

Maharashtra Groundwater Development and Management Act: Opportunities and Barriers at local level

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Problem statement

- ❖ **One third** of state falls under semi-arid climatic zone, four-fifths is under the impervious basaltic trap
- ❖ In rural areas groundwater is the primary source of domestic and agricultural use
- ❖ An increasing trend of growing water intensive commercial crops and exponential rise in the number of borewells
- ❖ Indiscriminate use of groundwater for irrigation drives water scarcity such that drinking water is not assured
- ❖ Reduction or failure of monsoon exacerbates water scarcity, many villages rely on water tankers to meet their basic drinking and sanitation needs



Statistics

- ❖ Ahmednagar : 58% of net irrigated area based on well
- ❖ Groundwater draft between 2004 and 2011 for Ahmednagar - rose from 74% to 82% of net annual groundwater availability
 - ❖ Sangamner - corresponding figure stood at 96.5% in 2011
- ❖ Total number of irrigation borewells in the State has increased by 390% from 2004 to 2011
- ❖ September 2015, more than 22% of villages in the Ahmednagar required water for domestic use via tankers
- ❖ March and October 2015, government spent more than 14 million USD on water tankers



Groundwater regulatory measures in Maharashtra

- Maharashtra has several schemes and laws on the demand and supply side to augment and regulate the use of water
 - Maharashtra Groundwater (Regulation for Drinking Water Purposes) Act 1993
 - Maharashtra Groundwater (Management & Regulation) Act
 - seek to protect public drinking water sources, in particular groundwater
 - The 2009 Act takes a more expansive view on groundwater management than its predecessor and seeks the use of groundwater in a more comprehensive manner
 - first put in practice in 2014
- Act offers a comprehensive framework for groundwater management but the institutional infrastructure and implementation pathway yet to be put in place

Key features Maharashtra Groundwater (Management & Regulation) Act

- requiring well owners to register their tube wells
- requiring drilling contractors to obtain permission prior to drilling tube wells
- prohibiting the drilling of new deep-wells and restricting water withdrawals from existing deep-wells
- imposing levies for groundwater extraction
- managing demands through participatory community crop planning
- protecting the sources of groundwater that are used for drinking purposes

Challenges or barriers in implementation

- Limited Capacities of the agencies to enforce the Act
- Awareness about the Act among the farmers
- Acceptance by farmers
- Awareness about the Act among the farmers

Limited Capacities of the agencies to enforce the Act

- Watershed Water Resources Committee (WWRC) play a central role
- Representatives from various departments like urban local bodies, block development officers etc
- Responsible for promoting and regulating the development and management of groundwater, planning, implementation and monitoring activities, preparation of crop plans
- District authorities are to support it in these activities
- Technical inputs in the area of groundwater and agriculture ???
 - Neither the Groundwater Surveys and Development Agency nor the agricultural universities have all the required capacities

Awareness about the Act among farmers

- Farmers display a general awareness about the act
- Not aware about the actual provisions and process of implementation of the act
- Reluctant to implement the act when they know that the state will provide the bare minimum of water supply during crises
- Unable to connect the groundwater availability with agriculture and drinking water
- Do not see groundwater as a common property resource rather they treat it as a private property
- The GAP ???

Acceptance by farmers

- Farmers are reluctant to implement measures of well regulation - involve foregoing potential income
- Farmers with commercial crops like horticulture (year round) which involve substantial investments – resist attempts at regulating extraction, stand to lose large investments
- Men, particularly underestimate the social and welfare costs of scarcity particularly in the case of groundwater, they are willing to accept the seasonal scarcities
- Since the burden of this scarcity falls primarily on women, who are generally marginalized in the village politics, these costs are underestimated
- The DISCONNECT **????**

Representation of stakeholders in local level institutions

- Preparation of Ground Water Use Plans and Crop Plans made mandatory for “notified” areas
- Participation of the community and farmers, especially, is a prerequisite for success
- Local Realities ???
- Stakeholders ????
- Actors and networks ????
- Buy-in from the stakeholders????



Way forward????

