



drishti

Policy Watch: National Water Policy

 drishtiias.com/printpdf/policy-watch-national-water-policy



[Watch Video At:](#)

<https://youtu.be/61FJ9sUVyIM>

Government is planning to come out with an **updated version of the National Water Policy (NWP)** with key changes in water governance structure and regulatory framework. Plans are also afoot to set up a **National Bureau of Water Use Efficiency**. Building consensus among the states within the constitutional framework is a precondition for making these changes.

- NWP was formulated to **govern the planning and development of water resources and their optimum utilisation**. The **first NWP** was adopted in **September, 1987**. It was **reviewed and updated in 2002** and **later in 2012**.
- **NITI Aayog** has said that India is facing its **first water crisis** and the demand for potable water may outstrip supply by the year 2030 if precautionary steps are not taken.

COMPARISON OF PROVISIONS OF NATIONAL WATER POLICIES OF 1987, 2002 AND 2012

Sl. No.	Sector Description	National Water Policy (1987)	National Water Policy (2002)	National Water Policy (2012)
1.	Perspective for Water Resources Planning	National perspectives	National perspectives	Integrated perspective considering local, regional, State and national context
2.	Information System	Standardized national information system	Standardized national information system	All water related data, should be integrated with well-defined procedures and formats to ensure online updation and transfer of data to facilitate development of database for informed decision making in the management of water
3.	Water Resources Planning	Hydrological unit such as a drainage basin as a whole, or a sub-basin	Hydrological unit such as a drainage basin as a whole, or a sub-basin	Integrated Water Resources Management taking river basin / sub-basin as a unit, should be the main principle for planning, development and management of water resources

4.	Project Planning	Water resource development projects should as far as possible be planned and developed as multipurpose projects	Water resource development projects should as far as possible be planned and developed as multipurpose projects	All water resources projects, including hydro power projects, should be planned to the extent feasible as multi-purpose projects with provision of storage to derive maximum benefit from available topology and water resources
5.	Environmental Flow in Rivers	No specific mention except providing for the preservation of the quality of environment and the ecological balance	Minimum flow should be ensured in the perennial streams for maintaining ecology and social considerations	A portion of river flows should be kept aside to meet ecological needs ensuring that the proportional low and high flow releases correspond in time closely to the natural flow regime
6.	Ground-water development	Exploitation of ground water resources should be so regulated as not to exceed the recharging possibilities, as also to ensure social equity	Exploitation of ground water resources should be so regulated as not to exceed the recharging possibilities, as also to ensure social equity	Declining ground water levels in over-exploited areas need to be arrested by introducing improved technologies of water use, incentivizing efficient water use and encouraging community based management of aquifers

7.	Access to safe drinking Water	Adequate drinking water facilities should be provided to the entire population both in urban and in rural areas by 1991	Adequate safe drinking water facilities should be provided to the entire population both in urban and in rural areas	Minimum quantity of potable water for essential health and hygiene to all its citizens, available within easy reach of the household, must be ensured
8.	Inter-basin transfer	Water should be made available to water short areas by transfer from other areas including transfers from one river basin to another, based on a national perspective, after taking into account the requirements of the areas/basins	Water should be made available to water short areas by transfer from other areas including transfers from one river basin to another, based on a national perspective, after taking into account the requirements of the areas / basins	Inter-basin transfers are not merely for increasing production but also for meeting basic human need and achieving equity and social justice. Inter-basin transfers of water should be considered on the basis of merits of each case after evaluating the environmental, economic and social impacts of such transfers

9. **Water Use Efficiency**

The efficiency of utilisation in all the diverse uses of water should be improved and an awareness of water as a scarce resource should be fostered

Efficiency of utilisation in all the diverse uses of water should be optimised and an awareness of water as a scarce resource should be fostered

The “project” and the “basin” water use efficiencies need to be improved through continuous water balance and water accounting studies. An institutional arrangement for promotion, regulation and evolving mechanisms for efficient use of water at basin/sub-basin level will be established for this purpose at the national level

10. **Flood management**

Emphasis on non-structural measures, such as flood forecasting and warning and flood plain zoning, so as to reduce the recurring expenditure on flood relief

Emphasis on non-structural measures, such as flood forecasting and warning, flood plain zoning and flood proofing, so as to reduce the recurring expenditure on flood relief

While every effort should be made to avert water related disasters like floods and droughts, through structural and non-structural measures, emphasis should be on preparedness for flood / drought with coping mechanisms as an option. Greater emphasis should be placed on rehabilitation of natural drainage system

11. Gap between Irrigation Potential created and utilized	Concerted efforts, such as command area development, should be made to ensure that the irrigation potential created is fully utilised and the gap between the potential created and its utilisation is removed	Concerted efforts should be made to ensure that the irrigation potential created is fully utilised. For this purpose, the command area development approach should be adopted in all irrigation projects	All components of water resources projects should be planned and executed in a pari-passu manner so that intended benefits start accruing immediately and there is no gap between potential created and potential utilized
--	--	--	--

Importance of An Updated Water Policy

- After 7 seven years of previous updation, there are a lot of **changes** which need to be addressed and the **prioritization of the water usage** needs to be defined.
- **Spring sets in Himalayas** have been **decreasing** without any active step by the government.
- **Revitalisation of rivers** needs to be brought in focus because many of our rivers and rivulets are drying and the policy parameters need to be set up accordingly.
- **Technological innovations** like censors, geographic information systems (GIS) and satellite imagery need to be introduced to modulate the water and track the flow.
- **Budgeting** needs to be done in a way that it covers all levels from the basin to sub basin.
- **NITI Aayog** has sensitised in its **Composite Water Management Index 2.0, 2018** that water usage in current times are very high and inefficient.
- The water used in **irrigation** sector gives the **efficiency of 30-38%**, the **water for drinking water supply and sanitation in the urban area** bears the **losses around 40-45%**. Villages on the other hand get very less amount of water so the **supply needs to be balanced**.

- To overcome the **natural and human caused challenges** like-
 - Adverse effects of climate change
 - Extreme rainfall
 - Water scarcity during summers
 - Drying up of rivers
 - **Degrading water quality and river pollution**
- In irrigation sector, **command area development has not been done**. Around 21 million hectares of land has been created for irrigation but it is not reaching the farmers because the small channels have not been constructed.
- A unified **Ministry of Jal Shakti** was launched in **May, 2019** as an immediate response to the escalating water crisis in India.
- Government also talks about **Nal Se Jal** to provide **piped water supply** to every household by the year **2024**.
- **Command Area Development**
 - It was **launched in 1974 to improve the irrigation potential utilization** and to optimize agricultural production through efficient water management.
 - The **Ministry of Water Resources** coordinates the implementation of the program with respective state governments.

Calibrating agriculture with Water Management

- **Region Based Water Availability:** We need to **focus on the water availability** according to the **particular agro climatic zones** and **find suitable cropping patterns suiting the particular needs**.
 - For example **Paddy in Punjab and Sugarcane in Maharashtra** are **not agro climatically suitable** crops because they need more water in these areas and deprive other crops from getting sufficient water.
- **Restructuring Subsidies:** There needs to be a **shift from the freebie culture to some paying mechanisms** because the water or power provided to the farmers are not their personal resources instead common pool resources.
 - **Pricing of resources** is of two types- One price is of the resource itself and the other is for the system which conveys the resource.
 - **Volumetric supply of water** should be there according to the sector specific needs.
- **Better Funding:** The communication, transmission and distribution systems are run by central or state government distribution centres so they will also be able to work better with more monetary help and support.

- **Better Technologies: Globally available technologies like micro irrigation should be implemented** where every single drop of water is used. India is still following age old practice of dam construction and then conveying water through open canals which creates problems like water logging and does not even transfer the real quantum of water to the source which is uneconomical and creates water hazards.

Functions of National Bureau on Water Use Efficiency

- To evolve a **mechanism to set up an efficiency bar** especially in domestic and industrial sectors.
- To **bring a paradigm shift in water management** and to look at the **river basin or the sub basin as the hydrological unit instead of the administrative and political boundaries.**
- To **propose a River Basin Management Bill** which envisages setting up of river basin authorities which would be **managed by a two tier structure- a governing council and an executive board.**
 - The governing council will mainly be **executing a river basin management plan.** If river basin has to be taken as a hydrological unit, **consensus is required at the basin level between the states involved** and within the **constitutional framework.**
 - It will be the **first time when there will be a consensus building mechanism at the political level in the river basin** ensuring solving issues and problems at the basin level only instead of coming to the centre. This will save time and efforts of the **dispute tribunals.**
- To take care of the **integrated water management.** It forces the integration of water resources with other resources like land and issues like the environment and quality of the resource. It also forces integration of water resources with themselves- groundwater, surface water and planning and policy formation for the entire water available in the basin.

Cooperative Federalism

- In the earlier water policies, **state water policies were also incorporated so involvement and contribution from the states is important.** However, it is a challenging task to achieve.
- States have to be involved in a very **cooperative and consultative approach** where there is a **win-win situation for both centre and states.**
- It is a very **emotive, political and highly divisive issue** and the centre-states relations are going to be highlighted by this, **testing Indian federalism.**
- Although **water is a state subject** but **centre has always played an active role** in the decision taking process and in interstate disputes.

- The process has to be **dialogue driven taking care of the sensitivities of the states** and should not be imposed on them.

How do we adopt a cohesive approach?

- In the proposed River Basin Management Bill, the **governing body** will sit with the **representatives from states** involved and decide on **water allocations and priorities and implement** the plans accordingly.
It will pay attention to the specific needs of the certain states involved.
- The **approach should be from basin to subbasin and watershed and then micro watershed to a village level**. That should be the **ideal pattern** to be followed.
This has been done in **the Murray Darling Basin, Australia**.

Issues with the Restoration of Water Bodies

- India has **not really paid much attention** to its **groundwater levels** yet so the first thing we need to do is effectively map the available groundwater and thereafter form groundwater policies.
- India **uses 85-90% of groundwater for irrigation** so concrete plans are needed to keep track of it and find measures to replenish it as well.
- As per NITI Aayog's report last year, **21 cities will be deficient in ground water by 2020**. More options have to be looked into for avoiding such circumstances.
- **Fourth Minor Irrigation Census Report, 2014** stated that India has around 6 lac water bodies which came down to around 5 lac after the **Fifth Minor Irrigation Census Report, 2017** was published.
- These water bodies are the **groundwater recharging structures** which are encroached by the people after the advent of the pipelines.
Ministry of Jal Shakti is trying to **upscale from 18% piped water supply to further up**. Wherever it is already provided, it is **around 40 litre per capita per day with 100m lead distance**.
- The **groundwater depletion enhanced with the reduction in these recharging zones**.
- The **extraction rate of groundwater is more than the replenishing rate in most of the cities which causes overexploitation**.
For example, Delhi is extracting 130% groundwater which means it is using 30% more than the replenishing rate.
- India needs to revive the water bodies, tanks, baolis and tankas.

Suggestions

- India **initiated its first water policy in 1987** and now has to look back at the nitty-gritties of earlier policies, find strong points and loopholes to work accordingly on the new policy.
- The new policy framework should be based on the recommendations of NITI Aayog's **Composite Water Management Index 2.0, 2018** which are very **realistic and alarming at the same time**.
- We need to **redefine, rethink and recalibrate** what we mean by **Integrated Water Resource Management**.
- The **aspects of basin and sub basin planning** has to be looked into for setting up realistic targets.
- Emphasis needs to be shifted towards **participatory groundwater management to ensure sustainability and quality of water**.
- The quantum of water is not less in this country but **management of water is required**. So next agenda should be managing water properly.
- **Sustainability and resilience** should be the key words in the management of problems like **water shortage or excessive water availability**.
- Another important aspect can be **interlinking rivers to transfer water from surplus basins to deficient basins** to balance out the water availability.

There is a need to update the national water policy in the light of new challenges, especially the adverse effects of climate change.