

DIBANG MULTIPURPOSE PROJECT (2,880MW - 12 X 240 MW)

- A Multipurpose Project **Storage Project for Flood Moderation & Hydropower**
- Catchment Area: 11,276 km²
- Environment Clearance accorded: 2015
- Average Annual Rainfall: 4357 mm
- PMF/Observed Maximum Flood: 26,230/14,000 m³/s
- Diversion Tunnel Discharge: 8680 m³/s
- Height of Dam above deepest foundation level: 278
(World's highest RCC Dam)
- Spread Area of Reservoir: 35.64 km²
- Gross Storage at MWL: 3,510 Mcm
- Energy: 11223 MU Levellised Tariff: INR 4.14 per kWh

PROJECT COMPONENTS

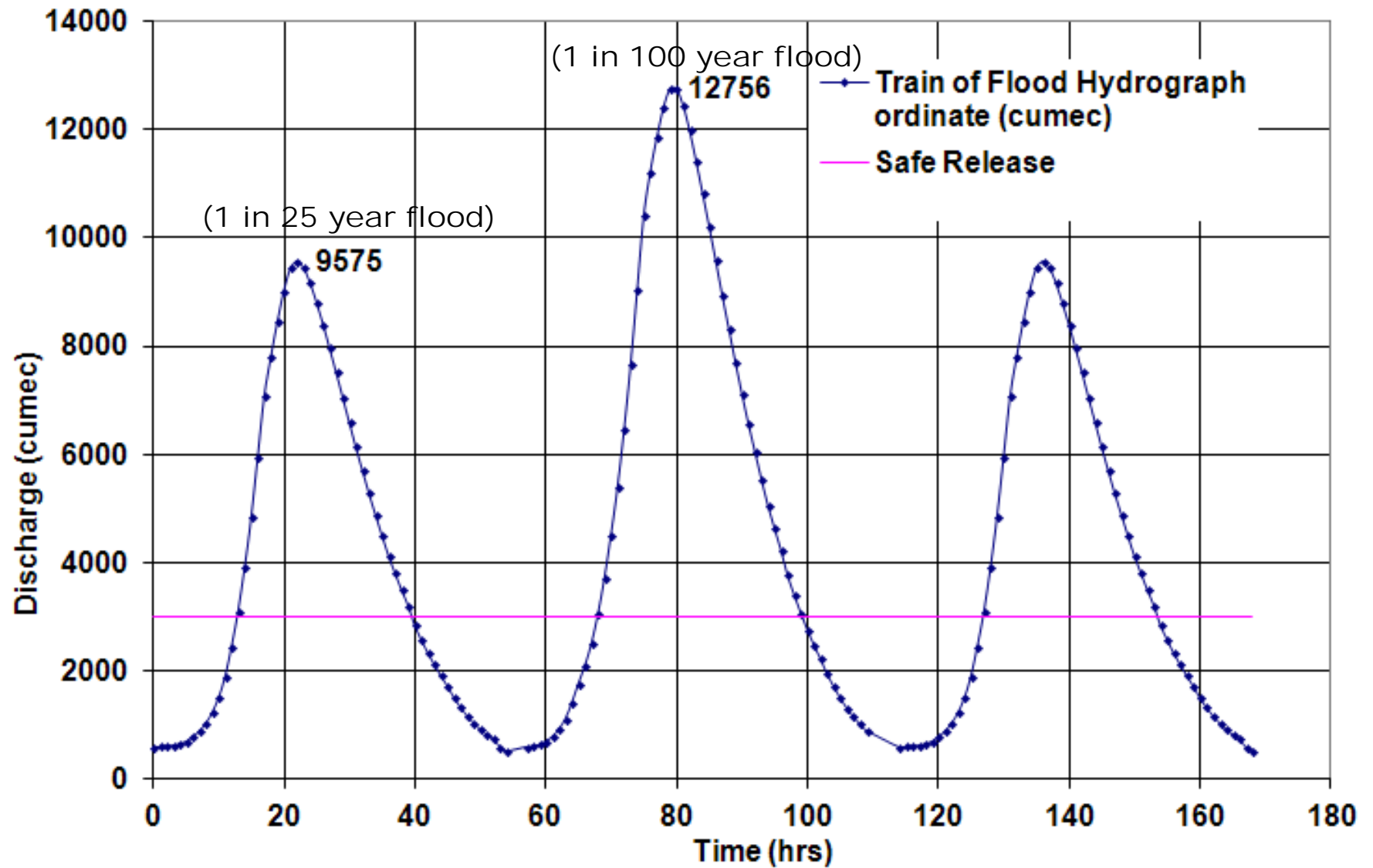


- Dibang contributes about 8 % of flood near state capital in Brahmaputra River
- Estimated damages due to floods in the state of Assam state disaster management agency

Year	Total funds NEEDS (INR Billions)
2012	110.92
2014	25.35
2015	15.24
2016	103.40
2017	43.59

- Dibang Project chosen as potential flood storage/moderation in Dibang basin f in the event of occurrence of a 100 year return period flood wave preceded and succeeded by a 25 year flood wave at dam site.
- Release from the reservoir will be restricted to 3000 m³/s,
- Flood storage for moderation of train of flood waves is computed as 1260 MCM.

TRAIN OF FLOOD



RESERVOIR RULE CURVE

Months (Monsoon)	Reservoir Level at end of period (m)	Remarks
May-III to Aug-II	490.2	25+100+25 yr Flood can pass
Aug-III to Sept-III	512.6	100 yr Flood can pass
Oct-I	530.3	FRL

Flood routing study has been carried out downstream of dam upto confluence with river **Lohit for 1 in 100 year return period flood (12,756 m³/s) and 3,000 m³/s (release after flood moderation)** discharge to assess the impact of flood moderation d/s of dam.

It is estimated that relief in water level is of order of 3 to 6 m in first 20 km and 1 to 2 m beyond 20 km d/s of dam for 1 in 100 year flood, which is quite significant considering the fact that Dibang is quite a wide river in these reaches.

After flood moderation the flood plain width will get reduced from average 6 m to about 3.3 km ie 45% reduction.

- Large Hydropower projects to be treated as Renewable energy Source
- Hydropower purchase obligation (For new projects)
- Grant for Enabling Infrastructure (on case to case basis)
- Flexibility in Tariff Determination
- Grant for Flood Moderation (on case to case basis)
- Policy to promote Cross Border Trade

ALLOCATION OF COST

- Flood Moderation component is taken as INR Billion 48. 12
- Flood Moderation Cost as grant from Government
- Flood moderation component cost is very small in comparison to yearly flood losses enumerated above put together with land reclaimed and by preventing further agriculture land erosion.

Description	Amount (INR Billions)
Equal Apportionment Method	67.14
Use of Facilities Method	46.28

- Cost of flood moderation has been calculated adopting following two methods as per **IS 7560-1974** and “*Use of Facilities Method*” recommended in the draft “*CWC Guideline for preparation of Project Estimates for River Valley Projects, April 2016*”