

Hot Chilli made his life sweet

Yogesh Pawar, Sachin H. Malve, Umesh Dobariya, Devchand Sadrasaniya, G.J. Patel

Farmer name : Bharatbhai M. Gehlot
Age : 24 Year
Address : Vadali Farm Ta. Deesa Dist. Banaskantha, Gujarat
Mobile No. : 8401774039
Education : B.Com
Land : 0.40 ha (MIS)
Horticulture : 0.18 ha (Chilli)
Other crop : Groundnut, Potato, Onion
Animal : Buffalo-01, Cow-03, Heifer-2



1. Situation analysis/problem assessment:

Mr. Bharatbhai M. Gehlot, a small farmer from Vadali village, Ta. Deesa, Banaskantha district, Gujarat holding 0.40 ha land under microirrigation. He has been cultivating groundnut during *kharif* season (0.35), potato in *rabi* (0.35), chilli in *summer* (0.18 ha) and small area for fodder purpose i.e. lucern, rajka, bajara thought the year to meet feed requirement of animals. The agriculture is only source of income and whole family depends on his farm. Irrigation water availability throughout the year, MIS and market facility in Deesa taluka, Mr. Bharatbhai entered into chilli cultivation from 2012-13 for more income generation and livelihood improvement. But he was not satisfied with his cultivation practices as chilli leaf curl disease could not make him to get good profit from his 0.18 ha land every year that cause huge losses to him. Later, he visited Scientists of KVK, Banaskantha-I in January 2016 and showed keen interest to adopt the Scientific production technology of chilli as per the guidance and technical suggestion given by KVK, Banakantha-I.

Plane, Implement and Support:

In the year 2016-17, Scientists of KVK, Banaskantha-I guided him for scientific production technology of chilli i.e. selection of high yielding variety (Golden hot), fertigation scheduling of nitrogen and potassium, micronutrient application, foliar spray of NPK water soluble fertilizer, plant protection package, proper interculturing operations and drip irrigation scheduling. The major challenge in front of Mr. Bhartbhai was leaf curl virus which were damaging every year and he was worry about sucking pest management. For pest and diseases management, we have recommended spraying of biopesticide (Neem oil), rotational

spraying of Neem oil, Trizophos, Acetamaprid, Dicofol @ 10 days interval for effective pest management and avoid resistance against sucking pest. Basal application of Trichoderma @ 2 kg per ha was applied along with 250 kg of FYM to avoid the wilt problem and need based foliar spray of Mancozeb+Carbendazim @ 0.2% was given for anthracnose and fruit rot management.

Output:

With adoption of integrated crop management approach and improved varietal selection of Gujarat (Golden hot), Mr. Bharatbhai realized significant improvement in production of summer chilli as compared to his previous practices. He observed bumper production of green chilli i.e. 5367 kg from 0.18 ha area with net return of Rs. 2,09,870/- through integrated crop management approach. Adopting appropriate plant protection measure and rotational insecticide uses of Neem oil/Trizophos/Acetamaprid/Dicofol, Mr. Bharatbhai able to prevent the occurrence of leaf curl i.e. viral disease transmitted by sucking pest which is the major constrains for chilli production Banaskantha district. Our scientists also suggest him proper nutrient management through fertigation and micronutrient foliar supplementation had good impact on plant growth, more branching and flowering. Foliar spray of Mancozeb+Carbendazim @ 0.25% effectively reduced anthracnose problem and fruit rot problem and water soluble NPK spray impact on improving the quality of fruit at harvesting stage. The details of production package of chilli mentioned in table no.1.

Table 1. Impact of the innovation practices on farmer field in terms of economics

Sr. No.	Details	Cost (Rs.)
(A) Expenditure details		
1.	Seedling (Variety :Golden Hot: 2550 plants in 0.18 ha)	5100
2.	Field preparation, planting, Interculturing	2,100
3.	DAP (20kg), Potash (25 kg), Ammonium sulphate (55kg), NPK (10kg), Sardaramin (8Kg) and Micromix spray {Micro nutrient}(4 packet x 250 gm)	2,500
4.	Interculturing (Hand weeding)	1,450
5.	Plant Protection (Neem oil, Trizophos, Acetamaprid, Quinalphos, Dicofol, Trichoderma, Mancozeb+Carbendazim)	3100
6.	Irrigation + Drip system installation	6,500
7.	Labour (Including harvesting) 27/4/2016 to 18/8/2016	12200
	Total...	32950
(B) Income details :		
1.	Total Production 5367.50 kg x Rs.45.23/kg)	2,42,820
	Net Profit : (B-A)	209870

Outcome:

Adoption of scientific production technology of chilli suggested by KVK, Banaskantha-I, Mr. Bhartbhai gained bumper production with effective control of leaf curl virus. He has suggested other chilli grown farmers to adopt the same package of practices and created awareness among them on use of biopesticide (Neem oil), rotational pesticide uses at lower concentration, biofungicide (*Trichoderma viridea*). Scientist of KVK, Banaskantha-I also organized a field programme, farmers visit and kisan meeting on Mr. Bhartbhai field for horizontal spread of technology and recorded a video clip to show other farmers for creating awareness and highlighted his success to encourage other farmers. Special training programme was also organized on rotation use of pesticide for sucking pest management for vegetables grown farmers and promoted for use of neem oil as biopesticide.

Impact:

After approaching Scientist of KVK Banaskantha-I in 2016-17, Scientific cultivation of chilli made his life very sweet and happy. With outstanding income from just 0.18 ha of land, he has been recognized as progressive farmer in Deesa taluka under small land holding category. With his bumper income, higher profit and strong financial condition, now he would like to enter in Hi-tech farming with new farm implements, new technology and diversified high value cash crops, orchard plantation for more revenue generation from different commodity by replacing traditional field crop of groundnut and onion.



Scientist of KVK, Banaskantha-I visited Mr. Bhartbhai chilli field.