

Profitable diversification through tomato cultivation in Nerwa area of district Shimla- A Success Story

1. Technology/ process which was intervened for its success

In the year 1999, scientists from KVK Shimla at Rohru conducted a survey of Nerwa area of tehsil Chopal district Shimla for exploring the area for cultivation of off-season vegetable crops. The scientists observed that tomato can change the life of farmers in the area and necessary interventions were initiated in the same year by organizing training camps on cultivation of tomato. Farmers groups were organized and field trials were laid out. By seeing the progress and profitability of tomato production, the more numbers of farmer were motivated for cultivation of tomato in the area.

2. Background about case or problem

In the mountaneous terrain of district Shimla of Himachal Pradesh, the farmers of sub- tehsil Nerwa of tehsil Chopal were growing traditional cereal crops like rice, wheat and maize. They used to face the vagaries of nature for their subsistence through production of these crops. The earnings were meager and hence the living standards were very poor. Due to this, unemployment was very high in the area. With a view to exploit the opportunities like favorable climatic conditions and abundance of man power, scientists of KVK Shimla with other line departments organized training camps on cultivation of tomato as cash crop and conducted field trials on farmers fields. Few farmers of the area got motivated and initially seven farmers from different villages came forward and were adopted by KVK for tomato cultivation under critical supervision of the scientists.

3. Effect of the technology/ process on

I. Production

The Nerwa area of tehsil Chopal was under subsistence farming till 1999. After exploring the scope of tomato cultivation in the area i.e . in the year 1999, trainings were provided on cultivation of tomato and field trials were conducted on farmers fields in collaboration with line department for adoption of this venture by the farmers of the area . In the year 2000, around 150- 200 bighas were undertaken for the cultivation of tomato, which was increased to 3000 bighas in the year 2002 benefiting around 1800 families with a net return of around six crores. Upto 2006-07, the income increased to about 10 crores benefiting around 3000 families. The average yield of tomato in the area is around 500qt/ ha.

II. Economic gains (Per unit expenditure, gross income, net income, C:B ratio)

The tomato cultivation has become an integral part of people of Nerwa area. The per unit expenditure (per bigha) is Rs. 20,000/- with a gross and net return of Rs. 52,000/- and Rs. 32,000/-, respectively and the C:B ratio comes out to be 1.60.

III. Suitability in the existing farming/ cropping systems

The cultivation of tomato as cash crop was found suitable in the area and fitted well with the existing farming system. The area is totally diversified from traditional cereal crops to tomato getting high return from unit area. This has changed the economic status of the people of Nerwa area, which is evident from the change reflected in their living standards.

IV. Acceptance of technology /process in terms of views of the farmers

Most of the farmers of Nerwa area and surroundings have started growing tomato as cash crop, replacing traditional cereal crops earlier grown in the area. On receiving the high returns from tomato cultivation in comparison to traditional farming, cultivation of tomato has become the main stay and most popular component of the farming in the area. The farmers have a keen interest in tomato cultivation and the impact of trainings and demonstrations was such that the movement which was started by about 7 farmers has now increased in numbers to about 5000 at present.

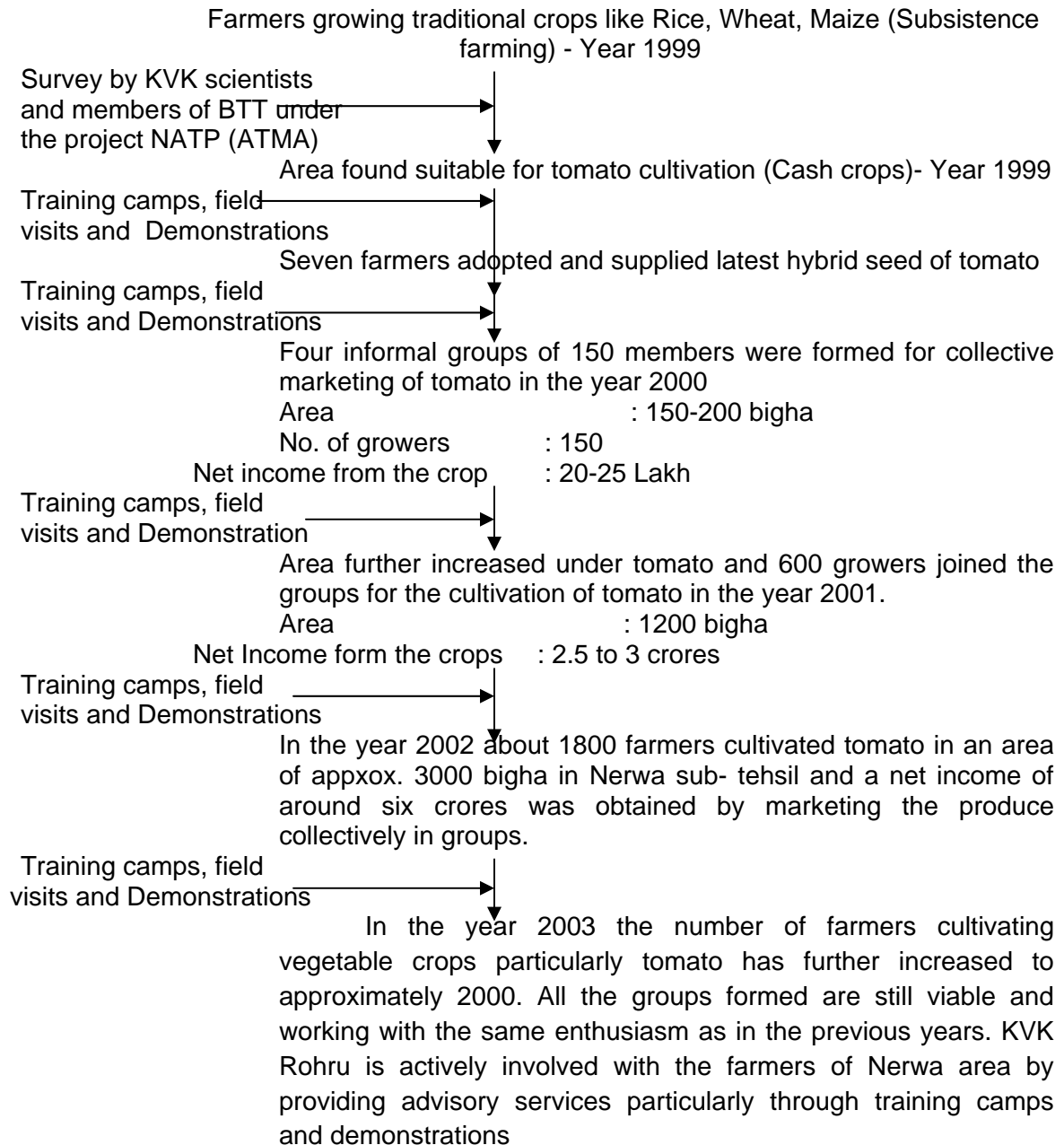
V. Acceptance of replacement of commodities

The change in farming system i.e from cultivation of cereals to tomato, required the knowledge about the cultivation of tomato and availability of inputs. Initially KVK scientists in collaboration with line departments provided trainings as well as made the availability of tomato hybrid seeds to the farmers. But once the produce started fetching returns, and the marketing of produce was explored, the farmers have started planning their schedules accordingly and procure all the requisites well in advance from the market.

VI. Horizontal spread

In the year 1999, when the intervention was initiated by organizing training camps on tomato cultivation, only seven farmers came forward, Later in 2000, a group of 150 members was constituted and on around 150- 200 bighas tomato cultivation was carried out. During 2005, when the area was visited, the data collected from different groups revealed that tomato of around 10 crores was supplied to various markets in the plains benefiting around 3000 families.

Flow chart presentation of the Horizontal spread of tomato cultivation of tomato



During the year 2005 when the area was visited, the data collected from different groups revealed that tomato of around ten crores was supplied to various markets in the plains from Nerwa sub-tehsil benefiting around 3000 families. This achievement of diversification made a dent of KVK Rohru in the farming communities of district Shimla. At present, the cultivation of tomato has completely replaced the traditional crops like rice, wheat etc. This has changed the economic status of the farmers of Nerwa area, which is evident from change in their living standard during the last five years.





Fig. 1. Diversification from field crops to high value off- season vegetable cultivation in Nerwa area of Chopal block in district Shimla

VII. Substitution/ replacement of commodities

Before 1999, farmers of the area of Nerwa used to grow cereal crops; however, interventions by the scientists of KVK Shimla with line departments motivated them for cultivation of tomato as cash crop. Tomato cultivation in an area has become a milestone on upliftment of people by fetching good returns of their produce and generating employments to youths.



Fig 2. Quality tomato production in Nerwa area of Chopal block in district Shimla

VIII. Social impact (formation of clubs, groups, federations, etc.)

The farmers of Nerwa area, when initially came forward in cultivation of tomato, formed a group, this helped them a lot especially in marketing of their produce. Later in 2000, four informal groups of 150 members were formed for collective marketing of

tomato. In 2001, 600 growers joined the group. At present four different societies namely Shallu Valley Kisan Sangh, Duwada; Pragati Sheel Kalyan Kari Krishak Sangh, Kuther; Alap Sankhyag Krishak Sangh, Piontra; Sabzi Utpatak Sagh, Bharanu and many other from Zighni Pul, Mashrahan, Gumma etc. exist in the area, dealing with cultivation and marketing of tomato.

IX. Marketing channels

Initially the produce was sold in the nearby market or in local markets. Coming up of groups and societies, different markets were explored. Now the produce are sold in Shimla, Delhi and Dehradun markets, through these societies fetching good returns to the tomato growers.

X. Establishment of process/ units

The farmers of the Nerwa area are getting good returns from selling of their produce directly in the markets. Different societies exist in the area, helping the growers in selling of tomato in different markets.

XI. Linkage with technology /development organizations

The farmers of the area are in constant contact with the scientists of the KVK regarding solutions of different problems encountered during the cropping period. Farmers are also linked with different line departments and different markets in Shimla, Delhi and Dehradun and are deriving all the necessary help and benefits from their collaboration.

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XII. Places and addresses of concerned farmers or persons who could be contacted

S. No.	Name of the farmer	Address
1	Sh Ram Saran Kalsaik	Village- Kuthar, PO- Gian, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP
2	Sh Amar Chand Negi	Village- Kiarla, PO- Kedi, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP
3	Sh Kanwar Singh Rathore	Village- Sitak PO- Kedi, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP
4	Sh Hari Singh Thakur	Village- Dhatrok, PO- Kedi, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP
5	Sh Mohan Dogra	VPO- Bharanu, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP
6	Sh Karan Vir	VPO- Bharanu, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP
7	Sh Punit Rathore	VPO- Bharanu, Sub- Tehsil- Nerwa, Tehsil- Chopal, Dist- Shimla, HP