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Attitude of farm women towards improved agricultural technology

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Abstract

The present study was conducted at Farmer's Training Centre, Sundernagar, district Mandi of Himachal Pradesh. Out of total 80 groups formed by the Department of Agriculture in the district under macro management – women in agriculture scheme, only 20 groups were purposively selected for the study. A sample of 80 respondents was taken to study the attitude of farm women towards improved agricultural technology. The results indicated that majority (56.25 %) of the farm women possessed highly favorable attitude towards the improved agricultural technology followed by favorable attitude (30.00 %). Only 5.00 per cent of the women of neutral opinion and 8.75 per cent had unfavorable attitude about the improved agricultural practices.

Introduction

Agriculture is the predominant sector and is the largest source of income and employment in the Indian economy. About 80 percent of the country's population resides in rural areas. Agriculture provides employment and thereby it contributes as a source of livelihood for over 70 percent of total population. The female population constituted nearly half of the total population plays a very significant role in agriculture.

Women play a significant and crucial role in agricultural development and allied fields including in the main crop production, live stock production, horticulture, post harvest operations, agro/social forestry and fisheries etc. By and large they have remained as "invisible workers". In Himachal Pradesh also women's contribution in performing agricultural operations is quite high but still they are considered as non-workers. Even the research system in agriculture has been male oriented. No deliberate efforts have been made to generate women specific home and farm technologies to increase their efficiency and effectiveness. In the recent years, various developmental projects for the up-liftment of farm women have been taken up to provide training with emphasis on skill development in agriculture and allied areas but the gap between what is recommended and what is actually adopted by the women is fairly wide even today. This stems from the fact that there is no or low out reach of the personnel involved in the intervention of the appropriate technologies to be adopted by the rural women or unfavorable attitude of farm women towards new improved technologies.

Human behavior is largely a function of attitudes and more so in a free choice society like ours. The predisposition to action is an essential feature of an acceptable definition of attitude. Attitude can also be defined as the degree of positive or negative affect associated with some psychological object. The new strategy of empowering women includes adoption of scientific package of practices coupled with knowledge and skills in applying the technology for higher production. It is therefore important that the attitude of farm women is a prelude for successful adoption of improved agricultural technology. Keeping this in view, the present study "To measure the attitude of farm women towards improved agricultural technology" was undertaken.

Material and Methods

The Department of Agriculture has formed 80 groups of farm women in all the 10 developmental blocks of Mandi district under Macro Management scheme – Women in Agriculture. Every block has 8 groups consisting 20 farm women in each group. Out of total blocks, only 8 blocks namely Sadar, Gopalpur, Sundernagar, Drang, Gohar, Seraj, Balh and Dharampur having different farm women groups were taken for study. The department of Agriculture has organized vocational trainings to 20 groups of farm women namely Nagwain, Gopalpur, Bhambla, Mahadev, Kangu, Majharnu, Barot, Upper Barot, Batheri, Maseran, Pundeer, Siyanj, Sukki Bain, Gunas, Sangalwara, Ballichowki, Leda, Dhaban, Sidhyani and

Cholthara from the selected blocks. From each group 4 farm women have attended the vocational training during the month of December, 2004 at Farmer's Training Centre, Sundernagar. Thus, a total of 80 farm women belonging to different groups constituted the sample for study.

The scale developed and used by Sadamate (1978) and Rao (1993) was used for this study. This scale consists of 20 attitude statements. Out of 20, 10 statements were the indicators of favorable attitude and the remaining 10 were the indicators of unfavorable attitude. The 3 columns represents continuum of 'agreement' to 'disagreement'. The deviation from 5-point continuum of Linkert (1932) was made for smooth administration of scale to farm women. The three points on the continuum were 'agree' 'undecided' and 'disagree' with respective weightage of 3,2,1 for positive statements and with 1,2 and 3 for negative statements.

The scale for finding out the attitude towards improved agricultural technology was then administered to the respondents to obtain their response to each of the statement in terms of their own degree of agreement or disagreement. The score for each individual on the scale was computed by summing the weights of the individual item response. The possible score ranges from 20-60.

Table 1. Categorization of respondents based on their attitude score range

Sr.No.	Category of Attitude	Score range
1.	Highly unfavorable attitude	20-29
2.	Unfavorable attitude	30-39
3.	Neutral attitude	40
4.	Favorable attitude	41-50
5.	Highly favorable attitude	51-60

Results and Discussion

As evident from the Table 2 that a majority 56.25 per cent of the farm women possessed highly favorable attitude towards the improved agricultural technology followed by favorable attitude (30.00 %). Only 5.00 per cent of the women were of neutral attitude about the improved agricultural practices and 8.75 percent had unfavorable attitude. None of the respondents found in highly unfavorable category of attitude. From the above table it can be concluded that majority of the farm women had highly favorable attitude followed by favorable attitude. This might be due to the fact that they might have convinced about the benefits of the technology or they are well aware about the various programmes related to empowerment of rural women run by the government. This finding is in agreement with the findings of Sadamate (1978), Samanta and Reddy (1982), Kapgate and Ingle (1988) and Punna Rao (1993).

Table 2. Distribution of respondents based on attitude scores towards improved agricultural technology

Sr. No.	Category of attitude	Respondents	
		Frequency	Percentage
1.	Highly unfavorable attitude	-	-
2.	Unfavorable attitude	7	8.75
3.	Neutral attitude	4	5.00
4.	Favorable attitude	24	30.00
5.	Highly favorable attitude	45	56.25

It is observed from the Table 3 that all the respondents (100.00 %) have agreed that improved agricultural technology solve food problem. The reason being that the farm women were convinced about the importance of improved agricultural technologies for getting higher returns. Similarly for the statement upliftment of farm women they should be encouraged for the cultivation of cash crops, all the farm women were found to be agreed because they might have now understand that by the cultivation of cash crops like vegetables and floriculture their socio-economic status can be uplifted. A good majority of farm women (67.50 %) were disagreed with that old practices are better than to take risk in improved agricultural practices whereas 23.75 per cent and 8.75 per cent of the respondents were having agreed and undecided opinion for this statement. The attitude of farm women can be changed favorably by exposing them to progressive farmers' fields, by organizing awareness programmes as well as by conducting demonstrations on improved agricultural technology on their fields. A large majority (87.50 %) of the farm women are in positive view that improved agricultural technology should be undertaken extensively, reason being the farm women they are convinced with the

improved technologies and feel to extend to the same others. At the same time this was disagreed by 12.50 per cent of the respondents. Use of improved agricultural practices enhances the infestation of pests in crops was disagreed by 78.75 per cent of the respondents and agreed by 21.25 per cent of the respondents. This clearly shows the positive attitude of the respondents. 66.25 per cent of the respondents have disagreed with the statement that improved agricultural technology is not the solution to remove poverty and it was agreed by 21.25 per cent of total sample. This clearly shows the positive attitude and because the impact of the improved technologies have been realized by them.

It adds prestige to be adopter of a new practices was agreed by 85.00 per cent, disagreed by 5.00 per cent and undecided by 10.00 per cent. This might be due to the fact that all agreed category respondents were having sound contact with extension workers or the demonstration conducted by the extension workers developed the favorable attitude whereas undecided and disagreed respondents are either uncovered by the extension agents. Therefore, extension agents should keep this in view. A large majority (67.50 %) of the respondents had the positive attitude about the recommendation of iron plough. The reasons for disagreed and undecided category might be that they have not realized the importance and use of iron plough. To create a favorable attitude towards iron plough efforts of extension workers in motivating are required. The table also shows that the statement for improved agricultural technology is not a solution of removing women indebtness was disagreed by 61.25 per cent, agreed by 32.50 per cent and undecided by 6.25 per cent of the total sample. The statement getting soil tested before the use of fertilizers is advantageous was agreed by a large majority of the respondents, disagreed by 22.50 percent and undecided by 6.25 percent. All the agreed respondents have been using fertilizers and were aware about the importance of soil testing whereas, disagreed and undecided category of respondents might have been not aware about the importance of soil testing. Therefore, extension workers have to create positive attitude among them by conducting awareness programmes on soil testing and judicious use of fertilizers. A large majority of the respondents were of positive view that seed treatment with chemical should be done to reduce the soil borne diseases and pests whereas, for the respondents having negative attitude method demonstration should be taken up to impart the skill to large number of beneficiaries. Scientific methods for the cultivation of vegetables are very complex. This statement was agreed by 23.75 per cent, disagreed by 67.50 per cent and undecided by 8.75 per cent of the respondents. A majority of disagreed because they are practicing and do not find any difficulty in adopting the cultural practices. The agreed and undecided category are those who either did not realize the benefits of cultivation of vegetable crops or lack in skill in adopting vegetable cultivation. To create favorable attitude about vegetable cultivation exposure visits to the progressive vegetable growers fields or result demonstrations can be organized in the village. It is amply clear from the table that positive attitude has been observed about the pest control with pesticides because the respondents who have agreed are either have used the pesticide or they have the knowledge of pesticides whereas disagreed category might not be aware about the plant protection measures. Few undecided respondents might be aware of the plant protection yet they do not have knowledge about selection and use of pesticides. Therefore, more training programmes clubbed with demonstration have to be organized to enhance the knowledge and skill of the beneficiaries. For the statements like Improved agricultural practices are more suitable to farm women and the HYVs are more profitable than the local varieties, positive opinion have been observed by the large majority of the respondents. Hence, extra efforts of extension agents are needed in order to make understand the suitability and profitability of improved agricultural practices especially among the respondents having negative attitude. For the statement that the application of fertilizers reduces the health and use of fertilizers should be continued even in the absence of subsidy was agreed by 40.00 per cent, 68.75 per cent, disagreed by 47.50 per cent, undecided by 12.50 per cent and 16.25 per cent respectively. To create a positive attitude, the extension worker should educate the beneficiaries to apply the balanced fertilizers to their crops to have better crop yield. Therefore, the extension worker must develop the positive attitude among the disagreed and undecided category of respondents. A large majority of the respondents (62.50 %) were disagreed about the statement that pesticides should not be used for the control of diseases and pests. This clearly shows the positive attitude towards the pest control. Thus,

Table 3. Responses of the respondents to different statements of attitude scale

Sr. No.	Statements	Agree		Disagree		Undecided	
		F	%	F	%	F	%
1.	Improved agricultural technology solve food problem (+)	80	(100.00)	-		-	
2.	It is better to use old practices than to take risk in improved agricultural practices (-)	19	(23.75)	54	(67.50)	7	(8.75)
3.	Improved agricultural technology should be adopted by all the farm women (+)	70	(87.50)	10	(12.50)	-	
4.	Use of improved agricultural practices enhances the infestation of pests (-)	17	(21.25)	63	(78.75)	-	
5.	Improved agricultural technology is not the solution to remove poverty (-)	17	(21.25)	53	(66.25)	10	(12.50)
6.	It adds prestige to be adopter of a new practice (+)	68	(85.00)	4	(5.00)	8	(10.00)
7.	Local plough is not desirable than the recommended iron plough for thorough land preparation (+)	54	(67.50)	20	(25.00)	6	(7.50)
8.	Improved agricultural technology is not a solution of removing women indebtness (-)	26	(32.50)	49	(61.25)	5	(6.25)
9.	Getting soil tested before the use of fertilizers is advantageous (+)	57	(71.25)	18	(22.50)	5	(6.25)
10.	For the upliftment of farm women they should be encouraged for the cultivation of cash crops like vegetables & floriculture (+)	80	(100.00)	-	-		
11.	Seed treatment with chemicals is not beneficial to crop growth (-)	8	(10.00)	68	(85.00)	4	(5.00)
12.	Scientific methods for the cultivation of vegetables are very complex (-)	19	(23.75)	54	(67.50)	7	(8.75)
13.	Killing pests with pesticides increases the crop yield (+)	67	(83.75)	12	(15.00)	1	(1.25)
14.	Improved agricultural practices are more suitable to farm women (+)	64	(80.00)	10	(12.50)	6	(7.50)
15.	The HYVs are more profitable than compared with local varieties (+)	54	(67.50)	18	(22.50)	8	(10.00)
16.	The produce grown by the application of fertilizers reduces the health (-)	32	(40.00)	38	(47.50)	10	(12.50)
17.	Use of fertilizers should be continued even in the absence of subsidy (+)	55	(68.75)	12	(15.00)	13	(16.25)
18.	Pesticides should not be used for the control of diseases & pests (-)	20	(25.00)	50	(62.50)	10	(12.50)
19.	More information on improved agricultural technology should not be given to women	(-)	-	80	(100.00)	-	
20.	Training on fruit & vegetable preservation & other employment generation activities should not be given to farm women (-)	-		80	(100.00)	-	

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to create the favorable attitude among the beneficiaries IPM should be promoted and encouraged. The statements that more information on improved agricultural technology should not be given to the women and training on employment generation activities like fruit and vegetable preservation should not be given to farm women, for both statements all (100.00 %) of the respondents were disagreed that clearly shows their highly positive attitude. This is because they might have been fully convinced that adopting the improved agricultural technology can uplift their socio-economic status.

Conclusions

It is concluded from the above findings that majority of the farm women have the favourable attitude towards the improved agricultural technology. This shows that it is the right time for the extension personnel to take advantage of their favourable attitude to make them adopt improved agricultural technology to improve their crop yields as well as to make farm women socially and economically sound.

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