

A Study on farmers in adoption of improved maize cultivation practices in hills

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Abstract

In the present context though it is a clear that hill farmers are adopting certain farm technologies but still these exist 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 problems. Such as land preparation, correct time of sowing, correct seed rate, method of sowing, problem in using of HYV, adoption of fertil- izer, weed control/inter culture, plant protection practices etc, they want to over come from the problems.

Introduction

The rapid growth of population and technological revolution has created a serious concern to the existence of life on earth. Indiscriminate use of natural resources has also posed a serious threat to the environment. Rural people in general are dependent on locally needs, they most oftenly fed temped of feeling trees indiscriminately to meet their requirements in terms of food, fuel fodder etc. Under these prevailing conditions, agriculture is practiced in limited area in hill region it is the main stay of the hill people. Agriculture is practiced on subsistence level at hill and is mostly rain fed. No doubt the area as well as production of the total food grain in hill area were increasing day by day, but hill farmers were having many problems. While adopting the improved maize cultivation practices, due to poor communication network, transport, small/scattered land holding size, lack of marketing facilities. Therefore, keeping up the above views the present study were designed to study the specific technologies, which will be related to the hill farmers.

Materials and Methods

The investigation was carried out in Mandi district of Himachal Pradesh, after discussion with S.M.S. (Subject Matter Specialist), which was selected purposively in the first stage of sampling. While in the second stage, Dadour block was selected randomly, total five (5) villages namely – Nalsar, Bihura, Darbthu, Bora and Khuri were selected from this block based on proportionate random sampling. Out of the total farm families in these villages' approximately 90 farm families, which is constituted 20 per cent of the whole population were selected. The head of the family was interview with the help of pre-tested schedule developed for this purpose and analyzed by using by statistical methods such as percentage and rank.

Results and Discussion

The presented in the Table 1, shows that there are so many, problem that are faced by the farmers at the time of adoption of improved cultivation practices. In order to bridge the technological gap there is need for location specific communication research compassing all accepts of technologies of maize. Still large groups of small farmers do not the use the correct dose of fertilizer, some time they were using excessive seed rate, it is also great problem with maize grower. The problem are due to the seed cost of H.Y.V. seeds, plant protection measures, fertilizer doses, weedicide application etc; the major constraints, being faced by 94.94 per cent of the farmers in hill. And 83.33 per cent were using as fodder for mulch animals, due to the scarcity of fodder crop for their milch animals.

Also, 77.78 per cent farmers felt that it will take more time, lack of technical knowledge for adopting plant protection measures, fertilizer doses, weed control methods were another major problems. That's why instead of maize cultivation practices on hills are mostly go for traditional methods though, agriculture practice on hills are mostly rain fed. 72.22 per cent farmers were depending upon it; due to lack of irrigation facilities as another constraint and also, the farmers are not able to irrigate their field on appropriate time, while badly hamper the production of maize crop.

While, 66.67 per cent of the farmers were in the opinion-lack of the specific technology knowledge, method of sowing is quite expensive, lack of guidance for fertilizer application, inter culture control methods. Lack of technical knowledge for correct seed rate used, it is inferred due to poor extensive services by the district and taluka head quarters. 61.11 per cent of the farmers were feels risky of using H.Y.V. and lack of technical knowledge for method of sowing, whereas, 55.56% farmers were having the lack of guidance for plant protection measures, while, 50.00% were having scattered field, so its

very difficult for them to adopt the method of sowing as well as land preparation. Whereas, 44.44% of farmers were having the lack of guidance for adopting H.Y.V., spraying/duster practices for plant protection, due to low economic status the majority of small farmers having lack of correct fertilizer doses as well as seed rate.

Table 1: Problem faced by farmers in relation to adoption of improved maize cultivation practices

S. No.	Specific technology	Frequency (N=90)	Rank
A. Problem in using of H.Y.V. seed			
1.	Costly	85(94.94)	I
2.	Lack of technical knowledge	60(66.67)	V
3.	Risky	55(61.11)	VI
4.	Lack of guidance	40(44.44)	IX
5.	Poor living standard	30(33.33)	X
6.	Lack of marketing facilities	15(16.67)	XIII
7.	Animal attack	10(11.11)	XVI
8.	Lack of subsidiary	5(5.56)	XIX
B. Method of sowing			
1.	It will take more time	70(77.78)	III
2.	It is to much costly	60(66.67)	VI
3.	Lack of technical knowledge	55(61.11)	V
4.	Scattered field	45(50.00)	VIII
5.	Lack of labour	20(22.22)	XII
C. Plant ptotection practices			
1.	It is costly	85(94.94)	I
2.	Lack of technical knwledge	70(77.78)	III
3.	Lack of guidence	50(61.11)	VIII
4.	Lack of spraying/duster's	40(44.44)	IX
5.	Low economic status	30(33.33)	X
6.	Scattered/small field	15(16.67)	XIII
7.	Lack of susidiary	9(10.00)	XVII
D. Adoption of fertilizer			
1.	To much costly	85(94.94)	I
2.	Lack of technical knowledge	70(77.78)	III
3.	Lack of guidence	60(66.67)	V
4.	Low economic status	40(44.44)	IX
5.	Lack of susidiary	25(27.78)	XI
6.	Scattered/small field	15(16.67)	XIII
E. Weed control/Inter culture			
1.	It is costly	85(94.94)	I
2.	Lack of technical knowledge	70(77.78)	III
3.	Lack of interculture	60(66.67)	V
4.	Low economic status	30(33.33)	X
5.	Scattered/small field	15(16.67)	XIII
6.	Lack of susidiary	8(8.89)	XVIII
F. Correct time of sowing			
1.	Depend on rainy season	65(72.22)	IV

2.	Lack of draft animal	20(22.22)	XII
3.	Lack of manual labour	10(11.11)	XVI
g. Correct seed rate			
1.	It can be used as fodder	75(83.33)	II
2.	Lack of technical knowledge	60(66.67)	V
3.	Lack of guidance	40(40.44)	IX
4.	It is risky	15(16.67)	XIII
5.	Attack of animal	5(5.56)	XIX
H. land preparation			
1.	Lack of technical knowledge	45(50.00)	VIII
2.	Availability of labour	15(16.67)	XVI
3.	Slope of land	13(14.44)	XIV
4.	Guidance	12(13.33)	XV
5.	Scattered /small field	5(5.56)	XIX

Also 33.33 per cent, which is one third of the total of farmers were having poor living standard. So it very difficult for them to adopt H.Y.V. recommended doses, adopting inter culture practices, 27.78% farmers were not getting any subsidiary on fertilizer for adopting the recommended doses. 22.22 per cent of farmers were having lack of manpower during sowing time. While, 16.67% farmers were facing the problems of marketing facilities, scattered farms for adopting plant protection measures, fertilizer doses, weed control/inter culture method, less availability of man power during land preparation, also farmers feel risky due to lack of communication/marketing network. Whereas, 14.44% of farmers were facing the problem due to sloppy land on hills, 13.33% were having lack of guidance of land preparation.

Also, 11.11% farmers were having the problem of animal attack due to the lack of proper fencing/ protection, problem of manual labour at the time of sowing. 10 per cent farmers were not getting any subsidiary on plant protection measures. 8.89 per cent were facing the transportation problem for getting fertilizers doses in time to their field. While the remaining 5.56% farmers were not getting any subsidiary on H.Y.V., knowledge of correct seed rate, due to animal attack and scattered field problem for land preparation. The finding of the study reveals that there is wide gap between the demand and supply. Specially quality of seed on subsidiary basis, method of sowing, recommended dose of fertilizer, plant protection measures, using correct seed rate in time with land preparation and lack of adequate knowledge about improved technology to the farmers are the major reasons for poor productivity. Since most of the farmers are doing traditional farming of maize cultivation. So, the proper training and transfer of technology will help the hill farmers to overcome from this problem.

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