

India Groundwater Meeting: Scoping a National Reform Agenda

Ministry of Water Resources, River Development and Ganga Rejuvenation

September 24, 2015, Venue: Le Meridien Hotel, New Delhi

Context

India has extensive groundwater – the major aquifers of the Indo-Gangetic basin (spanning the Indus–Ganges–Brahmaputra rivers) are amongst the most productive in the world – and India is now the world’s largest user of groundwater (25% of global use), exceeding the combined groundwater of China and USA (the 2nd and 3rd largest users). About 61% of net available groundwater has been developed, supporting 65% of all irrigation and 85% of all domestic water supply. Although there is potential to develop the alluvial aquifers of the eastern and northeastern states, groundwater use is already unsustainable in many other parts of India with aquifer levels steadily declining.

Intensive and unregulated groundwater pumping has caused rapid and widespread groundwater decline in many areas, including in the northern “bread basket” states where an estimated 15% of India’s food is being produced by groundwater mining. Groundwater levels are falling in several major urban areas including Delhi, Jaipur, Mumbai, Ludhiana, Faridabad and Rajkot. In addition to falling water levels, over-abstraction is causing yield reduction, pump failure in rural water-supply wells, unreliable urban water supplies, land subsidence and drying of wetlands. Perhaps of more concern even that depletion however, is groundwater contamination that is destroying the value of the resource base. Contamination with geogenic arsenic and fluoride is growing problem, and in urban areas contamination with sewage is rife.

The economics of groundwater are poorly understood and groundwater governance is weak, fragmented and under-funded. As an open access common property resource there are incentives to over-use groundwater and ignore the costs of resource depletion and damage. Groundwater departments have limited mandates and limited technical and administrative capacity. Financial investment in groundwater governance and management is not commensurate with the resource value, and has focused on development rather than planning, protection, regulation and management. Inadequate attention has been paid to incentives and community-based groundwater management.

India’s groundwater challenge is of an unprecedented scale and complexity. The challenge is not simply a water resources problem, but a multi-sectoral (e.g., agriculture, energy, water, and environment) urban and rural economic development challenge, and different hydrogeological conditions and socioeconomic conditions will require different sets of solutions.

A comprehensive approach to groundwater development and management is needed. A major new National Groundwater Management Program is advocated to support this reform. This program would address policy, regulatory and institutional and technical capacity limitations, and fill critical groundwater knowledge gaps. The program would establish coherent incentives to address the open access groundwater governance challenge and build climate change resilience.

Meeting Objectives

The Ministry of Water Resources, River Development and Ganga Rejuvenation will convene a one-day focusing meeting of senior central and state policy makers and resource managers and invited experts to:

- Reach a shared understanding of key groundwater governance challenges
- Learn from national and international examples good groundwater governance
- Identify and prioritize elements for a national groundwater reform program



Government of India



Central Groundwater Board



The World Bank

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CHAIR: Mr. Shashi Shekhar

Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation

09:30 – 10:00	REGISTRATION & COFFEE/TEA	
SESSION 1	Setting the Scene	
10:00 – 10:15	Welcome and Opening Remarks	Mr. Shashi Shekhar & Mr. Parameswaran Iyer
10:15 – 10:30	The Need for National Groundwater Reform	Mr. Shashi Shekhar
10:30 – 11:00	Current Groundwater Governance and Management	Mr. KB Biswas
11:00 – 11:30	MORNING TEA	
SESSION 2	Economics and International Experiences	
11:30 – 12:00	Groundwater Reforms in Australia	Mr. David Harris, Australian Water Partnership
12:00 – 12:30	Economics of Groundwater in India	Mr. Richard Damania, The World Bank
12:30 – 13:30	Discussion	
13:30 – 14:30	LUNCH	
SESSION 3	Discussion: Scoping a National Program	
14:30 – 15:15	What are the key knowledge gaps a national program should fill: Identify hot spots for Groundwater management; what are known solutions for hotspots today and for the potential ones in future?	
15:15 – 16:00	How to strengthen planning and regulating Institutions both at center and the states: Opportunities to add partners such as CSR, Institutions/Academia, supported by Centralized system?	
16:00 – 16:30	How to Institutionalize demand side management: reduce water use with communities, incentivize or regulate water use, introduce metering/ranking the group; incentivize through linking other schemes (PMKSY)?	
16:30 – 17:00	AFTERNOON TEA	
SESSION 4	Next Steps	
17:00 – 17:15	Summary of the discussion session: the architecture of a reform program	
17:15 – 17:45	Discussion: next steps to progress this reform program	
17:45 – 18:00	Concluding Remarks	Mr. Shashi Shekhar & Mr. Parameswaran Iyer