

WEATHER IN PAKISTAN WINTER SEASON (JANUARY -MARCH 2006)

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Introduction:

Winter season or northeast monsoon season of 2006 commenced almost all over the country on the very first day of the season i.e 1st January. After four days of wet spell, rainfall activity ceased and restarted on January 15 and lasted for four days and then no significant weather spell occurred in January. Two western disturbances affected the country from 14th to 20th and 23rd to 27th in the month of February and four from 4th to 11th, 13th to 17th, 19th to 21st and 23rd to 28th in March. Under the influence of these weather systems rain/thundershowers with a few moderate to very heavy falls and duststorms in plains occurred at a few places in the country during the quarter. In association with these systems heavy snowfall also occurred over hilly areas of Pakistan. Malam Jabba recorded 115 inches of snowfall whereas 30.1 inches at Skardu, 63.2 inches at Astor and 123.5 inches at Kalam during the season. The minimum temperatures remained extra ordinary low in plain and hilly areas of the country during first ten days of January. Lahore experienced coldest day in 39 years as mercury dropped to -2°C on January 7 & 8 and Nawabshah experienced the coldest day of last ten years as mercury dropped to -1°C on January 6 & 7.

Seasonal rainfall (January-March):

Seasonal rainfall out of 56 meteorological observing stations in the whole country was in large excess in 5, moderate excess in 4, slight excess in 3, normal in 10, slight deficit in 9, moderate deficit in 9 and in large deficit in 16.

Rainfall was in large excess in Skardu, Multan, Khanpur, Jacobabad and Hyderabad, moderate excess in Gupis, Chilas, Bahawalpur and Rohri, slight excess in Bunji, Astor and Parachinar, normal in Gilgit, Muzaffarabad, Garhi Dupatta, Kotli, Chitral, Balakot, Peshawar, Faisalabad, Shorekot and Moenjodaro, slight deficit in Dir, Drosh, Saidu Sharif, Kakul, D.I.Khan, Mianwali, Lahore (A/P), Sibbi and Padidan, moderate deficit in Kohat, Risalpur, Cherat, Chaklala, Murree, Jhelum, Lahore (PBO), Bahawalnagar and Zhob and was in large deficit in Sialkot, Sargodha, Quetta, Dalbandin, Nokkundi, Barkhan, Kalat, Khuzdar, Panjgur, Pasni, Jiwani, Nawabshah, Badin, Chhor, Karachi (A/P) and Karachi (Masroor). The Principal amounts of rainfall during the month of January, February and March 2006 are given in Table-1. Seasonal station wise percentage rainfall departures are given in Fig-1 and percentage departure in Table-2 whereas province wise graphic representation of rainfall is given in Fig-2.

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Monthly Features:

January

Weather and associated synoptic features:

Details of weather systems formed during the month are given in Table-3.

Rain/thundershowers with snowfall over hills occurred almost at the all the places or at a number of places on 5 - 8 days in FATA, Malakand, Hazara, Kohat, Peshawar and Rawalpindi regions, on 3 – 4 days in Bannu and Gujranwala regions, on 1-2 days in Sargodha, Faisalabad, Lahore, Quetta, Zhob and Kalat regions. Rain/thunderstorms also occurred at a few places or at isolated places on 8 days in Malakand region, on 1- 4 days in FATA, Hazara, Bannu, D.I.Khan, Rawalpindi, Gujranwala, Sargodha, Faisalabad, Lahore, Multan, Bahawalpur, Quetta, Zhob, Kalat and Mekran regions.

Rainfall distribution:

The rainfall was in large excess in 23 meteorological observing stations (Gupis, Gilgit, Skardu, Bunji, Chilas, Astor, Muzaffarabad, Garhi Dupatta, Kotli, Parachinar, Chitral, Dir, Drosh, Saidu Sharif, Kakul, Balakot, Kohat, Peshawar, Risalpur, Cherat, Murree, Jhelum and Bahawalnagar); slight excess in 1 meteorological observing station (Chaklala); normal in 1 meteorological observing station (Moenjodaro); slight deficit in 1 meteorological observing station (Lahore (PBO)); moderate deficit in 7 meteorological observing stations (Sialkot, Mianwali, Faisalabad, Shorekot, Khanpur, Zhob and Panjgur) and in large deficit in 23 meteorological observing stations (D.I.Khan, Sargodha, Lahore (A/P), Multan, Bahawalpur, Quetta, Dalbandin, Nokkundi, Barkhan, Sibbi, Kalat, Khuzdar, Pasni, Jiwani, Jacobabad, Rohri, Nawabshah, Padidan, Hyderabad, Badin, Chhor, Karachi(A/P) and Karachi (Masroor). The principal amount of rainfall during the month is given in table-1.

Table 1: Principal amounts of rainfall (30 mm and above)

Date	January	February	March
(1)	(2)	(3)	(4)
1	Nil	Nil	Nil
2	Murree 60, Muzaffarabad 51, Malam Jabba 50, Kotli 48, Kalam 46, Garhi Dupatta 45, Drosh 41, Cherat 39, Balakot 39 & Chitral 38.	Nil	Nil
3	Garhi Dupatta 50 & Rawalakot 31.	Nil	Nil
4	Nil	Nil	Nil

Date	January	February	March
(1)	(2)	(3)	(4)
5	Nil	Nil	Nil
6	Nil	Nil	Nil
7	Nil	Nil	Dir 44.
8	Nil	Nil	Nil
9	Nil	Nil	Nil
10	Nil	Nil	Nil
11	Nil	Nil	Nil
12	Nil	Nil	Nil
13	Nil	Nil	Nil
14	Nil	Nil	Islamabad 39, Rawalpindi 38, Hyderabad 37, Mirpurkhas 33 & Mangla 32.
15	Nil	Muzaffarabad 36 & Balakot 31.	Lahore (A/P) 59.
16	Malam Jabba 71, Kalam 69, Kotli 47, Murree 45, Kohat 43, Saidu Sharif 42, Garhi Dupatta & Muzaffarabad 38 & Kakul 30.	Nil	Rawalakot 39.
17	Garhi Dupatta 96, Saidu Sharif 64, Malam Jabba 46, Kalam 45, Balakot 37 & Murree 32.	Nil	Nil
18	Nil	Nil	Nil
19	Nil	Nil	Nil
20	Nil	Nil	Nil
21	Nil	Nil	Nil
22	Nil	Nil	Nil
23	Nil	Nil	Nil
24	Nil	Nil	Nil
25	Nil	Nil	Nil
26	Nil	Rawalakot 115, Kotli 47, Balakot 45, Murree 35 & Garhi Dupatta 32.	Multan 50.

Date	January	February	March
(1)	(2)	(3)	(4)
27	Nil	Rawalakot 37.	Nil
28	Nil	Nil	Nil
29	Nil	Nil	Nil
30	Nil	Nil	Nil
31	Nil	Nil	Nil

Table 2: Station wise rainfall (mm) for each month and season as a whole (Jan – March 2006)

	January			February			March			Season		
	Actual	Normal	Dep %	Actual	Normal	Dep%	Actual	Normal	Dep%	Actual	Normal	Dep%
1 Gupis	22	05	340	05	07	-29	00	09	-100	27	21	29
2 Gilgit	15	04	275	06	06	00	02	13	-85	23	23	00
3 Skardu	63	21	200	56	24	133	17	40	-57	136	85	60
4 Bunji	08	04	100	16	06	167	08	16	-50	32	26	23
5 Chilas	37	08	363	12	13	-08	20	30	-33	69	51	35
6 Astor	118	35	237	58	49	18	10	83	-88	186	167	11
7 Muzaffar- abad	172	94	83	102	135	-24	100	157	-36	374	386	-03
8 Garhi Dupatta	268	96	179	97	151	-36	102	184	-45	467	431	08
9 Kotli	129	76	70	68	99	-31	86	119	-28	283	294	-04
10 Parachinar	82	43	91	69	74	-07	124	121	02	275	238	15
11 Chitral	98	37	165	56	63	-11	38	107	-64	192	207	-07
12 Dir	179	111	61	106	173	-39	167	242	-31	452	526	-14
13 Drosh	95	42	126	42	68	-38	57	113	-49	194	223	-13
14 Saidu Sharif	172	76	126	51	103	-50	89	180	-51	312	359	-13
15 Kakul	125	65	92	79	114	-31	61	142	-57	265	321	-17
16 Balakot	196	95	106	126	153	-18	110	189	-42	432	437	-01
17 Kohat	62	25	148	17	42	-59	23	86	-73	102	153	-33
18 Peshawar	69	26	165	26	43	-39	60	78	-23	155	147	-05
19 Risalpur	64	35	83	18	53	-66	21	80	-74	103	168	-39
20 Cherat	79	36	119	13	67	-81	59	111	-47	151	214	-29

January			February			March			Season		
Actual	Normal	Dep %	Actual	Normal	Dep%	Actual	Normal	Dep%	Actual	Normal	Dep%

21	D.I.Khan	03	10	-70	02	17	-88	49	35	40	54	62	-13
22	Chaklala	70	56	25	27	73	-63	61	90	-32	158	219	-28
23	Murree	192	127	51	80	145	-45	53	177	-70	325	449	-28
24	Jhelum	67	34	97	20	50	-60	11	61	-82	98	145	-32
25	Sialkot	26	39	-33	11	44	-75	28	55	-67	65	138	-53
26	Mianwali	13	24	-46	23	24	-04	53	57	-07	89	105	-15
27	Sargodha	04	13	-69	07	23	-30	14	35	-60	25	71	-65
28	Faisalabad	08	11	-27	13	20	-35	31	26	19	52	57	-09
29	Shorekot	05	07	-29	09	12	-25	28	25	12	42	44	-05
30	Lahore (P.B.O)	19	23	-17	05	29	-83	42	41	02	66	93	-29
31	Lahore (A/P)	07	21	-67	01	29	-97	65	43	51	73	93	-21
32	Multan	02	07	-71	12	09	33	55	19	189	69	35	97
33	Bahawal- pur	00	06	-100	00	11	-100	38	09	322	38	26	46
34	Bahawal- Nagar	07	04	75	00	16	-100	14	15	-07	21	35	-40
35	Khanpur	02	04	-50	00	05	-100	25	06	317	27	15	80
36	Quetta	17	57	-70	08	49	-84	32	55	-42	57	161	-65
37	Dalbandin	00	16	-100	06	18	-67	05	19	-74	11	53	-79
38	Nokkundi	00	11	-100	00	08	-100	01	08	-87	01	27	-96
39	Zhob	11	18	-39	04	26	-85	41	48	-15	56	92	-39
40	Barkhan	0	16	-100	04	21	-81	28	33	-15	32	70	-54
41	Sibbi	00	07	-100	11	10	10	23	25	-08	34	42	-19
42	Kalat	11	24	-54	03	27	-89	19	25	-24	33	76	-57
43	Khuzdar	03	18	-83	05	24	-79	25	29	-14	33	71	-53
44	Panjour	08	16	-50	00	16	-100	08	16	-50	16	48	-67
45	Pasni	01	19	-95	01	19	-95	01	14	-93	03	52	-94
46	Jiwani	00	27	-100	21	33	-36	01	10	-90	22	70	-69
47	Moenjo- daro	00	00	00	00	05	-100	07	02	250	07	07	00
48	Jacobabad	00	03	-100	00	07	-100	08	10	-20	08	20	60
49	Rohri	00	03	-100	00	08	-100	23	06	283	23	17	35

January			February			March			Season		
Actual	Normal	Dep %	Actual	Normal	Dep%	Actual	Normal	Dep%	Actual	Normal	Dep%

50	Nawab-shah	00	02	-100	00	02	-100	03	03	00	03	07	-57
51	Padidan	00	01	-100	00	05	-100	09	05	80	09	11	-18
52	Hyderabad	00	01	-100	00	04	-100	37	05	640	37	10	270
53	Badin	00	01	-100	00	04	-100	03	02	50	03	07	-5
54	Chhor	00	01	-100	00	02	-100	15	05	200	15	08	-87
55	Karachi (A/P)	00	06	-100	00	10	-100	00	12	-100	00	28	-100
56	Karachi (Masroor)	00	04	-100	00	06	-100	00	08	-100	00	18	-100

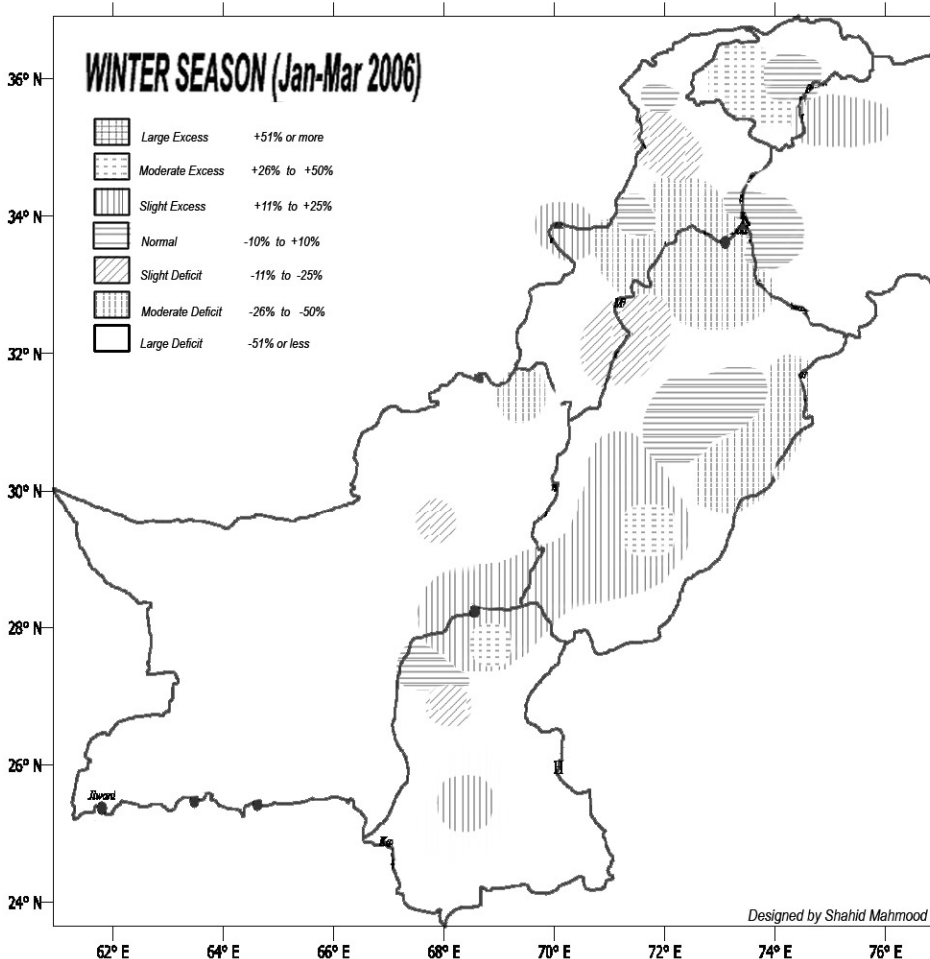


Fig 1

Temperature distribution

Severe cold wave conditions prevailed on 7 – 8 days in Quetta and Kalat regions, on 1 –2 days in FATA, Zhob and Karachi regions. Night temperatures were appreciably to markedly below normal on 7 –9 days in Peshawar, Zhob and Karachi regions, on 4 – 6 days in FATA, Malakand, Kohat, Faisalabad, Bahawalpur, Quetta, Sibbi, Sukkur, Larkana and Mirpurkhas regions, on 1 –3 days in Hazara, D.I.Khan, Rawalpindi, Gujranwala, Sargodha, Lahore, Multan, Kalat, Mekran and Hyderabad regions. They were appreciably to markedly above normal on 11 days in Lahore region, on 4 –5 days in Peshawar, Rawalpindi, Gujranwala, Faisalabad, Multan, Quetta, Kalat and Hyderabad regions, on 1 –3 days in Malakand, Hazara, D.I.Khan, Sargodha, Zhob, Sibbi, Larkana, Sukkur and Mirpurkhas regions. They were considerably above normal on 4 days in Quetta region, on 1 –2 days in FATA, Peshawar, Rawalpindi, Sargodha, Lahore, Kalat, Hyderabad and Mirpurkhas regions.

The month's lowest minimum temperature in plains of the country was -8.0°C recorded at Nokkundi (Quetta region) on January 5.

Table 3: Details of the weather system during January 2006

S. No	System	Period	Place of first location	Direction of movement	Place of final location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A) Low Pressure Area						
1	Low pressure area	14-17	Balochistan and adj. areas	Stationary	Balochistan and adj. areas	Became less marked on 18.
2	Trough of low	20-21	Upper NWFP and adj. Kashmir	Stationary	Upper NWFP and adj. Kashmir	Became less marked on 22.
B) Western Disturbance/Eastwards moving system						
1)	Low pressure area extended upto mid-tropospheric level	1-3	NWFP, adj. Punjab with its trough extended upto upper Sindh and adj. Balochistan	Northeastwards	Kashmir and adj. areas	Moved away Northeastwards on 4.
2)	Do	14-18	Upper NWFP and adj. areas	Do	Do	Moved away Northeastwards on 19.
3)	Low pressure area	26-29	Northeast Afghanistan and adj. NWFP	Do	Do	Moved away Northeastwards on 30.

Disastrous weather events and associated damages:-

According to press reports, two people died of cold in Sialkot district and 6 people in Umarkot as night temperatures fell to below freezing point in most plains of Punjab and Sindh. Lahore experienced the coldest day in 39 years as mercury dropped to minus 2 degree centigrade. Nawabshah experienced the coldest day of last 10 years as mercury dropped to minus 1 degree centigrade during January 5 – 8. ii) According to another press report of January 9, about 47 children died to pneumonia due to the bitter cold in Gultari district in northern areas.

February**weather and associated synoptic features:-**

Detail of weather systems formed during the month is given in Table 4.

Rain/thundershowers with snowfall over hills occurred almost at all the places or at a number of places on 7 – 8 days in FATA, Malakand and Hazara regions, on 1 – 3 days in Bannu, Kohat, Peshawar, Rawalpindi, Gujranwala, Sargodha, Faisalabad, Multan, D.G.Khan, Quetta, Zhob, Sibbi and Kalat regions. Rain/thunderstorms also occurred at a few places or at isolated places on 5 – 8 days in Malakand, Peshawar and Rawalpindi regions, on 1 – 3 days in FATA, Hazara, Bannu, Kohat, D.I.Khan, Sargodha, Lahore, Zhob and Mekran regions.

Rainfall distribution:-

The rainfall was in large excess in 2 meteorological observing stations, (Skardu and Bunji); moderate excess in 1 meteorological observing station (Multan); slight excess in 1 meteorological observing station (Astor); normal in 5 meteorological observing stations (Gilgit, Chilas, Parachinar, Mianwali and Sibbi); slight deficit in 4 meteorological observing stations (Muzaffarabad, Chitral, Balakot and Shorekot); moderate deficit in 12 meteorological observing stations (Gupis, Garhi Dupatta, Kotli, Dir, Drosh, Saidu Sharif, Kakul, Peshawar, Murree, Sargodha, Faisalabad and Jiwani) and was in large deficit in 31 meteorological observing stations (Kohat, Risalpur, Cherat, D.I.Khan, Chaklala, Jhelum, Sialkot, Lahore (PBO), Lahore (A/P), Bahawalpur, Bahawalnagar, Khanpur, Quetta, Dalbandin, Nokkundi, Zhob, Barkhan, Kalat, Khuzdar, Panjgur, Pasni, Moenjodaro, Jacobabad, Rohri, Nawabshah, Padidan, Hyderabad, Badin, Chhor, Karachi (A/P) and Karachi (Masroor).

The principal amount of rainfall during the month are given in Table-1

Temperature distribution:

Severe cold wave conditions prevailed on 1 day in Sargodha region. Night temperatures were appreciably to markedly below normal on 1 – 2 days in FATA, Sargodha and Quetta regions. They were appreciably to markedly above normal on 18 – 23 days in Malakand, Rawalpindi, Sukkur and Hyderabad regions, on 11 – 15 days in Peshawar, Sargodha, Faisalabad, Lahore, Multan, Bahawalpur, Quetta, Sibbi, Kalat, Mekran, Mirpurkhas and Karachi regions, on 8 – 9 days in FATA, Gujranwala, Zhob and Lahore regions, on 1 – 3 days in

Hazara and D.I.Khan regions. They were considerably above normal on 8 – 12 days in Lahore and Quetta regions, on 4 – 7 days in Rawalpindi, Sargodha, Bahawalpur and Karachi regions and on 1 – 3 days in Peshawar, Gujranwala, Multan, Zhob, Kalat, Larkana, Sukkur, Hyderabad and Mirpurkhas regions.

The month's lowest minimum temperature in plains of the country was 2.5° C recorded at Nokkundi (Quetta region) on February 26.

Disastrous weather events and associated damages:

No such report appeared in the national press during this month.

Table 4: Details of the weather systems during February 2006

S. No	System	Period	Place of first location	Direction of movement	Place of final location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A) Low Pressure Area						
1)	Do	1-2	Balochistan and adj. areas	Stationary	Balochistan and adj. areas	Became less marked on 3.
2)	Low pressure area	14-15	Upper NWFP and adj. areas	Do	Upper NWFP and adj. areas	Became less marked on 16.
3)	Low pressure area	22-25	Balochistan and adj. areas	Do	Balochistan and adj. areas	Became less marked on 26.
B) Western Disturbance/Eastwards moving system						
1)	Low pressure area	1-2	Upper NWFP and adj. areas	Eastwards	Kashmir and adj. areas	Became less marked on 3.
2)	Low pressure area extended upto mid-tropospheric level	16-20	North Afghanistan and adj. areas	Do	Do	Moved away Northeastwards on 21.
3)	Low pressure area extended upto mid-tropospheric level	23-27	Upper NWFP and adj. areas	Do	Do	Moved away eastwards on 28.

March

Weather and associated synoptic features:-

Details of weather systems formed during the month are given in table 5.

Rain/thunderstorms with a few falls of snow over hills occurred almost at all the place or at a number of places on 9 – 12 days in FATA, Malakand and Hazara regions, on 5 – 7 days in Peshawar, D.I.Khan, Sargodha and Lahore regions, on 1 – 4 days in Bannu, Kohat, Rawalpindi, Gujranwala, Faisalabad, Multan, D.G.Khan, Bahawalpur, Quetta, Zhob, Sibbi, Kalat, Larkana and Mirpurkhas regions. Rain/thunderstorms also occurred at a few place or at isolated places on 6 – 8 days in Malakand, Bannu, Peshawar, Rawalpindi and Faisalabad regions, on 1 – 4 days in FATA, Hazara, D.I.Khan, Gujranwala, Sargodha, Lahore, Multan, D.G.Khan, Bahawalpur, Quetta, Zhob, Sibbi, Kalat, Mekran, Larkana, Sukkur, Hyderabad and Mirpurkhas regions.

Rainfall distribution

The rainfall was in large excess in 9 meteorological observing stations (Lahore (A/P), Multan, Bahawalpur, Khanpur, Moenjodaro, Rohri, Padidan, Hyderabad and Chhor); moderate excess in 2 meteorological observing stations (D.I.Khan and Badin); slight excess in 2 meteorological observing stations (Faisalabad and Shorekot); normal in 6 meteorological observing stations (Parachinar, Mianwali, Lahore (PBO), Bahawalnagar, Sibbi and Nawabshah); slight deficit in 6 meteorological observing stations (Peshawar, Zhob, Barkhan, Kalat, Khuzdar and Jacobabad); moderate deficit in 12 meteorological observing stations (Bunji, Chilas, Muzaffarabad, Garhi Dupatta, Kotli, Dir, Drosh, Balakot, Chitral, Chaklala, Quetta and Panjgur) and in large deficit in 19 meteorological observing stations (Gupis, Gilgit, Skardu, Astor, Chitral, Saidu Sharif, Kakul, Kohat, Risalpur, Murree, Jhelum, Sialkot, Sargodha, Dalbandin, Nokkundi, Pasni, Jiwani, Karachi (A/P) and Karachi (Masroor). The principal amount of rainfall during the month is given in Table-1.

Temperature distribution

Severe cold wave conditions prevailed on 1 day in Quetta region. Night temperatures were appreciably to markedly below normal on 7 – 9 days in Peshawar and Zhob regions, on 1 – 4 days in Hazara, Rawalpindi, Faisalabad, Bahawalpur, Sibbi, Quetta, Kalat, Mekran, Sukkur, Mirpurkhas and Karachi regions. They were appreciably to markedly above normal on 10 – 14 days in Sargodha and Lahore regions, on 6 – 7 days in Rawalpindi, Bahawalpur and Quetta regions, on 1 – 3 days in FATA, Malakand, D.I.Khan, Peshawar, Gujranwala, Faisalabad, Multan, Kalat, Sibbi, Mekran, Sukkur, Hyderabad, Mirpurkhas and Karachi regions. They were considerably above normal on 1 day each in Sargodha, Quetta and Mekran regions.

The month's lowest minimum temperature in plains of the country was 4.5° C recorded at Nokkundi (Quetta region) on March 16.

Table 5: Details of the weather system during March 2006

S. No	System	Period	Place of first location	Direction of movement	Place of final location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A) Low Pressure Area						
1	Low pressure area	14-15	Sindh and adj. areas	Stationary	Sindh and adj. areas	Became less marked on 16
2	Low pressure area	24-26	Sindh and adj. Balochistan	Do	Do	Became less marked on 27
B) Western Disturbance/Eastwards moving system						
1)	Low pressure area extended upto mid-troposphere level	4-7	Upper NWFP and adj. area and its trough extended southwards	Eastwards	Kashmir and adj. areas	Moved away Northeastwards on 8.
2)	Do	8-10	Sindh and adj. areas	Do	Eastern Sindh and adj. areas	Moved away eastwards on 11.
3)	Do	13-16	NWFP and adj. Punjab	Do	Kashmir and adj. areas	Moved away eastwards on 17.
4)	Low pressure area	17-21	Northeast Afghanistan and adj. areas	Do	Do	Moved away Northeastwards on 22.
5)	Low pressure area extended upto mid-troposphere level	23-28	NWFP and adj. Punjab	Do	Do	Moved away Northeastwards on 29.
6)	Low pressure area	30-31	Northeast Afghanistan and adj. areas	Northeastwards	Northeast Kashmir and adj. areas	Moved away Northeastwards on 1st of next month.

Disastrous weather events and associated damages:

According to press report, seven people were killed and several others injured when heavy duststorm followed by torrential rains lashed many areas of upper Sindh on March 23.

Two persons including a girl were killed in rain related incidents in different parts of Faisalabad on March 26.

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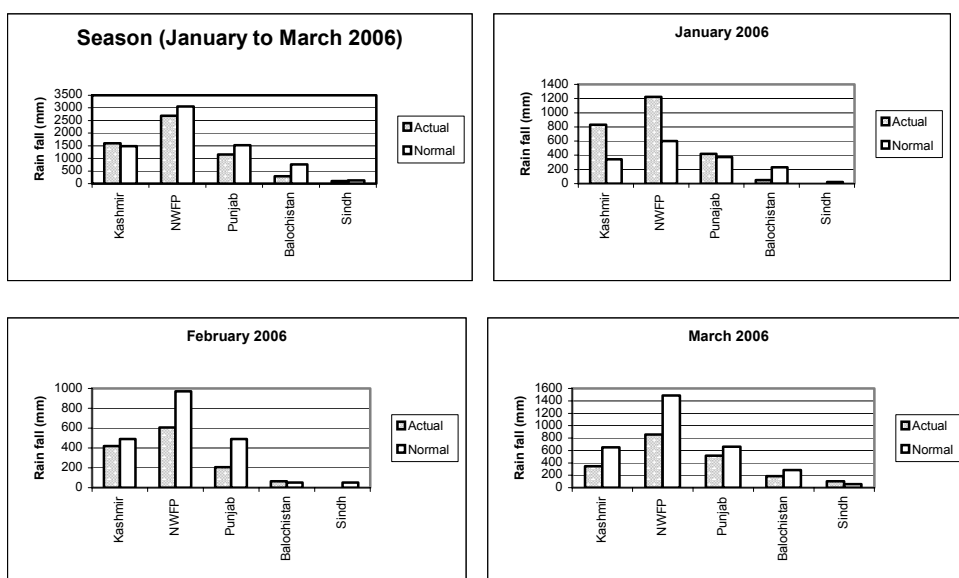


Fig 2

Appendix:

	<i>Rainfall</i>		<i>Temperature</i>
<i>Large excess</i>	percentage departure from normal rainfall is + 51% or more.	<i>Severe cold wave</i>	Departure of min. temperature from normal is - 8° C or less.
<i>Moderate excess</i>	percentage departure from normal rainfall is + 26% to + 50%.	<i>Considerably below normal</i>	Departure of min/max. temperature from normal is - 8° C or less.
<i>Slight excess</i>	percentage departure from normal rainfall is + 11% to + 25%.	<i>Markedly below normal</i>	Departure of min/max. temperature from normal is between - 6° C to - 7° C.
<i>Normal</i>	percentage departure from normal rainfall is - 10% to + 10%.	<i>Appreciably below normal</i>	Departure of min/max. temperature from normal is between - 4° C to - 5° C.
<i>Slight deficit</i>	percentage departure from normal rainfall is - 11% to - 25%.	<i>Markedly above normal</i>	Departure of max/min. temperature from normal is between + 6° C to + 7° C.
<i>Moderate deficit</i>	percentage departure from normal rainfall is - 26% to - 50%.	<i>Appreciably above normal</i>	Departure of max/min. temperature from normal is between + 4° C to + 5° C.
<i>Large deficit</i>	percentage departure from normal rainfall is - 51% or less.	<i>Considerably above normal</i>	Departure of max/min. temperature from normal is +8° C or more.
<i>Almost at all places reporting</i>	66 % or more stations of a meteorological division atleast 2.5 mm rainfall.		
<i>At a number of places reporting</i>	33 % to 66 % stations of a meteorological division atleast 2.5 mm rainfall.		
<i>At a few places reporting</i>	33 % or less stations of a meteorological division atleast 2.5 mm rainfall.		
<i>Isolated places</i>	One or two stations of a meteorological division.		
<i>Heavy rain</i>	rainfall amount is from 44.5 mm to 88.9 mm in 24 hour		
<i>Very heavy rainfall</i>	rainfall amount is 89.0 mm or more in 24 hours.		