

Knowledge level of farm women regarding mango post harvest technology in Latur district

V.D. JADHAV, B.M. THOMBRE AND J.V. MANDE*

College of Agriculture, LATUR (M.S.) INDIA

ABSTRACT

The present study was conducted in three talukas of Latur district, viz., Ahmedpur, AUSA and Renapur. Four villages from each taluka were selected having the maximum area under mango crop. The data were collected from 10 respondents from each of the twelve villages. The study revealed that majority of the respondents belonged to middle age group and educated up to secondary school level with medium income group. Majority of them (41.67 per cent) possessed semi-medium land holding and 67.5 per cent had medium social participation with medium sources of information. It was observed that majority of the respondents had medium level of knowledge regarding mango post harvest technology.

Key words : Farm women, Knowledge level, Socio-economic, Characteristics

INTRODUCTION

Horticultural and agricultural crops play significant role in Indian economy. The overall contribution of farm women in Indian agriculture is roughly estimated to be 70-80 per cent. Majority of them are engaged in the post harvest operations like harvesting, grading, storing and preservation of farm produce. Once farm produce is brought to the house, further responsibility rests with women folk. As a part of eighth five year plan, the Government of Maharashtra Government has launched a Horticulture Development programme in the year 1990-91 which recently has been merged into National Horticultural Mission from the year 2005. Under this scheme fruit crops, viz., ber, mango, custard apple, sapota, pomogranate, orange, jamun are selected for cultivation.

Mango (*Mangifera indica*) is one of the drought resistant horticultural fruit crop proved to be the best profitable crop under dry land conditions. The area under mango crop in Maharashtra state was about 81490 hectares. In Marathwada region, the area under mango fruit crop was about 34,529 ha and production was about 33,635 metric tonnes and productivity was 3.80 tonnes/ha during 2005. In Latur district the area under mango fruit crop was about 1134.45 ha. Mango is rich source of carbohydrates (16.6 mg /100 g), calcium (160 mg /100 g), protein (0.69 / 100 gm), Sodium (26 mg / 100 g), Thiamine (0.08 mg/ 100 g), Niacin (0.9 mg / 100 g) and vitamin C (35 mg /100 g). Thus the fruit is liked for its cool, refreshing juice and valued for its medicinal properties.

Keeping in the view the importance of various mango post harvest products knowledge regarding post harvest technology of mango amongst the rural women. The present investigation entitled was undertaken with the

following specific objectives to study the personal and socio-economic characteristics of farm women, to assess the knowledge level of farm women about mango post harvest technology and to find out the relationship between personal and socio-economic characteristics of farm women with knowledge of mango post harvest technology.

MATERIALS AND METHODS

This study was carried out in the Latur district in the Marathwada region of Maharashtra State. From Latur district three talukas and from each taluka four villages were selected. Ten farm women from each village were selected which comprises 120 respondents for study. The data were collected through personal interview method with the help of pre-tested structured schedule and analyzed by using suitable statistical techniques. The results of the study are summarized as follows.

RESULTS AND DISCUSSION

The finding obtained from the present study as well as relevant discussion have been presented under following headings:

Personal and socio-economic characteristics of farm women :

It was revealed that majority (65.83 per cent) of the respondents belonged to middle age group (30 to 45 years), 55 per cent were educated up to secondary school level (5th to 10th class) and 68.34 per cent were having in medium income group. Majority of them (41.67 per cent) possessed semi-medium land holding *i.e.* up to 4 hectares, 67.5 per cent had medium social participation, 61.67 per cent of the respondents had medium sources of

information similar to findings of Thakur *et al.* (1991), 49.17 per cent of the respondents were having medium risk orientation and 60 per cent had lower middle socio-economic status.

Practice wise knowledge of farm women about mango post harvest technology

It has been reported from Table 1 that 95 per cent of the respondents had knowledge about proper time of harvesting of mango crop, 86.67 per cent of the respondents had knowledge about the use of card board boxes for export and 77.5 per cent of the respondents had knowledge about chemical used for enhancing regular fruit bearing.

Knowledge about percentage of fruit set and biannual fruit set mango variety developed by M.A.U. were observed in case of 76.67 per cent of the respondent, 75.00 per cent of the respondents had knowledge about banned export of mango fruit, knowledge about method of harvesting of fruits had observed by 71.67 per cent of the respondents.

It has further observed that 51.67 per cent of the respondents had knowledge about symptoms of harvesting of fruits, 44.17 per cent of the respondents had knowledge

Table 1: Practice wise, knowledge of farm women about mango post harvest technology N = 120

Sr. No.	Particular	Knowledge level	
		Frequency	Percentage
1.	Symptoms of harvesting of fruit	62	51.67
2.	Methods of harvesting of fruits	86	71.67
3.	Most proper time of harvesting	114	95.00
4.	Size of export quality fruit	10	8.34
5.	Weight of export quality fruit	12	10.00
6.	Total soluble sold per cent in export quality fruit	10	8.34
7.	Acidity per cent in export quality fruit	12	10.00
8.	pH of export quality fruit	17	14.17
9.	Use of card board boxes for export	104	86.67
10.	Number of fruits in packing box	11	9.16
11.	Maintenance of temperature in cold storage	20	16.67
12.	Humidity to be maintained in the cold storage for storage of fruits	20	16.67
13.	Chemical used for regular bearing	93	77.5
14.	Preservation material used in pulp	53	44.17
15.	Total soluble solid of jam	10	8.34
16.	Banned on export of mango fruit	90	75.00
17.	Percentage of fruit set	92	76.67
18.	Knowledge about biannual fruit set mango variety	92	76.67

about the preservation material used in pulp and some of respondents had knowledge about number of fruits to be packed in packing box.

As regards the knowledge of mango post harvest technology, the respondents were line in per cent between 8.34 per cent to 16.67 per cent in respect of size of export quality fruit, total soluble solid per cent in export quality fruit, total soluble solid of jam, number of fruit in packing box, acidity per cent in export quality fruit, weight of export quality fruit, pH of export quality fruit, and knowledge about temperature and humidity to be maintained in cold storage at the time of storage of fruits.

Knowledge level of farm women about mango post harvest technology :

The collected data of knowledge of farm women about mango post harvest technology is presented in Table 2.

It was observed that majority (59.17 per cent) of the respondents had medium level of knowledge followed

Table 2 : Distribution of farm women according to their knowledge level N = 120

Sr. No.	Knowledge level	Respondents	
		Frequency	Percentage
1.	Low	24	20.00
2.	Medium	71	59.17
3.	High	25	20.83
	Total	120	100.00

by 20.83 per cent and 20 per cent respondents in high and low level of knowledge, respectively.

Relationship between personal and socio-economic characteristics of farm women with knowledge of mango post harvest technology :

The coefficient of correlation with knowledge independent and dependent variables is presented in Table 3

It is revealed from Table 3 that education, annual income, land holding, social participation, sources of

Table 3 : Relationship between personal and socio-economic characteristics with knowledge

Sr. No.	Independent variables	Correlation coefficient ('r')
1.	Age	-0.872**
2.	Education	0.817**
3.	Annual income	0.811**
4.	Land holding	0.800**
5.	Social participation	0.868**
6.	Sources of information	0.931**
7.	Risk orientation	0.872**
8.	Socio-economic status	0.921**

** indicate of significance of value at P = 0.01

information risk orientation, socio-economic status had established the positive and highly significant relationship with knowledge of farm women about mango post harvest technology. Whereas, age showed the negative and significant relationship with knowledge of farm women.

Multiple regression analysis of personal and socio-economic characteristics of farm women with knowledge of mango post harvest technology :

Multiple regression analysis of personal and socio-economic characteristics with knowledge is presented in Table 4

Table 4 : Multiple regression analysis of socio-economic character and knowledge				
Sr. No.	Independent variables	Regression coefficient (Bi)	Standard Error	't' value
1.	Age	-0.19893	0.1040	1.913
2.	Education	0.55928	0.5483	1.020
3.	Annual income	0.04916	0.0163	3.017**
4.	Land holding	0.00334	0.3564	0.009
5.	Social participation	-0.01543	0.4873	0.032
6.	Sources of information	1.60539	0.3793	4.233**
7.	Risk orientation	0.28136	0.2210	1.273
8.	Socio-economic status	0.16808	0.0809	2.078*

R² = 0.9296, F – value = 183.2304

* and ** indicate of significance of values at P = 0.05 and 0.01, respectively,

The data presented in the Table 4 clearly revealed that there was 92.96 per cent of variation explained in the knowledge of farm women by eight independent variables, out of these eight variables, age showed negatively significant, education, land holding social participation, and risk orientation had positive significant relationship while annual income, sources of information

and socio-economic status had positive and highly significant relationship with knowledge level of farm women. Finding are similar to Bhosale (2004).

Conclusion :

The study was revealed that majority of the respondents belonged to middle age group and educated up to secondary school level with medium income group. Majority of them (41.67 per cent) possessed semi-medium land holding and 67.5 per cent had medium social participation with medium sources of information. It was observed that majority of the respondents had medium level of knowledge regarding mango post harvest technology. It goes without saying that mango fetches fabulous income if almost recommended post harvest practices are followed by the farm women in right perspective. The respondents (farm women) who possess the high knowledge and quality of risk orientation may be considered as a resource person in enhancing the better management of mango orchards which ultimately help the farm women to export mango and carry out the post harvest practices of mango which ultimately increases the socio-economic status of farm women.

REFERENCES

Bhosale, S.S.(2004). Knowledge and adoption of post harvest technology by the pomogranate growers in Sangola tahsil of Solapur district. M.Sc. (Ag.) Thesis, Mahatma Phule Krishi Vidyapeeth, Rahuri (M.S.).

Thakur, K.K., Bhople, R.S. and Thakur, K.D. (1991). Information sources and knowledge of mango growers. *Maharashtra J. Extn. Edu.*, **10** (2) : 262-265.

Received : April, 2009; Accepted : July, 2009