



Government of Nepal
Ministry of Population and Environment
Department of Hydrology and Meteorology
Nagpokhari, Kathmandu, Nepal

PRELIMINARY WEATHER SUMMARY OF NEPAL
June 2017

MAIN HIGHLIGHT

Most parts of the country recorded below normal rainfall and normal to above normal temperature (Fig.2, Fig.4, and Table 2).

SYNOPTIC SEQUENCES

The arrival of monsoon this year was on 12th June delayed by 2 days than normal onset date of 10th June and covered the whole country on 26th June after fourteen days of its onset.

Weather over Nepal was affected by the following systems enhancing the rainfall activities during June 2017.

Monsoon Trough

During monsoon season, position of the monsoon trough plays an important role in the contribution of rainfall. In general, if it shifts north of its normal position towards foothills of the Himalayas, Nepal gets significant amount of rainfall and when it moves to the south, monsoon break period occurs resulting in less or no rainfall. There was no formation of distinct monsoon trough during this month.

Low Pressure Area (LPA)

Two distinct LPA forming over northwest Bay of Bengal and neighborhood (15th -16th June) and (25th -26th June) enhanced the weather activities over Nepal which brought rainfall during last two weeks of this June.

Upper Air Cyclonic Circulation (UACC)

Many UACCs formed during this month. However only few of them contributed in enhancing rainfall activity over Nepal.

PRECIPITATION DISTRIBUTION

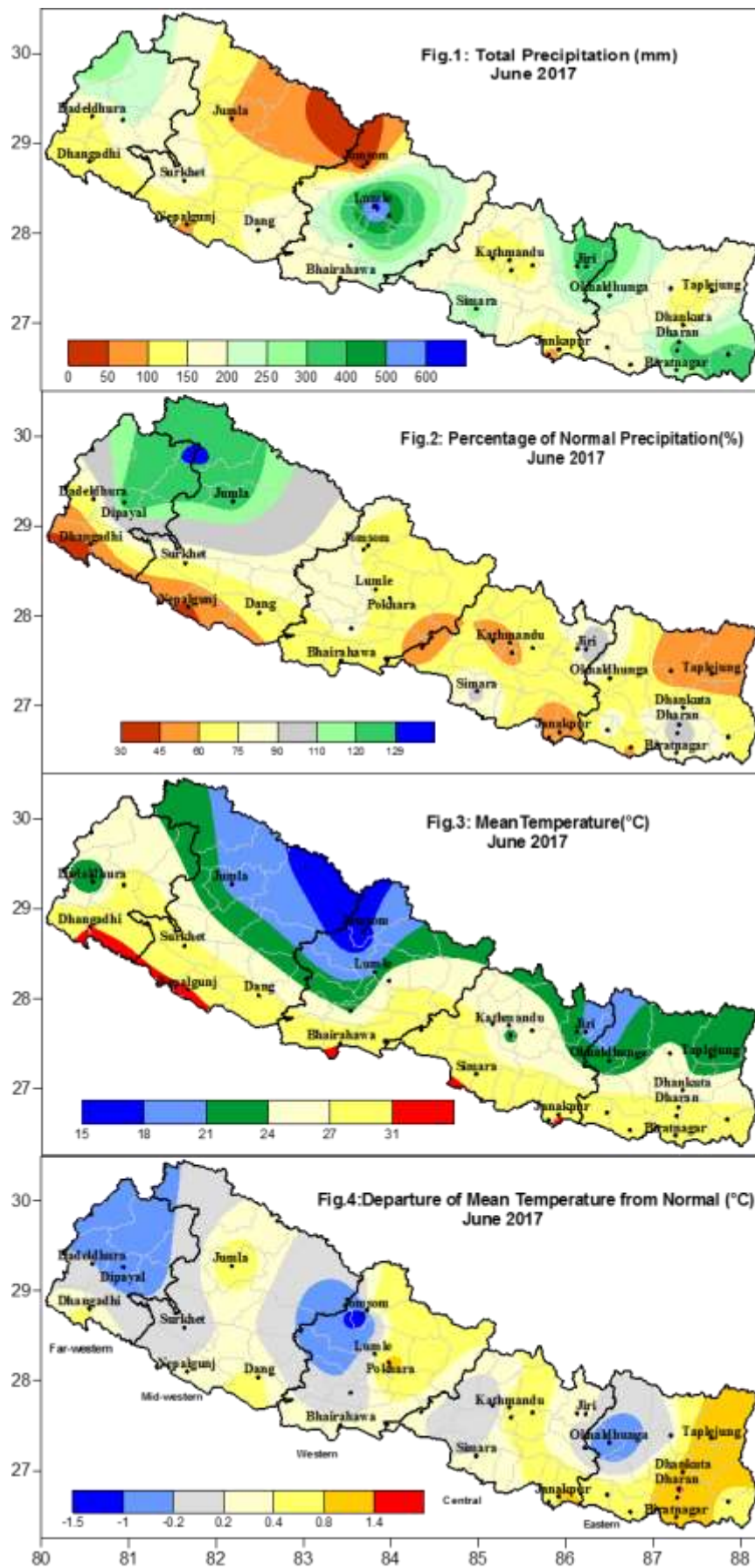
Except for adjoining areas of Far Western Region (FWR) and Mid-Western Region (MWR) rest of the country recorded normal to below normal rainfall. The highest 24 hour rainfall of 156.6mm on 27th June was recorded at Lumle contributing to the highest total rainfall of 659.6mm (74.5%) while highest percentage of rainfall 128.3% (207.0mm) was recorded at Dipayal. (Figure 1, Table 2). Highest percentage of the rainfall was received during 4th week of the month (Table 1).

Table 1: Temporal distribution of average rainfall in June, 2017

Week	Total rainfall (mm) (arithmetic average from station rainfall)	Percentage (%) of monthly total	Daily rainfall Intensity (mm)
1 st	32.0	15.7	4.6
2 nd	28.0	13.8	4.0
3 rd	54.3	26.7	7.8
4 th	66.5	32.7	9.5
Remaining 2 days	22.5	11.1	7.5
Total	203.3	100.0	

TEMPERATURE PATTERN

Most parts of the country recorded normal to above normal temperature. However, northern half of FWR, adjoining areas of MWR and WR as well as an isolated patch over western part of ER recorded below normal temperature (Figure 4). The mean temperature varied between less than 18.0°C in the northern parts of MWR and WR to above 31.0°C in southern parts of Tarai Region (Figure 3). As compared to other stations, Nepalgunj Airport recorded the highest maximum temperature of 41.4°C on 3rd June while the lowest minimum temperature of 6°C was recorded in Thakmarpha on 11st June (Table 2).



Remarks: Normal Rainfall (Gray colour) = $100 \pm 10\%$
 Normal Temperature (Gray colour) = $0 \pm 0.2\text{ }^{\circ}\text{C}$

Table: 2
PRELIMINARY MONTHLY WEATHER DATA
June 2017

Stations	PRECIPITATION							TEMPERATURE								
	Total (mm)	% of Normal	No. of Rainy Days				24hrs Extreme Rainfall & Date	Maximum (°C)			Minimum (°C)			Mean (°C)		No. of Days with maximum temperature $\geq 30^{\circ}\text{C}$
			≥ 1.0 mm	≥ 10.0 mm	≥ 25.0 mm	≥ 50.0 mm		Average Max	Departure from the normal	Highest Max & Date	Average Min	Departure from the normal	Lowest Min & Date	Monthly Mean	Departure from the normal	
DADEL DHURA	123.0	71.7	11	3	1	0	35/6	25.7	-0.3	29.4/4	16.6	0.0	13.1/11	21.2	-0.1	0
DARCHULA	294.0	99.3	16	8	3	2	95.3/27	33.1	-0.8	36.4/4	20.4	-0.5	16.5/1	26.7	-0.6	27
DHANGADHI	113.1	44.8	8	4	1	0	46/16	36.9	0.6	41.4/3	25.4	0.2	20.4/16	31.2	0.4	29
DIPAYAL	207.0	128.3	12	5	3	1	67/25	35.4	-0.8	40/5	22.3	-0.6	19.4/16	28.9	-0.7	27
JUMLA	93.2	125.8	13	2	1	0	29/26	26.8	0.8	30.4/30	13	0.5	10.2/12	20.1	0.6	2
SURKHET	182.0	72.1	12	5	3	0	41/30	33.5	0.3	38.6/4	22.5	-0.3	19.9/17	28.0	0.0	27
NEPALGUNJ AIRPORT	92.7	43.2	7	3	1	0	38/30	37.2	0.6	40.6/4	25.3	0.0	21.5/20	31.3	0.3	29
GHORAI (DANG)	169.7	66.3	14	6	3	0	31/11	32.5	0.2	36.5/4	23.8	0.7	20.5/16	28.1	0.5	26
JOMSOM	16.0	67.1	4	0	0	0	8.5/16	23.1	0.2	26.7/4	12.4	0.5	10.5/3	17.8	0.3	0
THAKMARPHA	17.7	74.2	4	0	0	0	8.3/16	22.3	-0.6	26/3	9.5	-2.5	6/11	15.9	-1.5	0
TANSEN	199.0	78.6	15	4	2	1	99/27	29.8	2.2	31.5/4	17.6	-2.4	14.7/16	23.7	-0.1	18
BHAIRHAWA AIRPORT	178.9	66.4	11	6	2	0	44/5	35.8	0.3	38.6/4	26.1	0.4	22.2/5	30.9	0.4	29
POKHARA AIRPORT	482.3	72.1	20	12	7	3	87/27	31.8	1.2	33.4/4	21.5	0.6	17.9/14	26.7	0.9	28
LUMLE	659.6	74.5	23	14	8	4	156.6/27	24.2	0.4	26.6/5	16.8	0.2	15/3	20.5	0.3	0
RAMPUR	179.7	52.2	13	6	2	0	46/10	35.3	0.4	39.2/4	24.7	0.1	21/10	30.0	0.2	29
SIMARA AIRPORT	269.5	95.6	11	7	3	1	108/16	34.6	0.3	37.6/14	25.5	0.1	22/16	30.0	0.2	29
GODAVARI	139.1	50.7	11	5	2	0	37.6/24	27.7	1.4	30.1/4	17.4	-0.2	15.5/1	22.6	0.6	1
KATHIMANDU AIRPORT	134.2	56.8	13	5	1	0	31/25	29.9	0.8	32/4	19.6	0.5	18/1	24.7	0.6	18
PANCHKHAL	128.9	69.9	16	5	0	0	24.9/23	33.1	0.8	35.5/4	21.5	0.2	19.5/3	27.3	0.5	30
DHUNIBESI	106.3	57.6	13	4	0	0	20.2/21	32.6	0.3	36/5	20.7	-0.6	17.5/3	26.6	-0.2	27
JIRI	416.8	110.1	24	10	7	3	68.7/28	24.9	0.7	27/4	15.5	0.1	12/6	20.2	0.4	0
JANAKPUR AIRPORT	101.9	42.7	7	3	2	0	37.4/6	35.4	1.3	38.4/1	26.5	0.6	22.4/12	31.0	1.0	28
JALESORE	90.4	51.5	7	3	1	0	25/6	35.2	0.4	37.6/13	26.3	0.3	23/5	30.7	0.4	30
KABRE	306.5	73.6	19	13	4	0	46.5/25	26.6	0.6	29.5/3	17.4	-0.1	14/1	22.0	0.2	0
OKHALDHUNGA	210.5	70.6	16	6	3	1	72/21	25.5	0.2	27.9/1	17.2	-1.9	16.4/3	21.4	-0.9	0
LAHAN	196.7	82.3	9	7	3	1	70.5/16	34.4	0.4	37/1	26.4	1.0	23.5/10	30.4	0.7	30
RAJBIRAJ	147.1	57.2	12	5	2	0	32.6/8	33.8	-0.4	36.2/1	26.5	1.6	23.5/3	30.1	0.6	28
DHANKUTA	115.3	78.2	13	2	2	0	40/19	28.4	1.3	31.2/14	20.6	0.7	19.3/2	24.5	1.0	4
DHARAN	325.1	98.0	18	11	5	1	67.8/2	32.6	0.3	34.5/27	25.1	2.7	22.4/3	28.8	1.5	22
BIRATNAGAR AIRPORT	247.9	82.0	16	8	2	1	63/21	34.2	1.3	36.9/11	25.9	0.7	24.4/20	30.0	1.0	29
TARAHARA	338.8	103.5	17	10	5	3	61.2/22	33.9	1.3	36.8/11	25.9	1.2	24/9	29.9	1.2	29
KHADBARI	156.5	48.1	18	7	1	0	40.3/19	29.5	0.0	31/27	21.0	0.2	19.5/1	25.2	0.1	14
TAPLEJUNG	141.7	48.0	18	5	2	0	35/25	27.0	2.2	28.8/27	17.8	0.5	16/3	22.4	1.4	0
KANKAI	329.7	73.5	15	6	5	2	126/22	34.2	1.0	36.5/11	23.4	0.1	19.5/3	28.8	0.6	29