

Farm ponds play big role in tiding over droughts

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New beginning: Currently, Adilabad district alone has about 195 farm ponds.— Photo: Special arrangement

The Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad, is actively involved in popularising farm pond concepts for farmers in Andhra Pradesh. The farm ponds are constructed at the lower side of the fields and the runoff from the higher side of the fields are channelised into the pond. For farmers of Seethagondi gram panchayat in Adilabad district, Andhra Pradesh, small dugouts created as farm ponds in their district dug under the Mahatma Gandhi National Rural employment Guarantee (MGNREG) scheme did not seem to create any enthusiasm as the volume of water stored in the pits was retained only for a short period and got silted up just after one or two rainy seasons. To address this grievance the Institute intervened to dig some additional large ponds in the district.

Crucial resource

“Water, the most crucial resource for sustainable agricultural production in the dry land/rain fed areas, is not being used fully. Much of the rainfall runs off the ground. The runoff does not only causes loss of water but it also washes away precious top soil,” says Dr. Mohammed Osman, Principal Scientist (Agronomy) and Head of the Institute. Apart from digging some new ponds those already dug under the scheme were re-modelled and about 30 ponds of higher dimension and capacity were dug. Sixteen ponds out of the total 30 retained water for some months and few of them throughout the year. The success led to huge demand from all farmers in the region for more such big ponds and today the district alone has about 195 farm ponds. The National Agriculture Innovation Project (NAIP) under Indian Council of Agricultural Research (ICAR), New Delhi bore the expense for the work. Farmers were also cooperative towards this concept and a couple of them also invested their money for installing pumpsets to draw the water from the ponds to irrigate their fields.

Personal investment

For instance, a small farmer, Umanath, whose field happens to be close to the pond met the cost for installing a diesel pump and pipelines for lifting the water from the pond to irrigate his half-acre plot. Even during peak summer the farmer could easily water his crop and was able to get a net return of Rs. 72,000 from his tomatoes in 3-4 months due to continuous water availability. Another small farmer M. Manthu whose field was also close to the pond introduced sorghum crop during rabi season in his two-acre plot and was able to earn Rs. 30,000 from both grain and fodder.

Scarce things

"Fodder and drinking water were scarce commodities for many of us during summer some years back but today after the establishment of these farm ponds both these problems no longer seem to bother us," says the farmer. The success of Mr. Manthu encouraged many more farmers to cultivate rabi sorgum, and today the area under sorgum has increased from two to 10 acres. Some farmers have also started cultivating wheat and chickpea using the pond water successfully. Similarly several tribal farmers in the region have now realised the importance of rainwater harvesting and are able to save Rs. 2000- to 2,500 on fetching of water (hiring of bullock cart and drum) for spraying pesticides for their crops. The institute is encouraging the farmers to fence the ponds and harness the multiple benefits of water by rearing fish and growing vegetables for meeting nutritional security. The availability of water in most of the ponds is the silver lining for improving cropping intensity and diversity in the most disadvantaged district of Andhra Pradesh.

Black soil district

Adilabad is mainly a black soil district and receives good rainfall that offers scope for rainwater harvesting and recycling on a large scale. Since continuous water availability is a must for agriculture work, preserving and maintaining a perennial source is of utmost importance. Today the district serves as a model for many other villages in the country to follow in preserving rainwater and using it during drought periods, according to Dr. Mohammed.

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