0	0	0	0	108	**
59	DROSH	0	0	0	0	0	9	0	4	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	3	0	0	0	23.1	21.8
60	KAKUL	0	3	8	20	1	4	22	2	7	18	16	0	0	2	1	0	1	65	0	0	0	0	0	0	0	1	0	0	0	0	171	104.3
61	KALAM	0	0	0	0	0	12	2	20	0	0	0	0	0	12	0	0	3	25	3	0	0	0	11	0	4	2	3	0	0	0	97	**
62	KOHAT	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	22	7	0	0	0	0	0	0	2	0	0	0	0	42.7	40.3
63	MALAM JABBA	1	3	3	37	20	7	10	42	0	5	0	0	0	1	4	0	23	20	0	0	0	0	7	0	0	2	0	0	0	0	185	**
64	MIRKHANI	0	0	0	0	0	6	0	4	0	0	0	0	0	0	6	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	28	**
65	PARACHINAR	0	7	4	0	0	5	9	10	17	17	10	2	2	0	0	0	19	20	5	0	0	0	0	0	0	2	9	0	0	0	138	55.4
66	PESHAWAR A/P	0	0	0	8	0	88	2	25	0	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0	0	1	0	0	0	0	129.3	22.2
67	PESHAWAR CITY	0	0	0	26	0	39	2	32	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	2	0	0	0	0	113.5	**
68	RISALPUR	0	0	18	1	0	0	2	25	1	0	0	0	0	3	0	20	5	20	0	0	0	0	0	0	0	0	0	0	0	0	95.3	39.9
69	SAIDU SHARIF	0	7	0	0	23	2	1	31	5	1	0	0	0	7	16	0	8	24	0	0	0	0	4	0	0	0	0	0	0	0	129	68.1
SINDH																																	
70	BADIN	1	0	0	0	0	0	20	28	0	50	10	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114.1	27.1
71	CHHOR	0	0	0	0	0	21	0	35	67	35	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170	37.3
72	HYDERABAD	0	0	0	0	0	20	35	0	52	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110.2	12.6

73	JACOBABAD	0	0	0	0	0	0	24	0	9	##	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	481.1	11
74	KARACHI AIRPORT	0	0	0	0	4	30	49	2	4	7	0	7	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125.3	10.1
75	LARKANA	0	0	0	0	0	1	42	10	47	58	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216.2	5.5
77	MITHI	20	0	0	18	0	3	20	65	4	16	16	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	164	**
78	SHAHHED BENAZIR	0	0	0	0	0	39	31	9	25	1	9	46	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164.1	16.2
79	PADIDAN	0	0	0	0	0	3	58	3	4	5	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86.2	12.6
80	ROHRI	0	0	0	0	0	0	0	0	3	152	49	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209.1	11.8
81	SUKKUR	0	0	0	0	0	0	1	1	4	164	36	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	207.1	**
82	MOIN-JO-DARO	0	0	0	0	0	20	7	1	25	25	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97.2	6.7
83	THATTA	0	0	0	0	50	27	0	0	58	4	2	2	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158	**
84	DADU	0	0	0	0	0	0	82	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89.1	**
85	MIRPUR KHAS	0	0	0	0	0	10	0	1	22	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	**
BALOCHISTAN																																	
86	BARKHAN	4	0	0	0	6	9	0	0	0	27	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	44.5
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
90	KALAT	0	0	0	0	0	0	3	0	0	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	16	2.0
91	KHUZDAR	0	0	0	0	0	0	0	0	4	0	12	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	7.9
92	LASBELA	0	0	0	0	4	10	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	21	6.2
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	**
98	SIBBI	0	0	0	0	11	22	18	0	0	4	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	9.0
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.0
101	ZHOB	0	0	0	0	0	0	3	0	0	7	13	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	11.4
NOTE: ** not available																																	

RAINFALL (MM) STATEMENT FOR THE MONTH OF OCTOBER-2012

	Stations	Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)																																
	PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-10-12	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	16	8.4
2	BAHAWALPUR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3.1	5.1
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	**
4	BHAKKAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1.1	**
5	CHAKWAL	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	9	0	0	0	10	0	0	0	0	0	0	0	25	**
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	9	**
7	FAISALABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	18	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	28	4.4
8	ISLAMABAD A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2	29.8
12	ISLAMABAD ZP	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.4	33.7
13	JHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	36	0	0	0	2	0	0	0	10	0	0	0	0	0	0	0	50	**
14	JOHARABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	11	**
15	JHELUM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	10	0	0	0	0	0	0	0	12.1	18.5
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6
17	KAMRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	**
18	LAHORE A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	20	18.5
19	LAHORE PBO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	29	14.8
24	MANDI-BAHU-DIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6.1	**
25	MIANWALI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	1	1	0	0	0	0	0	0	0	14	10
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	5.2
27	MANGLA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2.3	**
28	MURREE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	1	6	0	1	2	0	0	0	0	0	0	0	20	66
29	NOORPUR THAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	**
30	OKARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	13	**
31	RAHIM YAR KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
32	GUJRANWALA CANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.1	**
33	SAHIWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3.2	**
34	SARGODHA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	19.1	7.7
35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1.1	2.1
36	SIALKOT CANTT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	18.2
37	SIALKOT A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	**
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.1	**

GILGIT BALTISTAN / AZAD KASHMIR																																			
39	ASTORE	0	0	0	0	1	0	4	0	0	0	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	10.2	22.9
40	BUNJI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.3
41	CHILAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	7.3
42	GARHI DOPATTA	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	47.7
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	6.2
44	GUPIS	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	8	0	0	8	2	0	0	0	0	0	0	0	0	0	0	20	5.7
45	KOTLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0	0	1	0	0	0	0	0	0	0	7	31.7
46	MUZAFFARABAD	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	6	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	25	39.6
47	RAWALAKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	20	0	0	5	0	0	0	0	0	0	0	29.2	**
49	HUNZA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	**
50	PATTAN	0	0	0	0	0	0	19	0	0	0	0	0	4	0	0	0	3	0	2	7	19	6	0	0	0	0	0	0	0	0	0	60	**
51	SKARDU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	8.6
KHYBER PAKHTUNKHWA																																			
52	BALAKOT	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	4	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	16	46.7
53	BANNU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3.2	**
54	CHERAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	9	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	18	19.2
55	CHITRAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	19.3
56	D.I.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	5.8
57	DIR	0	0	0	0	0	0	0	0	0	0	0	0	0	4	26	13	0	0	2	19	2	3	0	0	0	0	0	0	0	0	0	69.1	61.6
58	LOWER DIR	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	14	**
59	DROSH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	7	0	0	0	0	0	0	0	0	0	0	23	31.1
60	KAKUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	3	0	0	0	2	8	0	0	0	0	0	0	0	0	0	0	33.1	53.3
61	KALAM	0	0	0	0	0	0	1	0	0	1	6	0	0	0	0	9	0	0	2	19	0	10	0	0	0	0	0	0	0	0	0	48	**
62	KOHAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	13	26.1
63	MALAM JABBA	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6	18	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	34	**
64	MIRKHANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	3	0	0	0	10	2	0	0	0	0	0	0	0	0	0	0	24.2	**
65	PARACHINAR	0	0	0	0	0	0	0	0	0	0	0	0	0	10	15	4	0	10	0	6	16	0	16	0	0	0	0	0	0	0	0	77.1	31.8
66	PESHAWAR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	16.2	19.4
67	PESHAWAR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	13.1	**
68	RISALPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	37	13.8
69	SAIDU SHARIF	0	0	0	0	0	0	0	0	0	3	0	0	0	0	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	51.1
SINDH																																			
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.5
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2
72	HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9

73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
78	SHAHHED BENAZIR/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	4.9
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
BALOCHISTAN																																
86	BARKHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	8.9
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1
88	GAVADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
89	JIVANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5
90	KALAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	5.3
91	KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.4
92	LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0	66.1	4.6
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.8
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.5
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.3
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	**
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
101	ZHOB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
NOTE: ** not available																																

RAINFALL (MM) STATEMENT FOR THE MONTH OF NOVEMBER-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

	Stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total Since 01-11-12	Monthly Normal
	PUNJAB																																
1	BAHAWALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.0
2	BAHAWALPUR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
4	BHAKKAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
5	CHAKWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	*
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
7	FAISALABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5
8	ISLAMABAD A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5.1	15.6
12	ISLAMABAD ZP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3.1	12.4
13	JHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
14	JOHARABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
15	JHELUM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	10
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
17	KAMRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	LAHORE A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	6.6
19	LAHORE PBO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	6.5
24	MANDI-BAHU-DIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4.4	*
25	MIANWALI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1.1	4.1
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3
27	MANGLA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	*
28	MURREE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9.1	34.4
29	NOORPUR THAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
30	OKARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
31	RAHIM YAR KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
32	GUJRANWALA CANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	*
33	SAHIWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
34	SARGODHA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	5.8
35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	3.9
36	SIALKOT CANTT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9.5
37	SIALKOT A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	*
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*

RAINFALL (MM) STATEMENT FOR THE MONTH OF NOVEMBER-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

Stations	PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total Since 01-11-12	Monthly Normal
GILGIT BALTISTAN / AZAD KASHMIR																																	
39	ASTORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4.1	18.7
40	BUNJI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	3.5
41	CHILAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	6.8
42	GARHI DOPATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	3	10	47.1
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2.2	2.6
44	GUPIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	1	0	8	1.9
45	KOTLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	14	25.2
46	MUZAFFARABAD	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	14.3	36.5
47	RAWALAKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	5	22.1	*
49	HUNZA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	*
50	PATTAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	4	0	0	0	23	0	36	*
51	SKARDU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	7.9
KHYBER PAKHTUNKHWA																																	
52	BALAKOT	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	6.3	41.5
53	BANNU	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	4.1	*
54	CHERAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	4	15.1
55	CHITRAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	9	0	10	28.7
56	D.I.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.2
57	DIR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	7	0	0	0	0	23	0	36	54.9
58	LOWER DIR	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	15	0	20	*
59	DROSH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8.1	26.8
60	KAKUL	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3	29.3
61	KALAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	0	0	0	0	0	6	1	0	0	0	21	0	39	*
62	KOHAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2.1	10.9
63	MALAM JABBA	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	10	0	16	*
64	MIRKHANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	*
65	PARACHINAR	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	20	0	40	16.5
66	PESHAWAR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4.1	11.4
67	PESHAWAR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2.4	*
68	RISALPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2.4	15.8
69	SAIDU SHARIF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8.4	28.4

SINDH																																
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6
72	HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3
73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0.8
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
78	SHAHHED BENAZIRAI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6	0.8
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
BALOCHISTAN																																
86	BARKHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.5
88	GAWADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
89	JIWANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.9
90	KALAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1
91	KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1
92	LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3.1	4.4
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	3	0	8.2	*
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	ZHOB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.5
NOTE: ** not available																																

RAINFALL (MM) STATEMENT FOR THE MONTH OF DECEMBER-2012

Rainfall Recorded in mm during past 24 hours (0800 to 0800 HRS PST)

	Stations PUNJAB	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Since 01-	Monthly Normal
1	BAHAWALNAGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	3.4
2	BAHAWALPUR CITY	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1	2.5
3	BAHAWALPUR A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	*
4	BHAKKAR	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1	*
5	CHAKWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	0	0	24.1	*
6	D.G.KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	*
7	FAISALABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.5	5.9
8	ISLAMABAD A/P	0	0	0	0	0	0	0	0	0	0	0	1	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	8	32	0	0	81.3	31.2
12	ISLAMABAD ZP	0	0	0	0	0	0	0	0	0	0	0	3	0	32	6	0	0	0	0	0	0	0	0	0	0	0	0	7	39	0	0	87.1	41.5
13	JHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	*
14	JOHARABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	8	*
15	JHELUM	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	31.6	26.6
16	KHANPUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7
17	KAMRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	LAHORE A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	24.1	11.5
19	LAHORE PBO	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	21.2	9.9
24	MANDI-BAHU-DIN	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	32.3	*
25	MIANWALI	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	8	0	0	19.1	13.8
26	MULTAN	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2.7
27	MANGLA	0	0	0	0	0	0	0	0	0	0	0	1	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	1	15	0	0	52.1	*
28	MURREE	0	0	0	0	0	0	0	0	0	0	0	2	1	40	13	3	0	1	0	0	0	0	0	0	0	0	0	15	45	0	0	120	75.8
29	NOORPUR THAL	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	0	0	26	*
30	OKARA	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	11	*
31	RAHIM YAR KHAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*
32	GUJRANWALA CANTT	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	28.2	*
33	SAHIWAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
34	SARGODHA	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	12.8
35	SHORKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	5.6
36	SIALKOT CANTT	0	0	0	0	0	0	0	0	0	0	0	0	0	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	55.1	24
37	SIALKOT A/P	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	28.3	*
38	T.T. SINGH	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	*

GILGIT BALTISTAN / AZAD KASHMIR																																			
39	ASTORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27.5
40	BUNJI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	2	0	11	5.1
41	CHILAS	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	4	1	0	9.3	9.7
42	GARHI DOPATTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	15	2	0	1	0	0	0	0	0	0	0	0	0	60	5	0	153	71.1
43	GILGIT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	5.4	4.1
44	GUPIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2.6
45	KOTLI	0	0	0	0	0	0	0	0	0	0	0	0	0	47	5	1	0	0	0	0	0	0	0	0	0	0	0	5	31	0	0	89.2	49.5
46	MUZAFFARABAD	0	0	0	0	0	0	0	0	0	2	0	1	21	14	11	0	1	0	0	0	0	0	0	0	0	0	0	15	31	5	0	101	70.3
47	RAWALAKOT	0	0	0	0	0	0	0	0	0	1	2	0	34	2	2	0	0	0	0	0	0	0	0	0	0	0	0	13	49	0	0	103.1	*
49	HUNZA	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4.1	*
50	PATTAN	0	0	0	0	0	0	0	0	0	0	0	3	0	17	5	3	0	1	0	0	0	0	0	0	0	0	0	41	26	1	0	97	*
51	SKARDU	0	0	0	0	0	0	0	0	4	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	24	15	1	0	57.3	16.6
KHYBER PAKHTUNKHWA																																			
52	BALAKOT	0	0	0	0	0	0	0	0	0	0	0	0	0	19	14	6	0	2	1	0	0	0	0	0	0	0	0	15	22	4	0	83	72.5
53	BANNU	0	0	0	0	0	0	0	0	0	0	0	0	2	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	51.1	*
54	CHERAT	0	0	0	0	0	0	0	0	0	0	0	3	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	42	0	0	87.1	26.3
55	CHITRAL	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	0	4	2	0	0	0	0	0	0	0	0	0	17	0	0	0	31.1	33.7
56	D.I.KHAN	0	0	0	0	0	0	0	0	0	0	0	9	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	26.1	8.8
57	DIR	0	0	0	0	0	0	0	0	0	2	2	1	36	0	0	0	7	1	0	0	0	0	0	0	0	0	0	38	15	2	0	104	74.7
58	LOWER DIR	0	0	0	0	0	0	0	0	0	1	0	1	25	0	1	0	1	0	0	0	0	0	0	0	0	0	0	9	22	0	0	60	*
59	DROSH	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	14	3	0	0	25.2	37.7
60	KAKUL	0	0	0	0	0	0	0	0	0	1	0	3	24	6	4	0	1	0	0	0	0	0	0	0	0	0	0	8	26	0	0	73	26.1
61	KALAM	0	0	0	0	0	0	0	0	0	0	0	2	21	4	1	0	10	4	0	0	0	0	0	0	0	0	0	37	10	0	0	89	*
62	KOHAT	0	0	0	0	0	0	0	0	0	0	0	4	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	40.3	22.6
63	MALAM JABBA	0	0	0	0	0	0	0	0	0	0	12	0	17	44	11	4	4	13	0	0	0	0	0	0	0	0	0	34	32	6	0	177	*
64	MIRKHANI	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	6	0	0	0	0	0	0	0	0	0	14	6	0	0	32	*
65	PARACHINAR	0	0	0	0	0	0	0	0	0	0	2	0	14	30	4	0	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	78	28.6
66	PESHAWAR A/P	0	0	0	0	0	0	0	0	0	0	0	0	8	33	0	0	0	3	0	0	0	0	0	0	0	0	0	15	20	0	0	79.2	16.9
67	PESHAWAR CITY	0	0	0	0	0	0	0	0	0	0	0	0	8	36	0	0	0	2	0	0	0	0	0	0	0	0	0	11	20	0	0	77.2	*
68	RISALPUR	0	0	0	0	0	0	0	0	0	0	1	0	4	26	0	0	0	0	0	0	0	0	0	0	0	0	0	17	61	0	0	109.1	28.9
69	SAIDU SHARIF	0	0	0	0	0	0	0	0	0	0	0	0	15	17	0	0	0	1	0	0	0	0	0	0	0	0	0	18	24	0	0	75.3	45.3

SINDH																																					
70	BADIN	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1
71	CHHOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
72	HYDERABAD	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1.3
73	JACOBABAD	0	0	0	0	0	0	0	0	0	0	0	1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.1	2.9
74	KARACHI AIRPORT	0	0	0	0	0	0	0	0	0	0	0	18	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.1	3.9
75	LARKANA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6
77	MITHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
78	SHAHHED BENAZIRAI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1.8
79	PADIDAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1
80	ROHRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1
81	SUKKUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
82	MOIN-JO-DARO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9
83	THATTA	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	**
84	DADU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
85	MIRPUR KHAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
BALOCHISTAN																																			
86	BARKHAN	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6
87	DALBANDIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9.2
88	GAVADAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	**
89	JIVANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	23.5
90	KALAT	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	33.8
91	KHUZDAR	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	14.3
92	LASBELA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.9
93	NOKKUNDI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1.8
94	PANJGUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	8.8
95	PASNI	0	0	0	0	0	0	0	0	0	0	0	0	0	1	27	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	19.6
96	QUETTA	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30.3	37.5
97	SAMUNGLI	0	0	0	0	0	0	0	0	0	0	0	15	2	0	2	0	11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	31.1	**
98	SIBBI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	5.3
99	TURBAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
100	ORMARA	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	8.3
101	ZHOB	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	11.4
NOTE: ** not available																																			