



CHALLENGES AND OPPORTUNITIES OF MAIZE PRODUCTION AND MARKETING IN KARNATAKA

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ABSTRACT

The present study has been conducted to know the production and marketing problem of maize crop in Karnataka state. The data were collected by sample households using pre-tested structured questionnaire. All the sampled households are growers of maize. The main findings of the study are summarized as follows. The major production and marketing constraints were identified in the present study. Producers are facing the problems of irregular rain, high cost of production and delay in inputs arrival for purchase. Traders are also constrained by price volatility, weak market information, poor coordination amongst traders, and absence of grades and standards. There are many productions and marketing opportunity was also identified in the study area.

Key Words: Marketing, Production, Challenges and Opportunities

1. Introduction

The value chain describes the full range of activities, which are required to bring a product or service from conception, through the different phases of production (involving a

combination of physical transformation and the input of various producer services), delivery to final consumers and to final disposal after use. With the growing division of labour and the global dispersion of the production of components, systemic competitiveness has become increasingly important. Efficiency in production is only a necessary condition for successfully penetrating markets. Entry into markets which allows for sustained income growth-that is making the best of market opportunities- requires an understanding of dynamic factors within the whole value chain. The resulting new economic regime is expected to alter the economics of existing cropping systems, including maize, in terms of production, value added, and trade. The question often raised is how research and development efforts can efficiently contribute to intensifying maize production in upland areas while protecting the interests of poor maize producers. To answer the question, it is necessary to study and characterize of maize production and marketing systems, and future policy and technology interventions need to be formulated accordingly. With this background the present study has been carried out to analyse marketing and production problems of maize crop in Karnataka.

2. Objectives of the Study

The major objectives of the study are as follows;

- To know the problems and opportunities of maize production in Karnataka
- To analyse the major challenges and opportunities in marketing of Maize.

3. Research Methodology

Present study has been carried out in the selected districts of Karnataka viz, Davanagere and Chitradurga. It is mainly based on primary data and the required data has been collected through the interview schedule from the farmers in study area. A simple random technique has been adopted for selecting the farmers and traders for the purpose of the study. Total 350 farmers and 80 traders were chosen and the required data was gathered from them. The information collected from the sample units has been arranged in table and graphs. The statistical tools such as average and the cost-benefit analysis were utilized.

4. Analysis and Discussion

The sample units were asked to identify their major production and marketing constraints of the maize and conducted survey for further technological, institutional and organizational innovation for upgrading the value chain in the study area. Thus the major problems and opportunities of maize growing are discussed below;

4.a Challenges of Maize Production

According to producers report, factors that hindered the production of maize were identified. Major constraints of irregular rain, high cost of fertilizers and improved seeds, and delay in inputs. Table 1 indicted maize production constraints identified by producers in percentages.

- a. Monsoon:** Natural factors such as drought and flood are often beyond the control of farmers and supportive institutions. According to the survey result 28.07 per cent of the producers indicated drought as a constraint in production. Despite the availability of irrigation water for 13.00 per cent of respondents water use is not well established. Due to shortage of water maize yield reduced if water deficit occurs during the critical growth stages from tease ling to grain.
- b. Inputs:** For higher yield of maize both physical and non-physical inputs are significant. Primarily producers used improved seeds, fertilizers, pesticide and agricultural labor with equal concern of services like research, extension service and technology dissemination from governmental and nongovernmental institutions. But those inputs are utilized in inappropriate amount by most producers due to its expensiveness and less supply in the market. Among the total sample of respondents 21.05 per cent and 7.89 per cent replied limited access and supply of inputs as their production problem due to high price of fertilizers and improved seeds respectively.
- c. Late Arrival of Inputs:** Since agricultural products are seasonal all useful inputs need early arrangement to boost the production by applying inputs on the right time. But the survey result revealed that 16.84 per cent and 12.28 per cent of the producers complain delay in the supply of improved seeds and fertilizers.

Table 1
The Problems of Maize Production

Major Constraints	Frequency	Percent
Irregular Rain	98	28.09
Price of fertilizers	74	21.05
Timely availability of improved seeds	59	16.84
Prices of improved seeds	28	7.89
Timely availability of fertilizers	43	12.28
Availability of credit to buy fertilizers	21	5.96
Availability of credit to buy seeds	27	7.89
Total	350	100

Source: Field Survey

4.b Production Opportunities

The favorable land, climatic condition and high productivity potential are good opportunity of production in the study area. Maize is considered as the main cash crop and food source for the farmers in the study area. This opportunity enabled farmers to produce this commodity for commercial purpose. Thus, these situations increased the production volume of maize in the areas.

Throughout time increased institutional support to production of maize by government bodies, research centers and private organizations is observed. Government, researchers and district agents' intervention increased correct use of inputs (fertilizers, seeds and pesticides) and organized trainings on business development to improve their role in production and marketing. As shown in Table 2, according to input supplier cooperatives, 48.14 per cent and 27.78 per cent of the interventions were on business management and correct use of inputs respectively. Trainings were also made on subsidized distribution of seeds and fertilizers.

Table 2
Input Interventions and Trainings

Types of Intervention	Frequency	Percent
Business management	168	48.00
Correct use of fertilizers/seeds/pesticides	97	27.78
Storage management	26	7.40
Subsidized distribution of seed	26	7.40
Subsidized distribution of fertilizers	20	5.72
Post-harvest management	13	3.70
Total	350	100

Source: Field Survey

4.c Marketing Problems

Table 3 indicates unstable price, weak market information, presence of non-licensed traders and absence of grades and standards were the major market constraints that impede maize market.

Price Volatility: It is a common problem for agricultural products. Thus, maize as agricultural product price instability is the major market constraint. This is because of its nature of seasonal supply with unsatisfied demand in the market in the Kharif season maize production and supply is more than compared to Rabi season in Karnataka. According to the survey result 73.60 per cent of the respondents replied unstable price hindered the business. Minimum support prices (MSP) for maize announced by the governments mean while the intermediaries were taken advantage in terms of Commission and brokerage on the price/quantity.

Lack of Market Information: In the surveyed maize and producing area, 38.50 per cent of the respondents were unable to access regular market information. It is a major problem in developing marketing plans and in price discovery apart from Minimum support prices (MSP). This lack of information is increasing both transaction cost and resistance to risk taking. All value chain actors suggest that a simple price and volume information system would develop their marketing decision making, somewhat MSP treated as benchmarking in price related information.

Lack of Coordination amongst Traders: According to the survey result 59.60 per cent of the traders pointed out presence of non-licensed traders in the market. Most of maize traders are not part of formal trading organizations. They are informal and often non licensed traders. Consequently very poor business coordination amongst traders has been observed. It was difficult for these informal traders to gather information and access opportunities in new area of the business. If traders were to be given support in terms of business skills development, they would wish such an intervention to apply across commodities. This situation also decreases competitiveness of licensed traders who obliged to pay annual taxes. But in non-licensed traders side the tax is used to develop their business. However, they have less access to different services like trainings, credit and information.

Absence of Grades and Standards: Absence of standards of specification, testing and grading constrained maize market. 57.80 per cent of the respondents indicated traders usually test quality of their purchase in traditional methods. The main assessment methods of quality are feeling,

biting, visual inspection, shaking or trust on sellers. Those methods are not proven scientifically to have appropriate measurement of quality of the commodity. Laboratory analysis and moisture meter are not used to standardize the maize to strengthen the business.

In addition to above all, less role of government support to strengthen grain marketing, limited access to credit to purchase required amount of maize covering other marketing costs, and non-transparent taxation system are identified as constraints of maize which hinder improvement of a special market supply-value chain actors/traders in the business.

However in India Central and State Governments made a concrete effort to improve the agricultural marketing. The APMCs Model Act (a) provides for the direct selling of produce through contract farming, (b) permits private persons, farmers and consumers to establish agricultural markets, (c) levies a single market fee on the sale of the commodity, and (d) replaces licenses with registration of market agencies so that they can operate in more than one market, among other things. Even government announce every year Minimum Support Price to 22 crops including maize. These are opportunities which give more yields to the formers for their production of maize.

Table 3
Problems of Maize Marketing in Study Area

Major Marketing Constraints	Frequency	Percent
Prices are unstable	258	73.60
Presence of non-licensed traders	209	59.60
Absence of grades and standards	202	57.80
Poor quality of grains	116	33.30
Limited access to credit	178	50.80
Non-transparent (complicated) taxation system	239	68.40
Absence of government support to improve marketing	147	42.10
Inadequate market infrastructure	135	38.50
Weak market information	184	52.60

Source: Field Survey

4.d Marketing Opportunities

Major maize market opportunities pointed out these are presence of potential sellers and buyers, presence of storage facilities and improved trends of quality.

Potential Traders: The major opportunity for marketing is presence of potential sellers and buyers in markets. Trader’s pool and transport for maize to different parts of the country as well

as abroad market the presence of high consumer demand for the commodities increased the marketing activities. Proximity of urban wholesalers, large volume carriers of the products, to processing factories/units was considered as an opportunity to maize market.

Storage Facility: The traders use different types of stores to keep their maize properly with a possible minimized loss and fetch a reasonable price. Mainly used types of stores were sealed warehouse, non-sealed warehouse, stores and shades. Table 4 indicated storage capacity of warehouses, stored amount, storage duration and loss of maize

Table 4
Storage Facilities of Traders

Storage Facility	Mean	SD
Store capacity(quintal)	1161.75	2835.09
Maximum quantity stored(qt)	102.05	156.10
Average storage period(week)	6.90	7.13
Spoilage (per cent)	1.49	7.56

Source: Field Survey

Product Quality: Agricultural products quality determines the price, volume of supply and level of value addition. Table 5 indicated trends of maize quality in the market. According to the survey results around 61.10 per cent respondents considered a lot increment in the quality of a commodity. Followed by 26.57 per cent respondents considered that the slight increment in maize quality. 8.86 percent of them opined that the no change in trends of maize quality and remaining of the respondents said trends of maize quality deceased slightly than earlier. Thus, increasing quality of maize attract all actors and enablers in the value chains development.

Table 5
Trends of Maize Quality

Quality	Frequency	Percent
Increased a lot	214	61.14
Increased slightly	93	26.57
No change	31	08.86
Decreased slightly	12	03.43
Total	350	100

Source: Field Survey

Conclusion

The present study has been conducted to know the production and marketing problem of

maize crop in Karnataka state. The data were collected by sample households using pre-tested structured questionnaire. All the sampled households are growers of maize. The main findings of the study are summarized as follows. The major production and marketing constraints were identified in the present study. Producers are facing the problems of irregular rain, high cost of production and delay in inputs arrival for purchase. Traders are also constrained by price volatility, weak market information, poor coordination amongst traders, and absence of grades and standards. There are many productions and marketing opportunity was also identified in the study area.

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