

Climate Smart Technologies Allured Vegetable Producers of Dry Land Areas, CSV, Kavre

This spring, Ms. Kamala Timalsina tried to cultivate bitter gourd differently by applying innovative climate smart practices. At that time she was not even sure about its success. Ms. Timilsina lives in Kalchhe village ward no. 8 which is located at the bottom basin of Patlekhhet VDC. The area is linked with Araniko Highway through an agricultural road that has eased the market connectivity. Kalchhe has hot and humid climate during spring and summer seasons with very low rainfall of 1.26 mm (February, 2015). . The area is facing problem of inadequate water for irrigation due to drying off of rivers. Due to their hardship in managing water for irrigation,



farmers still grow cucurbit which has been their one of the major means of income generation



In May 2014, CEAPRED implemented a “Climate Smart Village Project” in partnership with ICIMOD which established demonstration plots in cooperation with lead farmers of the groups. Various climate smart water management, crop management, and nutrient management practices and other climate smart practices were demonstrated. . Inspired with the demonstration, this spring Ms. Timalsina planted bitter gourd in 500 m² land practicing paddy straw for mulching to reduce moisture loss from evaporation. Mulching is not a new practice in agriculture. It has been extensively used in dry season farming as protective

technique for reducing soil evaporation and providing favorable temperature for crop growth. This improved technology involves interventions such as covering the soil with dry paddy straw. Ms. Timalsina experienced healthy crop growing resulting into fruiting beginning of the month of April, which was not a case before. Due to adoption of smart farming practice, the crop fetched 1.5 times more income (about NRs. 50,000) as compared to the last years’ income. She explained, “This year, the long harvesting duration of six months as a mulching effect made it possible to fetch more income than before. Before, vines lasted for only four months i.e. till mid of August resulting in short harvesting period.” She also added that this year she got better price of bitter gourd ranging from NRs. 20-50 per kg.

Similarly, one of the factors contributing to higher production was irrigation. To get sufficient water

for irrigation she constructed waste water collection plastic ponds. This way she was able to collect waste water which enabled her to harvest substantial amount of water from her daily household chores for the vegetable production. Furthermore, she was taught by the project staff to prepare *jholmol*, a bio-fertilizer cum bio-pesticide formulation, from locally prepared farm yard manure and cattle urine. She used Pheromone traps, cow urine and *jholmol* for controlling insects in Bitter gourd. All these practices reduced her workload in collecting water in the dry period and similarly helped her in reducing use of pesticides this year.

Getting all these benefits from the climate smart technologies she has now fully adopted the technologies and has stood as a pioneer farmer in her locality in practicing and suggesting the climate smart technologies to her group members.