

Ref. IC/02/98
June 18, 1998

Shri D. M. More
Secretary, Irrigation Commission
Govt. of Maharashtra
WALMI, Kanchanwadi,
Aurangabad 431 005

Sub.: Your letter No. 2428 dated 6.6.98 inviting more details on the points discussed on page 2, para 4 of my letter dated 30.4.98.

Dear Sir,

Please excuse me for replying to your Marathi letter in English as the Marathi software is not available to me at present.

Regarding the point made above, I am more familiar with the situation prevailing at Panshet dam. The usual surface temperature of stored water is in the range of 25 to 27 degrees celsius. Water from the bottom of the reservoir when released into the river shows a temperature range of 18 to 20 degrees c. It may warm up to the former range if it passes through the power house before emptying into the river.

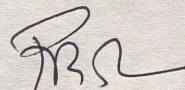
The dissolved oxygen(DO) content of the water from the bottom is usually two to three or even less mg. per litre. While to sustain life it should be above 4 mg per litre. The water when stored in a wetland before being released into the river may attain a level of 4 to 5 mg per litre within 24 to 48 hrs. depending on weather conditions. At Panshet the wetlands created by us on water so released from the dam shows DO levels of 5 to 6 mg per litre.

It will be ideal if the laboratories of the Irrigation Department are asked to collect data on temperatures and DO levels on water released from the dams on a regular basis.

Effects of cold and deoxygenated water can be seen in channels through which such water passes. These channels rarely show any growth of vegetation. On the other hand canals where water may come from the surface and is otherwise exposed to air and sunlight are plagued by many weeds. This can be seen at Panshet also. Control of weeds and regeneration of desirable vegetation, fish etc. can be achieved through such measures at wetland creation. At Panshet Fishery development is not seen between the dam and Khadakwasla reservoir. Fish grow in the latter where the water is stabilized and is exposed to sun and fresh air.

Thanking you,

Yours sincerely,



(Prakash Gole.)