To study the personal, socio-economic, psychological, communication and situational characteristics of pomegranate growers and to ascertain the resources available with pomegranate growers

A Idhole, MA Raut, RC Sawant and Dr. KT Lahariya

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Abstract
The study entitled “Resource management behaviour of pomegranate growers in Washim District”. The study was conducted in two panchayat samities of Washim district in Vidarbha region of Maharashtra State. The district is located in the Vidarbha Region of Maharashtra, India. The present study was purposively conducted in Mangaruipur and Manora Panchayat samities in the Washim district on the basis of higher area under the cultivation of Pomegranate crop. The form of study was mainly to assess resource management behaviours of pomegranate growers. Hence, total 12 villages were selected from 2 panchayat samities. The respondents were selected from village by random sampling technique. 10 respondents were selected from each village. Thus 120 respondents were selected for the present study for making the sample size of 120 in total. exploratory design of social research was used. The characteristics viz Education (0.233) source of information (0.229), were positively significant with procedure of resources of the respondents at 0.05% level of probability. The characteristics Land holding and irrigation facility were non significant and the characteristics Age (-0.312) was negatively significant with the procurement of resource of the respondents.

Experience in pomegranate cultivation (0.226), Training received (0.189), Management orientation (0.187), Education and annual income (0.182), size of orchard (0.180) and source of information (0.179), were positively significant with Utilization of resources of the respondents at 0.05% level of probability. It is observed that over half of majority (60.00%) of pomegranate growers have shown managing the resources to moderate extent. Distribution pertaining to utilization of resources indicate that majority of the respondents (79.16%) have utilized resources for pomegranate cultivation to high extent.

Constraints encountered by the respondents in resource management behavior for pomegranate cultivation showed that, in case of non-availability of processing industry, high fluctuation of weather condition, Lower price at harvesting stage, Lack of irrigation water in summer season were major constraints expressed by (100.00%), (98.33%), (93.33%), and 84.16% percent of the respondents respectively.

Keywords: Socio-economic, psychological, communication, situational characteristics

Introduction
Horticulture is a specialized branch of agriculture and significantly constitutes in the total agricultural production in India. Horticultural crops particularly fruits, have great export potential and can earn foreign exchange in the sizeable quantum.

The economic aspects of fruit production are not less important. The well established and maintained orchards can offer better yields as compared to other orchids. During non bearing stage, it is possible to grow intercrop which compensate the expenses involve in establishment a fruit grower remains engaged for the whole year and there is an opportunity for full utilization of waste land in the arid and semi arid regions for getting higher income with minimum inputs. Fruit crops occupy an important place in the international trades. Fruits can earn handsome foreign exchange. Fruit orchard adds to the aesthetic beauty of the environment, they purify the air and decrease pollution. Fruit trees affect the rain and drought and they bring improvement of soil and help in checking the soil erosion.
Pomegranate (Punica granatum L.) belongs to family Punnicaceae is one of the most favorite’s fruits of tropical and sub-tropical regions of the world. It is also known as Chinese apple or apple of Carthage (Hindi-Anar). Pomegranate is native to Iran (Persia) it is found from Kanyakumari to Kashmir, but it is cultivated commercially only in Maharashtra In India pomegranate is considered as a crop of the arid and semi arid regions because it withstands different soil and climatic stresses. It thrives best under hot dry summer and cold winter provided irrigation facilities are available.

The fruit is native of Ireland is extensively cultivated in Mediterranean countries like Spain, Egypt, Iran, Burma, Guinea and India. Pomegranate is grown in tropical and sub tropical regions of the World. It contains protein (1.6%), fats (0.1%), carbohydrates (14.5%), fiber (5.1%), calcium (10 mg/100 g), thiamine (0.06 mg/100g) and phosphorus (70 mg/100g) and Vitamin- C (14 mg/100g). It is having 68 per cent edible portion. It can be processed into drinks and jelly. The rind of the fruit and flower yield a dye which is used in indigenous system of medicine for prevention of intestinal disorders.

In Washim District area under pomegranate cultivation is more than 800 ha and among all Tahsil more area in Mangrulpur and Manora Tahsil.

**Table 1:** Area under pomegranate crop in Washim district (Year 2015-16)

| Sr. No. | Name of Taluka | Area (000) under Pomegranate cultivation | Area(000) under Production |
|---------|----------------|------------------------------------------|---------------------------|
| 1       | Washim         | 90.00                                    | 45.00                     |
| 2       | Mangrulpur     | 180.00                                   | 135.00                    |
| 3       | Manora         | 200.00                                   | 152.00                    |
| 4       | Risod          | 90.00                                    | 40.00                     |
| 5       | Karanja        | 110.00                                   | 30.00                     |
| 6       | Malegaon       | 130.00                                   | 70.00                     |
| Total   |                | 800.00                                   | 472.00                    |

(Source: S. A. O. Washim)

In Vidarbha day by day area under pomegranate cultivation increases in Yavatmal, Washim and, Amravati, district but highest area under pomegranate in Mangrulpir and Manora Tahsil of Washim districts.

**Objectives**

The study was highly helpful to policy makers, research scientist and extension workers to formulate the strategy to increase socio economic condition of pomegranate growers.

This study will reveal current status of knowledge and extent of adoption of improved pomegranate cultivation practices by the farmers. The present study entitled “Resource management behaviour of pomegranate growers in Washim District” is undertaken with the following specific objectives.

1. To study the personal, socio-economic, psychological, communication and situational characteristics of pomegranate growers.
2. To ascertain the resources available with pomegranate growers.

**Methodology**

The study entitled Resource management behaviour of pomegranate growers in Washim District™ was conducted in two panchayat samities of Washim district in Vidarbha region of Maharashtra State. The district is located in the Vidarbha Region of Maharashtra, India. The present study was purposively conducted in Mangurulpur and Manora Panchayats samities in the Washim district on the basis of higher area under the cultivation of Pomegranate crop. The form of study was mainly to assess resource management behaviours of pomegranate growers. Hence, total 12 villages were selected from 2 panchayat samities.

The respondents were selected from village by random sampling technique. 10 respondents were selected from each village. Thus 120 respondents were selected for the present study for making the sample size of 120 in total. The exploratory design of social research was used in present investigation.

**Table 2:** List of village wise respondents selected for the study

| Sr. No. | Name of village | No. of respondents |
|---------|-----------------|--------------------|
| 1       | Wanoja          | 10                 |
| 2       | Sawargaon       | 10                 |
| 3       | Kavthal         | 10                 |
| 4       | Mangrulpur      | 10                 |
| 5       | Kasola          | 10                 |
| 6       | Mangalasa       | 10                 |
| 7       | Jamdara         | 10                 |
| 8       | Parva           | 10                 |
| 9       | Javala          | 10                 |
| 10      | Mohagavan       | 10                 |
| 11      | Amdari          | 10                 |
| 12      | Hatti           | 10                 |
| 13      | Total           | 120                |

**Socio-Economic and communicationa l Characteristics of the Respondents**

**Table 3:** Distribution of respondents according to their characteristics

| Variables       | Sl. No. | Categories | Respondents (n=120) |
|-----------------|---------|------------|---------------------|
|                 |         |            | Frequency | Percentage |
| 1. Age (years)  |         | Young (up to 35 years) | 05        | 04.00       |
|                 |         | Middle (36 to 50 years) | 83        | 69.00       |
|                 |         | Old (above 50 years) | 32        | 27.00       |
| 2. Education (std.) |         | Primary school (1st-4th class) | 02 | 01.66 |
|                 |         | Middle school (5th-7th class) | 09        | 07.52       |
|                 |         | High school (8th-10th class) | 32        | 26.66       |
|                 |         | College (11th and above) | 77        | 64.16       |
| 3. Land holding (ha) |         | Marginal (Up to 1.00 ha) | 00        | 00.00       |
|                 |         | Small (1.01 to 2.00 ha) | 03        | 02.51       |
|                 |         | Semi-medium (2.01 to 4.00 ha) | 32 | 26.66 |
|                 |         | Medium (4.01 to 10.00 ha) | 76        | 63.33       |
|                 |         | Large (Above 10 ha) | 09        | 07.50       |
| 4. Annual income (Rs) |         | Low (up to Rs 400,000) | 32 | 26.66 |
|                 |         | Medium (Rs.4,00,001-Rs.8,00,000) | 73 | 60.83 |
The important findings of the study are as under
The distribution pertaining to age of the respondents indicate that higher proportion of respondents (69.00%) belong to middle age category. The distribution pertaining to education of the respondents indicates that more than fifty percent (64.16%) of the respondents were having college level education. Majority (63.33%) of the respondents had possessed medium category of land holding. Majority (60.83%) of the respondents comes under medium range of annual income i.e. Rs.4,00,001/- to Rs.8,00,000/-. The distribution pertaining to source of irrigation indicates that great majority (93.34%) of the respondents were having tube well or well as source of irrigation on their farm. More than half of pomegranate growers (55.53%) were found to be in upper middle category of socioeconomic status. The distribution pertaining to experience in pomegranate cultivation indicates that majority of pomegranate growers (60.83%) were having 4 to 6 years of experience in pomegranate cultivation. Nearly three fourth (72.51 %) of the respondents were using medium level of sources of information, The distribution pertaining to training received indicate that majority of respondents (62.50%) had not receive any training related to pomegranate cultivation. More than half i.e. 56.67per cent respondents possessed Medium size of orchard The distribution pertaining to resource availability indicate that majority of the respondent (83.34%) were having availability of resources are belonged in medium category. The distribution pertaining to management orientation indicates that majority (65.84%) pomegranate growers have found to be moderate level towards planning and production.

Resource management behaviour level of respondents
Resource management behaviour of pomegranate growers was studied on three dimensions namely planning, procurement and utilization, summation of all these dimensions had indicated the overall Resource management behaviour.

Table 4: Distribution of the respondents according to their. Resource management behavior

| Sl. No. | Category                  | Respondents (n=120) | Frequency | Per cent |
|--------|--------------------------|---------------------|-----------|----------|
| 1.     | Low (Up to 33.33)        | 12                  | 10.00     |
| 2.     | Medium (33.33 to 66.66)  | 72                  | 60.00     |
| 3.     | Large (Above 66.67)      | 36                  | 30.00     |
| Total  |                          | 120                 | 100.00    |

Summary & Conclusion
Characteristics of respondents
1. The distribution pertaining to age of the respondents indicate that higher proportion of respondents (69.00%) belong to middle age category.
2. The distribution pertaining to education of the respondents indicates that more than fifty percent (64.16%) of the respondents were having college level education.
3. Majority (63.33%) of the respondents had possessed medium category of land holding.
4. Majority (60.83%) of the respondents comes under medium range of annual income i.e. Rs.4,00,001/- to Rs.8,00,000/-.
5. The distribution pertaining to source of irrigation indicates that great majority (93.34%) of the respondents were having tube well or well as source of irrigation on their farm.
6. More than half of pomegranate growers (55.53%) were found to be in upper middle category of socioeconomic status.
7. The distribution pertaining to experience in pomegranate cultivation indicates that majority of pomegranate
growers (60.83%) were having 4 to 6 years of experience in pomegranate cultivation.

8. Nearly three fourth (72.51 %) of the respondents were using medium level of sources of information.

9. The distribution pertaining to training received indicate that majority of respondents (62.50%) had not receive any training related to pomegranate cultivation.

10. More than half i.e. 56.67per cent respondents possessed Medium size of orchard

11. The distribution pertaining to resource availability indicate that majority of the respondent (83.34%) were having availability of resources are belonged in medium category

12. The distribution pertaining to management orientation indicates that majority (65.84%) pomegranate growers have found to be moderate level towards planning and production.

**Implications**

Findings of present study majority of the respondent possessed medium level of planning their resource, There is still scope to the improve in adequate knowledge, certainly affects the planning of resources. Therefore extension agencies may organize educational programme like demonstrations farmer day and seminars, so as to convince the farmers about important aspect of resource management behaviour

Majority of the of the respondents procure resources moderately, there is a wide scope to achieve higher level of procurement of resources it is necessary to involved farmers in a method demonstration of recent resources and technology for realization This is matter of concern to draw attention of various extension and developmental agencies for taking various programmes at gross root level.

**References**

1. Ahire RD. A study on the adoption of improved management practices by the grape growers. M. Sc. (Agri.) Thesis (Unpub.), MKV, Parbhani, 1997.

2. Amle KD. Safety measures adopted by vegetable growers in pesticide application M.Sc (Agri.) Thesis, (Unpub.) Dr. P.D.K.V., Krushinagar, Akola (Ms), 2016.

3. Anonymous. Agriculture Statistics of a glance, 2010.

4. Atar RS. Study on knowledge and adoption of grape cultivation practices by the grape growers, M.Sc. (Agri.), Thesis (Unpub.), submitted to MKV, Parbhani (M.S.), 2012.

5. Bhosale SS. Knowledge and adoption of post harvest technology by the pomegranate growers in Sangola Tahsil of Solapur districts. M.Sc. (Agri) Thesis (Unpub.), MPKV, Rahuri, 2003.

6. Bobade DG. Factor related with adoption of improved orange cultivation practices. M.Sc. (Agri.) Thesis (Unpub.), Dr. PDKV, Akola, 1978.

7. Chandrakar, Khushboo, Choudhary VK, Koshta AK. Constraints in banana cultivation and supply chain management in Raipur district of Chhattisgarh. Internat. Res. J. Agric. Eco. & Stat. 2015; 6 (2):410-413.

8. Chikhale NJ. Constraints in adoption of recommended orange cultivation practices. M.Sc. (Agri.) Thesis (Unpub.), Dr. PDKV, Akola, 1993.

9. Girnale ND. Constraint faced by the farmers in adoption of recommended practices, of chilli M.Sc. (Agri.) Thesis (Unpub.), Dr. PDKV, Akola, 1987.

10. Gomase AS. Adoption behaviour of kagzi lime (citrus Auranifolia swingle growers M. Sc. Thesis (Unpub.). Dr. PDKV, Akola, 1997.

11. Indian Horticulture Database. Deptt. of Agri. & Coop., 2014. www.nhb.gov.in

12. Malapure SM. Constraints Analyses Ber Cultivation Practices by (Aari.) Thesis (Unpublished) in Adoption of Farmers. M.Sc. PKV, Akola, 1992.

13. Misal MM. A study on adoption of paclobutrazol technology by mango growers in Sindhudurg district. M. Sc. (Ag) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, (M.S.), 2002.

14. Soni RL. Impact of short duration training programme on gain in knowledge about horticultural practice Indian J Extn Educa and Rural development. 2014; 22:138-140

15. Sorate PT. Technological gap in cultivation of grape in Buldana district M. sc. (Agri.), Thesis (Unpub.). Dr. PDKV, Akola, 2011.

16. Tawade AD. A study on extent of adoption of recommended technology of pomegranate by the farmers in Parbhani district M.Sc. (Agri.) Thesis (Unpub.), MAU, Parbhani, 1991.

17. Wankhede YN. Soil Testing Status of Orange Orchards In Amravati District, M.Sc (Agri.) Thesis, (Unpub.) Dr. P.D.K.V., Krishinagar, Akola, (M.S.), 2016.

18. Yawalkar PB, Nikhade DM, Bhople RS. Correlate of adoption of plant protection of recommendation of kolshi by orange growers. A path analysis. Maharashtra J. Ext. 1991; CX(2):216-217.