



ACWADAM's Course on Groundwater Governance

About the Course

Scripted in its agricultural hinterland, the development of India's groundwater resources is a story about how groundwater has enabled millions of farmers to improve agricultural production over reasonably short periods of time. At the same time, it has also ensured access to safe drinking water and has proven to be a buffer for poor rainfall years, including complexities of drought and floods. This has, however, given rise to serious issues around socio-ecological sustainability of the resource itself which manifests in the form of depleting water tables including problems linked to public health, environment and increased levels of vulnerability to resource abuse and contamination. Groundwater competition is playing out in myriad ways, before flash points of conflicts become obvious.

The rationale behind the need to develop mechanisms of groundwater governance includes participatory forms of groundwater management. Aquifer-based approaches inclusive of combination of groundwater management and governance have begun to find their way into the practices and policies dealing with groundwater in India. While discussions on various approaches to groundwater management have gained momentum the question of 'complementary' groundwater governance remains largely unresolved. In this light, a significant diversion from a business-as-usual approach to groundwater resource management in India could be to move away from 'infrastructure' based, 'supply-side' solutions, to more comprehensive solutions that integrate hydrogeology and engineering with sociology and economics in developing a groundwater governance framework.

This course will attempt to take up these various linkages of issues, solutions, experiences and challenges to address the questions pertaining to groundwater governance in India. The course is designed in a modular fashion to cater to the needs and gaps in groundwater understanding and to comprehensively introduce a package of science, participation and regulation, all of which form the backbone of the groundwater governance framework.

Who can enroll?

Practitioners, civil society organisations, government officials, students, researchers and activists can enroll for the course. Although there is no stipulated minimum background qualification for eligibility, participants should have understanding of English, Marathi or Hindi language. Experience of working in the water sector or associated with various developments in the sector would be an added benefit.

Course design

Three modules are offered and participants can either enroll for 1 specific module or all the 3 modules. The modules consist of classroom sessions involving participatory pedagogy, practical and field work. The course details are as follows:

Duration: 12 weeks starting Mid November (around 20th November 2017)

Venue: Pune (details will be shared on confirming participation) - exact venue being finalised

Course structure: Three modules on

1. Science of groundwater
2. Participatory Groundwater Management
3. Groundwater Governance

Timeline	MODULE 1	
	SCIENCE OF GROUNDWATER	
		Session
Week 1	Introduction	· Importance of groundwater- integrating management and governance
		· Template of Groundwater issues-the need
		· Earth Sciences for understanding groundwater
		· Vadose Water
Week 2	Concepts	· Aquifers
		· Wells and Aquifers
		· Springs and Aquifers
		· Groundwater and ecosystems
Week 3	Tools	· Mapping- Field hydrogeology
		· Measurement and Monitoring-1; Water levels, Discharge
		· Measurement and monitoring- 2; GW Quality, Weather
		· Aquifer Properties
Week 4	Applications	· Groundwater Balance
		· Groundwater recharge
		· Groundwater Demand Management
		· Aquifers and Water Security
	Total Duration	32 Hours + 1 Field Work Day (Role of Science in understanding GW)
	MODULE 2	
	PARTICIPATORY GROUNDWATER MANAGEMENT	
Week 5	Groundwater And Society	· Embedding Science in GW Management
		· Existing efforts for GW Management
		· Water Conflicts
		· Socio-hydrogeology
Week 6	Aquifers as Common Pool Resource	· Groundwater as CPR
		· Competition over groundwater
		· GW Management- equity and efficiency
		· GW Management- sustainability
Week 7	Community Participation in Aquifer Management	· Communities as social structures
		· History of Participation in Water Management
		· Understanding aquifers through communities
		· Participation, decision and action: Protocols & social norms for GW Management
Week 8	Aquifer based Participatory Groundwater Management: Reflections from the field	· Case Studies- Drinking water security and GW Quality
		· Case Studies- Watershed development and Agriculture
		· Case Studies- Springsheds and Rainfed farming
		· Case Studies- River basins and Urban GW

	Total Duration	32 Hours + 1 Field Work Day Decentralised GW Management through Community Participation
	MODULE 3	
	GROUNDWATER GOVERNANCE	
Week 9	Groundwater Governance-Context	· Dichotomy of Challenges: From GW Management to Governance
		· Global Experiences of GW Governance -1
		· Global Experiences of GW Governance -2
		· Conceptual Contours of Groundwater Governance
		· Instruments of Groundwater Governance
Week 10	Institutions and Policy	· Institutional Architecture for GW Governance (National & State)
		· Policies and Groundwater in India
		· Decentralised GW Governance- Role of Local Governance Institutions
Week 11	Regulation	· Blind Spot: GW in Water Regulatory Institutions
		· Legislating Groundwater
		· GW Legislation Case Studies- Experiences of Select States
		· Indirect Regulation- Case of electricity control (Jyotigram Yojana et al)
Week 12	Groundwater Governance Framework	· Case Studies
		· Science in GW Governance
		· Participation in GW Governance
		· Regulation in GW Governance
	Total hours	32 Hours + 1 Field Work Day (Institutionalising GW Governance)

Classroom sessions (Hours)	96
3 Field Work Days (1 Day = 8 Hours)	24
Total Course Duration (Hours)	120
Total Course Duration (Weeks)	12

Selection and Fees: ACWADAM will exercise a selection of participants, depending upon enrolment and the limit to the number of seats. The course costs are subsidized through a support from Ford Foundation. A nominal fee of Rupees 1000/- will be borne by the participants as a contribution towards ACWADAM's work on aquifers, watersheds and environmental co-management (Fee for a single module is Rupees 400/-). Fees can be remitted through cheque drawn in favour of ACWADAM, Pune at the time of the registration session.

Interested individuals/organisations can contact: acwadam@vsnl.net for enrollment details or queries, if any.

ACWADAM

Suvidya, Plot no 27, Lane no 3, Kshipra Society, Karvenagar, Pune 411 052
Telephone: 9172246959 Website: www.acwadam.org