## 1. Introduction

Hydrology and Water Resources Services Division (HWRSD) is one of the four Divisions of the Center, responsible for generating and disseminating information and services related to hydrology and water resources.

The Division collects and archives daily data from the river gauging station located across the country, to keep updated on the status of the flow, the Division is coming up with Monthly Flow Monitoring Report in selected hydrological stations located in different river basins. Currently, following stations (figure 1) are selected for monthly monitoring of the flow;

## 1. Lungtenphu station in Wangchhu,

- 2. Kerabaristaion in Punatsangchhu basin and
- 3. Bjizam station in Mangdechhu basin.

The main objective of the report is to understand and keep updated flow status of the river and further provide information on the abnormal data observation while comparing with the historical flow data.

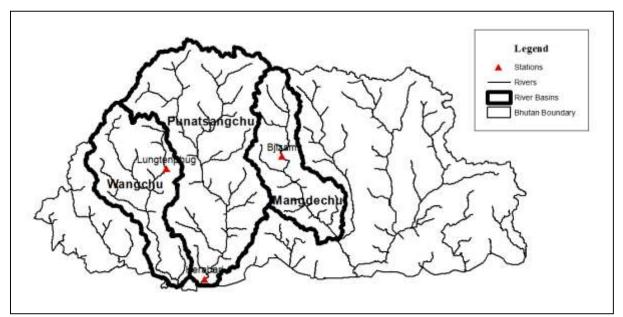


Figure 1 Map showing the selected stations for Flow monitoring

# 2. Methodology

The flow of June 2020 is compared to the flow of historical June months. The historical flow data is available from 1991 to 2018. The measures of dispersion such as mean, maximum and minimum flows are computed to make comparison.

### 3. Observation

During the June month the average flow ( i,e 39.47 cumecs) was higher than the average of historical June months (i,e 27.02 cumecs). The maximum flow was observed lower than the Maximum flow ever recorded in June from 1991-2018. While Minimum flow was observed to be higher in June 2020 compared to the Minimum flow ever recorded in June from 1991-2018.

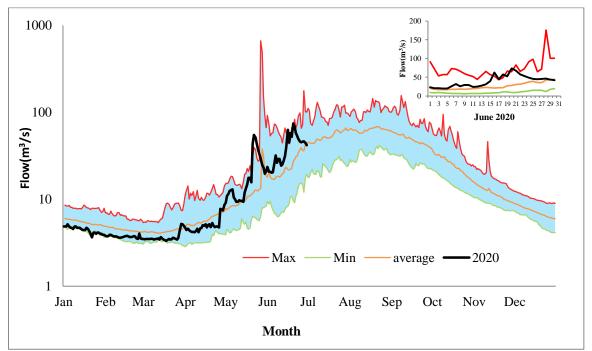


Figure 2Daily flow status of June 2020 as compared to historical daily flow data of June months

Statistics	June 2020 (m <sup>3</sup> /s)	Historical June (1991- 2018)m <sup>3</sup> /s
Mean flow	39.47	27.02
Max flow	74.03	175.91
Min flow	20.07	6.23

#### 4. Summary

- 1. The mean flow of June 2020 is observed to be 12.45 m<sup>3</sup>/s higher compared to the mean of Normal flow (average of flow for June from 1991-2018).
- 2. The minimum flow for June 2020 is observed to be higher by13.84 m<sup>3</sup>/s compared to the minimum flow ever recorded in June for past years (1991-2018).
- 3. The maximum flow for June 2020 didn't exceed the maximum ever recorded in June for past years (1991-2018).