

Original Research Article

<https://doi.org/10.20546/ijcmas.2021.1003.051>

Marketing Cost and Constraint Analysis of Sweet Corn in Chhindwara District of Madhya Pradesh

Neha Dwivedi*, Aradhana Singh Rajpoot, Yogeshwari Sahu and A. Shrivastava

College of Agriculture, JNKVV, Jabalpur (M.P.), India

*Corresponding author

ABSTRACT

Keywords

Marketing channel,
Marketing cost,
Sweet corn,
Marketing
Functionaries

Article Info

Accepted:
07 February 2021
Available Online:
10 March 2021

The present study was carried out with objectives to examine the marketing pattern of sweet corn and to identify the production and marketing constraints of sweet corn and suggest suitable measures to overcome them. The study area is confined to Chhindwara district of Madhya Pradesh, a sample of 45 sweet corn farmers comprises 15 small, 15 medium and 15 large were selected by proportionate random sampling method from three village viz. Rohankala, Rohandhana and Gauraiya, from Chhindwara district Madhya Pradesh. The required primary data were collected from selected respondents by survey method using pretested interview schedule. The Primary data in the study pertains to the agriculture year 2017-18. The finding of the study revealed that There were three marketing channels identified during study of sweet corn: Channel –I: Producer-Local village trader-Corn seller, Channel –II: Producer- Wholesaler-Corn seller, Channel-III: Producer- Commission Agent-Wholesaler- Corn seller. The maximum quantity was sold through local village merchant (41000 cobs) followed by commission agent (28500 cobs) and wholesaler (5500 cobs). The per 100 cobs marketing cost incurred by local village merchant was Rs.45, wholesaler Rs.60 and commission agent Rs.63. Average net receipt per 100 cobs for small sample respondents was Rs.208, medium Rs. 201 and large Rs.168.33 respectively.

Introduction

Maize (*Zea mays L.*) is one of the most versatile crops having wider adaptability under varied agro-climatic conditions. It is considered as the third most important cereal crop after Rice and Wheat in the world. This cereal is referred to as a Miracle and Queen of the Cereals due to its high productivity potential compared to other crop of Gramineae family. Maize was first domesticated by indigenous people in

Southern Mexico about 10,000 years ago. Maize has become a staple food in many parts of the world with total production surpassing that of wheat or rice. It is a seasonal crop, and annually it can be harvested thrice i.e., in kharif, rabi and summer seasons. Maize is usually grown as a sole crop; in some instances, it can be grown as sole crop combinations like Sugarcane, Cotton, Vegetables, and Legumes etc. Sweet corn is gaining popularity both in rural and urban areas because of its high sugar and low starch

content. It has got great market potential and high market value in India. Sweet corn is capturing good market in most of the big cities of India. The demand for eating roasted and boiled cobs in cities and towns is increasing day by day. This has resulted into opening the counters of sale for roasted cobs in cities and towns.

The growing Indian economy and changing consumer preferences, especially based on health consciousness are likely to fuel more demand for maize by food, feed and other industrial users. In India area covered under maize is about 9.30 million hectares (2015 - 16). The production and productivity were 23.70 million tonnes and 2557 (kg /ha) respectively (Directorate of Economics and Statistics, 2016). The major maize growing states are: Karnataka, Andhra Pradesh, Tamilnadu, Rajasthan, Maharashtra, Bihar, Uttar Pradesh, Madhya Pradesh and Gujrat which together accounted for more than 85 percent of maize production and 80 percent area under cultivation.

Madhya Pradesh covers an area about 10.98 lakh hectare and 26.96 lakh tonnes of production. In Madhya Pradesh Chhindwara, Dhar, Jhabua Betul, Rajgarh and Mandasaur are the major maize producing districts. Chhindwara district is the leading district in terms of both area as well as production. The Chhindwara district covers 1, 97,877 hectares area, production was 980 (000) metric tonnes with productivity of 5023 kg/ha. (Joint Director Agriculture, 2016). The climatic conditions of the district are extremely suitable for the sweet corn crop as warm sunny weather, rich and moist soil. There is wide scope for increasing area and production in the district. In this situation it is essential to know the reasons of low adoption of improved practices. Thus, present study was canvassed to know the existing production pattern and profitability aspect among the

farming community of sweet corn growers of the Chhindwara district.

Materials and Methods

Survey method was used for collection of relevant data. Chhindwara districts have been selected for the study as it occupied maximum area and production under sweet corn in the M.P.

The Chhindwara district comprises of 11 blocks, viz. Amarwara, Bichhua, Chhindwara, Chaurai, Harai, Jamai, Mohkheda, Pandhurna, Parasiya, Sausar and Tamia. Chhindwara block was selected purposively as block has remarkable area under sweet corn further the villages growing sweet corn was enlisted from this list 3 villages namely Rohankala, Rohandhana and Gauraiya were selected randomly for the study.

The primary data was collected from the selected cultivators and were recorded on socio-economic conditions, land use classification, sowing pattern of cultivators its profitability, marketing pattern of the respondents and costs incurred in marketing of sweet corn.

A list of all the cultivators growing Sweet Corn in these villages were recorded and classified into 3 size groups based on their size of holdings viz. Small (up to 2 ha), medium (2 to 4 ha), and large (above 4 ha) and 15 farmers were selected by using simple random sampling method. Thus, the total number of respondents was 45 and 15 from each category.

For knowing the marketing pattern of sweet corn in the study area, suitable numbers of market functionaries/agencies were considered. The information related to marketing cost and producers price of sweet corn growers was collected from selected

market functionaries in the study area (simple average and percentage statistical techniques was used to analyse the collected primary data).

(a). **Marketing cost:** The total cost associated with delivering farm goods from producer to the consumer. The marketing cost may include expenses incurred in transferring goods, packaging, labour charges, storage charges, processing, marketing charges etc.

(b). **Marketing channels:** People, organization, and activities necessary to transfer the ownership of farm produce from the point of production to the point of consumption.

(c). **Net receipt:** Cost of production + marketing cost- selling price

Results and Discussion

Marketing pattern

The Marketing process is a part and parcel of the production activity. The ultimate success in marketing of any commodity largely depends upon the efficiency with which it is marketed. The data relating to various aspects of marketing of sweet corn was classified under market channels and marketing cost in different marketing channels.

Marketing channels

Marketing channel is a route through which commodity passes from the producer to final consumer. Generally, the farmers choose the channels as per their convenience and considering the per unit price received by them. The major channels are:

1. Channel –I: Producer-Local village trader-Corn seller

2. Channel –II: Producer- Wholesaler-Corn seller

3. Channel-III: Producer- Commission Agent-Wholesaler- Corn seller

The quantity sold by the respondents is presented in Table 1.

It is observed from the data that the majority of respondents preferred to sold their produce to local village merchant (48.88 per cent) followed by wholesaler (28.88 per cent), and commission agent (22.22 per cent), they were also sold maximum quantity to village merchant (54.66 per cent) followed by village merchant (54.66 per cent) followed by commission agent (38.00 per cent) and wholesaler (7.33 per cent), although the rate received per cob was found to be more from commission agent (Rs.6/cob) as compared to wholesales (Rs. 5.5/cob) and local village merchant (Rs. 5/cob).

Marketing cost

Marketing cost affects the producer's net share in consumer rupees. An attempt had been made here to work out the marketing cost in different channels of sweet corns and presented in table 2.

It was observed from the data that total marketing cost incurred in marketing of sweet corn was Rs. 5.33/100 cobs, which was found more in case of commission agent (Rs.63/100 cobs), followed by wholesaler (Rs. 60/100 cobs) and local village merchant (Rs. 45/100 cobs).

In total marketing cost, the share of labour charges (Rs.26.66/100 cobs) was found to be more followed by packing charges (Rs. 13.33/cobs), transportation charges (Rs. 7.33/100 cobs), and marketing fee (Rs.5.33/100 cobs).

Table.1 Quantity sold in different marketing channels: Unit: Rs. Per cob

| Purchaser | No. of sellers | Quantity Sold | Rate | Value received |
|------------------------|----------------|------------------|----------------|-------------------|
| Local village merchant | 22 (48.88) | 41000 (54.66) | 5 (30.30) | 205000 (50.46) |
| Wholesaler | 13 (28.88) | 5500 (7.33) | 5.5 (33.33) | 30250 (7.44) |
| Commission agent | 10 (22.22) | 28500 (38) | 6 (36.36) | 171000 (42.09) |
| Overall | 45 (100) | 75000 (100) | 16.5 (100) | 406250 (100) |

(Figures in brackets shows the percentage to the total)

Table.2 Per hundred cobs, marketing cost incurred by different market functionaries (Rs/100 cobs)

| Functionaries | Packing charges | Labour charges | Transportation charges | Marketing fee | Miscellaneous charges | Total |
|------------------------|------------------|------------------|------------------------|----------------|-----------------------|-------------|
| Local village merchant | 10 (22.22) | 25 (55.55) | 5 (11.11) | 5 (11.11) | - | 45 (100) |
| Wholesaler (Mandi) | 10 (16.66) | 25 (41.66) | 5 (8.33) | 6 (10) | 10 (16.66) | 60 (100) |
| Commission agent | 20 (31.74) | 30 (47.61) | 12 (19.04) | 5 (7.93) | - | 63 (100) |
| Overall | 13.33 (23.80) | 26.66 (47.60) | 7.33 (13.08) | 5.33 (9.51) | 3.33 (5.94) | 56 (100) |

(Figures in brackets shows the percentage to the respective total)

Table.3 Net receipt gained by sample respondents Unit: Rs/100 cobs

| Market agencies | Cost of Production | Marketing cost | Selling price | Net receipt |
|----------------------|--------------------|----------------|---------------|-------------|
| Small | | | | |
| Local village trader | 286 | 45 | 500 | 169 |
| Wholesaler | 286 | 60 | 550 | 204 |
| Commission agent | 286 | 63 | 600 | 251 |
| Average | 286 | 56 | 550 | 208 |
| Medium | | | | |
| Local village Trader | 293 | 45 | 500 | 162 |
| Wholesaler | 293 | 60 | 550 | 197 |
| Commission agent | 293 | 63 | 600 | 244 |
| Average | 293 | 56 | 550 | 201 |
| Large | | | | |
| Local village trader | 309 | 45 | 500 | 146 |
| Wholesaler | 309 | 60 | 550 | 181 |
| Commission agent | 309 | 63 | 600 | 228 |
| Average | 309 | 56 | 550 | 168.33 |

Table.4 Constraints faced by the sweet corn growers in production and marketing

| S.No. | Constraints | Small 15 (100) | Medium 15 (100) | Large 15 (100) | Total 45 (100) | Rank |
|-------|--|----------------------|--------------------|----------------------|----------------------|------|
| 1. | High cost of seed | 15 (100) | 15 (100) | 9 (60) | 39 (86.66) | 1 |
| 2. | High cost of Fertilizer | 15 (100) | 12 (80) | 11 (73.33) | 38 (84.44) | 2 |
| 3. | Non availability of hired labours at peak operational period | 12 (80) | 9 (60) | 5 (33.33) | 26 (57.77) | 6 |
| 4. | High cost of transportation | 9 (60) | 7 (46.66) | 7 (46.66) | 23 (51.11) | 7 |
| 5. | Higher commission charges | 14 (93.33) | 10 (66.66) | 8 (53.33) | 32 (71.11) | 3 |
| 6. | Lack of market facilities | 13 (86.66) | 9 (60) | 7 (46.66) | 29 (64.44) | 4 |
| 7. | Price fluctuation | 12 (80) | 8 (53.33) | 8 (53.33) | 28 (62.22) | 5 |
| 8. | Delay in Payments | 8 (53.33) | 5 (33.33) | 5 (33.33) | 18 (40) | 8 |

(Figures in brackets indicates the percentage the total)

These figures were found to be similar for all the functionalities with minor variations in the area under study.

Net receipt gained

The profits from particular sales after all costs and taxes have been paid refer to net receipt. It gives an idea about the profit gained by the seller. From above data, it was observed that the average net receipt per 100 cobs for small sample respondents was Rs.208, medium Rs. 201 and large Rs.168.33 respectively. The highest net receipt in each category was for commission agent: small Rs. 251, medium Rs.244 and large Rs. 228 (Table 3).

Constraints in sweet corn production and marketing

The various constraints faced by the sample respondents were identified and summarized in the table 4.

Amongst, the different constraints high cost of sweet corn seed (86.66 per cent), high cost of fertilizer (84.44 per cent), and non-availability of hired labour at peak operational period were found to be major constraints in production of sweet corn as reported by the majority of respondents.

In marketing constraints higher commission charges (71.11 per cent), lack of market news (64.44 per cent), price fluctuations (62.22 per cent), high transportation cost and delay payments were found to be the major constraints as reported by the majority of respondents.

In conclusion marketing pattern, it was observed that the highest produce was sold through channel-I followed by channel-III and channel-II respectively. The items of marketing cost such as labour changes, packing charges, transportation charges, marketing fee & miscellaneous charges were

observed to be major contributors. Higher cost of hybrid seeds, high cost of fertilizers and non-availability of hired labours were found to be major production constraints, while in marketing of sweet corn high commission charges, lack of market news and price fluctuation were the major problem faced by sample respondents.

The market for sweet corn in Chhindwara is very limited thus, steps may be taken at government level to regularize the transport charges so that the fresh sweet corn may reach to wider metro city markets and market information with respect to the price in consuming markets should be made available to the farmers. The cultivation of sweet corn in Chhindwara block is a profitable proposition. This crop should be cultivated on a larger area gaining desired income for sustainable production of sweet corn.

Processing for value addition is the need of the time and demand of the market also therefore; government should encourage the local youth under department of micro, small and medium enterprise (MSME) schemes

References

Directorate of economics and statistics. (2016). Agricultural and statistics at a glance. New Delhi: Directorate of Economics and statistics, Department of Agriculture, Cooperation and Farmers Welfare, government of India.

Joint Director of Agriculture, (2016). Area, Production and Productivity of maize in Madhya Pradesh. Joint Director of Agriculture, Government of Madhya Pradesh, Jabalpur

Jaishridhar, P. *et al.*, 2011. Study on adoption and marketing behaviour of maize grower in Coimbatore district of Tamil Nadu, Indian Journal of Agricultural Research, 46 (2): 173-177

Kataria Poonam, S.S. 2010. "Constraints in the production and marketing of maize in Punjab, Department of Economics and Sociology, Punjab Agricultural University, Ludhiana (Punjab), India, Agriculture Update; 5 (1/2): 228-236. ref.

Mukherjee, A. *et al.*, 2015. Production and marketing of hybrid maize in Sarguja district of Chhattisgarh, Indian journal of Agricultural Marketing, 29 (1): 81-90.

Navadkar, *et al.*, 2012. Economics of production and marketing of kharif maize in Ahmednagar, district of Maharashtra state, Ministry of Agriculture and Co-operation, Directorate of Economics and Statistics, agricultural situation in India, 69 (6): 309-316, ref.

Shekhon, M.K. *et al.*, 2015. Cost –return analysis and marketing of hybrid maize in Sarguja district of Chhattisgarh, Indian Journal of Agricultural Marketing, 29 (1): 81-90.

How to cite this article:

Neha Dwivedi, Aradhana Singh Rajpoot, Yogeshwari Sahu and Shrivastava, A. 2021. Marketing Cost and Constraint Analysis of Sweet Corn in Chhindwara District of Madhya Pradesh. *Int.J.Curr.Microbiol.App.Sci.* 10(03): 390-395.
doi: <https://doi.org/10.20546/ijcmas.2021.1003.051>