

Underground Taming of Floods for Irrigation: Gendered Impacts of Intervention



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Context

- UTFI is piloted in Jiwai Jadid village of Ramganga sub-basin in Uttar Pradesh
 - By design the technology is gender neutral and is expected to benefit both men and women
 - By offering - greater convenience, better health and enhanced socio-economic opportunities through improved water facilities
 - Impacts and sustainability of the intervention remains sensitive to -
 - the socio-cultural context and the institutional frameworks
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Objectives

- Understand gendered impacts
 - Perceived changes in water availability/quality for domestic use and agricultural purpose
 - Livelihood opportunities
 - Dynamics of ownership and sustainability
 - Recognize any other benefits accrued due to technology
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Approach

Qualitative methods -

- Focus group discussions
 - Women
 - Men
 - Representing all socioeconomic groups from various geographical area of influence of technology
 - Panchayat members
- Key person interviews - semi-structured



Profile of the study village

- Agriculture is the primary occupation
 - Engagement mainly as agriculture labourer (Yadav community)
- Ground water is the main source of irrigation
- Acute water scarcity for domestic use not reported
 - Women/children need not travel long distance to fetch water
 - Self-owned individual hand pumps inside house premises

Perceived impacts - water for domestic use

- Post UTFI intervention
 - increased availability of water in private hand pumps especially during monsoon and winter months
 - Less time and effort required to fetch water



No acute water scarcity reported in the village

Perceived impacts - water for agriculture use

- Post UTFI intervention – farmers experienced increased availability of water especially in the months ranging from July (2015) to February (2016)
 - reduced time to irrigate fields - 3 hours to irrigate 0.25 hectares of land (paddy) as against 2 hours to irrigate 0.25 hectares of land post intervention
 - Reduced cost of irrigation - Rs 270/0.25 hectares as against to Rs 220/0.25 hectares post intervention



Perceived impacts - Linkage between flood and UTFI

- Prior to 2010, there used to be flood almost every year leading to some material loss
 - Major flood in 2000 damaged food crops
 - Presently excess rainfall and flood is not seen as a major threat
 - Last flood was reported in 2010 and hence the community did not draw any linkage between reduction in floods and UTFI interventions



Ownership and sustainability

- Operation and maintenance (O&M)
 - Not forthcoming for operation and maintenance
 - Women folk believe that the technology is the preserve of the male
 - Few women are willing to maintain the structures against an assigned monthly income
 - » But reluctant to undergo any technical training for its maintenance
 - Women from upper caste community are not willing to undertake O&M or be part of any user groups

- Ownership

- Men are willing to undertake O&M and even contribute to minor maintenance but not ready to take up complete responsibility or ownership of the structures
- Suggested ownership should rest with the Panchayat –
 - Taken up under MGNREGA

Men also reinforced stereotypical beliefs that women will not be in a position to maintain the structures

Other benefits

- **General cleanliness in the area**
 - Prior to the intervention the area near the UTFI used to be dumping ground for the village garbage
- **Additional income**
 - Care taker of the structures has planted green leafy vegetables along its boundaries which fetches him some additional income
 - Availability of fresh vegetables to the village community



Key challenges

- Institutionally weak
 - Absence of SHGs/user groups
 - Women not active in PRI
 - Low participation of women members
 - Non-participation in gram sabha meetings
 - Women not engaged in managing any community assets
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 - Social capital is weak
 - Poor social networks
 - Absence of NGO
 - Cultural barriers
 - Women from upper caste households are not encouraged to take up entrepreneurial initiatives/livelihood activities
 - Less visible in public domain
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Way forward

- Awareness building about the benefits of UTFI among women folk
 - Through active involvement of NGOs
 - Creation of management committees through PRIs
 - with active participation from women folk of willing households
 - Promotion of other women centric institutions in the area
 - SHG
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Thank you

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