CONSTRAINT ANALYSIS OF MAIZE MARKETING IN TELANGANA STATE USING GARRETT'S RANKING TECHNIQUE

ABSTRACT

This study examined the key constraints faced by farmers in marketing maize, a major crop in Telangana. The study was conducted in the top three maize-producing districts of Telangana - Warangal Rural, Siddipet, and Kamareddy. Data was gathered through personal interviews with 240 sample farmers using pre-tested, structured questionnaires for the 2021-22 agricultural year. An opinion survey was used to identify and rank the top challenges using the Garrett's ranking technique. The primary constraints cited by farmers were an excessive number of middlemen in the market (82.65), price fluctuations (79.13), lack of support pricing during production surpluses (73.45), and high commission charges levied by market intermediaries (70.62). Farmers also reported secondary issues like delays in Minimum Support Price (MSP) operations and inadequate market infrastructure. Minor problems included high transportation costs (40.58), improper storage (37.26), and lack of pledge loan facilities for warehouse receipts (28.61). The study provided valuable insights into the challenges impacting maize marketing in the region.

KEY WORDS: Survey, Maize, Marketing, Prices, Constraints.

INTRODUCTION:

Corn, commonly known as the "Queen of Cereals," plays a crucial role in India, standing as the third-most profitable crop after wheat and rice. With 16 million Indian farmers involved in its farming, the leading states for corn production such as Karnataka, Rajasthan, Madhya Pradesh, and Telangana play a major role in the nation's corn output [1].

In Telangana, corn is ranked third among crops, spanning a vast area of 12.74 lakh acres. The state saw a significant increase in corn output during the 2022-23 harvest, reaching 28.65 lakh tonnes [2]. The top corn-producing areas in Telangana include Warangal Rural, Khammam, Nirmal, Siddipet, Kamareddy, Mahabubabad, Nizamabad, Warangal Urban, Jagityal, and Karimnagar. Over the last ten years, both the area under cultivation and corn production have seen considerably expanded in the state [3].

Price instability, exploitation of farmers by middlemen in marketing activities and lack of market integration system, *etc.* are a few of the pressing problems faced by the farmers cultivating maize [6,7]. Keeping this in view, Telangana Government has urged the farmers not to go for maize cultivation during *kharif* 2020-21 under the Regulated farming policy. Accordingly, maize acreage has reduced from 6.50 lakh hectares to 2.61 lakh hectares in Telangana State even though the agro-climatic conditions are favourable for its cultivation [4,8-10].

Under these circumstances, it is felt that there is need to formulate appropriate ways and means for sustenance of the crop in the state and reduce price fluctuations, such that both producer's profit and consumer's benefits will increase and lead for overall economic development of the state.

MATERIAL AND METHODS:

Data source:

Selection of study area and sample farmers:

Maize, one of the major crops grown in Telangana State, covered 9.78% of the total cultivated area during 2019-20. This crop was the focus of the present study, which selected the top three districts leading in maize cultivation as the study area. Within each of these districts, the top two mandals and the top two villages with the highest maize production were purposively chosen. A random sample of 20 farmers was interviewed from each of the 12 selected villages, across the 6 mandals and 3 districts, resulting in a total sample size of 240 farmers. Primary data was collected from these sample farmers using a structured, pre-tested interview schedule.

Garrett's Ranking Technique

The Garrett's ranking approach was employed to evaluate the limitations in the marketing of maize. The farmers were requested to order the potential issues they encountered, and their answers were gathered. Garrett's technique then transformed these ordered lists into numerical values. This method stands out from a simple frequency distribution by allowing the ranking of obstacles based on the importance perceived by the participants. The formula for converting rankings into percentages is outlined below.

Percentage position = $100 (\text{Rank of } I^{th} \text{ factor by } j^{th} \text{ individual} - 0.5) / N_j$

Where, R_{ij} = Rank assigned to i^{th} factor (constraint) by j^{th} person

N_j = Total number of factors (constraints) assigned by j^{th} person

The relative standing of each rank, as calculated by Garrett's formula, was then used to assign scores. For each factor, the sum of the scores for all individuals was calculated, and then divided by the total number of participants to determine the mean scores.

RESULTS AND DISCUSSION:

Table 1. Constraints opined by farmers in maize marketing

Particulars	Garrett score	Rank
Frequent price fluctuations/ Low market price	79.13	**II**
Lack of support prices when there is a glut in the market	73.45	**III**
More number of middlemen	82.65	**I**
High commission charges	70.62	**IV**
Delay in Govt. procurement process through MSP	66.89	**V**
Delay in cash payment after procurement	61.67	**VI**
Lack of cooperatives in marketing societies at village level	44.75	**XI**
Lack of availability of market information at farm level	41.66	**XII**
Markets are far away from farm	51.71	**IX**
Higher market fee	47.44	**X**
Lack of amenities and facilities for farmer in the market	57.74	**VII**
Lack of proper infrastructure in market	54.95	**VIII**
High transportation cost from farm to market	40.58	**XIII**
Storage facilities are located far away from village	37.26	**XIV**
Improper storage and drying facilities at market yards	31.74	**XV**

High cost of storage	19.13	**XVII**
No pledge loan facility for the stored commodity	28.61	**XVI**

The key constraints faced by farmers in maize marketing are highlighted in Table 1., which lists the constraints perceived by the respondents and their corresponding mean (Garrett) scores. The major constraints included an excessive number of middlemen in the market (82.65), price fluctuations (79.13), lack of support pricing during production surpluses (73.45), and high commission charges levied by market intermediaries (70.62).

Farmers also faced minor problems such as high transportation costs (40.58), inadequate storage facilities (37.26), and a lack of pledge loan facilities for warehouse receipts (28.61). These findings are consistent with a previous study by Krishna *et al.* (2018) [5].

To address these challenges, Agricultural Market Committees (AMCs) should strengthen market regulations and practices to control middlemen issues and ensure that farmers receive remunerative prices. Efforts should also be made to provide market information through various channels to stabilize prices. Transportation costs can be reduced by procuring farm products at the village level through cooperative societies or establishing regulated market committees.

SUMMARY:

Maize farmers encountered major obstacles in marketing their crop. The proliferation of intermediaries led to unstable prices and high commission fees. Compounding these issues, the lack of adequate support prices during periods of surplus production and inadequate market infrastructure created further impediments. While transportation costs, storage problems, and the unavailability of pledge loan facilities were less severe challenges, they nonetheless posed hurdles for these farmers.

CONCLUSION:

The study found that farmers faced significant constraints in maize marketing. Chief among these was the widespread influence of numerous intermediaries, who caused price fluctuations and imposed high commission fees. Further exacerbating these challenges were the lack of adequate

support prices during production surpluses, as well as inadequate market infrastructure and support systems. Farmers also struggle with transportation expenses, storage issues, and the unavailability of pledge loan facilities.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

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