The Pharma Innovation

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To study the relationship between selected characteristics and resource management behaviours of pomegranate growers and the constraints faced by pomegranate growers in managing the resources

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Abstract
Findings of studies was 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.
Constraint analysis revealed that some of the major and important constraints faced by pomegranate grower were no processing industries, high cost of skill labours, no storage facility available, high transportation cost, lack of market information in this connection it may be suggested that established number of processing industry with the help of government and non- government agencies to store their produce for longer period, to train the farmers to help them cut off maintenance cost. Provide credits to the pomegranate growers in time and encourage them in pomegranate cultivation. So that the pomegranate growers may manage the resources required for pomegranate cultivation to the fullest extent.

Keywords: Relationship, characteristics, management, behaviours, pomegranate, resources

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. Fruit growing is one of the important branch of diversified farming. It provides raw material to several industries like preservation, processing, dehydration, essential oils, and package, transport, refrigeration and wine industries. Fruit crop provide wood for making furniture. Fruit crops also help in improvement in farmers as well as nations economy. 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 Mangrulpir and Manora Tahsil

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 entire district occupies an area of about 5150 sq kilometre. The present study was purposively conducted in Mangarulpir and Manora Panchayat samities in the Washim district on the basis of higher area under the cultivation of Pomegranate crop.
The form of present 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.

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Result and Discussion

1 Relationship of selected independent variables of respondents with planning

The correlation of selected independent variables with dependent variable of resource management behavior in terms of planning, procurement and utilization of resources was marked out separately. The result has been presented in Table 1.

Table 1: Correlates with Planning of resources

Sl. No.	Variable	R Values
1	Age	-0.195*
2	Education	0.219*
3	Land holding	0.103NS
4	Annual income	0.221*
5	Irrigation facility	0.013NS
6	Socio-economic status	0.241**
7	Experience in pomegranate cultivation	0.318**
8	Source of information	0.228*
9	Training received	0.552**
10	Size of orchard	0.211*
11	Resource availability	0.865**
12	Management orientation	0.289**

* Significant at 0.05 level of probability
** Significant at 0.01 level of probability
NS Non significant

The relational analysis depicted in Table-1 indicated that the characteristics *viz*. Resource availability (0.865), Training received (0.552), Experience in pomegranate cultivation (0.318), Management orientation (0.289) and Socio-economic status (0.241) were found to be positively and highly significant with the planning of resources of the respondents at 0.01% level of probability. Further it was revealed that, the characteristics *viz* source of information (0.228), Annual income (0.221), Education (0.219), size of orchard (0.211), were positively significant with planning 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 (-0.195) was negatively significant with the planning of resource of the respondents. The null hypothesis therefore, that there is no relationship between the selected characteristics of pomegranate grower with planning the resources for pomegranate cultivation is partially rejected. Result indicates that there exists a positive and significant relation.

From the findings it could thus be inferred that the educated pomegranate growers through having less land holding and irrigation facility can plan better resources for pomegranate cultivation.

2 Relationship of selected independent variables of respondents with procurement

Correlation of selected independent variables with procurement, the second dimension of resource management behaviour was worked out as an independent variable. The result of relational analysis has been presented in Table 2. The relational analysis depicted in Table-4 indicated that the characteristics *viz*. Resource availability (0.983), Training received (0.433), Socio-economic status (0.310), Experience in pomegranate cultivation (0.307),Management orientation (0.269), size orchard (0.252) and annual income (0.248)were found to be positively and highly significant at 0.01% level of probability with the procurement of resources of the respondents. Further it was revealed that, the characteristics

viz Education (0.233) source of information (0.229), were positively significant with procurement 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

Table 2: Correlate with Procurement of resources

Sl. No.	Variable	R Values
1	Age	-0.312**
2	Education	0.233*
3	Land holding	0.110NS
4	Annual income	0.248**
5	Irrigation facility	0.009NS
6	Socio-economic status	0.310**
7	Experience in pomegranate cultivation	0.307**
8	Source of information	0.229*
9	Training received	0.433**
10	Size of orchard	0.252**
11	Resource availability	0.983**
12	Management orientation	0.269**

* Significant at 0.05 level of probability
** Significant at 0.01 level of probability
NS Non significant.

3 Relationship of selected independent variables of respondents with utilization

The coefficient of correlation of independent variables and use of resources have been presented in Table 3.

Table 3: Correlate with Utilization of resources

Sl. No.	Variable	R Values
1	Age	-0.375**
2	Education	0.182*
3	Land holding	0.053NS
4	Annual income	0.182*
5	Irrigation facility	0.058NS
6	Socio-economic status	0.291**
7	Experience in pomegranate cultivation	0.226*
8	Source of information	0.179*
9	Training received	0.189*
10	Size of orchard	0.180*
11	Resource availability	0.892**
12	Management orientation	0.187*

* Significant at 0.05 level of probability
** Significant at 0.01 level of probability
NS Non significant.

The relational analysis depicted in Table-5 indicated that the characteristics *viz*. Resource availability (0.892), and Socio-economic status (0.291), were found to be positively and highly significant at 0.01% level of probability with the Utilization of resources of the respondents. Further it was revealed that, the characteristics *viz* 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.

The characteristics Land holding and irrigation facility were non significant and the characteristics Age (-0.312) was negatively significant with the Utilization of resources of the respondents

4 Relationship of selected independent variables of respondents with resource management behaviour

The correlation of selected independent variables with resource management behaviour pomegranate growers has been presented in Table 4.

Table 4: Correlate with resource management behaviour

Sl. No.	Variable	R Values
1	Age	-0.319**
2	Education	0.225*
3	Land holding	0.094NS
4	Annual income	0.232**
5	Irrigation facility	0.030NS
6	Socio-economic status	0.301**
7	Experience in pomegranate cultivation	0.300**
8	Source of information	0.225*
9	Training received	0.408**
10	Size of orchard	0.228*
11	Resource availability	0.976**
12	Management orientation	0.262**
13	Planning	0.905**
14	Procurement	0.991**
15	Utilization	0.913**

* Significant at 0.05 level of probability
** Significant at 0.01 level of probability
NS Non significant.

The relational analysis depicted in Table-4 indicated that the characteristics *viz.* Procurement (0.991), Resource availability (0.976), utilization (0.913), Planning (0.905) Training received (0.408), Socio-economic status (0.301), Experience in pomegranate cultivation (0.300), Management orientation (0.262) and Annual income (0.232), were found to be positively and highly significant at 0.01% level of probability with there source management behaviour of the respondents. Further it was revealed that, the characteristics *viz* size of orchard (0.228), Education and source of information (0.225) were positively significant with resource management behaviour of the respondents at 0.05% level of probability. The characteristics Land holding and irrigation facility were non-significant and the characteristics Age (-0.319) was negatively significant with the resource management behaviour of the respondents

Therefore it could be concluded that an educated pomegranate growers and better availability of resources had significantly management towards planning procurement and utilization of resources for pomegranate cultivation.

Constraints analysis
5. Constraints in resource management behaviour of pomegranate growers

Constraints encountered by the respondents in managing the resources were studied and presented in Table 5.

Constraints encountered by the respondents in resource management behaviour for pomegranate cultivation were identified and classified 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 respondent respectively.

The probable reason behind these constraints may be due to non-availability of subsidies and funds for erecting of pomegranate processing industries, carelessness among the farmer to conserve the rain water and its harvesting and water

sources are located nearer to the fields, source of planting material is not available nearby and pomegranate grower has to spend more time for its collection from far places such as Solapur, Ahamadnagar and sangli etc.

Table 5: Distribution of the respondents according to the constraints faced by the pomegranate growers in managing the resources

Sl. No.	Constraints	Frequency	Percent
1	No processing industry.	120	100
2	High fluctuation of weather condition.	118	98.33
3	Lower price at harvesting stage	112	93.33
4	No government support during crop failure.	110	91.66
5	Lack of irrigation water in summer season	101	84.16
6	High wages for skilled labours.	98	81.66
7	More commission charged by commission agent.	92	76.66
8	Inadequate credit facilities.	88	73.33
9	Lack of timely market information	77	64.16
10	High transportation cost.	71	59.16
11	No storage facility available in production area.	68	56.66

In respect of technical constraints, it was found that majority of the respondents (64.16%) faced the problem about lack of information about market.

Conclusion
1 Relational analysis of independent variables with dependent variables

1. **Planning:** It is observed that characteristics *viz.* annual income socioeconomic status, experience in pomegranate cultivation, training received, size of orchard, resource availability and management orientation were positively and significantly correlated with procurement of resources at 0.01 level of probability

2. **Procurement:** It is observed that characteristics *viz.* annual income socioeconomic status, experience in pomegranate cultivation, training received, size of orchard, resource availability and management orientation were positively and significantly correlated with procurement of resources at 0.01 level of probability.

3. **Utilization:** Variables namely education, annual income, Experience in pomegranate cultivation, Source of information, training received, size of orchard and management orientation established positive and significant relationship with utilization at 0.05 level of probability.

4. **Resource management behaviour:** It is observed that variables namely Annual income, Socioeconomic status Experience in pomegranate cultivation, Training received Resource availability management orientation, planning of resource, procurement of resource and utilization of resources established significant relationship with resource management behaviour at 0.01 level of probability. and age was negatively significant with planning, procurement, and utilization of resources

2 Constraints faced by the pomegranate growers

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 respondent respectively.

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