

# WOMEN-LED COMMUNITY PARTICIPATION A SUCCESSFUL MODEL FOR WATER SAVING IN AGRICULTURE

**M**ore than 85 percent of groundwater extracted in India is used for agriculture, and the remainder goes for industrial and domestic usage. According to the Central Groundwater Board report, in 2023, 736 blocks/mandals/talukas (units) are over-exploited in terms of groundwater extraction. 199 units are critical (water extraction is between 90 and 100 percent), 698 units are semi-critical (extraction is between 70 and 90 percent). Overall, out of the 6,553 units that were assessed, 25 percent are already in the unsafe or danger zone. Sensitization and knowledge enhancement at mass scale along with incentivization can help in behaviour change.

## PANI's -Water-Saving and Enhancement of Farmers' Income

Peoples Action for National Integration (PANI) is implementing a project on water-saving and enhancement of farmers' income, with support from Hindustan Unilever Foundation and Tata Trusts in Balrampur district of Uttar Pradesh- one of the NITI Aayog aspirational districts. The project is being implemented with more than 70,000 small and marginal farmers. In the last seven years the project has been able to save water and create water potential to the tune of 286 billion litres; increase in the yield of major crops of more than 220,000 tons; and an aggregate increase in income of Rs 1.06 billion. Additionally, the increased economic activities generated 71.6 lakh person days of employment for local population. Increase of between three and ten percent in village GDP in a majority of the project villages is estimated.

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on the execution, and the guidance and support of the funding organizations. The project was designed to ensure community participation at every step. This not only brought in the user perspective and real needs that were addressed through various

activities but also gave a sense of ownership to the community, thereby increasing adoption. The project team was trained to have two-way communication channels open during meetings, training, and all interactions with the community. They were encouraged to solicit feedback and ideas to align the project activities with the aspirations and pain points of the community.

## Women Participation

An important factor that led to the success is the role of women. The project team encouraged women farmers to participate in weekly meetings organized by the team, by forming small groups of 15-20 women. Women play a crucial role in agriculture right from preparing the field, to sowing, irrigating, weeding, spraying of fertilizer and pesticides, and finally in harvesting, cleaning, packing/storing etc. Therefore, imparting technical knowledge and pack-

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age of practices (PoP) to women farmers is equally effective way of improving agriculture practices, if not more effective than imparting this knowledge to men.

The role of women in this model was critical from the supply side as well, in the form of Community Resource Person (CRP)- who were women in the age group of 18-25 with basic knowledge of agriculture, decent education, and who are convivial and entrepreneurial. The CRPs undergo an intensive training on agriculture- crop cycles, common diseases, irrigation, soil testing, efficient use of fertilizers, pesticides etc. The thrust of training sessions is to train them on methods to save water, use of bio-fertilizers and bio-pesticides, use of healthy seeds and inputs, and similar other practices that help increase productivity, reduce costs, improve soil health, and conserve natural resources. Often, CRPs set up demonstration plots on a piece of their own land to show empirical evidence to address the reluctance among farmers. After one or two crop cycles farmers not only listen to their advice but proactively reach out to them for guidance.

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### Mahila Kisan Sangathan

Another factor that contributed to the project's success and will be instrumental in sustaining the project beyond the project duration, is the Mahila Kisan Sangathan (MKS). As the name suggests, MKS is an informal association of women farmers who meet periodically to discuss the best practices emerging out of the PoP suggested by the project team, and to provide guidance to the CRP so that her efforts can prove more effective. MKS also aggregates the demand for seeds and inputs and gives the list to CRPs, who in turn share the same

with Farmer Resource Centres (FRC)- another institution supported by the project. FRC is an outlet managed by an entrepreneur- often an agriculture graduate, with a passion to work with farmers providing them high quality seeds and inputs, farm equipment and tools on rent, and advice on best practices, market linkages, etc. CRPs act as an extended arm of FRC by providing the last-mile connectivity for distribution of inputs to the farmers.

The package of practices promoted in this project includes SRI for paddy, intensification for arhar, seed drill/zero tillage/SWI for wheat, on-bed for onion, mulching and SSI for sugarcane, and machan (trellis farming) for vegetables.

PANI's efforts are a drop in the ocean. More needs to be done to address the challenges of depleting ground water levels, increasing water efficiency, improving agriculture practices, and increasing farmer incomes along with conservation of natural resources. Balrampur model has given very encouraging results at a significant scale. This model can be customized, replicated, and scaled for large scale impact.