

How Modi 2.0 is paving new ways for paradigm changes in water governance in India | ORF

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6-7 minutes



Water needs a multidisciplinary approach that exceeds the capacity of reductionist engineering and myopic neoclassical economics.

The dispensation of Modi 2.0 is showing signs of positive change in the way water governance has been conceived in India so far.

We witnessed glimmers of this changing thinking in two draft bills and a report during Modi 1.0, namely, Draft National Water Framework Bill 2016 (NWFB), Model Bill for the Conservation, Protection, Regulation and Management of Groundwater 2016, and the report titled, A 21st Century Institutional Architecture for India's Water Reforms, (henceforth, the Report) respectively.

The Report and the two bills were drafted by committees chaired by Dr. Mihir Shah, former member of the erstwhile Planning Commission.

The report recommended dissolution of the Central Water Commission (CWC) and Central Ground Water Board (CGWB), and creation of a multi-disciplinary National Water Commission (NWC) given that there is no scientific justification of treating groundwater and surface water as two different entities under an integrated basin ecosystem governance approach.

It called for greater involvement of social scientists, professionals from management and other disciplines, thereby acknowledging that water needs a multidisciplinary approach that exceeds the capacity of reductionist engineering and myopic neoclassical economics.

The shift in policy

This did not go well with the archaic reductionist engineering thinking of the CWC, which sent a strong note to erstwhile Minister of Water Resources, stating that the Committee's "anti-dam" and "anti-development" approach would affect India's food security.

In many of the research by me and Jayanta Bandyopadhyay, we have argued and shown that nothing can be more far away from the truth than such a position by the CWC.

The idea of the multidisciplinary approach to water governance as suggested in the Report seems to be resonating well with the Ministry of Jal Shakti.

The Ministry has constituted a new committee to draft a new National Water Policy (NWP) in November 2019 chaired by Dr Mihir Shah. The panel has 11 members, including Shashi Shekhar, a former secretary of Water Resources, who also has been a major advocate of integrated basin governance.

Much in contrast to the past trend, this is not a Committee dominated by engineers. Rather, it has an ecological economist, political analysts, and policy experts, and some of the major proponents of interdisciplinary thinking like KJ Joy and Himanshu Kulkarni.

Of course, representations from governments are there. I was recently invited by this committee to make a submission.

Plug knowledge gaps

While this committee's constitution and thinking are apparently in the right direction in its apparent call for change, its biggest challenge will be to plug some major knowledge gaps that have plagued water governance in India so far.

The thought dominating the old paradigm "water for food security" associated with some use of water in industry, hydropower, and urban sectors, essentially entailed supply augmentation plans so far! The new emerging paradigm of Integrated Water Resources Management (IWRM) at the basin scale adds a newer dimension by proclaiming the notion of "water for ecosystems".

Given this dimension, the old paradigm practiced under archaic institutions like CWC is unsustainable. I summarise a few of my submissions to through these following points.

Water should be viewed as an integral part of the global hydrological cycle, and not as a stock of material resource to be used for the satisfaction of human requirements. Supply of ever-increasing volumes of water is not a pre-requisite for continued economic growth and food security. Water and food are already delinked in the new heterodox economics of water. Better practices can ensure "more crop per drop".

Strict prioritisation of the types of needs and demands for water is needed, including those of the ecosystems. There is a need for comprehensive assessment of the water development projects keeping the integrity of the full hydrological cycle. With ecological economics being the pivotal discipline for such assessments, a new trans-disciplinary framework needs to be adopted.

There is a need for an interdisciplinary knowledge base with clear acknowledgement of the interactivity of economic, social and ecological forces. Appropriate social and economic instruments for promoting careful and efficient uses of water resources or for the reduction of damage to their quality from pollution must be developed. The basin ecosystem should be understood as the unit of governance; the river flow should be understood in association with the sediments and the ecosystems associated.

Appropriate institutional mechanisms for integrated basin governance needs to be designed. Shifting to a state-of-art definition of "environmental flows" replacing the presently followed definition entailing barely percentage of total flow.

A nuanced approach

While environmental flows has often been understood as flows required for the sustaining of the ecological integrity of rivers, their associated ecosystems and the goods and services provided by them, they are unfortunately delineated in the form of a hydrograph showing a percentage of the temporal flow.

This is the convenient “arithmetic hydrology” that ignores the social, cultural-spiritual, ecohydrological and other finer dimensions of the functions of a specific flow regime of a river. A negotiated approach across stakeholders must be adopted.

The acknowledgement will not only entail surface water and groundwater being approached in an integrated way, but also mark a paradigm shift in water governance. This is where the new National Water Policy should lead us.

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