

# Policy Brief on Water, 2019

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## 1. Introduction

The Indian population has reached the stupendous figure of 1351.77 million and it is projected that by 2030 it will reach 1527.66 million. The rate of urban population growth is expected to rise much faster than the rural population and by 2030 we will have an urban population of about 600 million (currently it is about 460 million). These bludgeoning figures have serious implications for the sustainability of current methods of using surface water and mining groundwater. As in the case of all finite natural resources, the per capita availability of water in India has fallen from 5200 m<sup>3</sup> in 1951 to 1588 m<sup>3</sup> in 2010. Further, it has been projected that per capita surface water availability is likely to be reduced to 1191 m<sup>3</sup> by the year 2050, thereby converting our country from being 'water-surplus' to 'water-stressed'. (According to international norms, a country can be categorized as 'water stressed' when water availability is less than 1700 m<sup>3</sup> per capita per year, and 'water scarce' if it is less than 1000 m<sup>3</sup> per capita per year. )

Besides the National Water Policy (NWP, 2012) we have several other policies related to water; e.g. Hydropower Policy, 2008, National Environment Policy, 2006, National Urban Sanitation Policy, 2008, Ramsar Convention on Wetlands, 1971 ratified by India in 1982, etc. Of these, the NWP is an umbrella policy which has several important guiding principles. It has proposed some excellent radical ideas like, the Water Framework Law which aims at removing the anomalies arising out of the Constitutional status of water, wherein water in general is a State subject, while matters related to inter-state rivers is the prerogative of the Central Government. The Water Framework Law also aims at aligning the different policy statements in order to avoid internal contradictions and ambiguities. Such an alignment would include a plethora of laws and notifications at the State and Centre level which are currently not being implemented simply because the accompanying bye-laws and rules have still not been framed.

Another important principle introduced in the NWP, 2012 is the 'Public-Trust-Doctrine', which states that water is not only a scarce resource but is also a sustainer of life and ecology. Further, it states that "*groundwater needs to be managed as a community resource held by the state under public trust doctrine to achieve food security, livelihood, and equitable and sustainable development for all. Existing Acts may have to be modified accordingly*".

**It is therefore recommended that the Central Government must urgently initiate the process of bringing about a consensus between all parties for creating a Water Framework Law.**

- 2. Right to Water:** Although the citizens' Right to Water has now been indirectly established through case law, emanating from recent judgments of the High Court and Supreme Court, (based on Article 21 of the Indian Constitution), we still do not have a specific Act granting citizens the Right to Water.

**Therefore it is recommended that a comprehensive law should be passed which removes all obfuscations about Right to Water.**

- 3. Equitable Distribution of Water and Correcting Natural Inequities:** India is characterized by an enormous spatial and temporal variability in average annual rainfall ranging from, 200 mm to 400 mm in Rajasthan and 1927 mm to 2818 mm in Assam. This skewed but natural problem is exacerbated by inequitable supply of water in rural and urban areas. And finally even within sectors like agriculture which consumes 80% or more of the annual water available, the distribution is uneven, with perennial crops like sugarcane guzzling down between 25000 m<sup>3</sup> to 35000 m<sup>3</sup> of water per hectare. This leaves a very small proportion of water for cereals, pulses and vegetables.

Although very little research work or case studies on this subject are available for review, a lot of work has been done at the grass root levels in Maharashtra state. The *Pani Panchayat* movement initiated by Vilasrao Salunkhe in 1970's and the *Pani Sanghasrh Chalwal* in South Maharashtra, the *Tarun Bharat Sangh* (TBS) in Rajasthan, the *Swadhyaya* Movement in Gujarat have all been built around the issue of equitable distribution of water. Nevertheless the issue of equitable distribution of water needs to be taken up at the national level, since it may provide the key to the problem of inequitable distribution of water in our country.

**It is therefore recommended that water stored in all reservoirs built with public / budgetary finances must be distributed as per a cropping pattern based primarily on agro-climatic zones, in order to create greater equity in the use of water for irrigation.**

- 4. Creating a national platform for all hydrological data:** A National Water Informatics Centre (NWIC) has been established in May 2018, to maintain a comprehensive water resources data. It is supposed to be a single window source of updated data on water resources in India. The NWIC is also expected to collaborate with leading national and international research institutes to provide technical support to Central and State organizations dealing with water. The NWIC will be working under the Union Water Resources Ministry. But surprisingly, the NWIC does not appear to have its own website, nor does it have the mandate to ask the concerned agencies (MoWR, CWC, CGWB, etc.) to authenticate, update or validate the data on

a continuous basis. In addition, the NWIC issues a caveat which blanks out all key data related to Ganga, Brahmaputra and Indus, since data on these basins is supposed to be of a sensitive nature. Currently, such data is being treated as classified and therefore not available to Indian citizens. This view point of the government is self-defeating, because in the 21<sup>st</sup> century practically nothing can remain classified for long!! In fact, making such data available to our own researchers and ministries will place them in a better position as regards international negotiations.

**It is recommended that all hydrological data on Himalayan rivers be immediately declassified and placed in public domain. Further it is recommended that the NWIC be given the mandate to reconcile and periodically validate (say every three or five years) all hydrologic data procured from States and Union Territories. Such data should include information on snow-fall, evaporation, glaciers, tidal hydrology, river geometry changes, erosion, sedimentation, etc.**

- 5. Volumetric and automated water supply:** Practically, no water is currently being supplied in volumetric terms, since the requisite instrumentation and machinery has been installed for calculating the release of industrial effluents or sewage. Water Tariffs are being imposed for Bulk supplies in an *ad hoc* manner. On the supply side none of the state irrigation / urban water supply departments are accurately measuring the reservoir levels, canal and spillway discharges, evaporation losses or leakages in the canal and distributaries in a scientific manner. Consequently, water charges are not based on volumetric supply. Further, the generated sewage (assumed to be 80% of the water supplied) is also not measured at any point. This has led to enormous water use inefficiencies in all sectors. This has also yielded to grossly incorrect data about water supplied, purified, distributed, or discharged as waste water. Such unaccounted volumes have made the conducting of water-balance studies quite meaningless. If, however, modern technology is used investments for such a transition will be more than compensated for by the saving in terms of water and increase in revenues collected.

**Therefore, it is recommended that digital / automatic / volumetric measurement be made obligatory through statutory provisions for all water uses / sectors.**

- 6. All States and Union Territories should be directed to statutorily establish River Basin Agencies (RBA's), mandated to prepare Integrated River (sub) Basin Plans.** In the case of Inter-State River Basins the NWIC should then be asked to integrate and reconcile the sub-basin plans. Such plans should be prepared without prejudice to the ongoing process of inter-state water disputes and resolutions being conducted by the duly constituted Tribunals. Further, state legislatures should be directed to promulgate Rules and By-laws for all water related Acts in a time-bound manner, say

within a period of six months from the promulgation of such Acts. Such rules should contain the institutional framework and a mechanism for procuring budgetary support necessary for their immediate and effective implementation / enforcement.

7. **The Problem of Groundwater Ownership:** There is no Central or State legislation which specifically provides the mechanism for removing / clarifying ambiguities regarding the ownership of groundwater. While the existing legislation, e.g. Easement Act, 1882, GoI; or the Maharashtra Groundwater (Development and Management) Act, 2013 give an impression that ownership of land automatically confers ownership of water below such land, even though it may be limited to sixty meters below ground level. Such confusion in law and policy has so far led to a complete breakdown of the Rule of Law as regards groundwater.

**It is therefore recommended that a fresh central legislation be promulgated to clarify and remove the confusion regarding the issue of groundwater ownership.**

8. **Urban Water Use Policy / Laws:** These laws and policies declared at different points of time and with specific objectives are not internally consistent with each other, and therefore have led to contradictions and ambiguities which can be misused and exploited by special-interest-groups. Similarly, standards and norms for supplying water for different uses, e.g. drinking / domestic / industrial (e.g. as per standard requirements per megawatt of thermal / atomic / hydro-power, etc.) and irrigation (as per specific crops per hectare for the fifteen agro-climatic zones identified by the Government) have to be uniformly aligned. Once such standards are declared each State and Union Territory can make minor modifications as per variability of rainfall.

- a. **It is therefore recommended that the Ministry of Law and justice be directed by the Parliament to review all water related laws and policies and make recommendations for amendments or modifications which will make all of them internally consistent and unambiguous.**
- b. **Similarly, it is recommended that an urban specific water policy be adopted, for which an all-party consensus could be developed. Subsequently, a comprehensive Bill entitled “Urban Water Use, Sanitation and Waste Water Treatment Bill, 2019” should be tabled in the Parliament at the earliest.**
- c. Currently, a huge expenditure is incurred under the JNNURM and mega projects such as River Front Development, etc. are being proposed. Such projects neither save water nor improve their quality. This is happening in all metropolitan cities where close to 40% of water supplied is being lost due to leakages or thefts. **It is therefore recommended that before sanctioning any developmental project, a Leak Detection Project be made mandatory for all Local Bodies. A constitutional amendment could be made by adding the necessary clause to the 73<sup>rd</sup> Amendment of the Indian Constitution (April, 1993).**

**9. Maintaining Environmental Flows:** As per recent studies conducted by the International Water Management Institute (IWMI), some larger rivers have simply stopped reaching the sea during the summer months, a phenomenon known as a closing-river-basin, of which Krishna is an excellent example. This has happened because all the riparian states including Maharashtra have created storages far in excess of the shares of water allocated to them by the Krishna Water Disputes Tribunal (KWDT, 2010).

**It is therefore recommended that the competent authorities should direct all peninsular states lying in the Godavari, Krishna and Cauvery Basins to comply with the Tribunals directive regarding the volume of water to be reserved as Environmental-Flows.**

**10. River Pollution:** Practically all major rivers in India have polluted stretches where the Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) are far in excess of the norms statutorily laid down by the CPCB, which monitors 445 rivers in the country. In its latest report it has identified 302 polluted river stretches on 275 rivers. The State of Maharashtra has the distinction of having maximum number of polluted rivers (i.e. forty nine river stretches) in the country.

**It is therefore recommended that all cities and municipal corporations be directed by the MoEF to comply with the CPCB / SPCB norms.**

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