## A Plan for Resolving Mullaperiyar Conflict

[The following is an open letter to Prime Minister Manmohan Singh appeared in Economic and Political Weekly (December 17, 2011; Vol. XLVI No. 51)]

The Forum for Policy Dialogue on Water Conflicts in India has been closely following the Mullaperiyar issue for the last several years. The polarisation of views around the Mullaperiyar has hardened over the years. The Tamil Nadu government insists that the Mullaperiyar dam is safe and that the water level must be maintained at the maximum level as per the agreement. The Kerala government insists that a new dam, downstream of the present dam, must be built because the present dam is unsafe. The recent tremors with their epicentres near the dam and the already diminishing trust and rising fears and apprehensions on both sides have created a grave situation needing immediate intervention and your initiative in getting the two parties together is a welcome move.

However, we believe that both positions are flawed and there is a need to think beyond them. The 115 years old Mullaperiyar dam shows all the signs of the ravages of time. Expert opinion on the safety of the dam is divided; while there are experts who believe that the dam would be safe with certain repairs, others believe that the dam may be unsafe, based on hydrology studies as well as the technology and material used for dam construction. The dam is located in a seismically sensitive zone and recently there have been a series of tremors with epicentres close to the dam.

On the other hand, the new dam which is being planned about 400 m downstream with a larger storage capacity which would create a heavy financial burden, submerge a substantial additional portion of the Periyar Tiger Reserve, result in a large permanent structure inside the reserve, introduce massive interference and disturbance over the entire construction period, would be subject to the same problem of seismicity. It would also cause additional environmental damage in Kerala to fulfil Tamil Nadu's requirements.

Given the intense fear and insecurity amongst the downstream people, and the divided expert opinion on dam safety at higher water levels, it would be best to use the precautionary principle and keep water levels low, to around 120 ft.

Water can be delivered to Tamil Nadu at 120 ft level and the province should be encouraged to divert as much water as it can and store it inside the state in balancing reservoirs or other storages.

Long-term action is needed on the following lines:

- 1. Reconfirm Kerala's commitment to provide the present quantum of water. The Kerala government in any case has publicly confirmed this commitment;
- 2. Come to a common understanding of the role of the Mullaperiyar dam as *a diversion dam* rather than *a storage dam* and that the storage capacity needed for Tamil Nadu should be created inside the state with adequate assistance from the centre;

- 3. Immediately undertake studies on (a) the requisite capacity needed inside Tamil Nadu, (b) the redesign of the diversion and conveyance system, (c) on the basis of (b), minimising storage behind the dam as close as possible to the minimum regulatory storage required, (d) measures to strengthen the dam at the new level, (e) hydrological study of flow at the dam site and a schedule for the regulatory storage, and (f) working out arrangements in the transition phase;
- 4. Though the dam would continue to be in the control of Tamil Nadu, we would suggest that there should be a tripartite board consisting of representatives of the Government of Kerala, Government of Tamil Nadu and the union government (on the lines of the Tungabhadra Board) that oversees the preparation of a reservoir operation plan and monitors and modifies it throughout the year.

We believe that this would be a just and optimal solution and would be financially and economically more viable. The measures above are based on what we think is the *minimum* necessary to resolve the conflict. Further optimisation is possible in many ways. For example, a strategy of local water harvesting and increase of on-field and irrigation efficiency so as to gradually reduce the requirement from the Mullaperiyar allowing eventual decommissioning. In fact, we should ultimately move to ecosystem-based river basin planning.

We would once again emphasise that the short-term measures of keeping the water level down and strengthening the existing structure so as to allay the fears of the downstream people about the safety of the dam and abandoning the plans for a new dam are important both on the ground of the precautionary principle as well as from the perspective of building trust.

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