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Research Note

Knowledge and Adoption of Marigold Cultivation Practices of Women Farmers in Gurugram District of Haryana

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ABSTRACT

The study was conducted in Gurugram district of Haryana state. Two blocks Farrukh Nagar and Gurugram were selected randomly and from each selected block, fifty women farmers who were involved in marigold cultivation selected randomly, thus making a total of 100 respondents. The study revealed that, majority of the respondents were middle aged, having small family size, living as joint families, and having small landholding size. Majority of the respondents were found listening to radio krishi programmes as their mass media exposure. In case extension contacts majority of the respondents were found in contact with the ADO/VEW whereas risk orientation of majority of the respondents was at low level. Regarding concept, importance, harvesting, packing and marketing of marigold majority of the respondents had medium level of knowledge and adoption.

Keywords: Marigold cultivation, Women, Empowerment, Knowledge, Motivation and Adoption

INTRODUCTION

Rural women entrepreneurship is passing through a transition period. The Indian rural economy is also experiencing an entrepreneurial need. A farm business necessarily requires deliberate decision and proper investment, after assessing risks and available resources to maximize profit. Very little effort has been done on entrepreneurship development among women farmers, although, it is very useful in empowering women and enabling them to break the barriers that keep them away from commercial agriculture. There is a tremendous opportunity in floriculture trade at entrepreneurial level for women besides growing and selling cut flowers. Women can set up small enterprises where value-addition in the form of bouquets and flower arrangements can be taken up. Women play a significant and crucial role in horticultural operations such as nursery raising, planting, weeding, harvesting and seeds storage, whereas men mainly take care of marketing aspects. In our country females are 65.00 per cent of the total workforce involved in the production of flowers (Rao and Bramhanandan, 2003). An integrated postharvest management approach may help in achieving better market access, nutrition security, poverty alleviation, employment generation, environment protection and economic transformation of rural populations.

Flower cultivation has a great potential for generating remunerative self employment among the small and marginal farmers besides earning the much needed foreign exchange (Rakesh *et al.*, 2004). The survey of preference of flower cultivation revealed that men and women both gave preference to the cultivation of marigold, which was 67.60 per cent and 78.70 per cent respectively (Raghava and Saxena, 2001). Farmers need to adopt a set of postharvest technologies which are cost effective and appropriate for reducing losses by keeping perishable produce fresh for a longer period or processing them into durable products to fetch better returns on their produce. Considering the potential of floriculture in generating higher levels of income, employment opportunities, greater

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involvement of women farmers and increase in exports, it has been identified as an important focus area by the Government of India and several development schemes have been introduced. Nowadays in the urban area, females are also showing their interest to be a part of this profession and with this sector. Regarding cultivation of flower crop, marigold dominates in north Haryana. In Haryana, the area under flower cultivation covers 8200 ha of which the maximum area is under marigold i.e. 6481 ha. In Gurugram production and area in 2016 of marigold was 1020 tons from an area of 92 ha which reduced to 940 tons in 2017 from an area of 82 ha (NHB, 2016-17). The production, harvesting and marketing of traditional flowers for local marketing are typical women's activities hence the study to find out the level of knowledge and adoption of marigold practices was attempted with women respondents.

METHODOLOGY

The study was conducted in Gurugram district of Haryana. The district was selected purposely as it was found that flower cultivation is higher in that area, further, two blocks were selected, randomly from the district. From the selected blocks fifty women farmers engaged with pre and post-harvest practices were selected randomly for the study. A total of hundred respondents were finalized from the two selected blocks for the study. The respondents were requested to reply to a set of questions to ascertain their knowledge and adoption level. For the purpose of quantification of data three-score were assigned as for Full (2), partial (1) and Nil (0).

RESULT AND DISCUSSION

The data revealed that, the majority of the respondents (56%) cent belonged to the middle age group with low literacy level (68%) followed by middle level (20%) of education. It shows that the involvement of middle and young age group women members in the marigold cultivation was more than the old age group growers. It was probably because of the fact that young and middle aged people were more energetic than the old people. The majority of the respondents (80%) were living in a nuclear family system, the majority of respondents 77.00 per cent were having small family size. The findings are in line with Rajnish (2011). 48 per cent of respondents had a small size of landholding and 61.00 per cent having their occupation as agriculture and dairy. Further the risk taking ability of the majority 62.00 per cent of the women respondents was found to be which are in line with findings of Rathod (2009).

Table 1: Distribution of the respondents according to knowledge level with practices (n= 100)

S.No.	Practices		Percentage		
			Full (3)	Partial (2)	Nil (1)
1.	Recommended cultivars	African marigold	11	62	27
		French marigold	08	71	21
2.	Seed rate	400-600 gm per day	69	31	00
	Planting method	Planting done by transplanting the seedling sown during July to September	83	17	00
	Transplantation time	When seedlings are of 8-10 cm height	76	24	00
3.	Manure and fertilizer	Quantity used	38	62	00
		Time of application	89	11	00
4.	Irrigation		85	15	00
5.	Pinching	Pinching practices followed	09	78	13
		Pinching practice after 25-30 days of transplanting	00	18	82
6.	Harvesting		100	00	00
7.	Diseases and their control	Diseases	18	68	14
		Control	12	72	16

The data in Table 1 reveals that the majority of the farmers (50%) were having medium knowledge level regarding marigold cultivation followed by 30.00 per cent with low knowledge level and only 20 per cent of the farmers had high knowledge level. Study revealed that regarding marigold varieties, majority of the respondents belonged to medium level of knowledge. In case of agronomic practices, majority of the respondents belonged to low level of knowledge, majority of the respondents belonged to medium level of knowledge about manures and fertilizers application. In case of irrigation and pinching practices, the majority of the farmers had medium knowledge. Whereas, majority of the respondents had medium level of knowledge about harvesting and disease control. These findings closely resemble the findings of Chand (1994) The knowledge of the farmers regarding seed treatment, green manuring and plant protection was medium.

Table 2: Categorization of the respondents according to their knowledge regarding package of practices of Marigold Cultivation (n=100)

Knowledge	Class range	Frequency	Percentage
Low	21-26	26	26.00
Medium	27-32	62	62.00
High	Above 32	12	12.00

Table 3: Categorization of the respondents according to their knowledge regarding package of practices of Marigold Cultivation (n=100)

Knowledge	Class range	Frequency	Percentage
Low	20-24	18	18.00
Medium	25-29	72	72.00
High	Above 29	10	10.00

Results in Table 3 also indicated that regarding marigold flower varieties, the majority (72%) of the respondents belonged to medium adoption level, followed by low and high. In case of agronomic practices and manures and fertilizers application: majority of the respondents belonged to medium level of adoption. In case of irrigation and pinching practices, the majority of the farmers had low adoption, whereas, majority of the respondents have medium level of knowledge about harvesting and disease control. These findings closely resemble the findings of Ramamurthi *et al.* (1997).

The Table 4, indicates that a farmer works towards larger yields and economic profits was ranked 1st by respondents (weighted mean 4.40). A farmer should try any new idea which may earn him more money was perceived 2nd by respondents (weighted mean 4.20). The most successful farmer is one, who makes maximum profit was ranked 3rd (weighted mean 3.40), a farmer should earn his living but most important things in life cannot be defined in terms of economic conditions was ranked 4th (weighted mean 3.36), a farmer should grow cash crops to increase monetary profits in comparison of growing of food crops for home consumption was ranked 5th (weighted mean 3.26) and it's difficult for the children of farmers to make a good start unless they provides

Table 4: Distribution of the respondents according to their economic motivation (n= 100)

S. No.	Statements	Frequency					Weighted mean score
		SA (5)	A (4)	UD (3)	DA (2)	SDA (1)	
1	A farmer should work towards larger yields and economic profit	40	60	-	-	-	4.40
2	The most successful farmer is one, who makes maximum profit	-	40	-	30	-	2.20
3	A farmer try any new idea which earn him more money	38	44	18	-	-	4.20
4	A farmer should grow cash crops to increase monetary profits in comparison of growing of food crops for home consumption	-	42	42	16	-	3.26
5	It s difficult for the children of the farmers to make good start without economic assistance	-	24	52	22	02	2.98
6	A farmer should earn his living but most important things in life cannot be determined in economic terms	-	56	24	20	-	3.36

economic assistance was ranked 6th (weighted mean 2.98). The findings were found in line with the findings of Mukherjee (1997) where it was found that majority of the respondents perceived marketing as major prospects followed by quality, technical support and increase in farmers purchasing power.

CONCLUSION

The study revealed that, majority of the respondents were aware of concept, importance, harvesting, packing and marketing of marigold. In the case of agronomic practices and fertilizers application majority of the respondents belonged to a low level of knowledge. All the women farmers were found having medium adoption of the recommended package of practices. It can be concluded that training can be most important about marigold cultivation for the farmers so as to overcome the problems or constraints coming while cultivation. Training needs regarding plant protection, application of herbicides, use of water and storage of post-harvest flowers may be inferred from data.

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