

## **High Water Storage in Reservoirs before the monsoon Warning for repetition of 2006 flood disasters?**

Even as the nation awaits the arrival of monsoon (parts of India already drenched), a number of large water reservoirs in the country have significant water storages, which go upto 87% of their storage capacities. As per the Central Water Commission records updated on June 16, 2007, of the 76 large reservoirs monitored by CWC, 41 reservoirs had water filled upto more than 20% of its capacity, when ideally, the storage level should be 10% or less. In case of 20 reservoirs, the water level was over a third of the reservoir storage capacity. This situation could be dangerous as it could help create flood damages in the monsoon.

Existence of so much water stored just before the monsoon is difficult to justify in most cases. Particularly when such storages are seen in drought prone areas like Vidarbha (Maharashtra), Gujarat and Rajasthan and also flood prone basins like the Mahanadi.

**Vidarbha** For example, reservoirs like Upper Painganga (44% of its 964 Million Cubic Meters capacity reservoir full on June 16), Kamthi Khairi (88%), Upper Wardha (33%) and Arunawati (28%), are all in drought prone Vidarbha region, where one of the reasons cited for farmer suicides is lack of adequate irrigation facilities. The Prime Minister's much celebrated Vidarbha package is mostly constituted of additional resources of large irrigation projects in this region.

**Gujarat** Similarly in Gujarat's drought prone north Gujarat region, Kadana dam (54%) & Panam dam (38%) on Mahi River and Dharoi dam (38% full) & Jakham dam (in Rajasthan, 23%) on Sabarmati River had such high water storages. Ukai dam on Tapi River in South Gujarat, that brought unprecedented floods in Surat and other downstream areas last year, had 29% water storage at the end of May '07, though the level had been brought down to 18% by June 15. Here it may be recalled that Ukai, Sabarmati and Mahi Rivers brought disastrous floods in Gujarat last year.

**Rajasthan** In neighbouring Rajasthan, in Chambal basin, Gandhi Sagar had 35% and Rana Pratap Sagar 87% storage capacity full as reported by CWC on June 16. The Chambal basin also experienced floods in 2006 and such high storages before monsoon could increase the risk of repetition of such floods this year.

**Mahanadi** In the flood prone Mahanadi, the Gangrel Dam (41%) and Hansdeo Bango (27%), both in Chhattisgarh and Hirakud dam (42%) in Orissa had unjustifiably high water storage in these big reservoirs. This is bound to increase the possibilities of high flood damages in this basin in 2007 monsoon.

**Large Dams and the 2006 floods** Significantly, the storage levels are significantly high in the river basins like Tapi, Mahi, Sabarmati, Chambal, Krishna and Godavari. These basins faced disastrous flood damages in 2006, mostly even before half the monsoon season was over. In case of most of the flood damages in these basins in 2006, the sudden release of high magnitude water flows was one of the most important reasons for the flood damages and better management of reservoir storages could have lead to avoidance of many of these floods. Many of the reservoirs in these basins had significantly high water storage level before the 2006 monsoon, a similar situation now prevails in 2007. No action has yet been taken against those responsible for the wrong reservoir operation in 2006, which brought catastrophic floods.

The current storage position of reservoirs in these river basins seems to suggest that events of 2006 could be repeated this year if adequate prior precaution is not taken. International weather forecasts have already suggested that the western & southern India (where most of these reservoirs with high water storage are situated) are likely to have above average monsoon with some intense bouts of rain. If these forecasts come true, then the high water level in these reservoirs could help increase the possibility of destructive floods in the river basins mentioned above.

India urgently needs a transparent, accountable reservoir policy and reservoir operation rules with legal force. Failure of such measures could prove very costly for the people and the economy.

**Himanshu Thakkar ([ht.sandrp@gmail.com](mailto:ht.sandrp@gmail.com))**

**South Asia Network on Dams, Rivers & People ([www.sandrp.in](http://www.sandrp.in)) Delhi**

**(Ph: 2748 4655, 9968242798)**