A study on the Socio-economic characteristics and the constraints faced by the registered flower growers in the production and marketing of flowers in Srinagar and Budgam districts of Kashmir valley

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Abstract
The study was conducted in two districts of Kashmir, District Srinagar and district Budgam owing to the majority of registered flower growers. The type of survey was exhaustive in nature. An interview Schedule was devised as a tool to assess the knowledge and adoption level of the registered flower growers. Data was collected by personal interview method from 140 registered flower growers growing gerbera, lilium, gladiolus and carnation. Education, experience in cut flower production, exposure visits, participation in training programmes, economic motivation of growers were found to have a positive and significant relationship with knowledge and adoption level of the registered flower growers. Lack of mother stock and their high price, price of fertilizer and insecticides, lack of scientific knowledge & training, attack by pest & disease, lack of extension work came out as major financial and technical problems of the registered flower growers while inadequate & underdeveloped transportation & communication system, low market price, lack of market information, unstructured market are among major market related problems. On the other hand marketing intermediaries specified price instability, lack of adequate market information, lacking storage facilities, unsold flower, inadequate shop-space, demand fluctuation, strikes as their problems and constraints.

Keywords: reregistered flower growers, interview schedule, knowledge, marketing and adoption

Introduction
The Indian floriculture industry comprises the florist trade, nursery plants, potted plants, bulb and seed production, micro-propagation and extraction for essential oils from flowers. Karnataka, Tamil Nadu, Andhra Pradesh, West Bengal, Maharashtra, Uttarakhnad, UP, Delhi, Haryana, Kerala, Himachal Pradesh and North Eastern States are the major flower growing states in India. Tamil Nadu is the largest loose flower producing state, while West Bengal is the Leading cut flower producing state in India. Rose is the principal cut-flower grown all over the country. Other most important cut flowers in the country are Gladiolus, Gerbera, Carnation, Lilium, Aster, Tuberose, Anthuriums and Orchids. Major markets in terms of number of traders involved are Chennai, Coimbatore and Madurai in Tamil Nadu; Bangalore, Mysore and Dharwad in Karnataka; Hyderabad and Vijaywada in Andhra Pradesh; Thiruvananthapuram and Cochin in Kerala. Mumbai and Pune in Maharashtra, Kolkata in the Eastern India and Lukhnow/Kannaouj, Delhi and Rajasthan in North India. The Indian industry is growing at a compounded growth rate of 25 per cent over the last decade and is currently valued at US$ 230 million (Anonymous, 2013) [2]. In Jammu and Kashmir, the Government has propped the fledgling commercial flower production in J&K with the help of subsidies from centrally sponsored schemes like Horticulture Technology Mini Mission and RKVY. Department of Floriculture that previously was known a Department of Gardens and Parks (entrusted with the upkeep of gardens and public recreational spaces) underwent a radical revamp in 2007. The department started its activities in individual districts with the help of centrally sponsored schemes. (Misri, 2014) [24]. Government was able to create a primary extension and development apparatus in the districts that was instrumental in kick-starting commercial floriculture in different districts of J&K. The area under commercial floriculture has witnessed a quantum jump during the last six years. Government has also created a significant market side logistics/infrastructure in the form of cold storage facilities and refrigerated vans at district level. 15 walk-in-cold chambers at the cost of 182.00 lakhs have been established at various district headquarters in the Kashmir Valley and a provision of 9.00 lakhs has been kept for operational cost of these Walk in Cold...
Rooms. This has been further augmented by the creation state of the art auction centre at centrally located Srinagar district. At the end of the 11th five year plan, government has put in place the requisite level of investment in infrastructure and logistics that need to be further built upon and strengthened in the current financial plan. There is a need to consolidate the gains made so far by investing in critical areas to make further growth Sustainable long term growth (Misri, 2014) [24]. Hence, the present study is intended to address the following specific objectives:

- To study the Socio-economic characteristics of the registered flower growers of Srinagar and Budgam districts of Kashmir.
- To study the major constraints encountered by the registered flower growers in the production and marketing of flowers.

Materials and Methods
The materials and methods used in this study are presented in the following subheads:
- Locale of the study
- Selection of the respondents
- Agro-climatic background
- Construction of Interview Schedule for data collection
- Pre-Testing of Interview Schedule
- Procedure for Data Collection
- Operational definitions
- Statistical Analysis

Locale of the study
The present study was conducted in Central Kashmir i.e., District Srinagar and District Budgam of Jammu and Kashmir State to find out the Impact of Floriculture development programme.

Selection of the respondents
A list of the respondents (registered flower growers) was obtained from the Floriculture development Officers of the concerned districts. All the registered growers (140) i.e., 75 from Dist. Srinagar and 65 from Dist. Budgam were taken for the study.
Agro-climatic background

District Srinagar

Srinagar district is situated in the centre of Kashmir Valley and is surrounded by five districts. In the north it is flanked by Kargil and Ganderbal in the South by Pulwama and in the northwest by Budgam. The capital city of Srinagar is located 1585 metres above sea level. The district with a population of around 12.70 Lac souls (2011 census) is spread over an area of 294 sq. km. It comprises two tehsils/towns viz Srinagar North and Srinagar South, one block (Srinagar), besides 136 Revenue villages. The District has been divided into three Agri. Zones with 27 circles, each circle comprises of 3-4 villages, headed by J.A.E.O (Junior Agriculture Extension Officer) and each zone comprises of 6-9 circles headed by an Agriculture Extension Officer. The District has total cultivable area of 6660 hectares, out of which 5910 hectares are irrigated and 750 hectares un-irrigated. The total requirement of food grains in the district is 15 thousand metric tons against availability of 14.29 thousand metric ton. The area is shrinking day by day. The area under paddy is also being converted into vegetable production. Vegetables are grown over an area of more than 2500 hectares of land and the cropping intensity in the District is more than 200%. Paddy and Maize crops are grown over an area of about 3400 hectares and 450 hectares respectively. Pulses are grown over an area of 100 hectares during Kharief, 220 hectares in winter while as 200 hectares are covered under summer & 1200 hectares under winter fodders.

District Budgam

The topography of the district is mixed with both mountainous and plain areas. The climate is of the temperate type with the upper-reaches receiving heavy snowfall in winter. The average annual rainfall of the district is 585 mm. While the southern and south-western parts are mostly hilly, the eastern and northern parts of the district are plain. The average height of the mountains is 1,610 m. The soil is loose and mostly denuded karewas dot the landscape. Literacy rate is 57. 98%. With a predominately rural outlook, 86% of the population in the district lives in the villages and are primarily involved in agricultural operations. Gender ratio of the district is 833/1000.

Construction of interview Schedule for data collection

An Interview Schedule was constructed based upon the objectives, variables and available literature on the topic. The schedule was prepared in English language. While preparing the schedule, due care was taken to avoid questions with dual meaning and contradictory statements. The language used for the questions was simple for easy understanding. In this way the research schedule was constructed to collect the necessary information. Interview Schedule Part A. It consists of two parts. Part I dealt with the profile of the registered flower growers. In part II of the Schedule, questions related to Knowledge and Adoption of recommended flower Production Practices were included. Part B included the items related to the constraints faced by the flower growers in adoption of recommended flower Production Practices.

Pre-Testing of Interview Schedule

Before, finalization of the schedule, it was pre-tested by interviewing ten members who were not included in the sample in order to know whether the respondents furnish the required information and whether the questions were clear and can be easily understood by the respondents. The confusing questions were modified so that no practical difficulties arise while filling the schedule.

Procedure for Data Collection

The author personally interviewed the respondents included in the sample. The help of concerned Floriculture Officers (FOs) was sought for obtaining the list of registered flower growers. The importance and objectives of the study were clearly explained to all the registered growers. They were assured that all the information furnished by them will be kept confidential and would be used for the research study only. The author attempted to contact the registered flower growers at their homes during their leisure time and some farmers were also contacted at their fields to get the information. The interview was conducted in a friendly and informal manner.

Duration of field study

The work of data collection was started in the 2nd week of April, 2015 and completed by the 3rd week of May, 2015. The total period required for this purpose was over one month.

Compilation of data

The qualitative data was quantified by using various statistical tools and working out different scores in order to find out the nature of association between dependent and independent variables.

Operational definitions

Independent Variables

Age

It is, one of the basic characteristic of an individual linked with his maturity, physical fitness and productivity. At the time of interview, chronological age was considered. The respondents according to age were classified into three categories.

- Up to 38 years - Low (Young)
- 39 to 55 years - Medium (Middle Age)
- 56 years and above - High (Old Age)

Education

The level of formal education attained by an individual tends to influence the extent to which an individual is exposed to new ideas and outer world. According to formal education, the respondents were classified into following categories.

- Illiterate
- Middle
- Matric
- 10+2
- Graduate
- Graduate and above

Family Size

The size of family refers to the number of members in the family. Considering the number of members in the family, the respondents were classified into three categories.

- Up to 6 members - Low
- 7 to 10 members - Medium
- 11 and above members - High

Annual Income

This includes the annual income of the registered growers from Agriculture and all other sources. According to their level of income, the member farmers were classified into three categories.
• Up to Rs 140000 - Low
• Rs 140001 to Rs 260001 - Medium
• Rs 260002 and above - High

Land Holding
The land holding refers to the total land possessed by an individual flower grower. According to the extent of land possessed by them, the registered growers were classified into three categories.
• Up to 1.3 hectares - Low
• 1.4 to 2.65 hectares - Medium
• 2.66 hectares and above - High

Experience in flower growing
Experience means the number of years for which the registered grower has been cultivating flowers. As per their experience in flower growing, the registered growers were classified into three categories.
• Up to 13 years - Low
• 14 to 27 years - Medium
• 28 years and above - High

Sources of Information
The source of information refers to the use of different sources by the registered growers for obtaining information regarding Flower Production Practices. The score was worked out by assigning scores to each of the source used by the registered growers. The total score of each flower grower was worked out and the registered growers were grouped into three categories.
• Up to Score 21 - Low
• Score 22 to 28 - Medium
• Score 29 and above - High

Economic Motivation
The economic motivation refers to the motivation of an individual in all aspects leading to his development. The score was worked out by assigning score one to statement yes and score 0 to no. The total score was calculated by summing up scores of all statements and on the basis of the total score obtained by each member farmer; they were classified into three categories.
• Up to Score 2 - Low
• Score 3 to 4 - Medium
• Score 5 and above - High

State of Modernization
The state of modernization here refers to the recommended flower production practices possessed by the registered growers. Each of the recommended flower production practice possessed by the grower was assigned one score. The total score was worked out and on the basis of the total score gained by each registered grower; they were classified into three categories.
• Up to Score 3 - Low
• Score 4 to 6 - Medium
• Score 7 and above - High

Statistical Analysis
The data collected was processed, quantified, categorized and tabulated. The established parameters like frequency, percentage, regression, descriptive statistics and Karl Pearson’s product movement correlation coefficient were calculated.

Mean
This measure was used to categorize the dependent and independent variables into low, medium and high categories. Mean is defined as the arithmetic average of distribution of scores. It is determined by adding the scores and dividing the sum by the number of scores. Symbolically, the mean is given by

\[ \text{Mean} = \frac{\sum X_i}{n} \]

Where, \( X \) = Mean Score
\( X_i = \) Score for the respondents
\( n = \) Total number of respondents.

Frequency distribution of flower growers
Frequency was used to know the distribution pattern of respondent’s on different variables and to categorize the problems perceived by flower growers in order of importance. The frequency distribution of the flower growers has been worked out and expressed in terms of percentage as well.

Percentage
It is used in descriptive analysis for making simple comparison. For calculating percentage, frequency was multiplied by 100 and divided by the total number of observations or respondents in that particular category. Percentage was calculated up to 2 places of decimal and in some cases rounded up to the nearest whole numbers.

Results and Discussion
Characteristics of the registered flower growers, their relationship with knowledge and adoption level of the recommended Flower Production Practices.

Age
In the present study, it was found that sixty per cent of the registered flower growers belonged to middle age category in district Srinagar while as, in district Budgam, fifty three per cent of the registered flower growers belonged to the middle age category. A very small percentage (less than 10%) of the registered flower growers belonged to the old age category of 56 years and above in both the districts.

Statistically there was a significant relationship between age and knowledge \( r=0.619 \) and relationship between age and adoption \( r=0.619 \) was also found significant in both the districts. This might be due to the fact that age influences the registered flower growers’ interest in knowing the new things and enhances registered flower growers’ curiosity about scientific ideas and new innovations and their adoption as well. Similar results were observed by Babanna (2002) \(^3\). 

Education
The present study revealed that nearly one third of the registered flower growers had 10+2 level education in district Srinagar while as, in district Budgam, more than thirty per cent of the registered flower growers had matric level education. A minimum percentage of the registered flower growers were having above graduation level qualification in both the districts.

Statistically, there was a significant relationship between education and knowledge \( r=0.985 \) and also between education and adoption \( r=0.745 \) of the registered flower growers. This might be due to the fact that education brings about desirable changes in an individual’s knowledge, attitude and skill. Higher the education, higher is the knowledge and adoption of recommended flower production practices. It seems that comparatively higher education level of registered
flower growers must have enabled them to make use of relevant literature and might have better contacts with extension agency. Similar results were also reported by Balasubramani (1997) [4].

**Family Size**
In the present study, a majority of the registered flower growers in both the districts, Srinagar and Budgam had medium size family (7-10 members) while as, near about one third of the registered flower growers from both the districts had small size family of up to 6 members. Statistically, there was a non-significant relationship between family size and knowledge (r=0.434) and significant relationship was observed between family size and adoption (r=0.845). Thus, with the large size family, the registered flower growers would be interested in making flower production profitable. The findings are in conformity with the findings of Lakshmisha (2000) and Vedamurthy (2002).

**Annual Income**
It was observed from the analysis of data that in district Srinagar, majority of the registered flower growers (57.33%) had an annual income of Rs. 140001-Rs. 260000 Whereas, fifty six per cent of the registered flower growers had annual income of up to Rs.14000 and below, followed by one third of the registered flower growers having annual income of Rs.260001 and above. While as, in district Budgam, eighty three per cent of the registered flower growers had an annual income of Rs.140000 and below followed by (35.38%) and (20.00%) registered flower growers had annual income of Rs.140001-Rs. 260000 and Rs. 2600001 and above respectively. Statistically, there was a significant relationship between annual income and knowledge (r=0.759) and a non-significant relationship between annual income and adoption (r=0.299). The reason may be that the high income registered flower growers can purchase costly agricultural inputs and implements. Similarly, they have no problem of getting loans and subsidies because of high economic status in the society and develop better contacts with outside world. It also enables registered flower growers to take risk in trying new ideas regarding flower production. Thus, annual income is a vital index of social status. The results are in conformity with the results of Balasubramani (1997) [4].

**Land Holding**
The present study indicated that in district Srinagar and district Budgam, more than eighty five per cent of the registered flower growers had land holding of up to 1.3 hectare while as, a small percentage (around 10%) of the registered flower growers had land holding of 1.4 to 2.65 hectare and a very negligible percentage of the registered flower growers had land holding above 2.66 hectare. Statistically there was a non-significant relationship between land holding and knowledge (r=0.149) while as relationship between land holding and adoption was significant (r=0.285). The possible reason that could be attributed was that more the land holding, more is the enthusiasm to adopt the recommended flower production practices. The findings are in the line with the findings of Raut (1985) and Borude (1992).

**Experience in flower growing**
In the present study, near about fifty per cent of the registered flower growers of district Srinagar and more than ninety-six per cent of the registered flower growers of district Budgam had an experience of up to 13 years in flower production. While as, 46 per cent of the registered flower growers from district Srinagar and only 3 per cent of the registered flower growers from district Budgam had experience of 14-27 years. Statistically, there was a significant relationship between experience in flower growing and knowledge (r=0.991) and also between experience in flower growing and adoption (r=0.770) of the registered flower growers. This may be due to the fact that the experience lessens the extent of problems and helps in more adoption of the recommended flower production practices as it influences the knowledge and skills of the registered flower growers for better adoption. The findings are in conformity with the findings of Borude (1992) and Vedamurthy (2002).

**Sources of information**
The present study revealed that in both the districts, Srinagar and Budgam, more than (50%) of the registered flower growers had low sources of information whereas, a negligible percentage of the registered flower growers had high sources of information. Statistically there was a significant relationship between sources of information and knowledge (r=0.726) and the relationship between sources of information and adoption was also significant (r=0.295). This may be due to the fact that more the contact with different sources of information, more is the knowledge of the recommended flower production Practices and more the adoption. The similar findings were observed by Babanna (2002) [3], Raghupathi (1994) and Kanavi (2000).

**Economic Motivation**
It was observed in the present study that more than half of the registered flower growers had low economic motivation in both the districts, Srinagar and Budgam. While as, near about one-third of the registered flower growers had medium economic motivation and a minimum percentage of the registered flower growers had high economic motivation. Statistically there was a significant relationship between economic motivation and knowledge (r=0.756) while as relationship between economic motivation and adoption was non-significant (r=0.295). This may be due to the fact that the economic development is the root of individual’s development in knowledge and adoption of the recommended flower production practices. The findings of the study are in accordance with the findings of Reshmury (2001) and Borude (1992).

**State of modernization**
The present study indicated that in district Srinagar, more than fifty per cent (54.66%) of the registered flower growers had low state of modernization. Whereas, in district Budgam more than fifty per cent (53.85%) of the registered flower growers had low state of modernization. Only minimum percentage (16%) in district Srinagar and (13.84%) in district Budgam had a high state of modernization. Statistically, there was a non-significant relationship between state of modernization and knowledge (r=0.103) and also between state of modernization and adoption (r=0.171). The findings are in the line with the findings of Nalwade (1989) and Borse (1992).
Personal and socio-economic characteristics of registered flower growers. (n=140)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Characteristics</th>
<th>Srinagar (n=75)</th>
<th>Budgam (n=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>1.</td>
<td>Young (up to 38 years)</td>
<td>21</td>
<td>28.00</td>
</tr>
<tr>
<td></td>
<td>Middle Age (39-55 years)</td>
<td>45</td>
<td>60.00</td>
</tr>
<tr>
<td></td>
<td>Old Age (56 years and above)</td>
<td>9</td>
<td>12.00</td>
</tr>
<tr>
<td>2.</td>
<td>Educational Qualification</td>
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<tr>
<td></td>
<td>Illiterate</td>
<td>09</td>
<td>12.00</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>15</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>Matric</td>
<td>18</td>
<td>24.00</td>
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<td></td>
<td>10+2</td>
<td>24</td>
<td>32.00</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>06</td>
<td>08.00</td>
</tr>
<tr>
<td></td>
<td>Graduate &amp; Above</td>
<td>2</td>
<td>02.66</td>
</tr>
<tr>
<td>3.</td>
<td>Family Size</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Small (up to 6 members)</td>
<td>21</td>
<td>28.00</td>
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<tr>
<td></td>
<td>Medium (7-10 members)</td>
<td>35</td>
<td>46.66</td>
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<tr>
<td></td>
<td>Large (11members and above)</td>
<td>19</td>
<td>25.33</td>
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<td>4.</td>
<td>Annual Income (Rupees)</td>
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<td></td>
<td>Medium (140001-260000)</td>
<td>43</td>
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<tr>
<td></td>
<td>High (260001 and above)</td>
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<td>5.</td>
<td>Land Holding</td>
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<td></td>
<td>Small (up to 1.3 hectare)</td>
<td>64</td>
<td>85.33</td>
</tr>
<tr>
<td></td>
<td>Medium (1.4-2.65 hectare)</td>
<td>10</td>
<td>13.33</td>
</tr>
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<td>Large (2.66 hectare and above)</td>
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<td>6.</td>
<td>Experience in farming</td>
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<td>Low (up to 13 years)</td>
<td>38</td>
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<td>Medium (14-27 years)</td>
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<tr>
<td></td>
<td>High (28 years and above)</td>
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<td>7.</td>
<td>Sources of Information (score)</td>
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<td>Low (up to 21)</td>
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<td></td>
<td>Medium (22-28)</td>
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<td></td>
<td>High (29 and above)</td>
<td>08</td>
<td>10.66</td>
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<td>8.</td>
<td>Economic Motivation (score)</td>
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<td>Low (up to 2)</td>
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<td></td>
<td>Medium (3-4)</td>
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<td>29.33</td>
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<tr>
<td></td>
<td>High (5 and above)</td>
<td>12</td>
<td>16.00</td>
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<td>9.</td>
<td>State of Modernization(score)</td>
<td></td>
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<td>Low (up to 3)</td>
<td>39</td>
<td>52.00</td>
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<tr>
<td></td>
<td>Medium (4-6)</td>
<td>28</td>
<td>37.34</td>
</tr>
<tr>
<td></td>
<td>High (7 and above)</td>
<td>8</td>
<td>10.66</td>
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</tbody>
</table>

Constraints faced by the registered flower growers in adoption of recommended Flower Production Practices.

**A. Economic Constraints**

Among the economic constraints, eighty per cent of the registered flower growers from district Srinagar experienced the constraint of high rate of interest on loans followed by more than seventy per cent as higher costs of planting material while as, nearly seventy per cent of the registered flower growers experienced inadequacy of capital for purchase of planting material and fertilizers and high cost of fertilizers. Low subsidy on inputs was reported by 65 per cent of the registered flower growers. Also high charges of labour were experienced by more than fifty per cent of the registered flower growers. In district Budgam, among the economic constraints, the main problem faced by the registered flower growers was low subsidy on inputs (76.92%), followed by high cost of planting material (69.23%), inadequacy of capital for purchase of planting material and fertilizer (64.62%), high rate of interest on loans (61.53%) and high charges of labour (60%). Therefore, the availability of financial resources is an important aspect in adopting the recommended flower production practices because majority of the registered flower growers expressed their difficulty regarding availability of finance on time.

**B. Supply Constraints**

It was observed that more than sixty per cent of registered flower growers from district Srinagar reported that they had the problem of inadequate and untimely supply of loans to registered flower growers followed by non-availability of proper irrigation facilities (42.66%). Forty per cent of the registered flower growers had the problem of non-availability of fertilizers at the time of planting followed by non-availability of labour at the time of transplanting and harvesting (37.33%) and non-availability of seeds or planting material at the time of planting in nearby area (34.66%). In district Budgam, near about forty per cent of the registered flower growers reported that non-availability of labour at the time of transplanting and harvesting was the major supply constraint while as, 35.38 per cent of the registered flower growers had the problem of non-availability of proper irrigation facilities. The other constraints faced by the registered flower growers were the non-availability of planting material and fertilizers at the time of planting (32.30%) and the non-availability of fertilizers, pesticides and fungicides at the time of application (27.70%). The success of flower production depends on the full time of labour and...
timely availability of planting material and fertilizer for adoption of the recommended flower production practices.

**C. Marketing Constraints**

Among the marketing constraints, more than eighty per cent of the registered flower growers from district Srinagar expressed that the main constraints faced by them was low rate of flowers in the local market and exploitation by the middlemen. The other marketing constraints faced by the registered flower growers were non-availability of stores in nearby area (84%), the lack of market knowledge (80%), lack of co-operative societies for the purchase of produce (81.33%), poor transport facilities in rural areas (34.66%) and delay in payments (32%) while as, more than eighty per cent of the registered flower growers from district Budgam faced the main problem of low rate of flowers in local market and exploitation by middlemen (73.84%) followed by lack of market knowledge (69.23%) and non-availability of stores in the nearby area (61.54%). The other marketing constraints faced by the registered flower growers were lack of co-operative societies for the purchase of produce (49.23%), delay in payments (40%) and poor transport facilities in rural areas (32.30%). The problems expressed by the registered flower growers hinder them to adopt the recommended flower production practices.

**D. Technical Constraints**

It was observed that among the registered flower growers from district Srinagar, more than ninety per cent faced the problem of lack of skill in seed treatment, lack of cold storage facilities and lack of knowledge about improved varieties. Near about ninety per cent of the registered flower growers faced the problems of irregular visits of Floriculture Officers and more than sixty per cent of the registered flower growers received sub-standard planting material. In district Budgam, more than ninety per cent of the registered flower growers reported the problems of lack of skill in seed treatment followed by lack of knowledge about improved varieties (89.23%), irregular visits of Floriculture Officers (87.69%) and lack of cold storage facilities (75.38%). Also more than sixty per cent of the registered flower growers faced the problem of planting material available was of sub-standard quality. The findings of this study are at par with the study conducted by Balasubramani (1997)[4].

**Constraints encountered by the registered flower growers**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Economic Constraints</th>
<th>Srinagar (n = 75)</th>
<th>Budgam (n = 65)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Rank</td>
</tr>
<tr>
<td>1</td>
<td>Inadequacy of capital for purchase of planting material and fertilizers.</td>
<td>51</td>
<td>68.00</td>
</tr>
<tr>
<td>2</td>
<td>High cost of planting material</td>
<td>54</td>
<td>72.00</td>
</tr>
<tr>
<td>3</td>
<td>High rate of interest on loans</td>
<td>60</td>
<td>80.00</td>
</tr>
<tr>
<td>4</td>
<td>Low subsidy on inputs</td>
<td>48</td>
<td>64.00</td>
</tr>
<tr>
<td>5</td>
<td>High labour charges</td>
<td>42</td>
<td>56.00</td>
</tr>
</tbody>
</table>

Supply Constraints

| 1     | Non-availability of planting material at the time of sowing or planting in the nearby area | 26 | 34.66 | IV | 21 | 32.30 | III |
| 2     | Non-availability of fertilizers, pesticides and fungicides at the time of application. | 30 | 40.00 | II | 18 | 27.70 | IV |
| 3     | Non-availability of labour at the time of planting, transplanting and harvesting. | 28 | 37.33 | III | 25 | 38.46 | I |
| 4     | Non-availability of proper irrigation facilities | 32 | 42.66 | I | 23 | 35.38 | II |

Marketing Constraints

| 1     | Low rate of flowers in the local market | 65 | 86.66 | I | 49 | 75.38 | I |
| 2     | Lack of co-operative societies for the purchase of flowers | 61 | 81.33 | IV | 32 | 49.23 | V |
| 3     | Non-availability of stores in nearby area | 63 | 84.00 | III | 40 | 61.54 | IV |
| 4     | Delay in payments of purchase | 24 | 32.00 | VII | 26 | 40.00 | VI |
| 5     | Poor transport facility in rural areas | 26 | 34.66 | VI | 21 | 32.30 | VII |
| 6     | Exploitation by middlemen | 64 | 85.33 | II | 48 | 73.84 | II |
| 7     | Lack of market knowledge | 60 | 80.00 | V | 45 | 69.23 | I|

Technical Constraints

| 1     | Irregular visits by floriculture Officers | 67 | 89.33 | IV | 57 | 87.69 | III |
| 2     | Lack of knowledge about improved varieties | 69 | 92.00 | III | 58 | 89.23 | II |
| 3     | Lack of skill in seed treatment | 71 | 94.66 | I | 60 | 92.30 | I |
| 4     | Planting material available is sub-standard. | 45 | 60.00 | V | 40 | 61.53 | V |
| 5     | Lack of cold storage facilities | 70 | 93.33 | II | 49 | 75.38 | IV |

**Conclusion**

The major conclusion that can be drawn from the study is that both the districts have a tremendous potential and prospects for the flower cultivation and marketing which can be further propelled by overcoming the major constraints faced by the flower growers of these districts. The line departments as well as the Research Centers of the Agricultural University has got to play the key role in facilitating the flower growers with the modern technologies and ensure regular training programmes for the registered flower growers so as to acquaint them with the recommended production and marketing practices of the flowers.

**References**

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