

Case Study: Pond renovation through MNREGA

Context

Uttar Pradesh lies in the centre of the Indo-Gangetic Plain which provides optimum conditions for agriculture. With fertile soil, flat lands and perennial water sources, high productivity is possible in crops in most parts of the state. In the eastern parts of UP, abundance of surface water, which comes from over 1400 mm rainfall, is hardly tapped to use for irrigation in this region. Natural water bodies, mainly as ponds, which existed for years to support local micro climate and eco systems, have disappeared fast during last few decades. Such limited water structures which still exist are under serious threat of encroachment and inhabitation. Man-made ponds including the recent ones constructed under MNREGS are both poorly maintained and choked due to siltation; their inlet natural water ways are closed or interrupted, resulting in extremely low water collection in these ponds even during the best of

monsoons. The farming community doesn't consider ponds and river as dependable and cost efficient source of irrigation. Allotment and use of water filled ponds for fisheries by Gram Panchayat (GP) is also one of the reasons why ponds are not commonly used for irrigation by farmers. Thus, an urgent need has been felt to influence community behaviour and instigate actionable plans with collective participation of stake holders like MNREGA through community generated water managements demands. The objective, therefore, is to sensitize the community towards the issue, to encourage and activate monitoring and need generation and to consequently create changes in the infrastructural priorities, specially with reference to open sources of water like ponds in the community.

Background information

PANI(People's Action for National Integration) is the PIA for HUF funded program 'Water for Public good', under implementation in cluster of selected villages in 10 districts of Eastern Uttar Pradesh. 10 grass root NGO sub-partners of PANI are involved for ground implementation of project. Program commenced in November 2014 with the prime goals to improve water productivity through improvement of various water management practices and alleviating poverty of 26500 small and marginal farming household by promoting water efficient and sustainable agriculture practices amongst farming community, which is most potential sector for water management improvement. This project has been appropriately designed to layer the water management component over a Tata Trusts supported agro based livelihood program - FASAL, which is also under implementation at the same locations by PANI and its sub-partners.

Project Location Characteristics:

- High population density (776/sq. kilometre)
- 68% of the population is dependent on agriculture for livelihood with a small land holding of 0.88 ha.
- 75% of net sown area is irrigated
- 93% of annual ground water draft is accounted for irrigation
- Construction and operation of bore wells is primarily unregulated
- Electric power and diesel for operation are available as subsidized energy

With this situation in mind, an intervention was designed to identify ponds that can be revived and used for irrigation by the catchment community and can also improve ground water recharge. Intervention was based on the basic idea of collective community action, collective ownership and joint management of water source by forming Water User Group (WUG).

Strategies

With the evidence of rampant exploitation of the ground water and complete negligence of the existing open water sources, it is logical to conclude that collectivization and sensitization of the community is extremely critical for bringing about behavioural change and consequential influence to work towards the renewal and maintenance of ponds. For this effect, it was strategized to form a buy in of the Gram Panchayat and employ the

provision of MNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) to renovate the existing ponds by the convergence of public funds. To ensure community interest, activation, ownership and responsibilities towards public sources of water and to ensure appropriate pressure to be created on governance, Water User Groups were formed.

Innovation

Keeping in mind the novelty of this intervention and an almost complete lack of information or sensitivity of the community members towards the need of action toward pond renovation and maintenance, a need for

WATER USER GROUPS

At the 120 GPs of the project, such water sources were identified that are used by the community as a public source-like ponds, lakes or wells. Community members around the water source were collectively addressed and formed into user groups. The groups were oriented on water conservation and were instigated to exercise thoughtful and responsible consumption from their water source.

The objectives of forming this Water User Groups (WUG) were to create a motivation for collective responsibility, judicious usage and for close monitoring of water use and wastage. These WUGs are also an effective means to create pressure, execute monitoring and support in action plans for the WMCs

NM Sadguru Foundation in Gujarat has set up an ideal model of water management and community ownership towards public sources of water. MNREGA provision is optimized to renovate and maintain water bodies. While the provision allows for infrastructural support of the water bodies, the community in itself is sensitized towards collective monitoring of water consumption. Subsequent demands as per the situation of the water needs are raised by the community thus creating a viable and sustainable model of water management.

innovation was felt to create an environment for the community to understand and initiate into the process. For this, exposure visits were conducted where in the Gram Pradhans (head of village council) and selected influential and active farmers from 2 selected location of the project area were invited to witness demonstration models set up in Gujarat;

Implementation

A methodical and step by step process was adopted keeping the priority as orientation, sensitization and mobilization of the community towards importance of ponds, ground water recharge and collective management of water resources.

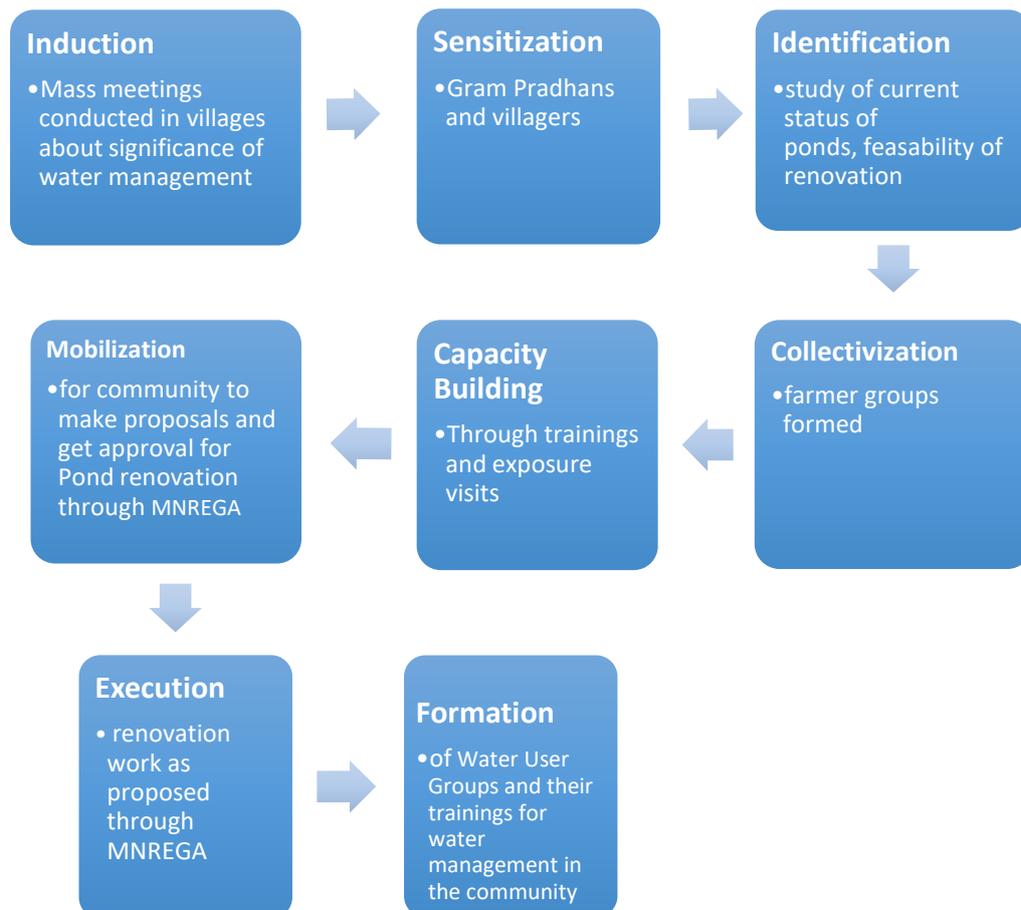


Figure 1: Intervention Flow

Challenges & concerns:

Although the intervention was intended to benefit the community at large, there was opposition from direct or indirect entities that led to difficulties in the implementation. Gram Pradhans and Gram Panchayats were found to be reluctant in approving and accepting the project interventions. While mobilization of the community that they did not consider urgent was in itself challenging, it was observed that once initiated, this did not remain a major concern. However, for the community members who were not directly involved or benefitted from the project, it was extremely challenging to create an interest towards water management. This sometimes negatively influenced even the directly involved who had previously been mobilised through an environment of discouragement.

Outcomes:

The intervention, though relatively new in its action, has managed to create a mark of community mobilization through very measurable factors. Through community advocacy and proposals through MNREGA, the process of renovation has already been initiated for 4 ponds in the selected project area. In terms of community benefit, more than 70 farmers have so far been benefitted after joining the Water User Groups and using pond water for irrigation.

Quantitative analysis reveals that because of the renovation of the ponds, a water storage capacity of 19200 cubic meters created. A considerable production (about 80 tons) is achievable through irrigation from these ponds. Additionally, the initiatives of water



Figure 2: Pond after maintenance through intervention

management is also responsible for generating almost 3000 employment days of renovation work where more than Rs. 5 lac is being used from the MNREGS fund for water source development.

It can safely be concluded that as more and more community members find induction and involvement in the project, the growth of community awareness and sensitization speeds up. It may be challenging for the community to relate with the larger objective of environmental sustainability and ecological impact as outcomes of these interventions, but short term outputs like better and more permanent sources of water availability provide

sufficient motivation to mobilize the farmers. Exposure visits and demonstration models also work effectively in creating an encouraging environment for the community.

With continued pursuit, and meticulous sensitization, it is possible to create a capacity and motivation within the community not only towards management of existing water resources but also towards initiative for more effective innovations for water conservation and collective responsibility of public sources of water.