

## Mullaperiyar Dam Dispute

### Why in news?

The Tamil Nadu government has moved the Supreme Court accusing Kerala of “crying foul” about the safety of the old Mullaperiyar dam.

### What is the history of Mullaperiyar dam?

- **Location**- It is a *masonry gravity dam* in Idukki district of Kerala, where the Periyar and Mullayar rivers meet.
- **Periyar National Park**- It is located in Thekkady around the reservoir of dam.
- **Built by**- Pennycuik between 1887 to 1895.
- **Need**- To provide water to the *arid shadow region of Madurai* which was in greater need of supply of water.
- **Periyar lease deed**- The dam is operated by Tamil Nadu following an 1886 lease indenture for 999 years.
- **Post independence**- In 1947, the Kerala government said that the lease agreement was invalid and needed to be renewed.
- **Agreement renewal**- The agreement was renewed in 1970, Tamil Nadu is operating the dam and has been paying to the Kerala government.
- **Ownership**- The dam is owned and operated by *Tamil Nadu Public Work Department*.
- **Risk zone**- The dam is located in the *Seismic Zone III* area (moderate damage risk zone)
- **Issue** - There lies a bone of contention between Tamil Nadu and Kerala regarding the safety of the dam, release of water etc.,



## What is the genesis of the dispute?

- **Safety of the dam**- In 1979, a problem erupted over the safety of the dam which led to a tripartite meeting that decided to bring the water level from the full reservoir level of 152 ft to 136 ft.
- **Restore dam level**- By mid-1990, Tamil Nadu started demanding restoration of the water level in the Mullaperiyar as it had completed the dam strengthening works.
- **Supreme Court verdict**- Supreme Court was approached due to lack of consensus, it allowed Tamil Nadu to raise water level of the dam to 152ft in 2006.
- **Supervisory committee, 2006**- It was constituted by Supreme Court that is empowered to oversee the repair work and allowed to take the required necessary safety measures for the benefit of both the states and the dam
- **Irrigation and Water Conservation (Amendment) Act, 2006**- It was enacted by Kerala in response to the verdict and put in the *Schedule of 'Endangered Dams'* and fixed its maximum water level to 136ft.
- **Restrictions on Kerala**- In 2014, the apex court declared the Act unconstitutional and restrained Kerala from interfering with the rights of Tamil Nadu in raising the water level in the dam to 142 feet.
- **A.S. Anand Committee, 2010**- It was set up by the Supreme Court to look into the dispute, it was mandated to study all the aspects of the dam including its safety.
- **Hydrologically safe**- The committee declared that the dam was “structurally and hydrologically safe” and that the Tamil Nadu government could raise the water level to 142 feet after carrying out some repairs.
- **Periodic inspection**- A permanent supervisory committee is set up under Ministry of Jal Sakti based on directions of Supreme Court to oversee the process of raising the water level, inspect the dam routinely and look into the safety concerns.
- **Rule curve**- The permanent supervisory committee finalised the rule curve which is a tabulation that specifies quantum of storage of water or empty space to be maintained in a reservoir during different times of a year, based on the rainfall data for 35 years.

*According to Tamil Nadu Water Resources Organisation, Mullaperiyar is the first reservoir to have Rule Curve implemented, in India.*

- **Study by IIT, Roorkee**- It was commissioned by Kerala, the study reiterated that the dam would not be able to withstand a major earthquake.

**Tamil Nadu's stand**

**Kerala's stand**

<ul style="list-style-type: none"> <li>• <b>Lifeline of people</b>- The dam is like a lifeline for the people of Madras Presidency for irrigation and drinking.</li> <li>• <b>Hydropower generation</b>- The dam is also significant for the generation of the power in lower Periyar water station as the region is in shadow and arid.</li> <li>• <b>Agriculture</b>- The State government insists on raising the water level in the dam pointing out the failure of crops.</li> <li>• <b>Full control</b>- The government has also asserted that it has full right over the control of the dam citing the Periyar lease deed.</li> <li>• <b>Periodic repairs</b>- The State claims that though it has undertaken periodic repairs on the dam, the Kerala government has not allowed it to raise the water level.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Dam safety</b>- The Mullaperiyar dam suffers from structural issues and the possibility of a dam-break cannot be ruled out.</li> <li>• <b>Earthquake prone area</b>- It is located in an earthquake prone area and small time earthquakes that happened in 1979 and 2011 caused some cracks in the dam.</li> <li>• <b>Outdated designs</b>- The technology which was put into use for constructing the dam 130 years ago was obsolete compared to the sophisticated construction methods used now.</li> <li>• <b>Impact on livelihood</b>- According to the UN University report, 35 lakh people in Kerala will be directly hit in the case of a dam-break.</li> <li>• <b>Loss of biodiversity</b>- It will also have its impact on the National Periyar Park which hosts some of the endangered species.</li> <li>• <b>Decommission the dam</b>- Kerala has proposed to decommission the dam and to construct new dam.</li> </ul>
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### What is the recent issue?

- **No progress**- Despite the constitution of three panels, including a Supervisory Committee and two sub-committees, no significant progress has been made in finding a solution to the pending issues.
- **Failure of supervisory committee**- Tamil Nadu's grievance is that the reconstituted Supervisory Committee, despite having powers under the Dam Safety Act, 2021 has failed to ensure that Kerala permits and facilitates dam strengthening and related works.
- **Dam safety evaluation**- Tamil Nadu also emphasizes the need for a comprehensive dam safety evaluation within five years, as stipulated by the Dam Safety Act, 2021.

### What lies ahead?

- Kerala prioritizes dam safety, while Tamil Nadu seeks to balance safety with water availability.
- Both states should resume bilateral negotiations, maintaining their right to legal recourse.

### References

1. [The Hindu- Mullaperiyar dam row](#)
2. [Ministry of Jal Sakthi- Mullaperiyar dam issue](#)



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