



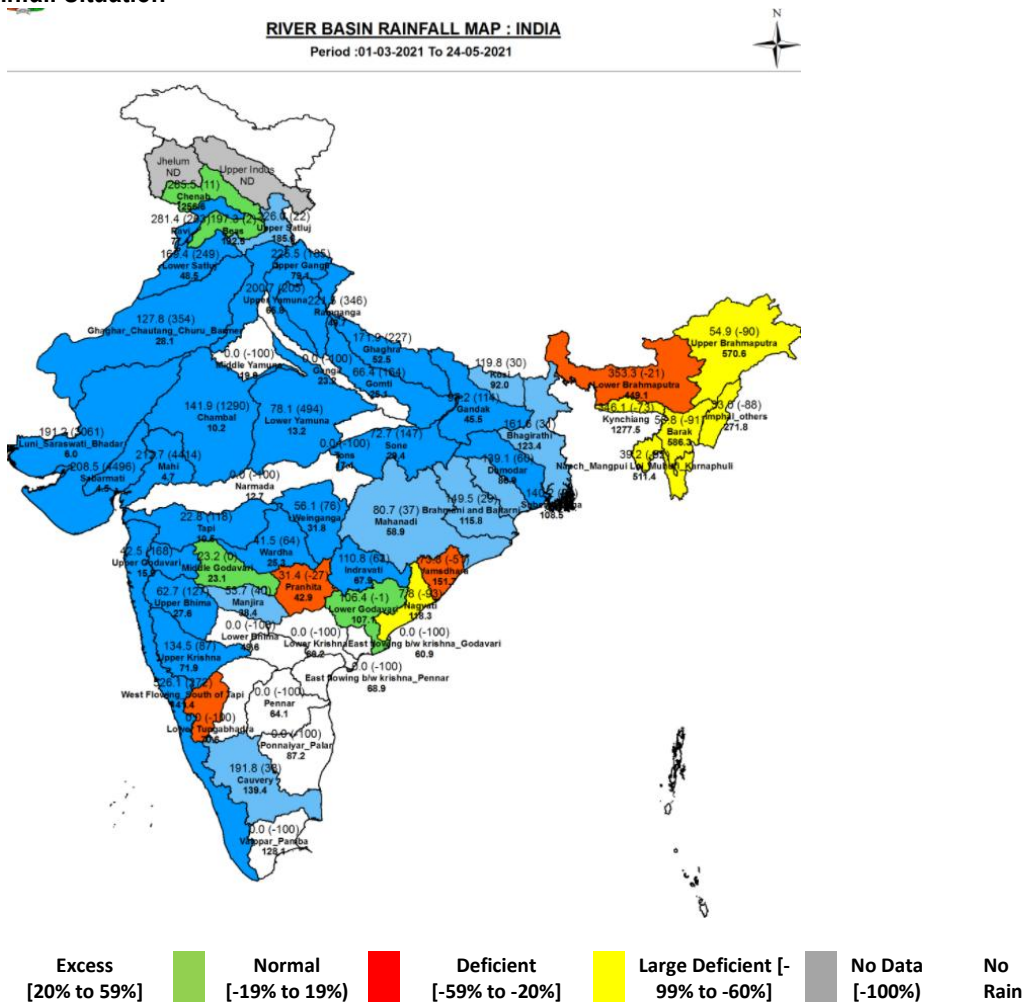
**Central Water Commission**  
**Special Flood Advisory for Odisha, Jharkhand, West Bengal**  
**24-05-2021 at 1700 hrs**

## 1. Meteorological Situation

The **Cyclonic Storm 'Yaas'** (pronounced as 'Yass') over Eastcentral Bay of Bengal moved northwestwards with a speed of 02 kmph during past 6 hours, and lay centred at 0830 hrs IST of today, the 24<sup>th</sup> May, 2021 over Eastcentral Bay of Bengal near latitude 16.4°N and longitude 89.6°E, about 620 km north-northwest of Port Blair (Andaman Islands), 530 km south-southeast of Paradip (Odisha), 630 km south-southeast of Balasore (Odisha) and 620 km south-southeast of Digha (West Bengal).

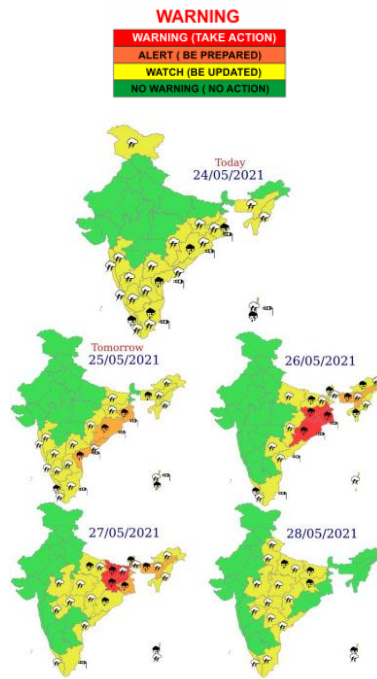
It is very likely to move north-northwestwards, intensify further into a **Severe Cyclonic Storm** during next 12 hours and into a **Very Severe Cyclonic Storm** during subsequent 24 hours. It would continue to move north-northwestwards, intensify further and reach Northwest Bay of Bengal near north Odisha and West Bengal coasts by 26<sup>th</sup> May early morning. It is very likely to cross north Odisha-West Bengal coasts between Paradip and Sagar islands around noon of 26<sup>th</sup> May as a Very Severe Cyclonic Storm.

### 1.1 River Basinwise Rainfall Situation



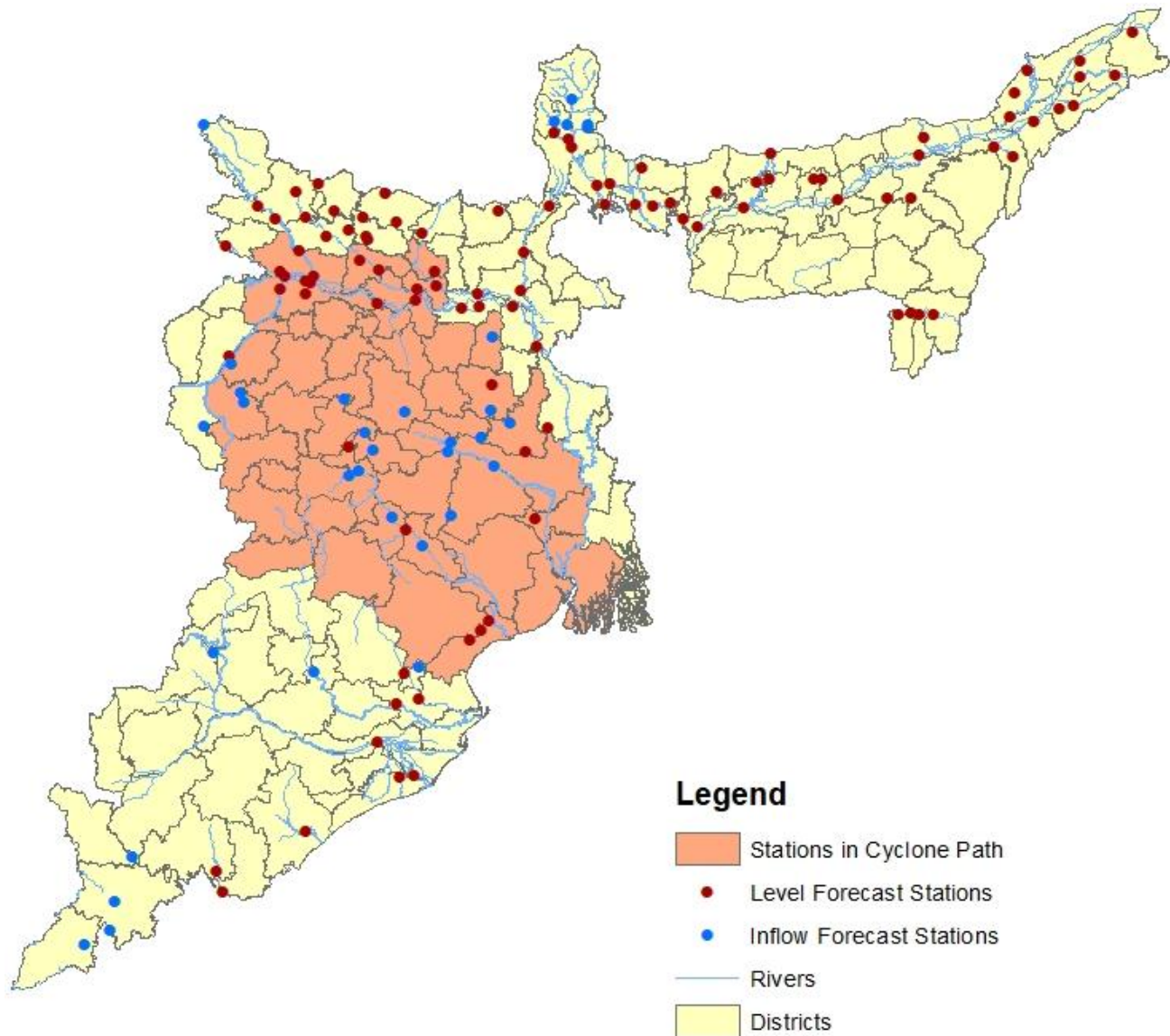
River Basinwise Cumulative Rainfall indicates that rainfall was Large Excess in Damodar Basin and Excess in Subarnarekha, Burhabalang, Baitarni & Brahmani and Mahanadi Sub-Basins indicating good soil moisture conditions in the Coastal and Interior Pats of Odisha, West Bengal and Jharkhand.

## 1.1 Rainfall forecast for next 5 days issued on 24-05-2021 (Midday) by IMD



S. No.	Basin Name	Sub-basin Name	Quantitative Precipitation Forecast (QPF) in (mm)				
			Day-1	Day-2	Day-3	Day-4	Day-5
1	SUBARNAREKHA	SR	0.1-10	38-50	0.1-10	38-50	0.1-10
2	BURHABALANG	BB	11-25	76-100	>100	0.1-10	0
3	BAITARANI	BT	11-25	76-100	>100	11-25	0
4	UPPER BRAHMANI	UB	11-25	0.1-10	38-50	38-50	0
5	LOWER BRAHMANI	LB	0.1-10	76-100	>100	11-25	0
6	UPPER MAHANADI	UM	0	0.1-10	0.1-10	0.1-10	0.1-10
7	LOWER MAHANADI	LM	0.1-10	38-50	76-100	0.1-10	0
8	RUSHIKULYA	RK	0.1-10	11-25	0.1-10	0	0
9	VAMSADHARA	VD	0.1-10	0.1-10	0.1-10	0	0
10	NAGAVALI	NV	0.1-10	0.1-10	0.1-10	0	0
11	MAYURAKSHI	MAYURAKSHI	0.1-10	11-25	26-50	11-25	0.1-10
12	AJOY	AJOY	0.1-10	11-25	26-50	11-25	0.1-10
13	KANSABATI	KANSABATI	11-25	26-50	51-100	11-25	0.1-10
14	BARAKAR	Barakar West	0.1-10	0.1-10	26-50	51-100	11-25
		Barakar East	0.1-10	0.1-10	26-50	51-100	11-25
15	DAMODAR	Damodar West	0.1-10	0.1-10	26-50	26-50	0.1-10
		Damodar East	0.1-10	0.1-10	51-100	51-100	11-25
16	LOWER VALLEY	Lr Valley West	0.1-10	11-25	51-100	11-25	0.1-10
		Lr Valley South	11-25	11-25	26-50	11-25	0.1-10

The flood forecasting stations which fall in the cyclone field of the Yass cyclone is shown in the Map below which covers the sub-basins of Burhabalang, Baitarni & Brahmani, Subarnarekha, Kangsabati, Damodar, Myrakshi & Ajoy in the States of Odisha, West Bengal, Jharkhand, while the rainfall in Bihar due to the movement of the cyclone may be restricted to Southern tributaries and that in Sikkim, Assam & Meghalaya may be restricted to the Western & Southern Portions.



## 2.1 Subarnarekha, Burhabalang Basin in Odisha, Jharkhand & West Bengal

Due to the expected crossing of the system around 26<sup>th</sup> May evening near Balasore and the predicted extremely heavy rainfall, the rivers Burhabalang and Jalaka are expected to rise rapidly and there is atleast 60% probability of river crossing warning level and 30% probability to cross Danger Level respectively at **NH5 Road Bridge** at **Govindpur** on river **Burhabalang** in **Balasore** District and at **Mathani Road Bridge** on river **Jalaka** in **Balasore** District.

In **Subarnarekha** basin due to many dams in the upstream, chances of flooding in the downstream is mostly due to the extremely heavy rain which is expected. As the level in reservoirs are low and the river is flowing at comparatively low level, the chances of crossing warning level is minimum at **Rajghat** in **Balasore** District in **Odisha** and at **Jameshedpur** in **East Singhbhum** District of **Jharkhand**. However, there are may be steep rise in water levels at these stations as well as in Medhinipur District of West Bengal in association with expected extremely heavy rainfall in the region on 27<sup>th</sup> and 28<sup>th</sup> May 2021. **Chandil Dam** in Saraikhela Kharaswan District as well as **Galudih Barrage** in **East Singhbhum** District are also expected to get good inflows while the storage in **Getlasud Dam** in **Ranchi** District is about 30% of its Full reservoir Level. Hence this rainfall shall increase the storage in major reservoirs in the basin. These reservoirs have to monitor the levels very carefully and releases if any have to be done after informing downstream areas

as well as lower riparian States well in advance as there is likelihood of drainage congestion in view of the extremely heavy rainfall expected to occur in downstream areas in association with cyclone.

## **2.2 Damodar Basin in Jharkhand & West Bengal**

In view of the forecasted rainfall in association with the system, there is likelihood of sudden increase in the water levels of rivers Damodar, Mundeshwari in the lower valley of Damodar. The **reservoirs in Damodar Basin** in Jharkhand such as **Maithon Dam (43%)**, **Panchet (65%)** both in **Dhanbad District**, **Konar (52%)** in **Hazaribagh District** and **Tenughat** in **Bokaro District (39%)** are having storages between 39 to 65% capacity. The expected rain in the basins on 27<sup>th</sup> and 28<sup>th</sup> may increase the inflows into these dams which may take them very close to their rule levels. This may result in the projects releasing excess water. These reservoirs have to monitor the levels very carefully and releases if any have to be done after informing downstream areas as well as lower riparian States well in advance as there is likelihood of drainage congestion in view of the extremely heavy rainfall expected to occur in downstream areas in association with cyclone.

## **2.3 Kangsabati Basin in West Bengal**

In view of the forecasted rainfall, there is likelihood of rise in water levels downstream of **Kangsabati Dam** in **Meidhinipur District**. The Kangsabati Dam is having storage of 25% and hence the predicted rainfall may give good inflow to raise the storage. However, the rule level may get exceeded as it is in the falling limb at the far end of the water year and in such case, proper reservoir operation has to be done to avoid downstream flooding and releases from dam should be undertaken after informing all downstream areas as per protocol.

## **2.4 Ajoy & Mayurakshi Basin In Jharkhand & West Bengal**

In view of the forecasted rainfall, there is likelihood of rise in water levels on river Mayurakshi downstream of **Massanjore Dam** in **Dumka District of Jharkhand**. The Massanjore Dam is having storage of 20% and hence the predicted rainfall may give good inflow to raise the storage. However, the rule level may get exceeded as it is in the falling limb at the far end of the water year and in such case, proper reservoir operation has to be done to avoid downstream flooding and releases from dam should be undertaken after informing all downstream areas as per protocol and release information if any should be informed to all downstream areas as well as to lower riparian State which is **Birbhum District of West Bengal**. River Ajoy is also expected to rise which may increase the water level at **Gheropara in Birbhum District of West Bengal**.

### **General Advisory**

Since rainfall is expected to continue in upstream areas of all the medium dams, the need for proper reservoir operation taking into account the upstream rainfall as well as the downstream flood situation in association with forecasted rainfall by taking a balanced approach to avoid upstream submergence as well as downstream flooding is required to be done by all project authorities. All project authorities have to inform in advance about the releases made to downstream Districts in the same State as well as to lower riparian States. **Further, in view of the Pandemic Situation, the relief camps for flood affected people can be established by following Covid Appropriate Protocols.**