

CRIMINAL NEGLIGENCE OF DAM OPERATORS LEAD TO MAN MADE DISASTER

Why did the Reservoirs have up to 47% water before the monsoon?

PRESS RELEASE

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Mismanagement and negligent operations of the large reservoirs on Tapi, Narmada, Krishna, Godavari, Mahi and Sabarmati Rivers have created man made disaster in Gujarat, Maharashtra, Madhya Pradesh, Karnataka and Andhra Pradesh. The Big dams that were expected to reduce the floods have actually been responsible for the flood disaster visiting these states now, the states that also happen to have the largest number of big dams.

Reservoir storage before the monsoon Consider the first set of facts. Following are the figures of the % water storage in live capacities of respective dams JUST BEFORE the monsoon 2006, all figures are from the Central Water Commission, Govt of India:

DAM	Reservoir Capacity filled up before monsoon	DAM	Reservoir Capacity filled up before monsoon	DAM	Reservoir Capacity filled up before monsoon	DAM	Reservoir Capacity filled up before monsoon
TAPI BASIN		MAHI BASIN		KRISHNA BASIN		GODAVARI BASIN	
UKAI	21.56%	KADANA	40.69%	KOYNA	25.19%	JAYAKWADI	28.33%
GIRNA	10%	PANAM	19.37%	KHADAKVASLA	12.5%		
		MAHI BAJAJ SAGAR	28.17%	NARAYANPUR	44.15%		
NARMADA BASIN				SRISAILAM	17%	SABARMATI BASIN	
TAWA	22.58%			NAGARJUNSAGAR	47.08%	DHAROI	42.59%

This situation reservoirs having substantial water JUST BEFORE the onset of monsoon is a big loss to the nation in a number of ways. Firstly, this means that the water available in live storage before the monsoon could not be used (e.g. for irrigation, water supply, power generation). With the onset of monsoon, since the reservoirs had that much less capacity to absorb monsoon flows, they were bound to release large amount of water without use. The SUDDEN release of LARGE quantities of water from these dams has led to big disaster in the downstream areas, thus DAMS in the current case are DIRECTLY responsible for the flood damages, and dam operators are responsible for this state of affairs.

Releases from the reservoir The second big factor that decides the floods in the downstream region is the releases from the dams AFTER the onset of the monsoon. Here this information is generally kept a state secret, so unless the Dam operators and governments make public as to how much water was released, say for irrigation, power generation, water supply and for the downstream areas since the onset of monsoon, it cannot be said if the dam operation has been done in an optimal manner. However, available evidence suggests that the dam operators are responsible for criminal mismanagement in this respect also. Let us take two stark examples.

⇒ **UKAI, SURAT** Even as the Ukai dam on Tapi river upstream of Surat city was filling up very fast (the dam was already 51% full on July 20, 77.54% full on Aug 3, '06 and 100% full on Aug 7, '06) and the dam was getting high inflows of up to 9-10 lakh cusecs, the authorities waited for the dam to fill up before starting to release water. This meant sudden release of up to 10 lakh cusecs of water from the dam, for several days running. This when the authorities all along knew that the Tapi river downstream from dam has drainage capacity of only about 3.5 lakh cusecs. Secondly, the releases also coincided with high tide, leading to prolonged flooding. All this shows that the dam operators are solely guilty for the floods that Surat is now experiencing. Here it should be noted that Surat city has experienced just 12% excess rainfall this monsoon till 0800 hours on August 9, 2006, so sudden high intensity rainfall or cloudburst is certainly not the reason for floods in Surat.

⇒ **Sardar Sarovar** On August 2, its been widely reported, SSP main canal was open by just 0.5 m, releasing just about 580 cusecs of water, when the dam was getting inflows of over 98000 cusecs and

downstream releases were just around 21 000 cusecs. This led to build up of water behind the dam, up to 128 m, when it need not have gone much beyond 119 m. As a direct consequence of this build up, lands, houses and habitats of thousands of families faced avoidable and illegal submergence. This seemed like the state bent on using submergence as a weapon to terrorise the affected people into accepting unjust displacement. SSP authorities need to answer as to what were the hourly releases into canals, riverbed power house and inflow and overflow from the dam along with water level behind the dam. If Gujarat did not have the capacity to use water, why was the increase in dam height from 110.63 m to 121.92 m pushed?

The story is similar in Krishna, Godavari and Sabarmati basins that are also facing floods. A related issue is the siltation of dams, which is also leading to reduction of available capacity at reservoirs, and nothing is being done to arrest the siltation. According to the report of the Govt of India's National Commission for Integrated Water Resources Development, the country is losing 1.4 BCM storage capacity every year, and the loss is about Rs 1600 crores of rupees.

The least one can demand is a credible, independent enquiry as to why such a situation arose which could have been substantially avoided with more optimal operation of projects. The dam authorities also will have to come out with full facts and figures about inflows, outflows, releases and reservoir levels and storage capacities on daily basis, so that those responsible for mismanagement can be identified and necessary action is taken. The Nation has paid huge costs in creating these reservoir capacities and negligence of the dam operators is leading to disastrous consequences which are entirely avoidable.

Himanshu Thakkar
South Asia Network on Dams, Rivers & People, Delhi
2748 4654/5

cwaterp@vsnl.com

www.sandrp.in

TABLE
Why did these Reservoirs have up to 47% water before the monsoon?

River basin	Dam	State, location	Lowest Pre monsoon/ current LIVE storage, BCM	Date	% of live storage capacity
Tapi	Ukai	Surat, Gujarat	1.426	270606	21.56
			5.129	030806	77.54
			6.615	080806	100
	Upper Tapi	Maharashtra	0.016	210606	6.27
			0.055	030806	21.57
	Girna	Maharashtra	0.052	270606	9.924
0.115			030806	21.95	
Narmada	Tawa	Hoshangabad, MP	0.439	270606	22.58
			1.116	030806	57.41
	Bargi	Jabalpur, MP	0.141	270606	4.43
			1.74	030806	54.72
Krishna	Koyana	Satara, Maharashtra	0.668	310506	25.19
			2.498	030806	94.19
	Bhima/ Ujjani	Solapur, Maharashtra	0.085	310506	5.60
			1.434	030806	94.53
	Khadakvasla	Pune, Maharashtra	0.007	210606	12.5
			0.032	030806	57.14
	Narayanpur	Karnataka	0.318	310506	44.15
			0.625	020806	72.42
	Srisailam	AP	1.388	210606	16.87
			4.723	030806	56.99
Nagarjunsagar	AP	3.221	210606	47.08	
		4.574	030806	66.86	
Godavari	Jayakwadi	Maharashtra	0.615	210606	28.33
			1.527	030806	70.34
Sabarmati	Dharoi	Gujarat	0.313	270606	42.59
			0.544	030806	74.01
Mahi	Kadana	Gujarat	0.599	270606	40.69
			1.052	030806	71.47
	Panam	Gujarat	0.135	270606	19.37
			0.430	030806	61.69
	Mahi Bajaj Sagar	Rajasthan	0.482	210606	28.17
1.569			030806	91.70	

Note: All figures from the periodic bulletins of Central Water Commission, Govt of India, where information about water storage position is given for 76 reservoirs.