

Success Story

# Per drop more crop

## Rajkarni under NICRA leads the way



### Compilation

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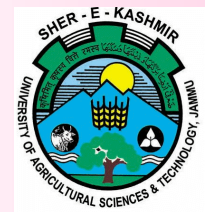
### Inspiration & Guidance

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For the last eight years, Krishi Vigyan Kendra Kathua under the administrative control of Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (J&K) has been implemented climate resilient technologies under the National Innovations in Climate Resilient Agriculture (NICRA) project, sponsored by Indian Council of Agricultural Research, New Delhi. One of the major module under Natural Resource Management was renovation of village community pond in the selected Said Sohal village. The women of the village used to collect water from the pond for daily needs but for many years the water could not be saved due to the deterioration in the structure of the pond. After the renovation of community pond under NICRA project by KVK Kathua, the women lead the way in management of pond and utilizing the water efficiently for getting optimum returns from water.

### **Situation analysis**

Said Sohal village is a complete rainfed (kandi) village situated in Kathua district of Jammu & Kashmir. The absence of assured irrigation limits the options for farmers in terms of making profit in farming. The village community ponds were damaged and could not able to harvest and retain water for long time. Water scarcity was at its prime and villagers were finding it difficult to manage their farms and livestock. Vegetable cultivation was almost seems impossible in that scenario and farmers were unwilling to take up any enterprise, especially in the summer season.

National Innovations on Climate Resilient Agriculture (NICRA) was launched in Kathua district under Technology Demonstration Component (TDC). Said Sohal village were adopted under the project to implement in- situ moisture conservation practices under Natural Resource Management besides popularization of practices such as deep summer ploughing, ploughing across the slope and intercropping of maize with cucurbits and legumes. Women of the selected village showed the way for optimizing use of water cultivated in the village community pond.

### **Efforts of KVK Kathua under NICRA**

KVK Kathua adopted the Said Sohal village under NICRA project and implemented several measures such as in-situ moisture conservation, introduction of short duration and drought resistant varieties etc. to build the confidence among farmers related to farming. Some of the important steps taken by KVK Kathua to revive the village farm economy are discussed below:

## Revival of village community pond – Rajkarni leads the way

Mrs. Rajkarni, a progressive farm woman took the initiative of managing the pond for efficient use of its water on the principle of 'per drop more crop'. KVK Kathua identified Rajkarni to be the leader, keeping in view her enthusiasm in the field.

KVK, Kathua under NICRA supported the cause in collaboration with Rajkarni to repair the village pond under NICRA project. The dimension of the pond was 37'x 26'x10' having a total storage capacity of 9620 cubic feet with full capacity of storing water up to 2,74,2000 litres. The renovation was done in a way to have as bigger catchment area. It also cured the problem of overflowing of water during monsoon and the leakage/seepage in the pond during Rabi season. The pitching of the pond was done and locally available clay soil was used along with masonry work. Due to this intervention, the storage capacity of the pond was improved and the water was used by the local women folk to irrigate their nutritional gardens. The revival of village pond made diversification possible in this rainfed villages of NICRA cluster.



## Introduction of quality vegetable seeds

KVK Kathua popularized nutritional kitchen gardens, exclusively managed by farm women. Suitable varieties of vegetables were provided to farm families for cultivation in their backyards. Some exotic vegetables were also introduced such as Broccoli to create enthusiasm among farm women to develop nutritional kitchen gardens.

## Impact of KVK activities

### Soil and water conservation

The renovation of village pond had resulted in reduction of runoff & thereby increased soil and moisture conservation. Reduced velocity of runoff water resulted in

minimizing soil erosion losses. In addition, the popularization of practices such as intercropping of cereals (erosion permitting crops) with legumes (erosion resisting crops) provided resistance to the runoff to a greater extent and thus improved the water infiltration and water retention.

### **Improvement of nutritional and income status**

The nutritional gardens maintained by women in the village created additional income and nutrition for their children and farm families. Seasonal vegetables were raised on the backyard to cater the domestic needs. The water accumulated in the village pond is being used exclusively by farm women to provide critical irrigation to their nutri-gardens.



### **Crop diversification**

The provision of critical irrigation through renovation of farm pond had helped in diversifying the crops in the village such as incorporation of Mash in addition to maize, inclusion of oilseeds (Gobhi Sarson & Toria), popularization of Gram (GNG-1581, & PBG-5), introduction of cowpea and cucurbits in maize and introduction of Turmeric in existing cropping system. Introduction of late variety of Okra i.e. Varsha uphar synchronizing with scheduled rainfall provided economical returns to the farmers, till the month of November.

### **Livestock management**

Provision of quality water in a rainfed village is an essential practice for livestock management, as water makes up 80% of the blood, regulates body temperature and is vital for organ functions such as digestion, waste removal and the absorption of nutrients. Village ponds provide adequate quality drinking water to enable livestock to a source feed in otherwise inaccessible grazing areas for enhancing milk production. With the provision of assured water in Said Sohal village pond, the rearing of livestock became easier for rural women. The lack of clean water for livestock was a big hurdle for smooth maintenance of

livestock. With the renovation of village pond, women were able to ensure permanent clean water source for their livestock.



### Recreational value

Age old community ponds are the real assets of the villages in India. They not only provide assured water supply to the inhabitants, but also serve as a source of recreation and aesthetic feeling. Thus, renovation of community water pond has developed new confidence among villagers to do better in their farming through collaborative efforts.



Recognizing the importance of moisture conservation practices in rainfed areas, KVK Kathua under the NICRA project is implementing climate resilient practices to strengthen farm activities and empowerment of farm women for overall social and economic development of the selected village in Kathua district.

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