

## Original Research Article

### **Constraints and Suggestions Regarding Training Need Assessment of Apple Growers in Mandi district of Himachal Pradesh**

**Abstract** : The goal of the current study was to determine the obstacles and recommendations for the 2022–2023(December-February) apple growers' training needs assessment in the Mandi region of Himachal Pradesh. 120 randomly chosen respondents who completed a pre-tested schedule provided the data. Descriptive research design was selected for the present study. The proper statistical tools were used to tabulate, analyses, and interpret the acquired data. According to the study, the majority of respondents (50.83%) were middle-aged, and (34.17) farmers held a medium amount of land. Farmers perceived major constraints as unprecedented weather conditions, such as heavy rainfall, snowfall, hailstorms, etc., particularly at the critical stage of apple cultivation, as a very serious problem by a number of respondents, with the majority of respondents having medium level economic motivation and risk orientation.

**Keywords:** Apple, Constraints, Suggestion and Training needs

#### **Introduction**

“Agricultural as well as horticultural sector is considered as one of the effective factor in economic development of India. Achieving food and nutritional security is possible only by making use of new technologies in farm land. Today in most parts of the world, due to limited land and water resources, increase in production and quality food is hardly possible unless need based effective techniques in production system are adopted by the farmers. People have shift towards non-conventional dietary pattern, using more of fruit, vegetable and other food item, which are rich in protein etc. In the state of Himachal Pradesh, Himachal valley is endowed with congenial agro-climatic condition for a wide range of horticulture crop. The growth in area and production of horticultural crop like peach, pear, plum and apple is quite impressive. Himachal Pradesh is rightly known as “Apple State of India. contributing 4,200 crores to the state GDP” (**Anonymous, 2013**). “The scenario of horticulture crops in India has become very encouraging. The percentage share of horticulture output in

Agriculture has become 33%. Under the purview of Agriculture & allied activities, the share of plan outlay for Horticulture which was 3.9% during IX Plan, has increased to 4.6% during the XII Plan” **(Anonymous, 2018)** “Apple is one of the most widely cultivated tree fruits. The apple is the fourth widely produced fruit in the world after banana, orange and grapes. India is ranked as the sixth largest world’s apple producing country and second largest country in area” **(Deodhar et. al. 2006)**. “The apple is the fourth widely produced fruit in the world after banana, Apple is one of the most widely cultivated tree fruits. The apple is the Training of the farmers is essential to induce motivation, create confidence and inculcate efficiency in an individual. Training of the farmers is also inevitable for imparting new knowledge and updating the skills of farmers. Training of farmers had assumed further importance and urgency in the context of the high yielding varieties and improved practices in agriculture and allied fields. In order to make any training meaningful and effective, it is imperative on the part of the training organizers to identify the training needs of the farmers based on which suitable training modules can be developed so that the appropriate training is given to the right people, in the right form, at the right time so that higher degree of productivity and profitability can be achieved” **(Prajapati and Patel, 2013)**. “Therefore, training of the farmers is ‘an intensive learning activity, assisted by competent trainers to understand and practice the skills required in a deficit situation in the knowledge, skills and attitude level of the practicing farmers as well as the availability of appropriate applicable information, the utilization of which will correct the problems” **(Agwu and Ejem 2022)**. “Apple farming is the fastest growing economic activity of the state and is being grown in 9 districts out of 12 districts. Due to varied agro-climatic conditions across the districts, there exists a large variation in the area output growth of apple fruit crop. Among all the fruits grown in the State, apple crop occupies a premier position in terms of production and productivity. Apple was found to be predominant amongst various types of fruits and commercially the most important temperate fruit”. **(Firdous Ahmad Wani<sup>1</sup>, Dr. Manoj Songara 2018)**. “Apple is the most vital temperate fruit crop of the northwestern Himalayan region in India. In particular, it accounts for 48.83 per cent of total area under fruit crops and 83.14 per cent of the total fruit production of Himachal Pradesh” **(Horticulture development in Himachal Pradesh at a glance, 2015)**.

“The Indian apple’s peak season is between August and December. During the off season, apples are imported. While the profit margins vary from 10-15%, losses can be unlimited” **(Neha Dewan 2017)**. “The Apple cultivation is the most important horticultural farming in Himachal Pradesh (Kinnaur). It has got great future prospects in term of export”. **(Gourab Bera, 2015)**

“Training is a process of acquisition of new skills, attitude and knowledge in the context of preparing for entry into a vocation or improving one’s productivity in an enterprise. Effective training requires a clear picture of how the trainees or farmers will need to use information after training in place of local practices what they have adopted before in their situation. Training of the farmers is carried out so as to be fitted, qualified and proficient. The purpose is to impart knowledge and skills to the farmers so that they can perform some desirable tasks” **(Halim and Ali, 1988)**. “The training needs of farmers or any individual is difference between what is and what ought to be”. **(Adesoji et al. 2006)** “The training of farmers provides management support and commercial awareness; it affords small farmers a better understanding of their opportunities and how they might be managed”. **(Davis et. al. 2007)**

#### **Objectives:**

- 1. To assess the Socio-economic profile of the farmers.**
- 2. To trace the constraints, suggestions regarding training needs assessment of apple growers.**

#### **I. Materials and Methods:**

The research study was conducted in Mandi district of Himachal Pradesh start during the year 2022-2023. Mandi district was purposively selected for the study. There are 11 blocks in Mandi district of Himachal Pradesh. Out of 11 blocks Seraj block was selected through purposive sampling. There are 296 villages in Seraj block. Out of which 5 villages were selected randomly viz: **(Dhawas, Cheuni, Lamba Thaach, Chhatri and Tung)**. for study. Thus, in all 120 apple grower constituted sample for the investigation. Based on the objectives of study, an interview schedule was prepared. The information was elucidated from respondents with the help of structured scheduled through descriptive research design. The information was collected by personally interviewing respondents using structured interview schedule.

## II. Results and Discussions:

### 1. Socio Economic Profile

**Table no. 1 Socio economic Profile of the respondents.**

<b>S.n o.</b>	<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>01.</b>	<b>Age</b>		
	Young (<35)	19	15.84
	Middle (36-55)	61	50.83
	Old (55 and above)	40	33.33
<b>02.</b>	<b>Education</b>		
	Illiterate	11	9.17
	Primary school education	11	9.17
	High schooleducation and above	98	81.66
<b>03.</b>	<b>Family Size</b>		
<b>1</b>	Small (up to 6 members)	76	63.33
<b>2</b>	Medium (7-14 members)	29	24.17
<b>3</b>	Large (15 and above)	15	12.50
	<b>Total</b>	120	100
<b>04.</b>	<b>Family Type</b>		
	Nuclear	89	74.17
	Joint	31	25.83
<b>05.</b>	<b>Occupation</b>	<b>Main (%)</b>	<b>Subsidiary (%)</b>
	Agriculture labour	42 (35.00%)	78 (65.00%)

	Agriculture only	76 (63.33%)	44 (36.67%)
	Caste based occupation	71 (59.17%)	49 (40.83%)
	Service	34 (28.33%)	86 (71.67%)
	Business	52 (43.33%)	68 (56.67%)
<b>06.</b>	<b>Land Holding</b>		
	Marginal	34	28.33
	Small	30	25.00
	Medium	41	34.17
	Large	15	12.50
<b>07.</b>	<b>Annual Income</b>		
	Low (up to 1 lakh)	40	33.34
	Medium (1- 2lakh)	55	45.83
	High (2-3 Lakh )	25	20.83
<b>08.</b>	<b>Source of Information</b>		
	Low (16-19)	25	20.83
	Medium(20-21)	57	47.5
	High (22-24)	38	31.67
<b>09.</b>	<b>Farm Power</b>		
	Low (14-15)	34	28.34
	Med (16)	68	56.66
	High (17)	18	15.00
<b>10.</b>	<b>Economic motivation</b>		
	Low (06 to18 score)	37	30.83
	Medium (19 to 30 score)	52	43.33
	High (31 to 42 score)	31	25.83
<b>11.</b>	<b>Risk Orientation</b>		

	Low	41	34.16
	Medium	46	38.33
	High	33	27.5

A majority (50.83%) % of farmers were from the middle-aged group, and 63.33% of respondents had a small family size, i.e., up to 6 members. In selected villages (90.83%) were literate, while (9.17%) of the illiterate respondent were doing agriculture only (76%), with 34.17% of medium-type farmers having medium land holdings, and 69.17% of the respondent having medium income (1 lakh–2 lakh). It reveals that the majority of the respondents, accounting for 74.17% of the total sample (47.5%), had a medium score of information, the maximum farmer had a medium level of economic motivation (43.33%), and 38.33% of the total sample had a medium level of risk orientation.

### B. Constraints faced by the apple growers.

The main problems faced by the apple growers about apple cultivation were identified and measure on three point scale namely most serious, Serious and Not serious with a score of 3, 2 and 1 respectively accordingly degree of seriousness was determined. **The data have been presented table 2.**

**Table 2 : Constraints faced by the apple growers**

S.No	Problems/Constraints	Most serious (%)	Serious (%)	Not Serious (%)	Rank
1	Unprecedented weather conditions, such as heavy rainfall, snowfall, hailstorm etc. particularly at the critical stage of apple cultivation.	81 (67.5)	32 (26.6)	7 (5.83)	I
2	Non- availability of critical inputs in time. (Fertilizers, Pesticides etc.)	37 (30.8)	71 (59.1)	12 (10.00)	VII
3	Poor economic condition	33 (27.5)	52 (43.3)	35 (29.16)	VIII
4	Lack of transportation facilities.	71 (59.1)	29 (24.16)	20 (16.66)	III
5	Road blockage particularly at the time of marketing.	72 (60)	43 (35.83)	5 (4.16)	II
6	Lack of technical guidance.	52 (43.3)	59 (49.1)	9 (7.5)	VI

<b>7</b>	Non- availability of storage facility.	58 <b>(48.3)</b>	49 <b>(40.8)</b>	13 <b>(10.83)</b>	<b>V</b>
<b>8</b>	Lack of marketing knowledge.	61 <b>(50.8)</b>	48 <b>(40)</b>	11 <b>(9.16)</b>	<b>IV</b>

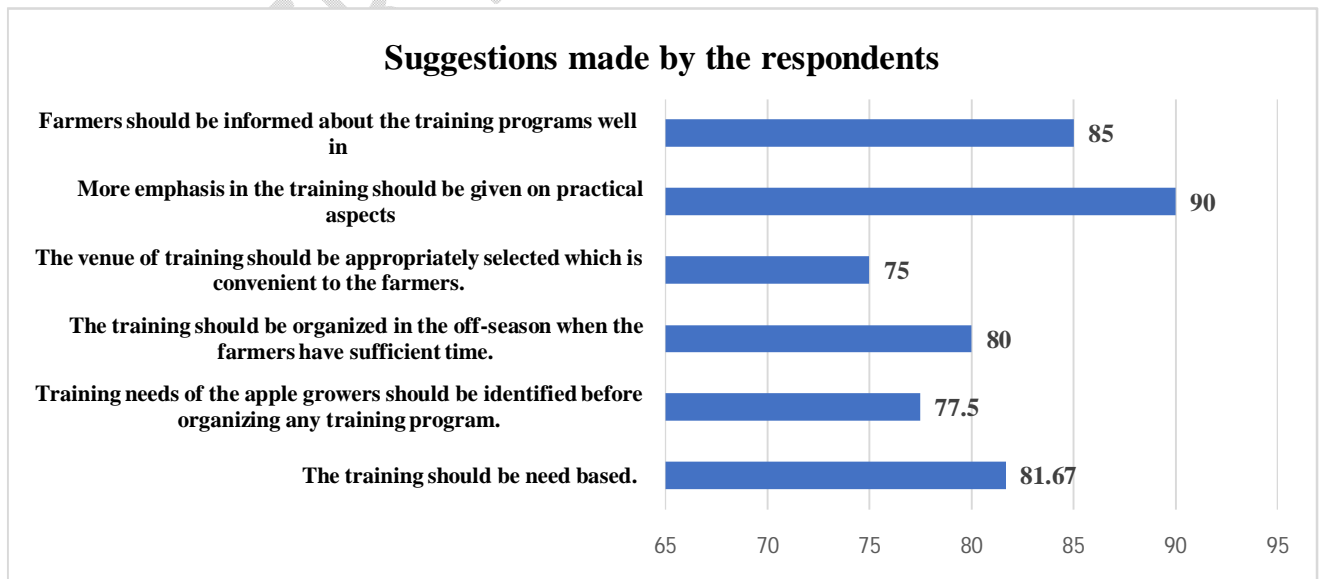
It has been noticed from the data that unprecedented weather conditions, such as heavy rainfall, snowfall, hailstorms, etc., particularly at the critical stage of apple cultivation, were perceived as a very serious problem by a number of respondents, such as (81, 32, and 7) who were most serious, serious, and not serious respectively and also ranked I followed by road blockage, particularly at the time of marketing (72, 43, and 5), which were most serious, serious, and not serious, ranked II respectively, and a lack of transportation facilities (71, 29 and 20) were the most serious, serious, and not serious, ranked III respectively, and lack of marketing knowledge (61, 48, and 11) were the most serious, serious, and not serious, ranked IV respectively, were the major constraints. There were some other problems, like a lack of technical guidance, the non-availability of storage facilities, and the non-availability of critical inputs in time (fertilisers, pesticides, tools, etc.), which created hindrances in the apple cultivation. Hence, it is suggested that the government make efforts to provide critical inputs in time along with technical guidance, besides ensuring storage facilities for the apple growers.

**Table 3 : Suggestions for making the training programs more effective.**

<b>S no.</b>	<b>Suggestions</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Rank</b>
<b>1</b>	The training should be need based.	98	81.67	<b>III</b>
<b>2</b>	Training needs of the apple growers should be identified before organizing any training program.	93	77.5	<b>V</b>
<b>3</b>	The training should be organized in the off-season when the farmers have sufficient time.	96	80	<b>IV</b>

4	The venue of training should be appropriately selected which is convenient to the farmers.	90	75	VI
5	More emphasis in the training should be given on practical aspects	108	90	I
6	Farmers should be informed about the training programs well in time	102	85	II

A majority of the respondents suggested that more emphasis in the training programs should be given on practical aspects (90%), farmers should be informed about the training programs well in time (85%) and training should be need based (81.67%). Those who suggested that training should be organized in the off-season when the farmers have sufficient time (80%) and those who suggested that training needs of the apple growers should be identified before organizing any training program (77.5%). However, a substantial percentage of them also suggested that the venue of training should be appropriately selected which may be convenient to the farmers.



**Fig 1: Suggestion made by the respondents**

**Conclusions:** A majority (50.83%) % of farmers were from the middle-aged group, and 63.33% of respondents had a small family size, i.e., up to 6 members. In selected villages, 90.83% were literate, while 9.17% of the illiterate respondent were doing agriculture only (76%), with 63.33% of small farmers having small land holdings and 69.16% of the respondent having a medium income (1 lakh– 2 lakh). It reveals that the majority of the respondents account for 74.17% of the total sample. It has been noticed from the data that unprecedented weather conditions, such as heavy rainfall, snowfall, hailstorms, etc., particularly at the critical stage of apple cultivation, were perceived as a very serious problem by a number of respondents, such as (81, 32, and 7) who were most serious, serious, and not serious respectively and also ranked I, followed by road blockage, particularly at the time of marketing (72, 43, and 5), which were most serious, serious, and not serious, ranked II, respectively, and a lack of transportation facilities (71, 29 and 20) were the most serious, serious, and not serious, ranked III, respectively. A majority of the respondents suggested that more emphasis in the training programmes should be given on practical aspects (90%), farmers should be informed about the training programmes well in advance (85%), and training should be need-based (81.67%).

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