



Dam Safety Bill, 2019

Why in News

Recently, the Parliament has cleared the **Dam Safety Bill, 2019** for surveillance, inspection, operation and maintenance of all specified dams across the country.

Key Points

▪ Salient Features of the Bill:

- **National Committee on Dam Safety:** The National Committee on Dam Safety will be constituted and will be chaired by the **Chairperson, [Central Water Commission](#)**.
 - **Functions of the Committee** will include formulating policies and regulations regarding dam safety standards and prevention of dam failures, and analysing the causes of major dam failures and suggesting changes in dam safety practices.
- **National Dam Safety Authority:** The Bill also envisages setting up of a National Dam Safety Authority to be **headed by an officer not below the rank of an Additional Secretary**, to be appointed by the central government.
 - The **main task of the National Dam Safety Authority includes** implementing the policies formulated by the **National Committee on Dam Safety**, resolving issues between State Dam Safety Organisations (SDSOs), or between an SDSO and any dam owner in that state, specifying regulations for inspection and investigation of dams.
 - The NDSA **will also provide accreditation to agencies** working on construction, design and alteration of dams.
- **State Dam Safety Organisation:** The proposed legislation also **envisages constituting a State Dam Safety Organisation** whose functions will be to keep perpetual surveillance, inspection, monitoring the operation and maintenance of dams, keeping a database of all dams, and recommending safety measures to owners of dams.
- **Obligations of Dam Owners:** The owners of the specified dams are required to provide a **dam safety unit in each dam**. This unit will inspect the dams before and after the monsoon session, and during and after every earthquake, flood, or any other calamity or sign of distress.
 - Dam owners will be required to prepare an **emergency action plan**, and carry out **risk assessment studies** for each dam at specified regular intervals.
 - Dam owners will also be required to conduct a **comprehensive dam safety evaluation of each dam**, at regular intervals, through a panel of experts.
- **Punishment:** The Bill provides for **two types of offences** - obstructing a person in the discharge of his functions, and refusing to comply with directions issued under the proposed law.
 - Offenders will be **punishable with imprisonment of up to one year**, or a fine, or both. If the offence leads to loss of lives, the term of imprisonment may be extended up to two years.

- Offences will be **cognisable only when the complaint is made by the government**, or any authority constituted under the Bill.

▪ **Need:**

◦ **Ageing of Dams:**

- India is the **third largest dam owning country**. There are 5,745 reservoirs in the country of which 293 are more than 100 years old. There are a number of challenges to the dam safety and some are mainly due to the **age of the dams**.
- As the dams become old, their design, hydrology and everything else do not remain at par with the latest understanding and practices.
- Huge siltation is taking place as a result of which the water holding capacity of dams is getting reduced.

◦ **Dependency on Dam Managers:**

- The regulation of dams is entirely dependent upon individual dam managers. There is no systemisation and **no actual understanding in terms of the downstream water requirement** or the kind of flows that are already there.

◦ **Factors not Considered:**

- Dam safety is dependent upon many factors such as landscape, land use change, patterns of rainfall, structural features etc. **All the factors have not been taken into account by the government in ensuring the safety of a dam.**

◦ **Dam Failures:**

- In the **absence of a proper dam safety institutional framework, shortcomings of varying degrees** may get ingrained in the investigation, design, construction, operation and maintenance of dams. Such shortcomings **lead to serious incidents and sometimes dam failure**.
- Beginning with the failure of the **Tigra dam (Madhya Pradesh) in 1917**, about 40 large dams are reported to have failed so far. The most recent case of failure of the Annamayya dam (Andhra Pradesh) in November 2021 is reported to have led to the death of 20 people.
- Collectively, these failures have **caused thousands of deaths and economic losses of mammoth proportions**.

▪ **Significance:**

◦ **Will Bring Uniformity:**

- The government wants that there should be a **uniformity of procedures which is followed by all dam owners** for a particular type of large dams.

◦ **Provides Strict Guidelines:**

- **Water is a state subject** and the Bill in no way takes away the authority of the state. The Bill provides **guidelines and a mechanism to ensure that the guidelines are followed**.
- There are many protocols, including pre and post-monsoon inspections, for ensuring dam safety. However, as of now these **protocols are not legally mandated, and the agencies concerned** (including Central and State Dam Safety Organisations) have no powers to enforce them.

◦ **Will Ensure Quality:**

- So far the professional efficiency of various contractors, designers and planners has never been evaluated, and that is the reason why India's dams today have a design problem. The Bill provides a **mechanism where accreditation of the people who are really going to take part in the construction and maintenance, has to be taken care off**.

◦ **Security:**

- Dams are prone to damage and therefore their **safety is very important**. The Bill provides for the formulation of dam safety standards.

- **Concerns:**

- **Illogical:**

- The Central Water Commission will be responsible for the techno-economic appraisal of all the dam projects. It is also the authority to audit the same project (if the project fails).

- **It is like being a judge of one's own cause.**

- **Silent on Compensation:**

- The bill is silent on the payment of compensation to **people affected by dam projects.**

- **Interferes with Federal Structure:**

- The states alleged that it needs scrutiny as it is **unconstitutional and encroaches upon the states' rights**. certain provisions of the bill **interfere with the [federal structure](#)**.

Constitutional Validity of the Bill

- Although water is **under the state list (Entry 17)**, the Centre has brought the legislation under **Article 246 of the Constitution** read with **Entry 56** and **Entry 97** of the Union list.
 - **State List, Entry 17:** Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power **subject to the provisions of entry 56 of List I**.
 - **Entry 56 of List I** allows Parliament to make laws on the **regulation of inter-state rivers** and river valleys if it declares such regulation to be **expedient in public interest**.
- **Article 246 empowers Parliament** to legislate on any matter **enumerated in List I of the Union list** in the Seventh Schedule of the Constitution.
- **Entry 97** allows Parliament to legislate on any other matter **not enumerated in List II or List III** including any tax not mentioned in either of those Lists.

Way Forward

- Since the dam safety is dependent on many external factors, the environmentalists and the environmental angle in this, needs to be taken. With the **[changing climate](#)** it has become absolutely essential to really think about the issue of water carefully and proactively.
- There is a **need to strengthen the state irrigation department** and the Central Water Commission. It should be ensured that the **inspection of dams is done by the respective state governments**.
- A **preventive mechanism to avoid dam failures is necessary** because if a dam fails, no amount of punishment can compensate for the loss of lives. While considering uniformity across dams, **local factors such as climate and catchment areas, need to be taken into consideration**

[Source: TH](#)