This innovation has helped address these challenges effectively by increasing groundwater recharge potential to 5.0 MCM per year, improved crop productivity by 30% and about 1,000 hectares of fallow lands have been brought into productive cultivation. This has led to enhanced water use efficiency, increasing the demand for manpower for agricultural activities, and return of villagers to their homes and farms after decades of migration.

ICRISAT has developed an innovative landscape management approach of rainwater harvesting through a large-scale field bunding along with construction of masonry structures in decentralized manner. About 3.0 million cubic meter (MCM) storage capacity that was created has been crucial in helping farmers double their incomes and for long term sustainability. The innovation reviving traditional practices (called haveli system in local parlance) has helped enhance water availability across the clusters.

Harsh climatic conditions have made the land infertile for growing crops with reasons like frequent drought, dry spells, and flooding. Rainwater harvesting through masonry check dams, farm and community ponds, check walls and well recharge systems have increased water availability for irrigation by ensuring good crop growth and helping improve food security, nutrition and reduce poverty. The innovation addresses water scarcity, land degradation in the fragile dryland ecosystem of Central India.

“...harvested 1,200 kilos of groundnut, over 100 kilos of a mix of crops including black gram, mung bean and sesame from this season”

“I used to work for other farmers far away from home but decided to return to my farm when I saw water available. My family is happy that we are farming our land, which was left fallow until monsoon this year”

“This water and land management technique has been taken up by users, led to adoption at scale or beyond the direct CGIAR sphere of influence. Among others, this is evidenced by more than 25,000 households in the project areas having effectively addressed water scarcity, land degradation, improving crop productivity and income levels besides returning of residents to farming after migrating for work to other regions years ago.

“Before the tank was renovated, our tube wells could supply water only two hours a day. This year, even in the summer, we had continuous supply. We did not take water from the tank as the tube wells located close to our fields provided plenty of it”

“...I returned to farming after migrating for work many years ago. I have been able to live with my family since my return and resume farming my land with the water made available”