RESEARCH ARTICLE

SOCIOECONOMIC CHARACTERS AND STATUS OF CUT FLOWER PRODUCERS IN KATHMANDU, NEPAL

Samikshya Kunwar^{a*}, Pratibha Bist^b^a Himalayan College of Agricultural Science & Technology^b Agriculture and Forestry University (AFU), Rampur, Nepal*Corresponding Author email: sam8kshya08@gmail.com

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ABSTRACT

In Kathmandu valley, the production of cut flowers has gained popularity in the past few years due to the high demand for cut flowers in the valley with the increasing population and increased use of cut flowers on various occasions like birthdays, anniversaries, marriage, etc. Kathmandu valley has a favorable environment and availability of skilled manpower for the success of cut flower production here. Recognizing these points, the study was carried out to study the status of cut flower producers in Kathmandu valley. For the research purpose, 40 farmers were interviewed out of 60 cut flower producers in the valley. In the study, it was found that most of the farms were male-dominated with the highest proportion of the household head having higher secondary level education. More than 50% of farmers had rented land. Lack of proper extension services during disease infestation did a lot of loss to the farmer which was the major problem in the cut flower enterprise. Similarly, unavailability of quality inputs, labor, transportation problem, dissatisfaction about the price received by the farmers, and low quantity of the product are major marketing problems. The products were sold directly to the different wholesalers in the valley.

KEYWORDS

Floriculture, Market, Survey, SWOT

1. INTRODUCTION

In the era of globalization, floriculture has become an essential commercial activity in agriculture. It has emerged as a viable and profitable alternative, with the potential to generate remunerative self-employment among small and marginal farmers to increase the earning of developing countries such as Nepal. Nepal as a popular tourist destination has good market opportunities for floriculture products. Floriculture has a great scope in Nepal, as it has a high demand and most of the cut flowers consumed are imported from Netherlands, India, Holland, and many other countries. The production decreases during the winter season in comparison to the summer season. The floriculture has been becoming one of the eminent sectors in the Nepalese economy attributing 0.05% of the total national Gross Domestic Product (GDP). However, the annual growth rate of flowers production is 24%, while the import value was 0.4 million in 2014/015 (FAN, 2016). In addition, floriculture is constrained by the higher cost of production that led to importing a larger quantity of flower products. In spite of the Flower Promotion Policy, 2069, the flower producers and concerned stakeholders in floriculture are not inclined and encouraged to enhance production and productivity (Gauchan et al., 2009).

The area expansion and commercial production potentiality of various cut flowers are higher in Nepal because of diversified agro-ecological settings and increasing physical infrastructures. Commercial floriculture is still at a callow stage of establishment and has been facing several constraints such as inputs, technology development, and transfer, credit access, and flower market, and etc. In developing countries, smallholder farmers are

frequently handicapped by ineffective extension services and poor access to agriculture credit that lead the farmers to be inefficient (Akobundu et al., 2003; Fletschner, 2008). In addition, farmers are facing land leasing issues to expand the floriculture gardens. Such constraints hindered the floriculture and led to a higher quantity of imports of the flower products estimated to be Rs. 40 million in 2014 (FAN, 2016).

2. OBJECTIVE

- To study socio-demographic status of cut flower producers in Kathmandu valley.
- To identify major problems of cut flower producers in the study area.
- To assess strength, weakness, opportunities and threat related with cut flower production by participatory approach with help of flower producers.

3. RESULTS AND DISCUSSION

3.1 Research Area

Kathmandu valley which is in the Bagmati Province of Nepal was selected for this study as the majority of cut flower business is centralized here. Kathmandu valley includes Kathmandu district, Bhaktapur district, and Lalitpur district, and information was collected from all these three districts. In Nepal, Kathmandu valley is the major market for flower business mainly due to a higher population with better purchasing power, the existence of high-class hotels, big business houses, international

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agencies, and the only one international airport in the country (Gauchan et al., 2009). In addition, the climate is suitable with a different type of flowers to be grown.

3.2 Commodities under consideration

Carnation, gladiolus, rose and gerbera is major cut flowers produced in Nepal. Among them carnation, rose and gerbera producers were taken under consideration for the study. Rose is universally famous for its beauty and delightful fragrance. It is most commonly used as a cut flower while it is also famous for its medicinal values, as the rose petals aid in weight loss, provides vitamins and mineral to the body, regulates blood sugar and proper circulation, helps with spasm and fights inflammation. Rose is also used for making essential oils. A red carnation symbolizes love, pride, and admiration; a pink carnation symbolizes the love of a woman or a mother; a purple carnation symbolizes capriciousness; a yellow carnation symbolizes disdain, rejection, or disappointment; while a white carnation symbolizes innocence and pure love. It is used on various occasions for its beautiful colors. Flowers of Gerbera are available in different colors yellow, orange, pink, crimson, red, purple, and white. It is the most important cut flower in the world as well as in the world and occupies fourth place in the world (Paudel, 2014).

3.3 Data Collection

The primary data was collected through the field survey of the study area. According to a study, the number of floriculture nurseries and farm in Kathmandu valley was 132 out of which only 15 were producing rose, 20 were producing carnation and 25 producing gerberas (FAN, 2016). These farmers represent the study population from which 10 rose, 15 carnation and 15 gerbera producers were considered as study sample (80% of the population). The respondents were directly interviewed using the predefined questionnaire and focus group discussion as conducted to meet the objectives of the study. The secondary data was collected through library research in the related field and by studying reports, journals, books and annual reports prepared by various related agencies/organizations.

3.4 Market Margin

Marketing margin is the difference between the price received by farmers and price paid by the consumers. It was calculated by following formula (Agrawal and Acharya, 1999):-

Marketing margin = Retailer's price (Pr) – farm gate price (Pf)

4. RESULT AND DISCUSSION

4.1 Socio-economic Characters of Households

4.1.1 Gender and Age of Household Heads

Among the total household surveyed, majority were male dominated (82%) and only 18% were female were female dominated. A group researcher also observed male dominated household decision making among the flower growers (Dahal et al., 2018). The age group has been divided into 4 groups i.e. 15 years or below, 15-30 years, 30-50 years and above 50 years. The survey revealed that majority of the household head were above 50 years (58%), followed by age group of 30-50 years (25%), 15-30 years (17%) and 15 years or below (0%).

4.1.2 Education Level of Household Head

The level of education has been classified into 3 groups which includes under S.L.C, higher secondary and bachelors and above. Under S.L.C includes respondents who have the education till S.L.C or below. Similarly, secondary level is for those who have passed SLC. The next level includes those who have passed bachelors and above degree in formal education.

Table 1: Education level of respondents

Education Level	Frequency
Under S.L.C	8%
Higher Secondary	67%
Bachelor or above	25%

Source: Field Survey (2019)

Largest proportion of the household head had received higher secondary education (67%), followed by bachelor level and under SLC which is found to be 25% and 8%, respectively.

4.1.3 Land tenure of respondents/ ownership

The proportion of household with rented land was found to be highest.

Table 2: Land tenure of respondents

Type of Land	Frequency
Own land	27%
Rented land	55%
Both	18%

Source: Field Survey (2019)

During the survey, two main types of farms were found; 1) with a single owner and 2) with 2 or more partners/owners (joint-venture). Among the Gerbera producers surveyed, 60% respondents were single owner of their farms and remaining 40% respondents had partners. Similarly, among Rose producers 60% respondents were single owners of their farms while 40% respondents had partners. In Carnation producers, it was seen that 73.3% respondents were single farm owners and 23.7% respondents had partners. Thus, around 65% of sampled householders were single owner while remaining 35% had partners.

4.1.4 Source of income

The survey revealed that agriculture was the major source of income for all the respondents while 5% respondents had government job and 7.5% respondents were involved in trade/business as a minor source of income.

4.1.5 Area under cut flower cultivation

From the survey, it was summed up that total land holding of the surveyed household was ha 9.73 ha with 3.33 ha under Gerbera cultivation, 3.38 ha under Rose cultivation and 3.02 Ropani under Carnation cultivation. The average area for Gerbera, Rose and Gerbera cultivation was found to be 0.22 ha/household, 0.33 ha/household and 0.2 ha/household respectively. In the study sites, it was seen that all of the respondents used drip irrigation system for irrigating the flowers.

4.2 Market status

4.2.1 Market Margin

The market margin for Gerbera, Rose and Carnation was calculated to be NRs 25, NRs 40 and NRs 30 respectively (table 3).

Table 3: Market margin of different cut flowers

Cut flower	Farm gate price (Rs/sticks)	Market price (Rs/sticks)	Market margin (Rs/sticks)
Gerbera	10	35	25
Rose	10	50	40
Carnation	10	40	30

Source: Field Survey (2019)

4.2.2 Marketing channel

Marketing channel is the route through which the commodity is transferred from the production point to consumption point. In this survey 4 marketing channels were provided for the respondents to choose among which all chose 3rd channel.

Channel 1 Producer- consumer

Channel 2 Producer- retailer-consumer

Channel 3 Producer- wholesaler-retailer-consumer

Channel 4 Producer- collector-wholesaler-retailer-consumer

Figure 1: marketing channel of cut flower

From the survey, it is clear that number of middle man in marketing of cut flower is low, which is good from the point of view of marketing efficiency.

4.3 Problems/ Constraints perceived by farmers

Problems or constraints are the hindering factors for the development of floriculture. According to a group researcher, insect pest, diseases and nutritional problems are the constraints of cut flower production in the

Kathmandu valley (Adhikari and Pun, 2018). In this study, problems and constraints were organized into seven categories such as inputs, disease infestation, labor, irrigation, extension, transportation, and market. Each of those parameters were indexed from 1 (severe problem) to 7 (least problem). The result showed that the most severe problem was disease infestation in the farm followed by lack of good extension services, inputs consisting of seed, fertilizer, pesticide, machinery (means of traction power), irrigation, labor, transportation services and marketing services. Though the market distance is not so far but lack of organized floriculture wholesale market hinders efficient flower marketing.

Table 4: Problems in cut flower production

Problems / constraints	Severity
Availability of input (improved seed, fertilizer, pesticide, etc.)	3
Diseases	1
Labor resource	5
Irrigation problem	4
Extension service not available	2
Means of transportation	6
Marketing services	7

Source: Field Survey (2019)

4.4 SWOT analysis

Cut flower production and marketing mechanism in Kathmandu valley has following strengths, weaknesses, opportunities and threats: -

4.4.1 Strength identified by the respondents

The domestic production gaining momentum to cater to the major parts of the local market, as a result, import is gradually substituted by the domestic products. Similarly, cut flower producers from Kathmandu valley are able to produce high-quality products even with low-level infrastructural facilities. Favorable geo-climatic conditions and rich in bio-diversity with topographical conditions are muscles for cut flower production. Moreover, the availability of high-value special cultivars and exotic species, land, and labor force have advocated the sector. Market linkages with neighboring countries, particularly with India also have been proved to be a boon.

4.4.2 Weaknesses experienced by the respondents

Farmers are not institutionalizing their business and hesitant to boost further investment. Lack of knowledge on the varietal characteristics and performance has caused varietal failure leading to the loss in the flower production business (Magar and Siwakoti, 2014). On top of that, a lack of stability in production in type and volume as required by the markets has impaired the production sector. Similarly, weak value chain network infrastructure including cold storage, collection center, warehouses, and other distribution facilities, inadequate skilled manpower, inadequate information on the world market and trading system has been proved to be a bane for flower production in past. At last, poor knowledge of farm management has limited farmers from further advancement.

4.4.3 Opportunities seen by the respondents

An upward trend in the domestic market has created favorable market access with preferential tariffs. Most of the transaction in the floriculture in Nepal is within the Kathmandu valley with high demand during Dipawali Festival (Pokhrel, 2021). Training and support programs held by the government have strengthened women entrepreneurs with their high involvement in value chain development. A group researchers observed highest increase in the production area of gerbera followed by carnation and rose due to governmental support in greenhouse (Pun et al., 2019). With globalization, export prospects to India, Bangladesh, Gulf countries,

and other Asian countries have augmented. More specifically, off seasonal production getting a better market in India. Thus, floriculture has surfeit potential in the international market. Moreover, the sector has the potential for generating additional employment. Some supportive government initiatives have been proved to be auspicious in that sense.

4.4.4 Possible Threats

Non-tariff barriers in destination markets have the potential to create competition between domestic and exotic products. Unfavorable policy and a low level of financial and technical support are likely to discourage farmers. Similarly, banks and insurance companies are not interested to provide their services and facilities at priority rates. On top of that, the imposition of VAT on inputs imported by farmers has attenuated that profit. Restriction on the import of specific fertilizers needed for the flowers and ornamental plants is limiting the production potential. Finally, the future of this sector is whimsical because of labor unions and political instability.

5. CONCLUSION

Floriculture is at tyro stage in Kathmandu valley. Provided with adequate inputs, technical support, required infrastructure and skilled personnel, this sector has huge potential. Disease pest followed by lack of extension services and quality inputs are three major constraints of cut flower production. Similarly, low level of farm gate price provided with high market price has benefitted the middleman while discouraging producers. Thus, governmental regulation of cut flower value chain is necessary to ensure profit of cut flower producers.

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