

Success story on Kiwi fruit production at Thipuzu village under NICRA

Thipuzu village of Phek district is 26 km away from Pfitsero sub division. This village is organic by default and engaged in cultivating agricultural, horticultural crops and livestock rearing. Paddy and Maize are the major cereal crop, whereas, soyabean is major pulse crop. The annual rainfall of the district is about 1600 mm however the winter is severely dry. The total house hold is 910 and the total population of the village is 4678. Thipuzu under Chozuba tehsil was taken up under the project National Innovation On Climate Resilient Agriculture NICRA in the year 2012.

The technology

Kiwi also known as Chinese gooseberry (*Actinidia deliciosa*) originated in China and is grown widely in New Zealand, China, Japan, Australia, Chile and Spain. The fruits of kiwi are oval, about the size 5–8 cm long and 4.5–5.5 cm in diameter. It has a fibrous, dull brown-green skin and bright green or golden flesh with rows of tiny, black, edible seeds. The fruit has a soft texture and a sweet but unique flavour. Approximately 7 lakh tonnes of kiwifruit enter world trade each year, with the major producers being Italy (35%), New Zealand (32%) and Chile (15%). In India it is mostly grown in the mid hills of Arunachal Pradesh, Nagaland, Himachal Pradesh, J & K, Sikkim, and northeastern hill region. The technologies demonstrated are a) Introduction of four Kiwi varieties viz. Allison, Bruno, Hayward and Monty b) Training of Kiwi plants using T Bar c) Post harvest pruning of Kiwi plants.



Economics of Kiwi Cultivation for 1.0 hectare area:

Sl. No.	Components	Expenditure (Rs)
1.	Jungle clearing and pit digging	10000
2.	Cost of planting material	15000
3.	Organic Manures (Vermicompost)	20000
4.	Insecticides & pesticides	2000
5.	Cost of training (T Bar)	95000
6.	Cost of Labour	15000
7.	Cost of low cost water harvesting structure with pipes	7000
8.	Miscellaneous expenses	10000
	Total	1,74,000
	Benefit Cost Ratio	
1.	Average yield per plant after 3 years	30 kg
2.	Yield per hectare	15 t/ha
3.	Gross Income from 1.0 ha	7,50,000
4.	B:C ratio	4.31

The intervention:

Introduction and capacity building: Assessing the suitability of soil, climate and market demand, various capacity building programme were taken up in the adopted village. Training and field demonstrations were conducted. Prospective farmers were exposed to scientific kiwi farming in Solan, Himachal Pradesh as a part of study tour from the village.

Facilitation : Four varieties of Kiwi viz. Allison, Bruno, Hayward and Monty was introduced at Thipuzu village, Pftusero under NICRA project during the year 2012. Two female variety Matua & Allsion male were planted for pollination at 9:1 ratio. Altogether 400 plants were distributed to the farmers for planting. A community area was allotted in the village with the involvement of village Climate Risk Management Committee VCRMC. A total of 100 plants were planted with a spacing of 4m x5 m occupying an area of 0.2 ha in the community farm. Iron T-bars and GI wires were provided for training of kiwi plants for longer durability.

The impact:

Subsequent to our scientific interventions in terms of suitable variety, recommended spacing, incorporation of T-Bars, timely pruning of branches, other inter-cultural practices and post harvest management has yielded bumper harvest. With an initial practicing 5 farmers in an area of about 4.5 ha in the year 2011, the area under the crop increased to approximately 58 ha involving 130 farmers with an annual production of 23 tons in 2018. The village earned gross revenue of Rs. 23 lakhs from the enterprise. In order to add value to the product and marketability, a suitable family pack of 30 kiwi fruits has been introduced. The product label bears the testimony and acknowledgment of the effort of the institute and the project NICRA. The success stories of the Kiwi farmers of NICRA village has inspired many farmers of adjoining villages to take scientific Kiwi fruit farming as a profitable enterprise.



Exposure visit of Kiwi farmers of Phek district to Himachal Pradesh



Training on Improved production technology Kiwi



T –Bars provided to farmers of Thipuzu village



Community Kiwi farm at Thipuzu village



Commercial Kiwi nursery at Thipuzu village



Packaging of Kiwi fruit under NICRA



Kiwi fruit tray ready for marketing