

A COST EFFECTIVE INPUT FOR SUSTAINABLE PRODUCTION

Proper maintenance of soil health is very important for sustainable production of crop especially in command areas having irrigation in black soil. Irrational use of irrigation water coupled with application of chemical fertilizers affect the soil health in Naragund block of Gadag district as farmers have been irrigating there since long time under Malaprabha Command Area Project. Over the period of time there has been decrease in production of crops due to deterioration in soil health.

Here is a case study of a farmer who has addressed the problem of productivity with the technical guidance from KVK.

Mr. Gurappa Basappa Chavadi of Surakod village in Naragund block owns 20 acre of dry land cultivating crops of maize, greengram, bengalgram and onion. He used to purchase chemical fertilizers worth Rs.40000-50000 every year. Prolonged use of chemical fertilizers & heavy irrigation have spoiled the soil fertility status and the productivity of the land started declining until he came in contact with KVK during 2003-04. During this period, he attended training on management of soil fertility and vermicomposting at KVK. He interacted with the KVK scientists about his farm and had shown interest for establishment of vermicompost unit. Initially he started with a single pit with size 20' x 4' x 3' and harvested 20 quintals of vermicompost. He applied the vermicompost to the Kharif crops such as maize, onion and greengram during 2004-05. As there was long dry spell with no rains for 35 days during that year, the fields of Mr. Chavadi didn't show withering symptoms compared to his neighbour's fields. He was convinced about the role of vermicompost in retaining the soil moisture. The farmer harvested 5 quintal of greengram, 30 quintal of maize and 30 quintals of onion per ha. The yield levels were comparatively higher than his fellow farmers and in addition he saved about Rs.50000/- on cost of chemical fertilizer. During the same year Mr. Chavadi extended the vermicompost unit. He established 5 additional pits of size 20' x 4' x 3' with Rs.30,000/- financial assistance from Department of Horticulture, Government of Karnataka. With the strengthening of input production on his site, Mr. Chavadi at present is producing 250 to 300 bags of vermicompost and is applying the same to all the crops being cultivating in his 20 acres of land. He says that

the continuous application of vermicompost to his fields for last 3-4 year has improved the soil fertility status and soil physical characters which inturn has enhanced the productivity of land. Even during drought years, he was able to get sustainable income from his lands. He is of the opinion that at present he is able to save Rs.50,000/- on the cost of chemical fertilizers. Production and application of vermicompost has not only added value to his land but reduced the cost of cultivation and improved his socio-economic condition.The resource conservation technology adopted by this farmer has influened many other farmers in this village and neighbouring villages to adopt the vermicompost technology.

The fellow farmers of Mr. Chavadi in the village are approaching him for technical guidance on sustainable crop production. Eight farmers of the village have already started vermicompost production under the guidance of Mr. Chavadi.