

INTERACTION WITH SOPPECOM, Pune

The CE members Ms. Mary, Mr. Anwar, Mr. Ramkumar interacted with Mr. K.J. Joy and Ms. Seema Kulkarni of SOPPECOM who provided a gist of different water management methods and gender balance while formulating water laws. The major points that came up for discussion include:

Water and Land rights: They described their experiences of organizing the community into water user associations in the Mula irrigation project and the importance of such organization for legal entitlement to water to all members of the community. These efforts resulted in the first water user society at Chanda. Systematic water management occurred where the society paid a standard rate to the irrigation department and differential rates were collected by the society from the farmers based on the type of crops grown. One important point was that of delinking water rights from land rights and recognizing the multiple uses of water.

Technical aspects that promote equity and sustainability: One good example described was that of Ozar, a tail end region. Here, there was a shift towards calculating water charges based on *hourly basis* (volumetric supply) for water usage instead of the usual area and crop basis. This contributed to better water saving and improved water use efficiency. Apart from this, there was *co-management of ground and surface water* by convincing the well owners that the water in their wells is due to seepage and recharge from the canals and levying charge on the wells in the command area.

New methods of resource assessment: Mr. Joy explained using biomass as a measure of water productivity. The idea is to create surplus biomass production (for economic services) over and above the basic needs such as food, fodder, fuel and recycled biomass and plan water use accordingly. This surplus biomass can be used for value addition and non-farm income generation.

Gender issues: The focus was on water entitlements to women and landless. Water quota for landless was mooted and use of this allocated water to cultivate surplus lands of big landowners was planned. At Khudawadi, women showed more interest mainly for fodder and fuel needs but the land that was taken on a 15 year lease was low fertile and located outside the command area. The major objectives of the exercise were to treat water as a livelihood resource, form institutions for water rights and use of the allocated water quota.

RALEGAN SIDDHI, Ahmednagar district, Maharashtra

Ralegan Siddhi is a model watershed about which much has been written. The process of change, from a poverty stricken village to a prosperous model village, began in 1975 under the leadership of Mr. Anna Hazare. It started with uprooting social problems such as alcoholism. Principles and rules were initiated to organize the community.

Increased agricultural production was seen as a necessity to tackle economic problems and watershed development was seen as a solution towards this. Proper water management began with forming cooperatives around wells and distribution of water to the members on an equitable basis. Members pay an annual water tariff and water is allocated in turns. There are no restrictions on borewells.



View of one of the three microwatersheds (KoynaTekdi) of Ralegan Siddhi



Fencing to prevent free grazing



National watershed training center at Ralegan Siddhi

Another action was that of social fencing whereby villagers voluntarily prevented free grazing and stall fed the animals from the fodder grown. This is reflected in increased grasslands and milch animals.

HIVRE BAZAR, Ahmednagar district, Maharashtra

Village characteristics

- Total geographical area of the village of 977 hectares and cultivable area is about 795 hectares.
- Irrigation source in the village is well irrigation (open wells).
- Relatively homogeneous in terms of caste,
- Distribution of landholding is relatively equitable
- The village was divided into three micro-watersheds, the first with an area of 612 ha, the second with an area of 123 ha and the third with an area of 241 ha.

The change started under the leadership of Mr. Popatrao Pawar the village Sarpanch. The success of Ralegan Siddhi provided the inspiration for change and rules were formed and followed to sustain the change.

Rules and regulations

The 'panchastuti' or five principles collectively adopted in the gram sabha:

1. Restrictions on free grazing
2. Ban on tree felling
3. Ban on alcohol
4. Adoption of family planning
5. Voluntary labour

Two rules regarding use of water were explicitly adopted in Hivre Bazar about three years after the project commenced:

- (a) Ban on borewells in agriculture
- (b) Ban on cultivation of water-intensive crops (except if cultivated using drip or sprinkler irrigation)

In Hivre Bazar, the bans have helped to ensure that groundwater use is both sustainable as well as equitable.

Concerns:

Conservation activities and rules and regulations in the village had positive externalities on the adjacent villages but they themselves are bearing negative externalities from adjacent villages due to excessive abstraction of groundwater (since there are no restrictions on bore wells in those villages).

Recent steps:

Efforts are on to bring all the adjacent villages together as a cluster of villages and Popatrao Pawar carries the hope that the change could happen gradually over a period in the entire area.



View of Hivre Bazar watershed area



Interaction with Popatrao Pawar, sarpanch and man behind the change



Clear demarcation of common land of Hivre Bazar and adjacent village (Dedhne Gunjal)



Left: Impact of unregulated grazing (Dedhne Gunjal)

Right: Impact of rules - Restricted grazing (Hivre Bazar)

WATER USER ASSOCIATION, Minor 7, Mula project, CHANDA, Ahmednagar District, Maharashtra

Minor 7 is one of the canals taking off from the right bank canal of Mula dam. The minor has a length of 2.2 km and 13 outlets. The main outlet is controlled by the government department, which supplies the allocated quota of water to the village. The irrigable command of this minor is 361 ha.

The Datta Cooperative Water Distribution Society began functioning from 1989 after signing an agreement with the irrigation department to receive water on volumetric basis.

Role of the society

- Equal access to water for all members
- Maintenance of sub-channels
- Implementing the regulations and levy of charges

Water charges

Differential rates based on type of crops to promote balanced mix of crops (water intensive cash crops and food crops). The charges for different crops are decided at the annual meeting. For example, water intensive crops such as sugarcane is charged Rs. 300 per watering per acre (sugarcane needs 11-12 waterings and usually 5-6 waterings are based on the canal water and rest supplemented through own wells). Food crops such as Bajra are charged Rs. 150 per acre per season. Rabi wheat is charged Rs. 300 per acre per season. Groundnut in summer is charged Rs. 700 per acre.

Generally, cash crops are charged more than food crops and food grains are given priority during water scarcity. The society sets deadlines for the farmers to pay the charges and a fine of 10 percent is charged for delays.

Change due to formation of society

- It has become possible to make proper crop plans by the farmers
- The farmers submit an application in advance to the society where they mention the crop grown and number of waterings needed
- Charges are fixed accordingly
- Irrigation is assured during critical periods of the crop

Some suggestions by the society members

- Measurement of the quota of water allocated to be done at the tail end rather than head region since this takes into account the evaporation and percolation losses. It was felt that the society is ending up paying more to the government department since these losses are not taken into account and there is a difference between the amount of water allocated and that actually used.
- Lining of canals to prevent losses
- All repairs including lining, approach roads etc. to be undertaken by the government before handover to society. Otherwise, it adds to the burden of the society.



Main sluice gate to release allocated quota of Mula river water



Mula Minor 7 under the control of the society to distribute the allocated water



The water user society members at their office

Outputs planned

The expected outputs include stories that could be captured on the video and also documentation in the form of short cases studies.

Story format: The stories would be of 45 minute duration and to be recorded in the field. The basic structure of the story would be a description of the scenario, the change that occurred and the key lessons. The process of identification of the specific story and the script, location and person narrating hope to be completed by members by the 2nd to 3rd week of September. Actual recording of the stories are to be undertaken by September last week or first week of October. The logistics for recording were also discussed (quotations for videographer, cost estimates and other details to be worked out by Ramkumar in the mean time).

Short cases: These are proposed to be in the form of a folder that would have short cases (2 pages) as leaflets. These cases would back the stories on the video with more details. The format/structure of the cases would be to capture:

- A brief background of village/ location/ history
- Introduction to the problem
- Key questions:
 - What are the type of rules and regulations and how did they evolve?
 - Identify the necessary conditions/circumstances under which these rules work?
 - How are the rules enforced and what makes the community comply with the rules?
 - Is there a legal sanctity to the rules framed in terms of penalties when rules are not complied with or is it simply the social pressure that keeps the rules together?
 - Do they contribute to sustainability of the institutions or structures created and also towards equity (gender, economic, social or any other)?
 - What are the constraints faced during the whole process?
- Key lessons

One idea was also to look at how rules operated traditionally, their strengths and weaknesses and how these old systems can be strengthened and adapted to the current situations and requirements by addressing the gaps and issues (such as the role of women and weaker sections of the society). Some such experiences are from Ms. Mary and Dr. Rao.

Anwar plans to look into the groundwater management in two villages under different conditions and draw lessons to the extent to which rules and regulations can be complied.

Based on discussions with Ms. Nafisa at Utthan, it was felt that legal framework is an important addition to preserve the sanctity of the agreements. One such case/story could be from Utthan.

Once the draft case studies are in place, possibility exists for an issue paper with the help of Mattia.

Final outputs expected are about 6 case studies and 4-5 stories to be captured on video.