



## CONSTRAINTS INVOLVED IN PROCESSING AND MARKETING OF MANGO JELLY IN KAKINADA DISTRICT OF ANDHRA PRADESH

K. PRASANTHI\*, S. HYMA JYOTHI, M.V. KRISHNAJI AND B. RAMANA MURTHY

Institute of Agribusiness Management, S.V. Agricultural College, ANGRAU, Tirupati-517 502.

Date of Receipt: 03-01-2024

**ABSTRACT**

Date of Acceptance: 02-03-2024

Mango occupies a significant position among the fruits grown in India, hailed as the king of fruits due to its versatility and utility. Various processed food products, including pickles, baby foods, mango leather, and toffee, are derived from mangoes. In Andhra Pradesh, Kakinada district hosts a substantial number of mango jelly processing units, generating income and employment opportunities. However, challenges such as adverse climatic conditions affecting mango crops, lack of credit facilities, price fluctuations, labor availability, storage facilities, and equipment maintenance impact the working capital requirements and overall profitability of processing units. Middlemen practices, poor profit margins, limited market intelligence, and domestic demand constraints also pose marketing barriers. Policy interventions and support from the government are crucial to improve infrastructural facilities, access to credit, fair pricing, and market intelligence, ultimately promoting the growth of the mango jelly processing industry in Andhra Pradesh.

**KEYWORDS:** Constraints, Mango, Marketing, Processing.

### INTRODUCTION

Mango's, often hailed as the "king of fruits" holds immense economic significance in many tropical and subtropical regions worldwide. Mango cultivation is currently being promoted commercially. Mangoes are widely accessible as fresh fruit, frozen food, and processed food. Mangoes are a seasonal fruit, fresh fruit used to be in high demand exclusively during that particular season. In contrast, there will always be a need for processed or added-value mango products. Mango preservation through pickling has long been traditionally practiced in India. There are also a number of value-added mango products on the market. Value-added product processing boosts farmers' revenue while reducing post-harvest losses. Additionally, it improves off-season accessibility, nutritional balance, employment prospects, export trade, and foreign exchange. Mango pulp, mango juices, nectar, squash, jams, jellies, toffee, custard powder, and cereals are processed items made from ripe mangoes. Unripe mangoes are used to make processed goods such as pickles, dry mango powder, chutney, and beverages. Aside from these items, other well-liked mango products are mango leather and mango candy, popularly referred to as "Aam papad".

The Kakinada district in the Andhra Pradesh state is well known for being a significant mango jelly-producing area. It is home to a number of small and medium-sized

businesses that produce mango jellies. Due to factors like shifting consumer preferences, urbanization, and an escalating health-conscious population, the market for processed mango products has been continuously rising on a global scale. As a result, mango processing units have gained significance as essential players in the agri-food industry. However, Low-capacity utilization and fluctuating profitability of the processing firm are issues that are frequently raised by the industries. Furthermore, different size classes of processing enterprises exhibit different levels of efficiency. The study will also take into account the suggestions for addressing existing issues and restoring mango jelly production to its former exquisiteness. The study was carried out with the following objective; to study the constraints faced by the processors during processing and marketing of mango jelly.

### MATERIAL AND METHODS

The research was carried out in the Andhra Pradesh district of Kakinada during the year 2023 since it has the most area specialized to mango jelly production. Ten processing units were purposefully chosen from the district. Six of the 10 selected processing units are chosen at random from the unorganized sector, while four are chosen from the organized sector. The 'issue' in the present study was defined as undesirable situations in mango jelly processing as perceived by processors.

\*Corresponding author, E-mail: prasanthi.iabmt@gmail.com

## Constraints involved in processing and marketing of mango jelly

Based on an extensive research of the literature, interactions with mango jelly processors during pretesting, and expert opinion, a total of 18 difficulties were identified and classified into two categories: mango jelly processing and mango jelly marketing. The mango jelly processors were asked to rank each problem in terms of severity. The limitations were prioritized using the Garret ranking technique. Suggestion was operationally defined as the requirements given by disorganized and organized processors in order to meet their demands. The suggestions made by the respondents were carefully observed and quantified using frequency and percentage. Finally, the proposals were sorted from one to twelve in descending order of frequency acquired.

### Garrett's Ranking Technique

Garrett's Ranking Technique was used to determine the respondent's largest limitation. The primary advantage of this technique over ordinary frequency distribution is that the limitations are organized according to their severity in the point of view of the respondents. As a result, the same number of responders on two or more limitations may have received different rankings. Garrett's formula for translating ranks to percentages is:

$$\text{Percentage position} = 100 * (\text{Rij} - 0.5) / \text{Nj}$$

where Rij= Rank given for ith item by jth nursery owner.

Nj= Total number of constraints ranked

**Table 1.1.**

Constraints perceived by processors	Percentage	Rank
Price fluctuations in procurement of mangoes	66.33	3
Unavailability of labour	53.56	5
Adverse climatic factors	86.00	1
lack of credit facilities	79.89	2
Lack of govt support	64.89	4
Year-round maintenance of the equipment	34.11	8
High working capital requirement	49.56	6
Lack of storage facilities	44.78	7
Lack of technical information	23.78	9

## RESULTS AND DISCUSSION

### A. Constraints as perceived by the processors

The processing firms studied were examined in order to determine constraints in the processing of mango jelly. The results from Table 1.1 revealed that adverse climatic conditions that affect the mangoes were the major constraint, as reported by the sample units at 86 percent. Lack of credit facilities with 79.89 percent was the next major problem for the processors, as they were lending the money from private lenders with a high rate of interest, followed by price fluctuations of mangoes with 66.33 percent, which was the other major concerning constraint. It affected the working capital requirement during every period of processing, and the lack of government support for mango jelly processing was another problem in terms of limited access to

infrastructure facilities and credit facilities for mango jelly production. The other constraints faced during processing were the unavailability of labor, a high working capital requirement, a lack of storage facilities, and year-round maintenance of equipment.

Similar findings were identified by Kumar (2023) in his study that the arrangement of finance and price fluctuation in raw material and procurement were the major problems.

### B. Marketing Constraints as perceived by the processors

As per the results in Table 1.2, the processors stated that the lack of a fair price was the biggest issue at 84.67 percent, followed by a poor profit margin of 70.11 percent. The processors reported that the middlemen's malpractices constituted a barrier to obtaining a

**Table 1.2.**

<b>Marketing constraints</b>	<b>Percentage</b>	<b>Rank</b>
Lack of remunerative price	84.67	1
Shortage of buyers	62.44	5
Non availability of nearby markets	39.00	8
Low profit margin	70.11	3
Negative image of mango jelly on health aspects	23.78	9
Lack of market information	63.56	4
High commission charges	42.67	6
Malpractices by Intermediaries due to absence of regulated marketing system.	72.56	2
Low domestic demand	41.22	7

remunerative profit. Due to a lack of large buyers in this region, the majority of the mango jelly product was sold to a smaller number of clients. Lack of market intelligence, hefty middleman commissions, and limited domestic demand were additional marketing barriers.

### **Suggestions**

- Financial incentives and support programs should be readily accessible to small-scale mango jelly producers.
- Facilitate market access for mango jelly processors, particularly small-scale ones, by supporting with product marketing, distribution, and linking them with possible buyers and markets.
- Contract farming should be encouraged in order to assure a timely and adequate supply of raw materials while also lowering raw material costs.
- To safeguard the mango processing business against variations in demand on the international market, domestic consumption should be stimulated through marketing activities and the creation of different items.
- Implement and enforce strict food safety standards for mango jelly producing factories.

The study provides the several challenges that were facing during processing and marketing of mango jelly and given realistic recommendations to solve these issues. Mango jelly processors can optimize their production processes, increase their profitability, and ensure the mango jelly industry's long-term viability by applying these recommendations. To ensure a robust

and prosperous future for mango jelly processors, stakeholders must collaborate and take proactive efforts toward implementing these recommendations. Same findings were observed in Dolapo's (2016) study, the major constraint was lack of reliable market in marketing the produce.

### **LITERATURE CITED**

- Govindaraj, G and Jain, V.K. 2012. Constraints and strategies for development of small-scale peanut processing units in Gujarat (India): A Garret ranking approach. *International Journal of Agricultural and Statistical Sciences*. 8(2): 705-711.
- Kalaiarasi, D., Palanichamy, N.V and Praveena, S. 2020. Financial performance analysis of mango pulp processing unit: A case analysis. *The Pharma Innovation Journal*. SP-9(12): 41-44.
- Raj Kumar, Ekta, Ajay Kumar, Sonal Vishnoi and Nirmal Kumar. 2023. Constraints in production, marketing and processing of tomato (*Solanum lycopersicum* L.) in Nuh district of Haryana. *Pharma Innovation*. 12(3): 4309-4312.
- Reddy, K.V and Kumar, P. 2010. An economic appraisal of mango processing plants of Chittoor District in Andhra Pradesh. *Indian Journal of Agricultural Economics*. 65(2). 277-297.
- Sharma, K.D., Pathania, M.S and Lal, H. 2010. Value chain analysis and financial viability of agro-processing industries in Himachal Pradesh. *Agricultural Economics Research Review*. 23(347-2016-16944): 515.