

Report Summary

Draft National Water Policy 2012

(June 2012)

Background

On June 7, 2012, the Ministry of Water Resources published its Draft National Water Policy 2012 (NWP). The Draft Policy seeks to address issues such as the scarcity of water, inequities in its distribution and the lack of a unified perspective in planning, management and use of water resources. Under the Constitution, states have the authority to frame suitable policies, laws, and regulations on water (Item 17 in List II of the Seventh Schedule or the State List). The NWP proposes an overarching national legal framework of general principles on water that can be used by states to draft their own legislation on water governance. The draft NWP was placed before the National Water Board and National Water Resources Council in February 2012. It was finalized and adopted by the National Water Resources Council on August 9, 2012 and is under deliberation by the National Water Board.*

The current scenario of water resources and their management have given rise to several concerns, some of which are:

- Increasing variation in availability of water caused by incidences of water related disasters such as floods and increased erosion.
- Poor access to safe drinking water and water for sanitation and hygiene continues to be a problem.
- Groundwater, though a community resource, continues to be perceived as individual property. It is exploited inequitably and without any consideration for its sustainability.
- Grossly inadequate maintenance of existing irrigation infrastructure results in wastage and under-utilization of available resources. There is a widening gap between irrigation potential created and utilized.

Basic principles of draft NWP

Some of the basic principles that govern the draft NWP are as follows:

- The principle of equity and social justice must inform the use and allocation of water.

- A common integrated perspective should govern the planning and management of water resources. Such a perspective would consider local, regional and national contexts and have an environmentally sound basis.
- Water needs to be managed as a common pool community resource that is held by the state under the public trust doctrine to ensure equitable and sustainable development for all.
- Water may be treated as an economic good to promote its conservation and efficient use after basic needs such as those of drinking water and sanitation are met.
- The river basin should be considered as the basic hydrological unit for the purpose of this policy.

Water Framework Law

Under the framework proposed by the Draft NWP, water needs to be managed as a community resource by states under the public trust doctrine to achieve food security, livelihood, and equitable and sustainable development for all. Existing Acts of various states such as the Indian Easements Act, 1882, the Irrigation Acts, etc. may have to be amended accordingly if they give proprietary rights to a land owner on groundwater under his land rather than treated as a community resource.

The draft NWP makes recommendations on several issues such as adapting the availability of water to climate change, water pricing, and conservation of river corridors, water bodies and infrastructure. This note summarises the key recommendations under each of these sections.

Adaptation to climate change

The draft NWP specifies initiatives that need to be adopted to regulate the availability of water when it varies due to climate change. The policy highlights the need to enhance capabilities of local communities so they can adopt climate resilient technological options to increase the availability of water. Adaptation strategies include, among others:

- Increasing water storage in the forms of soil moisture, ponds, ground water, small and large reservoirs.

* "Implementation of Water Policy," Ministry of Water Resources. PIB Release. August 9, 2012.

- Enhancing the efficiency of water use through the adoption of agricultural strategies, cropping patterns, and improved water application methods, such as land leveling and drip/sprinkler irrigation.
- Stakeholder participation in land-soil-water management with scientific inputs from local research and academic institutions to evolve different agricultural strategies, reduce soil erosion and improve soil fertility.
- Incorporating coping strategies for possible climate changes in the planning and management of water resource structures, such as dams, flood embankments and tidal embankments.

Enhancing water available for use

India's average annual precipitation is about 4,000 Billion Cubic Meter (BCM). Of this, only about 1,123 BCM is utilizable. This limited availability of water will not meet the rising demand caused by population growth, rapid urbanization, industrialization and economic development. The report suggests the following ways to augment the water available for utilization:

- Rainfall needs to be used directly and inadvertent evaporation of water needs to be avoided.
- Aquifers need to be mapped to know the quantum and quality of ground water resources. Local communities should be involved in this process.
- Declining ground water levels in over-exploited areas need to be arrested by introducing improved technologies of water use and encouraging community based management of aquifers. Additionally, artificial recharging projects should be undertaken so that more water is recharged rather than extracted from aquifers.
- Inter-basin transfers of water from surplus basins to deficit basins/areas need to be encouraged to increase the production of water.
- Integrated watershed development activities with groundwater perspectives need to be undertaken to increase soil moisture, reduce sediment yield, and increase overall land and water productivity. Existing programmes such Mahatma Gandhi National Rural Employment Guarantee Act may be used by farmers to harvest rain water using farm ponds and other soil and water conservation measures.

Demand management and water use efficiency

The draft NWP recommends the following methods to promote and incentivize the efficient use of water:

- Systems to benchmark water use, such as water footprints (total volume of water used in an area to produce goods and services) and water

auditing (assessment of water use), need to be developed. Continuous water balance and water accounting studies need to be conducted to improve the efficiency of water use from irrigation projects and river basins.

- Project appraisals and environment impact assessment for water uses, particularly for industrial projects, should include analyses of water footprints.
- Water needs to be saved during irrigation. Methods to encourage water saving include, aligning cropping pattern with natural resource endowments, micro irrigation (drip, sprinkler, etc.), automated irrigation operation, and evaporation-transpiration reduction. Canal seepage water can also be recycled through conjunctive ground water use.
- Small local level irrigation through small bunds, field ponds, agricultural and engineering methods for watershed development, need to be encouraged.
- Users of water should be involved in monitoring the pattern of water use if it is causing problems like unacceptable depletion or building up of ground water, salinity, alkalinity etc.

Water pricing

For the pre-emptive and high priority uses of water, the principle of differential pricing may have to be retained. Other than these uses, water should be allocated and priced according to economic principles.

- A Water Regulatory Authority should be established in each state. The authority will be responsible for fixing and regulating the water tariff system and charges to be levied.
- Water charges should be determined on a volumetric basis.
- Recycle and reuse of water should be incentivized through a properly planned tariff system.
- Water Users Associations (WUA) should be given statutory powers to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them and maintain the distribution system in their jurisdiction.

Conservation of river corridors, water bodies and infrastructure

- Conservation of river corridors, water bodies and infrastructure needs to be undertaken in a regulated and scientifically planned manner through community participation.
- Encroachments and diversion of water bodies and drainage channels must not be allowed. Wherever such diversions have taken place, they should be restored and maintained to the extent feasible.

- Pollution of sources of water and water bodies should not be allowed. Water bodies should be periodically inspected by a third party and stringent punitive action should be taken against persons responsible for pollution.
- Legally empowered dam safety services need to be ensured in the centre as well as states. Appropriate safety measures such as downstream flood management for each dam should be given top priority.

Project planning and implementation

Considering the existing water stress conditions, water resource projects should be planned as per the following efficiency benchmarks:

- All clearances, including environmental and investment clearances, required for implementation of projects should be made time bound to avoid the economic losses incurred due to delays in implementation.
- To avoid time and cost over-runs, concurrent monitoring at project, state and central levels should be undertaken for timely interventions.
- Water resource projects should be executed closely after they are planned so that intended benefits start accruing immediately and there is no gap between potential created and utilized.
- Local governing bodies such as panchayats, municipalities, corporations, and WUAs should be involved in the planning of projects.

Management of flood and drought

While efforts should be made to avert water related disasters like floods and droughts, a greater emphasis should be on preparedness for floods and droughts. Emphasis should also be placed on rehabilitation of the natural drainage system.

- Land, soil, energy and water management with scientific inputs from local, research and scientific institutions should be used to evolve different agricultural strategies and improve soil and water productivity.
- Revetments (walls), spurs, embankments, etc. should be constructed on the basis of morphological studies to prevent soil erosion.
- Flood forecasting needs to be expanded to the rest of the country and modernized using real time data acquisition system.
- Operating procedures for reservoirs should be evolved and implemented so as to have a flood cushion and reduce trapping of sediment during flood season.

- Frequency based flood inundation maps should be prepared to evolve coping strategies. Communities should be involved in preparing an action plan for dealing with floods/droughts.

Water supply and sanitation

- Efforts should be made to provide improved water supply in rural areas with proper sewerage facilities. Least water intensive sanitation and sewerage systems with decentralized sewage treatment plants should be incentivized.
- In urban and industrial areas, rainwater harvesting and de-salinization should be encouraged to increase availability of utilizable water.
- Urban water supply and sewage treatment schemes should be integrated and executed simultaneously. Water supply bills should include sewerage charges.
- Subsidies and incentives should be implemented to encourage the recovery of industrial pollutants and recycling, which are otherwise capital intensive.

Institutional arrangements

Forums need to be established at the central and state levels to deliberate upon issues relating to water and resolving differences in demands for water between users.

- A permanent Water Disputes Tribunal should be established at the centre to resolve disputes expeditiously.
- Communities should participate in the management of water resource projects and services. State governments or local authorities can encourage the private sector to become a service provider through public private partnerships.
- Integrated Water Resources Management should be the main principle for planning, development and management of water resources.

Trans-boundary rivers

- Efforts should be made to enter into international agreements with neighbouring countries on a bilateral basis for exchange of hydrological data of international rivers on real time basis.
- Riparian (along the banks of rivers) states should be consulted during negotiations about sharing and management of water of international rivers keeping national interests in mind.

Database and information system

- A National Water Informatics Centre should be established to process hydrological data regularly

from all over the country. All hydrological data should be put into the public domain.

- More data about snow and glaciers, evaporation, tidal hydrology and hydraulics, river geometry changes, erosion etc. needs to be collected. Such a database should be maintained online to facilitate informed decision making in the management of water.

Research and training needs

- Grants should be given to states to update technology, design practices, and planning and management practices.
- An autonomous centre for research on water policy should be established to evaluate impacts of policy decisions and evolve policy directives.
- To meet the demand of skilled manpower in the water sector, regular training and academic courses in water management should be promoted. A national campaign for water literacy needs to be

started for capacity building of stakeholders in the water sector.

Implementation of National Water Policy

- The National Water Board should prepare a plan of action based on the National Water Policy, as approved by the National Water Resources Council, and monitor its implementation.
- State Water Policies need to be drafted/revised in accordance with this policy.

(Prepared by Sakshi Balani on August 24, 2012)

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