

Short Communication

Knowledge level and training needs of fig growers in Pune District

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Horticulture is an effective instrument for generating greater income per unit area, additional employment, provision of nutritive and proteinous diet, conservation of soil, environment and prevention of shifting cultivation. Horticulture also plays a vital role in export and import substitution. Horticulture crops can be grown in the areas where other crops are not suitable to grown in effectively.

Fig is one of the oldest Horticultural fruit crop known to the mankind. The edible fig (*Ficus Carica*) is small deciduous tree, which has been under cultivation since antiquity in the Western Mediterranean region. It was first brought to cultivation in the southern part of the Arabian Peninsula by least 300 B.C.

Fig is consumed fresh or dried, preserved or candied and canned fresh fruits are very delicious, wholesome and nutritious. From nutritional point of view, fig fruits are much valued and contain high sugar and low acid. The mineral content is 2-4 times more than that of other fruits.

The total area under fig cultivation in Maharashtra is 1080 ha. Out of which 483.35 ha. (44.75 per cent) is alone in Pune district. However, of the total area under fig in the district about 50 per cent area is in Purandhar Tahsil.

The average yield of fig fruits and the area under cultivation is comparatively less. This is because of lack of knowledge about improved and recommended package of practices and post harvest technology in the fig farming business. If the present knowledge of the farmers is identify and steps are taken to improve their knowledge and provision of infrastructure marketing facilities through the process of training. Then only it is possible to increase in area and production of the fig.

In view of this, the present investigation entitled "Knowledge Level and Training Needs of Fig Growers in Pune district" was undertaken with the following specific objectives.

1. To study the knowledge of fig growers about fig cultivation and;
2. To ascertain and relationship between on training needs of fig growers and their personal and socio-economic characteristics.

The present study was carried out in Purandhar and Bhor Tahsils of Pune district during the year January, 2005 because fig is grown extensively in these tehils.

The list of fig growing villages was obtained from the Panchayat Samiti of Purandhar and Bhor. Out of 288 villages, 15 villages from Purandhar (out of 96 villages) and 5 villages from Bhor (out of 185 villages) tahsils were selected on random selection basis. In all 20 villages were

selected for the study purpose.

The list of fig growing farmers from the selected 20 villages was prepared. Out of these fig growers 10 fig growers from each village were selected on random basis. Hence, in all two tahsils, 20 villages and 200 fig. Growers were selected for the present study purposes. The data were collected by conducting the personal interview of the respondent with the help of pre-tested interview schedule specially designed for the study purpose. The information collected through interview was transferred from the interview schedule in to the primary tables and then to the secondary tables. Whenever, necessary, the information of qualitative nature was converted in to quantitative form. In this way, the collected information was analysed and tabulated. The results are presented under following heads.

Knowledge level of fig growers about fig cultivation :

The data in respect of knowledge level of the fig growers regarding cultivation practices of fig technology was collected and analysed. The results are presented in Table-1.

The table-1 revealed that a majority of the fig growers (85.50 per cent) had no knowledge about notching. As regard the grading and processing 53.00 per cent and 75.50 per cent of them had no knowledge. Most of the fig growers had average knowledge about preparation of land and selection of soil (56.00 per cent) for the plantation of fig, selection of varieties (81.50 per cent), reproduction method (65.00 per cent), material used for reproduction (65.00 per cent), method of planting (65.50 per cent), distance of planting (82.50 per cent), size of pit (80.00 per cent), filling of pit (83.00 per cent), application of fertilizers (51.0 per cent), bahar treatment (55.00 per cent), disease (67.50 per cent), pest (66.00 per cent) and packaging (55.00 per cent). Also some farmers had full knowledge about the time of transplanting (69.00 per cent), weeding (74.00 per cent), earthing-up (69.50 per cent) and harvesting (59.00 per cent).

Further, the information pertaining to how far and at what extent the respondents possess the knowledge about fig cultivation technology was scored and classified. The results are presented in table 2. The table 2 indicate that, a majority of the fig growers had medium level of knowledge (67.50 per cent). The 17.50 per cent of the fig growers had high level of knowledge and only 15.00 per cent of the fig growers had low level of knowledge. It mans that a majority of the respondents belonged to sampled area had better knowledge about fig cultivation technology.

Relationship between training needs of fig growers and their personal and socio-economic characteristics :

To understand the relationship between training needs

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Table 1 : Distribution of fig growers by their level of knowledge in fig Cultivation.

S. No.	Particulars of practice	Knowledge level (N = 200)		
		Full Knowledge	Partial Knowledge	Overall Knowledge
1.	Selection and preparation of soil/land	46 (23.00)	134 (56.00)	180 (79.00)
2.	Selection of variety	37 (18.50)	163 (81.50)	200 (100.00)
3.	Reproduction Method	70 (35.00)	130 (65.00)	200 (100.00)
4.	Production material used	36 (18.20)	130 (65.00)	166 (83.00)
5.	Method of planting	37 (18.50)	131 (65.50)	168 (84.00)
6.	Time of transplanting	138 (69.00)	62 (31.00)	200 (100.00)
7.	Planting distance	35 (17.50)	165 (82.50)	200 (100.00)
8.	Size of pit	30 (15.00)	160 (80.00)	190 (95.00)
9.	Filling of pit	27 (13.50)	166 (83.00)	193 (96.50)
10.	Fertilizer application	70 (35.00)	102 (51.00)	172 (86.00)
11.	Weeding application	148 (74.00)	52 (26.00)	200 (100.00)
12.	Earthing-up	1369 (69.50)	61 (30.50)	200 (100.00)
13.	Notching	4 (2.00)	25 (12.50)	29 (14.50)
14.	Bahar treatment	90 (45.00)	110 (55.00)	200 (100.00)
15.	Irrigation	96 (48.00)	81 (40.50)	177 (88.50)
16.	Occurrence of diseases	37 (17.00)	135 (67.50)	169 (84.50)
17.	Attack of pests	14 (7.00)	132 (66.00)	146 (73.00)
18.	Harvesting	118 (59.00)	73 (36.50)	191 (95.50)
19.	Grading	25 (12.50)	69 (34.50)	94 (47.00)
20.	Packaging	36 (18.00)	110 (55.00)	146 (73.00)
21.	Processing (Drying)	2 (1.00)	47 (23.50)	49 (24.50)

Figure 1 parenthesis indicate percentages

Table 2 : Distribution of the fig. Growers by their extent of level of knowledge about fig cultivation technology.

S. No.	Extent of knowledge level	No. of respondents N = 200	Percentage to the total
1.	Low	30	15.00
2.	Medium	135	67.50
3.	High	35	17.50
		Total	100.00

of the fig growers and their selected personal and socio-economic characteristics (independent variables), correlation co-efficient (4) was worked out. The results are presented in table 3.

Age and training needs :

It can be seen from table – 3 that, there is negative but significant correlation (r=0.149) between age and training needs. It means that the old person stick to their old practices. They are not ready to adopt new technology very easily. This may be because of they are not aware about the new recommendations evolved in the package of fig cultivation technology.

Education and training needs :

It can be seen from table – 3 that, there is negative but significant correlation (r=0.147) between education and

Size of land holding and training needs :

It can be seen from table-3 that, there is positive and significant correlation (r=0.142) between size of land holding and training needs. This means that as the farm size increases farmer want to exercise more components or aspects of technologies on his farm. The larger size of farmers get motivated themselves to adopt new and more remunerative crops both in regard of yield and productivity per unit of area for that to avoid the risk he seek training. So as in case of fig growers, larger the farm size higher was the training needs.

Socio-economic status and training needs :

It can be seen from table 3 that, there is negative and non-significant correlation (r=-0.087) between socio-economic status and training needs. This indicates that,

Table 3 : Relationship between training needs of the fig. Growers and their selected independent variables.

S.No.	Independent variables	Correlation coefficient (α)
1.	Age	-0.149 ⁽⁺⁾
2.	Education	-0.147 ⁽⁺⁾
3.	Size of family	+0.088 N.S.
4.	Size of land holding	-0.0142 ⁽⁺⁾
5.	Socio-economic status	0.087 N.S.
6.	Knowledge	+0.167 ⁽⁺⁾
7.	Annual income	-0.140 ⁽⁺⁾
8.	Experience in fig cultivation	+0.032 N.S.
9.	Sources of information	-0.113 N.S.

(+) = Significant at 5 per cent level
 N.S. = Non significant

training needs. It means that higher the education widens the knowledge of individual in different areas. So that with higher education individual feel less need of training as compared to those having lower education level.

Size of family and training needs :

The © value 0.088 from the table 3 indicates that, training needs of the fig growers were not influenced by the size of the family, since there is no statistically significant relationship noticed between those variables. The fig growers belonged to either small or larger size families felt similar requirements about training needs for fig cultivation.

lower the socio-economic status of the respondents, they are more in need of increasing in their yield per unit of area. Hence, they seek more knowledge for which they needs training as compared with higher socio-economic status but relation is non-significant.

Knowledge and training needs :

It can be seen from table 3 that, there is positive and significant correlation (r=0.167) between knowledge and training needs. Thus, higher the knowledge level, higher was the training needs of fig growers since; they want more details about the fig technology.

Annual income and training needs :

It can be seen from table 3 that, there is negative but significant ($r=-0.140$) correlation between annual income and training needs. Thus, it indicates that, lower the annual income, farmers having low knowledge and requires more training as compared to those having higher annual income.

Experience in fig cultivation and training needs :

It can be found from table 3 that, there is non-significant correlation between ($r=0.032$) training needs and experience of the respondents in fig cultivation. It means that, there is no influence of experience on the requirement of the training needs. The farmers belongs to all categories of low or high experience requires similar kind of training to update of their knowledge.

Source of information and training needs :

It can be found from table 3 that, there is non significant but negative correlation ($r=-0.113$) between sources of information and training needs. It indicates that, lesser the use of sources of information higher will be the requirement of training needs but relation is non-significant.

CONCLUSIONS

Fig is one of the principal cash fruit crops grown in Purandhar and Bhore tahsil of Pune district. The fig fruits from the area are known as Poona fig through out the India. There is also scope for bringing more and more area under this fruit crop for increasing the yield. However, as yet, per hectare/per tree yield of fig fruits has not reached to its maximum. It can be achieved by giving proper training to the fig growers for adopting the improved technology of fig cultivation and its marketing. However, training needs regarding fig cultivation is affected by personal, socio-economic and psychological factors. Most of them having medium level of knowledge. But low knowledge in respect of the components of post harvest technology was observed. Most of the cultivation practices were carried out in traditional manner.

Training needed areas on the basis of preferences were processing (90.00 per cent), notching (91.50 per cent),

control against the attack of pest and diseases (79.00 per cent) followed by marketing (120.50 per cent), fertilizer application (20.50 per cent), irrigation management (31.00 per cent), planting method (14.50 per cent), selection of soils (9.50 per cent) and identification of maturity signs of fruits (21.50 per cent).

The independent variable viz; age, education, size of land holding and annual income having significant and negative correlation with the dependent knowledge i.e. training needs. Size of family and knowledge having significant and positive correlation with the training needs. Sources of information used and socio-economic status of the fig growers having the negative and non-significant correlation with the training needs.

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