PRODUCTION AND MARKETING OF MARIGOLD IN GAJAPATI DISTRICT, ODISHA, INDIA: CHALLENGES AND OPPORTUNITIES

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ABSTRACT
As an agricultural economy, Odisha captures about 75 percent of its population, depending on agriculture and allied activities as their primary source of livelihood. The district of Gajapati, in Odisha state, shows a similar trend of agricultural dominance in the economy. The study focuses on the following objectives - the cultivation of marigold, understand the marketing channels involved in the marketing of marigold and identifying the gaps and challenges in the marketing of marigold. Two villages (Allada and Gurandi) out of 249 villages in two blocks (Gosani and Kasina) were selected. The production and marketing data was collected on a well-structured survey method. Primary data was collected from selected marigold vendors and marigold growers through personal interviews using a pre-tested questionnaire. Out of the four marketing channels, only two were strictly used in the Paralakhemundi town of Gajapati district – one included cultivators, commission agents, wholesalers, retailers, and customers, and the second channel had cultivators and customers. Gajapati district comes under a sub-tropical zone of the climatic environment, so it is suitable for marigold cultivation, but most growers cultivate it as a border crop. Sellers and farmers are not aware of the cultivation of marigold commercially. The response of farmers to marigold production constraints include - the high price of fertilizers and insecticides, lack of labor, attack by pests and diseases, lack of scientific knowledge and training, environment-related issues, and instability in yield. A suitable strategy to overcome the constraints includes training farmers with contemporary research techniques to help them improvise the production business.

Keywords: Production, Marketing, Marketing Channel, Constraints, Farmers.

Introduction
India is bestowed with several agro-climatic zones conducive to producing sensitive and delicate floriculture products. The decade after liberalization, floriculture industries took giant steps in the export arena (APEDA). This era has seen a dynamic shift from sustenance production to commercial production (APEDA). As per the National Horticulture Database published by National Horticulture Board, during 2020-21 the area under floriculture production in India was 322 thousand hectares with the production of 2152 thousand tones of loose flowers and 828 thousand tones of cut flowers(APEDA). Floriculture is now commercially cultivated in several states, with the highest area in states such as Kerala (16.5%), Tamil Nadu (13.3%), Karnataka (11.4%), Madhya Pradesh (11.1%), and Uttar Pradesh (7%) have gone ahead of other producing states like Andhra Pradesh, West Bengal, Mizoram, Gujarat, Orissa, Jharkhand, Haryana, Assam, and Chhattisgarh(APEDA).

Marigold (Tagetes erecta, Tagetes patula) flower cultivation is getting increasingly popular among farmers. Marigold, belonging to the family Asteraceae, is an important ornamental herb grown for its highly decorative and long-lasting flowers (OUAT). Marigold is referred to as “Ganduphula” in Odisha. In Odisha, the soil should be fertile, friable, and well-drained, with good water holding capacity(OUAT). The pH of the soil should be 7 to 7.5. The climate of Odisha is very suitable for marigold cultivation except for the hot summer months, as high temperature reduces the size and number of flowers (OUAT). Varieties, winter season: Bidhan marigold-1, Bidhan Marigold – 2, Arka Agni, Arka Bangara. Rainy season: Bidhan Marigold - 2 Summer season: Siracole(OUAT). Harvesting, fully opened flowers are plucked by hand early in the morning(OUAT). The field is irrigated before plucking to enhance the longevity of flowers. Regular plucking should be done to increase the yield of flowers (OUAT). Extensively used for cultural and social occasions as loose flowers or as garlands. The wrapping of marigold flowers and fern and mango leaves to greet people, used as garland to god in various ceremonies, occasion’s offerings.
Climate of Gajapati District

Gajapati District covers an area of 3850 sq km. The climatic condition in the Gajapati District varies between 16 degrees to 40 degree Celsius and the average rainfall received is 1403.30 mm. The district is surrounded by Andhra Pradesh in its South, Ganjam District in its East, Rayagada in its West, and Kandhamal in its North. The soil and climate are suitable for the plantation of crops, and the district has excellent potential for horticulture development. More than 60 percent of the land is situated in hilly terrain and high grounds, and those are mainly suitable for horticulture. Another cultivable land comes under the medium lands (20 percent) and low lands (15 percent) category (District Administration, Gajapati).

The area under floriculture in Odisha is about 6,500 hectares, with an annual production of about 24,800 tones of loose flowers and about 5,500 lakhs of cut flowers. To promote the commercial cultivation of traditional flowers to meet the increasing demand in the domestic market, the state government has decided to implement the floriculture programme in mission mode. The flower production can meet only 10 percent of the state’s demand (New India Express).

Materials and Methods

The main objectives of the study
1. Study the production pattern of marigold.
2. Understand the marketing channels involved in the marketing of marigold.

The study was conducted in the Gajapati District of Odisha, India

SAMPLING TECHNIQUE

A two-stage, multi-stage sampling technique was used to select the block, villages, and respondents (Marigold grower).

1. Selection of District

In the first stage, the Gajapati District of Odisha was selected because, in the Gajapati district, marigold is imported and cultivated on a large scale and supplied to the local market of Paralakhemundi. Odisha, India

A total of 149 Gram Panchayats spread over seven blocks, Gajapati district comprises of

Tribal blocks 05:
   i. Mohana
   ii. R.Udayagiri
   iii. Nuagada
   iv. Rayagada
   v. Gumma

Two normal blocks:
Paralakhemundi at Gosani
Kasinagar

Selection of the Block

Out of the seven blocks in the Gajapati district, two blocks (Gosani and Kasinagar) were selected as they have the maximum number of villages growing marigold.

Selection of the Village

Two villages (Allada and Gurandi) out of 249 villages located in two blocks (Gosani and Kasinagar) were selected for the survey, where a maximum number of farmers grew marigold.

Selection of Mandis

One prominent flower mandi of Paralakhemundi was selected because they handled a large quantity of flowers.

Selection of Wholesaler

Two wholesalers out of four were selected randomly from mandis after preparing the list of all wholesalers.

Selection of Retailers

Five out of twenty were selected randomly from the market/mandis after preparing the list of all retailers.

COLLECTION OF DATA AND METHOD OF ENQUIRY

Primary data

The data on production and marketing aspects were collected by a survey method, and several visits were made to collect all the details.

Secondary data

The secondary data was collected from the published sources available from the Government of Odisha website, Horticulture office, Agriculture office, block office of Gajapati.

PERIOD OF ENQUIRY

The study is related to the years 2020 – 2021. The study covered all farm activities adopted by the marigold growers during the agricultural year 2020 – 2021.

Marketing channels involved in the marketing of marigold

The present study is based on an analysis of primary and secondary data at the Paralakhemundi town of Gajapati district, Odisha, India. The analysis of primary data is based on a survey of 5 vendors selected randomly and 2 villages of Gajapati district. Data collected for study pertaining to the period 2020-2021. The study required primary data. Primary data was collected from selected marigold vendors and marigold growers through personal interview with the help of pre tested questionnaire.

MARKET SURVEY

The market survey (Fig. 1) denotes that 90% of the total marigold cut flowers and other flowers are being imported from Rajahmundry, Andhra Pradesh. They are marketed in the primary market of Paralakhemundi and sold to the flower hawkers, 7% are imported to the market from the local growers of Kashinagar and Gosani blocks, and the rest 3% are the domestic growers.

![Graph on market survey of Marigold](Derived from Primary data)
According to the above primary survey, four channels were identified in the study area for marketing marigold in the Gajapati district.

**Market channel**

Marketing channels are the paths traced in the direct transfer of a product as it moves from a producer to ultimate consumers or industrial users. The marketing channel is the structure of intra-company agents and dealers, and the wholesalers and retailers are where the commodity/products or services are marketed.

**Channel – 1**

In channel – 1, the producers cultivate marigold and sell it to the wholesaler by addition of some margin sells with addition to some commission agents, and then the wholesaler sells to the retailer with a margin and finally when it comes to the consumer if it is for the seasonal demand, the price is higher while for off-season the price is lower.

![Depiction of operation of market Channel 1](Derived from Primary data)

**Channel – 2**

In channel – 2, the cultivators cultivate marigold and sell it to the wholesaler by addition of some profit sells to the retailer with a fare and finally when it comes to the consumer if it is for the seasonal demand the price is higher. In comparison, for off season the price is lower.

![Depiction of Market Channel 2](Derived from Primary data)

**Channel – 3**

In channel – 2, the cultivators cultivate marigold and sell them to the retailer with a margin. Finally, when it comes to the consumer, if it is during the seasonal demand, the price is higher, while for off-season, the price is lower.

![Depiction of Market Channel 3](Derived from Primary data)

**Channel – 4**

In channel – 4 the cultivators directly sell to the customers or they use for their own usage. They not only use it commercially but also they use for domestic purpose.

![Depiction of Market Channel - 4](Derived from Primary data)

**Results and Discussion**

The primary and secondary data was analyzed in light of the present study's objectives.

**Cultivation of Marigold**

The Gajapati district of Paralakhemundi town was selected for the study. The district primarily imports marigold from the neighboring state of Andhra Pradesh. Five flower vendors were selected randomly for the interview. The respondents from each market functionary, commission agents, wholesalers, and retailers, were randomly selected. A specially designed questionnaire was used to get information on marketing and other related aspects. The collected data was compiled, tabulated, and analyzed.

Odisha largely depends on neighboring states like Andhra Pradesh and West Bengal to meet its flower requirement during festive seasons. Sources said though qualitative data on area, production, and trade are not available, the mushrooming of florists in all cities and towns indicates the high rate of growth.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Block</th>
<th>Crops</th>
<th>Total estimated area (in Ha.)</th>
<th>Production MT</th>
<th>Lakhs Nos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gosani</td>
<td>Marigold (Loose)</td>
<td>13</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gumma</td>
<td>Marigold (Loose)</td>
<td>8</td>
<td>75.8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Kasinagar</td>
<td>Marigold (Loose)</td>
<td>16</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mohana</td>
<td>Marigold (Loose)</td>
<td>20</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Nuagada</td>
<td>Marigold (Loose)</td>
<td>6</td>
<td>60.7</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>R. Udayagiri</td>
<td>Marigold (Loose)</td>
<td>6</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Rayagada</td>
<td>Marigold (Loose)</td>
<td>6.5</td>
<td>63.5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>75.50</td>
<td>749.00</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Designed and developed by National Informatics Center, Odisha
TO UNDERSTAND THE MARKETING CHANNELS INVOLVED IN THE MARKETING OF MARIGOLD

Most of the selected area's produce is marketed to the Paralakhemundi market.

MARKET CHANNEL

Out of the four channels, only two channels were strictly followed in Paralakhemundi town.

Channel – 1

As per the survey, the cultivators cultivate marigold (Rs. 50/kg) and sell it to the wholesaler by addition of Rs. 3 (Rs. 53/kg) and sell with addition to some commission agents. Then wholesaler sells to the retailer with a margin of Rs. 2 (Rs. 55/-), and finally, when it comes to the consumer, if it is for the seasonal demand, the price is higher (Rs. 100/-) while for off-season the price is lower (Rs. 70/-). Ultimately, the producer does not benefit from it, and the primary reason for procuring marigold from other states is to ensure a regular product supply to the market.

All the channel participants except the producer benefit from it.

Channel – 2

The farmers cultivate marigold (Rs. 50/kg), and finally, when it comes to the consumer, they directly sell it at per lower price than the market price (appx. Rs. 80-100/kg). Ultimately the producer is being benefited from it, but due to the cost of cultivation and climate suitability in the Gajapati district for marigold is lesser as most of the farmers depend on rainfed conditions as compared to other neighborhoods. Hence, the cultivation rate is lesser as compared to other states.

GAPS AND THE CHALLENGES IN THE PRODUCTION AND MARKETING OF MARIGOLD

Some of the critical gaps faced in marigold cultivation and marketing of marigold are

• Gajapati district comes under the sub-tropical zone and makes it suitable for marigold cultivation, but most growers cultivate it as a border crop.
• Farmers are not aware of the cultivation practices of marigold.
• As Gajapati district lies between Andhra Pradesh and Odisha, most of the sellers are non-Odia. In contrast, the wholesalers from Andhra Pradesh import at a lower price, so the sellers are not much interested in production. It has become a norm to import flowers from neighbouring states.

Constraints are identified in three aspects:

1. in production
2. marketing
3. Constraints faced by retailers

Constraints faced in production

The significant problems in the production of marigold include high cost of pesticides (reported by 80%), pests and diseases attacking crops (reported by 64%), irregular supply of electricity required for irrigation (reported by 64%) The highest cost of labors (reported by 72%) and poor harvest during the rainy season (opined by 60%).
Production and marketing of marigold in Gajapati district, Odisha, India: Challenges and Opportunities

Constraints of Marketing (Respondents 25)

The prominent constraints expressed by the sample growers included seasonality of demand (reported by 96% of the respondents), Price Fluctuations (88%), high cost of transportation (reported by 72%), and lack of market price information (reported by 64%) and distant of the market price (reported by 32%).

Constraints faced by Retailers (Respondents 5)

The problem of retailers engaged in marigold flower business broadly relates to the procurement and selling of marigold. More than 100 percent of the sample retailers/florists engaged in marigold flower business reported wide price fluctuations in the flower prices. Nearby 60 percent of the retailers surveyed reported a lack of regular supply, while 40 percent complained of a lack of regular customers.

Alternative Strategies for developing the marketing channels in Gajapati District is to develop awareness among the young farmers, Women and SHG groups regarding benefits and profit of the output they will be getting out of not doing a mono cropping but go for varieties of cropping and in addition to that marigold as per commercial growing has a good profit in the market and it will be further create entrepreneurial strategies in Gajapati District.

Summary and Conclusions

An effective marketing channel and system are crucial for the successful marketing of marigold in terms of yield and income. Good marketing information and facilities will ultimately increase the producers’ share of the consumers’ price. Farmers should be educated about the recent production techniques to help them improve the production business. Hilly areas of the Gajapati district (like Udayagiri, Nuagada, Mohona, Gumma, Seronga, etc.) to be focused on by the Directorate of Horticulture, Gajapati so that the farmers will be aware of the benefits of producing marigold commercially. Different Government related schemes and subsidies to be made available to the farmers.

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