

Farmer's innovation - An innovative irrigation technique for vegetable cultivation

Tribal dominated disadvantaged district, Jhabua, Madhya Pradesh is characterized by undulating topography, fragmented holdings, rainfed farming, shallow and eroded soils, low and stagnant crop productivity and low income from ancestral farming. To enhance income of the farmers of the area, an attempt was made to introduce improved vegetable cultivation under National Agricultural Innovation Sub Project "Integrated farming system for sustainable rural livelihood in undulating and rainfed areas of Jhabua and Dhar districts of M.P." Shri Ramash Bariya is a beneficiary farmer from Rotla village of district Jhabua under this project.



After interaction with NAIP-KVK scientists during 2009-10, Shri Ramesh started vegetable cultivation on small area during rainy and winter seasons and got more profit. With this encouragement, he decided to grow cucurbits viz., bitter guard, and sponge guard in late summer season of 2012-13 in 0.1ha area.

He prepared nursery in May 2012 and sown these crops (12 line bitter guard and 3 line spongy guard) in 1st week of June 2012. During the early growing stage of these crops, he faced acute shortage of irrigation water due to delayed monsoon. Shri Ramesh was worried about failure of his crops.

Then he discussed with NAIP scientists and got advice for adoption of an innovative irrigation technique using waste glucose bottle. In this technique, a cut is made at the top of waste glucose bottle for filling of water and discharge of water could be regulated by glucose regulator system. Shri Ramesh was firm to save his vegetable crops, hence he purchased 6kg waste glucose bottles (350 in numbers) @ Rs.20/kg and cut the upper bottom of bottle for filling of water. These bottles were hanged on the top with the help of stacked plant.



Ramesh instructed to his children to fill these bottles with water before they went to school in morning. He used the regulator for supply of water drip by drip. Thus, Ramesh saved his crop from drought due to delayed monsoon and got net profit Rs.15200/- from 0.1 ha land till date. It indicates that a tribal farmer can get about Rs 1.50 to 1.70 lakhs/ ha in one season of vegetable cultivation by adopting this new innovative technique of irrigation even in remote tribal undulating hilly soils.



In recognition of his achievement, Sri Ramesh was awarded with certificate of appreciation by District Administration and by Minister of Agriculture, MP Government.

(Source: Director Research, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior)