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Impact of Training Program on Adoption Behavior of Mango Growers in Faizabad District of Uttar Pradesh

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Mango fruit *(Mangifera indica)* is national fruit of Indian and most popular, nutritionally rich tropical fruit with unique flavor, fragrance, taste, and promoting qualities for health. In India harvest and sale of mango is during March, April and May, and this is annually covered by news magazines. Several hundred cultivars of mango depending on the cultivars of mango. The field survey was conducted the year of 2014-15. Exist survey was carried out to determine the extent of adoption of recommended Mango production practices by the farmers in Masaudha and another block of Sohawal, Faizabad District in Uttar Pradesh. One hundred thirty respondents were selected randomly and descriptive research design was followed for the research. The study inferred that there are 47.70 per cent trainees and 56.93 per cent non-trainees were having medium level socio-economic status whereas 41.54 per cent trainees and 35.38 per cent non-trainees were having low socio-economic status while 10.76 per cent trainees and 7.69 per cent non trainees were having high socio-economic status. It was also observed from the results that there were 32.30 per cent trainees, 24.61 per cent non-trainees had medium level of adoption, 26.15 per cent trainees and 49.23 per cent non-trainees having low level adoption followed by 41.53 per cent trainees and

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26.15 per cent non-trainees having high level of adoption of improved Mango production practices. Govt. should take proper steps and appropriate extension strategies to be followed for recommended adoption of mango production practices.

Keywords: Trainees; non trainees; adoption; KVK; level; mango.

1. INTRODUCTION

Mangos are one of the most popular fruits in the world. They are the succulent, aromatic fruits of an evergreen tree (*Mangifera indica*), a member of the cashew family (Anacardiaceae) of flowering plants. mango is a drupe, consisting of an outer skin, a fleshy edible portion, and a central stone enclosing a single seed – also called stone fruit, like a plum, cherry, or peach.

Agricultural research and education has been considerably advanced in India. Research contribution in preceding decade has been enormous in all directions of agriculture. The extension machinery, however, has not been able to cope up with scientific advantages. Big still exist between the productive technologies available and their rapid transfer to the farmers field. The findings of the studied are helpful to the planners, administrators, extension agents, farmers, NGOs, INGOs all those working in these areas, it is also helpful to the research scholars in future.

With the advent of Krishi Vigyan Kendra, training of farmers and in-service extension functionaries is being considered a critical input for the rapid transfer of agricultural technologies. But this aspect could not be recognized and given due attention in the past and thus emerged as a weak bridge for effecting functional linkages with state extension machinery as well as other extension sub-system including NGO and voluntary organizations. The traditional training institutions existed were not devoted to skill training, hence, they could not make as much dent on increasing production and on generating income in the farming community. India continuously developing in the area of agricultural technologies but their full potential has to be exploited to minimize the problems to alleviate rural poverty. Realizing the importance of technology and its adoption on farmers' field, the ICAR during the fifth five-year plan launched an innovative project for imparting training in agriculture and allied fields to the participating farmers, school dropouts and field level extension functionaries in the country by establishing KrishiVigyan Kendra's. During the short span of 32 years 721 Krishi Vigyan Kendras have been established in nearly 607 districts of the country.

2. RESEARCH METHODOLOGY

The field survey was carried out in Faizabad district of Uttar Pradesh covering two selected blocks namely Masaudha and Sohawal based on maximum number of trainees and Non trainees available there, and four villages selected in each blocks randomly. Thus, a total of eight villages included in the study for selecting the respondents. A total 130 respondents (65 Trainees and 65 Non Trainees) were selected randomly and Ex post facto study design was followed to check out the impact of trainees and non trainees program conducted by existing KVK in the Faizabad area. The data was gathered by personal interview method with the help of Appropriate statistical tools were used to interpret the data. The collected data were processed, classified, tabulated and analyzed using percentage, frequency, weighted score and weighted mean score. The independent variables were measured by using appropriate scale and procedure adopted by various researchers in past with slight modification.

3. RESULTS AND DISCUSSION

The socio-economic characteristics of respondents an individual induce changes in a number of mental abilities so, socio-economic factors must be considered as the facilitators of adoption decision of innovation.

It was reveals from the above Table 1 shows those 32.31 per cent trainees and 29.23 per cent non-trainees were between the young age group of 18-35 years. Majority 50.77 per cent trainees and 49.24 per cent non-trainees were between the middle age group of 36-50 years. In age of above 50 years there were 16.92 per cent trainees and 21.53 per cent non-trainees. And it is apparent from the above Table 1 that 41.53 per cent trainees and majority 60.00 per cent non-trainees were illiterate. Similarly only 26.16 per cent trainees and 23.08 per cent non-trainees were educated up to Primary School

whereas educated up Junior High School 16.92 per cent trainees and 6.15 per cent non-trainees and in Higher Secondary 9.24 per cent trainees and 7.69 per cent non-trainees were educated and 6.15 per cent trainees and 03.08 per cent non trainees were educated up to graduate and above.

The Table 1 reveals that majority of the trainees 60.00 per cent and 47.6 per cent non-Trainees having their main occupation as agriculture and about 18.47 per cent Trainees and 35.38 per cent non-Trainees having subsidiary occupation as Ag+ Caste Occupation, followed by 16.92 per cent Trainees and 35.38 per cent non-Trainees having agriculture + Business and 4.61 per cent trainees and 3.07 per cent non-trainees having agriculture + Service. Similar findings are also reported by Brajendra et al. [1].

Table 1. Distribution of Trainees and Non-Trainees on their socio -economic status (N=130)

S. no.	Category	Trainees (n=65)		Non-Trainees (n=65)	
		Frequency	Percentage	Frequency	Percentage
1.	**Age interval (in year)**				
	Young	21	32.31	19	29.23
	Middle	33	50.77	32	49.24
	Old	11	16.92	14	21.53
2.	**Education**				
	Illiterate	27	41.53	39	60.00
	Primary	17	26.16	15	23.08
	Junior High School	11	16.92	4	6.15
	Higher Secondary School	06	9.24	5	7.69
	Collegiate	04	6.15	2	3.08
3.	**Occupation**				
	Main (Agriculture)	39	60.00	31	47.69
	Subsidiary				
	Ag.+ Caste Occupation	12	18.47	23	35.38
	Ag.+ Business	11	16.92	9	13.84
	Ag.+ Service	3	4.61	2	3.07
4.	**Type of family**				
	Joint Family	33	50.76	31	47.69
	Nuclear Family	35	53.84	34	52.31
5.	**Annual earnings**				
	Rupees 30001-50000	9	13.84	12	18.46
	Rupees 50001-100000	18	27.69	37	56.92
	Rupees 100001-150000	25	38.46	12	18.46
	Above Rs. 150000	13	20.00	04	6.16
6.	**Land Holding**				
	below 1 hectare	23	35.38	19	29.23
	below 1-2 hectare	24	36.93	32	49.24
	Large above 2 hectare	18	27.69	14	21.53
7.	**Agricultural Implements**				
	Tractor	06	9.24	03	4.61
	Diesel Engine	05	7.69	03	4.62
	Thresher	03	4.61	02	3.07
	Electric motor	06	9.24	04	6.15
	Cultivator	07	10.76	05	7.69
	Bullock (1-2 Pair)	38	58.46	48	73.84
8.	**Communication Medium**				
	Radio+T.V+News paper	29	44.62	27	41.53
	Magazine	02	3.07	01	1.54
	Radio+Telephone	34	52.31	37	56.93

Source: Field survey, 2015

From the above Table 1 it is clear that are majority of the trainees 50.76 per cent trainees and 47.69 per cent non trainees are joint family. And in nuclear family 53.84 per cent were trainees and 52.31 per cent non-trainees were having nuclear family. While 13.84 per cent trainees and 18.46 per cent non-trainees were in Below Rs.50000. Similarly 27.69 per cent trainees and 56.92 per cent non trainees were in Rs.50001-100000. In Rs. 100000-150000 there were 38.46 per cent trainees and 18.46 per cent non- trainees. Similarly 20.00 per cent trainees and 06.16 per cent non-trainees were in the Above Rs. 150000 smiliar findings are also reported by Bhosle et al. [2].

The results of land holding to their respondents presented in Table 1 reflected that more than 35.38 per cent Trainees and 29.23 per cent non-Trainees having their main land holding as below 1 hectare 36.93 per cent Trainees and 49.24 per cent non-Trainees having land holding as below 1-2 hectare, followed by 27.69 per cent Trainees and 21.53 per cent non-Trainees having above 2 hectare land holding. Table 1 depicts that more than 9.24 percent Trainees and 4.61 per cent non-Trainees having their agriculture implements as tractor and about 7.69 per cent Trainees and 4.62 per cent non-Trainees having agriculture implements as diesel engine, followed by 4.61 per cent Trainees and 3.07 per cent non-Trainees having thresher, 9.24 per cent trainees and 6.15 per cent non-trainees having electric motor whereas 10.76 percent trainees and 7.69 per cent non trainees having cultivator. While majority 58.46 percent of the trainees have bullock and 73.84 per cent non trainees have bullock similar findings are also reported by Pandhareet et al. [3]. Table 1 indicates that 44.62 per cent trainees and 41.53 per cent non-trainees were having Radio + T.V + News paper in their communication medium and 03.07 per cent trainees and 01.54 per cent non-trainees were having magazine in their communication medium. 52.31 per cent trainees and 56.93 per cent non trainees were having Radio+ Telephone in the communication medium.

The above Table 2 shows that 41.54 per cent trainees and 35.38 per cent non-trainees were having Low in their socio - economic status and 47.70 per cent trainees and 56.93 per cent non-trainees were having Medium in their socio economic status, 10.76 per cent trainees and 07.69 per cent non trainees were having high in the socio – economic status.

The similar findings are also reported by Manoj et al. [4].

It is clear from the above table that 26.15 per cent trainees and 49.53 per cent non-trainees have low level adoption of improved Mango practices followed by 32.30 per cent trainees and 24.61 per cent non-trainees having medium level adoption. While remaining 41.53 per cent trainees and 26.15 per cent non trainees having high level adoption of improved Mango production practices. Similar findings are also reported by Singh et al. [5].

It was obvious from the above table that education, annual Income, land holding, Agricultural implements and communication medium were positively and significantly relationship with the level of adoption whereas age, occupation and type of family were found non-significant relationship with the level of

Table 2. Over all distribution of respondents according to their socio-economic status (N-130)

S. no.	Socio-economic status	Trainees		Non-Trainees	
		Frequency	Percentage	Frequency	Percentage
1.	Low (Up to 22).	27	41.54	23	35.38
2.	Medium (Between 23-28)	31	47.70	37	56.93
3.	High (Above 29).	7	10.76	5	7.69
	Total	65	100.00	60	100.00

Table 3. Overall adoption of respondents about production practices of mango

S. no.	Level of Adoption	Trainees		Non-Trainees	
		Frequency	Percentage	Frequency	Percentage
1.	Low (10-18)	17	26.15	32	49.23
2.	Medium (19-26)	21	32.30	16	24.61
3.	High (Above 34)	27	41.53	17	26.15
	Total	65	100.00	65	100.00

Table 4. Relationship between selected socio-economic characteristics and adoption level of respondents

Sl. no.	Variables	Trainees		Non Trainees	
		F ratio	Result	R ratio	Result
01	Age	-0.067	NS	-0.521	NS
02	Education	0.619**	S	0.526**	S
03	Occupation	0.086	NS	0.048	NS
04	Type of family	0.058	NS	0.041	NS
05	Annual Income	0.539**	S	0.089	NS
06	Land holding	0.368*	S	0.311*	S
07	Agricultural Implements	0.385*	S	-0.407	NS
08	Communication Medium	0.518**	S	0.369*	S

** = Significant at the 0.01 level; ** = Significant at 0.05% level*

adoption of respondents. In case of non trainees education, land holding and communication medium were found positively significant relationship with the adoption of improved cultivation practices of Mango, where as respondents age, occupation, type of family, annual income, agricultural implements and communication medium found non-significant relationship with the level of adoption. The findings is in the line of the findings of Yadav et al. [6].

4. CONCLUSION

It was concluded that majority of the trainees and non trainees belong to medium level of socio economic status. Whereas the adoption level of trainees was medium to high and in case of non trainees adoption level was low to medium. Education, type of family, annual income, land holding, agricultural implements and communication medium positively significant relationship with the level of adoption of trainees, in case of non-trainees age and occupation was positively significant relationship with the level of adoption.

5. RECOMMENDATIONS

There is need to intensify efforts to make agricultural extension services more functional so Those farmers can get useful information to enhance adoption of mango cultivation practices. Farmers should be encouraged for form and belong to cooperatives to facilitate group dynamism. Proper extension efforts and adequate training as well as demonstration to be provided in the rural area so that farmers are able to know improved package of practices which will enhance mango production and productivity.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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