

Specific Technology Adopted and Constraints Faced by the Farmers in Hills

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ABSTRACT

Though forest and grasslands are two predominant land uses of hill region, production of foodgrains and horticultural crops is necessitated to meet the local needs. From the present study though it is clear that hill farmers are adopting certain major farm technologies but still there exist a wide technological gap regarding hill farming. Since most of the farmers are doing traditional farming but at the same time they are facing a lot of constraints such as, attack of insect pest, unavailability of improved seeds etc., that they want to overcome. So proper training of farmers and transfer of technology will certainly help in improving the productivity of hill agriculture.

Though agriculture is practiced in limited area in the hill region, it is the main stay of the hill people. Agriculture is practiced on subsistence level at hill and is mostly rainfed. No doubt the area and production of total food grain in hills increased but due to certain constrains not much differences have been occurred in average yield of crop. Agricultural development in the hills is badly hampered by the socio economic, physical and technological constraints prevalent on the hills, which include small and scattered land holding, poor communication, transport, marketing facilities and many more. Therefore, keeping this in view the present studies were designed to study the specific technologies adopted by the hill farmers and to study the constraints associated with hill farming.

MATERIALS AND METHODS

The present study was conducted in Shimla district of Himachal Pradesh. After discussion with the scientists of Regional Fruit Research Station, Mashobra and Patwaris, two villages, Saddi and Seepur of Theog and Mashobra block respectively were purposively selected on the basis of their progressiveness. Village Saddi was selected as a progressive village while Seepur as less progressive. Twenty-five farmers based on different land holdings were randomly selected from each village, thus making the total number of respondents to fifty. The data were collected through personnel interview and analysed using statistical methods such as percentage and rank.

RESULTS AND DISCUSSION

The respondents were asked to report the constraints and specific technology they are adopting in hill farming. During investigation a variety of adopted technology and constraints

were expressed by the respondents, which were tabulated and are presented in Table 1 and 2.

SPECIFIC TECHNOLOGY ADOPTED BY HILL FARMERS

The data presented in Table-1 shows that the hill farmers are not adopting various modern technologies for improving their farming. The data reveals that only 50 per cent of farmers are practicing training and pruning in the horticultural crops. Also, some major farm practices like timely and appropriate doses of fertilizer application (24 per cent), pesticide application (18 per cent) etc are adopted by the farmers. However, some important practices like use of fungicide, mulching in fruit crops. weed management etc. are very less adopted by hill farmers.

Table 1. Specific technology adopted by hill farmers

Specific Technology	Frequency (N-50)	Rank
Mulching in fruit	1(2.0)	IX
Foliar spray of 4% urea with fungicide	4(8.0)	VI
Use of plastic hail net against snow	3(6.0)	VII
Spray of micro nutrients, cytozyme and plant growth regulators	2(4.0)	VIII
Training and pruning in fruit	25(50.0)	I
Fertilizers application time and doses method according to age of plant	12(24.0)	II
Use of pesticide at right time with right doses	9(18.0)	III
Planting technique of fruit plants	5(10.0)	V
Recent fungicide use	1 (2.0)	IX
Weed management in fruit and vegetables	2(4.0)	VIII
Planting and seeding of grasses in orchard	2(4.0)	VIII
High density orcharding	4(8.0)	VI
Use of improved dwarf variety of apple	8(16.0)	IV

Figure in parenthesis indicate percentage

CONSTRAINTS ASSOCIATED WITH HILL FARMING

The data presented in Table-2 show that among the various farming constraints, "attack of insect pest in various crops (70%), transport facilities (62%) and unavailability of improved seeds (62%) were the major constraints being faced by most of the farmers in hills. Also, 52% farmers felt scarcity of fodder for their animals as another major problems, that's why instead of keeping animals use for ploughing purpose, they used to rear small animals like sheep, goat etc. Though, agriculture practice on hills are mostly rainfed but still 50% of farmers expressed

lack of irrigation facilities as another constraint i.e., the farmers are not able to irrigate their field on appropriate time, which badly hamper the production of fruits and vegetables. Since people are using less inorganic fertilizers in the hills and that too are easily available at district and taluka head quarters, so only 22% farmers expressed unavailability of fertilizers as a constraint in hill farming. Since the people on hills are well acquaint with hill climate and use to grow crops accordingly, therefore, only 12% farmers feel natural climatic condition as constraints that they are facing in farming.

Table-2. Constraints associated with hill farming

Constraints	Frequency (N=50)	Rank
Lack of irrigation	25(50.0)	IV
Weed problems	16 (32.0)	VIII
Insect pest attack	35 (70.0)	I
Yellowing of legumes	22(44.0)	V
Stunting of crops	17(34.0)	VII
Fodder problems	26(52.0)	III
Unavailability of improved seeds	31(62.0)	II
Marketing problems	17(34.0)	VII
Unavailability of fertilizers	11(22.0)	IX
Leaf scorching	6(12.0)	X
Poor grain set	11(22.0)	IX
Disease infection and rotting	19(38.0)	VI
Natural climatic condition	6(12.0)	X
Transport facilities	31(62.0)	II

Figures in parenthesis indicate percentage

The finding of the study revealed that wide gap between the demand and supply of quality seeds of the recommended high yielding improved crop variety and other inputs like fertilizers, irrigation facilities and lack of adequate knowledge about improved technology to the farmers are the major reasons for poor crop productivity. Since most of the farmers are doing traditional farming, so, proper training and transfer of technology will help in overcoming this technological gap among hill farmers.

REFERENCES

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