MARKETING OF MAIZE - A CASE STUDY OF HASSAN DISTRICT

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Abstract

Maize is a crucial crop in India, grown year-round and accounting for 10% of total food grain production. It serves as a staple food for humans and animals, and is used in various industries. Maize marketing is crucial for producers, as it affects market structure, marketing cost, margin, price-spread, price analysis, and efficiency. The study focuses on six main agricultural markets, with Hassan and Holenarasipura being the leading markets. The study found a 400-percent price difference between producers and wholesalers, while farmers sold their maize through NAFED channels. The government should implement e-Marketing information systems and train farmers on marketing information through mass media. This will help farmers gain financial, social, and technical support, ultimately leading to increased income and fair prices for their crop.

Key Words: *Maize, Marketing, Farmers, NAFED*

Introduction

Maize (*Zea mays* L.) is one of the most important crops in the world and is one of the multipurpose emerging crops having wider adaptability under varied agro-climatic conditions. Globally, maize is known as 'Queen of Cereals' because it has the highest genetic yield prospective among the cereals. Maize referred to as corn in North America. Maize is originated in central Mexico in approximately 10000 years ago North America. The crop was introduced to Europe in the sixteenth century, from where it spread to Africa and Asia. It is now one of the most widely-grown crops around the world in both temperate and tropical regions. Globally, maize is along with the most usually produced and consumed cereal crops. In 2020, about 1.15 billion MT of maize was produced covering acreage of about 193.7 million Ha across 170 countries. During this year, global consumption of top three cereals (maize, wheat and rice) stood at 2,365 million MT of which maize held about 48 per cent share. The United States of America is the top country by maize production in the world. As of 2020, maize production in the USA was 360,252 thousand tonnes that accounts for 33.84 per cent of the

world's maize production. Others top five countries are China, Brazil, Argentina, Ukraine and India account for 75.18 per cent of it.

Over the last decade, both global production as well as consumption increased at a CAGR of about 3.4 per cent. Just above 15 per cent of global production was traded internationally with about 89 per cent exports contributed by five exporters such as USA, Brazil, Argentina, Ukraine and European Union. India ranks 4th and 7th in terms of global maize acreage and production, contributing to about 4.6 and 2.4 per cent respectively. The contribution of maize to food security is enormous, given that it is a preferred staple food for more than 900 million poor including one-third of all malnourished children globally. In regions such as Latin America and Sub-Saharan Africa, that are dependent on maize as a key staple crop, it serves as an important source of carbohydrate, protein, iron, vitamin B, and minerals. About 120-140 million farm families, depend on this crop for their livelihoods. Maize is along with the world's most broadly produced and consumed cereal crops. Given its photo-thermal insensitivity and its genetic amenability to reconstruction, it can be grown in diverse agro-climatic conditions and genetically modified for specific human needs. Consequently, it serves as a key raw material across various sectors including livestock feed, starch, food processing and bio ethanol. Additionally, derivatives of corn starch are actively used in diverse industries including pharmaceuticals, cosmetics, food processing, textiles and paper among others. Various types of maize are cultivated in highly diverse climate and soil conditions across the world.

In India, maize is the third most significant cereal crop after rice and wheat. It is the fastest growing cereal crop in terms of area, production as well as productivity. Over the last few decades, maize cultivation has shifted from being grown only during the Kharif in traditional areas such as Rajasthan, Uttar Pradesh and Bihar, primarily to be used as food, to being grown diagonally non-traditional areas such as Andhra Pradesh, Madhya Pradesh and Karnataka, across seasons and majorly produced for industrial use. However, the production system continues to be largely rain-fed. In 2020, maize production for India was 30,200 thousand tonnes, growing at an average annual rate of 4.67 per cent. Over the last decade, maize consumption in India grew at a compound annual growth rate of 5.6 per cent while production grew at just about 2.9 per cent. Maize off-take by the feed industry grew fastest at a compound annual growth Rate of 8.8 per cent followed by industrial sector, which grew at a compound annual growth rate of 6.2 per cent. Compound annual growth rate with domestic demand for maize growing faster than production and the fact that maize provides the right

opportunity for crop diversification and increasing farmer income, there is an imminent need to identify and address key barrier hinder growth of the Indian maize ecosystem. Multiple challenges diagonally the value chain are impacting farm prices on one hand, while constraining the availability of good quality produce to the consumer at reasonable price on the other.

Marketing of Maize

Maize is one of the oldest plants domesticated by humans. Maize or Corn, also known by its scientific name *Zea mays* L., is a plant belongs to the family of grasses. Maize comes under coarse grains category and is the third largest planted crop. Maize is an annual plant which is cultivated globally due to its outstanding geographic adaptability however its cultivation is mostly concentrated in the Northern hemisphere countries. A major portion i.e. over 60 per cent of global maize production is used in animal feed as it provides a high amount of energy and oil content to the livestock. Furthermore, maize is used as staple food and also find a broad range of industrial application such as food processing and ethanol production. Maize market has undergone dramatic change over the past few decades owing to the green revolution and rapid development in biotechnological advancement in seed and production which has resulted in the availability of genetically modified maize seeds which offers increased average maize yield

Review of literature:

Manual (2008) reported on good agricultural marketing practices for Maize, the report explains that Maize is extensively cultivated throughout the world. It is an important cereal crop in India. The significance of Maize is due to its wide diversity of uses. It is used both food for human and feed for animals. Maize is the dry land crop for four months. There are six types of marketing channels like producer, wholesaler, seller; commission agent. District marketing is truly benefited for the producer. Less number of producers sold their product in co-operative market because of grading system, lakh of facilities. Grains which are insect or vermin damaged, broken kernels other grains max: 7 per cent which diseased grains must not exceed 0.5 per cent maximum 6 per cent, maximum 2 per cent usually examination ISO 5223-1983 visual assessment Finally concluded that Maize is one of highest profitable crops in India.

Ragasa, Catherine & Chapoto, Antony & Kolavalli, Shashi, 2014. "Maize Productivity in Ghana," in his paper presented Maize is an important food crop in Ghana, accounting for more than 50 percent of the country total cereal production. The Ghana Grains Development

Project (1979 “1997) and the Food Crops Development Project (2000 “2008) made major investments to improve maize yield. Despite these efforts, the average maize yield in Ghana remains one of the lowest in the world, much lower than the average for Africa south of the Sahara.

Objective of the Paper:

- To study the market structure, marketing cost, marketing margin, price-spread, price analysis and marketing efficiency of different channels in the study area.

Methodology:

The present study is mainly based on survey method. Both primary and secondary data is used. The required primary data is collected from the sample respondents through two types of well-constructed interview schedules originally, in conformity with the objectives of the study.

Analysis of the paper:

In Hassan district maize is the major growing crop. Majority of the farmers are growing maize crop. The district alone accounted 87526 hectares in area and 237736 tonnes in production at present

Market Structure, Cost, Margin and Price-Spread Analysis “

Hassan District is mainly Depends on Agriculture production for its development and substance of its economic growth. 70 percent of the total population is engaged in agriculture. The products are marketed through APMC. The working regulated markets of the district is shown in the below Table 4.20.

Table-1.1: Taluk-wise Regulated Markets in the District

Sl. No	Taluk	Main Market	Total
1	Alur	0	0
2	Arakalgud	0	0
3	Arsikere	1	1
4	Belur	1	1
5	C R Patna	1	1
6	Hassan	1	1
7	Holenarasipura	1	1

8	Sakaleshpura	1	1
	District total	**06**	**06**

Source: District at a Glance, 2019-20, District Statistical Office, Hassan

Graph-1: Taluk-wise Regulated Markets in the District

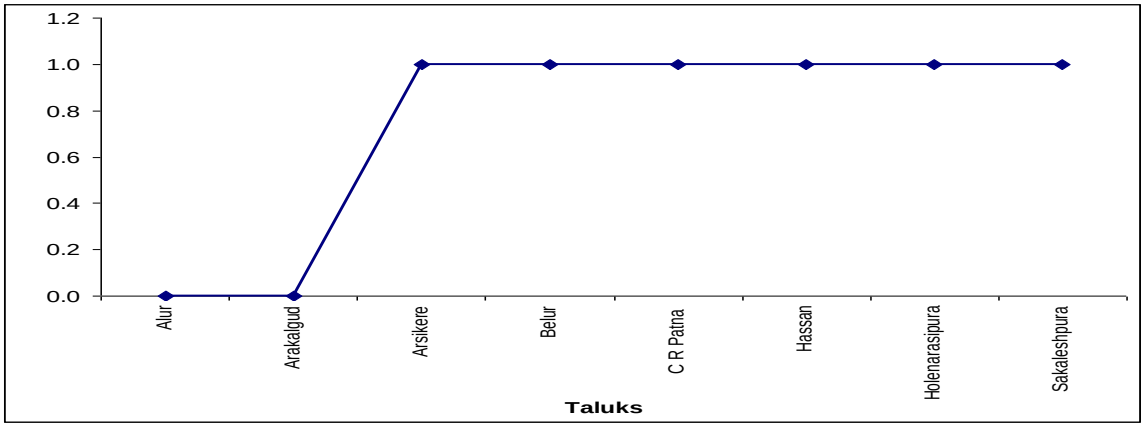

Table: 1.1 and Graph 1 reveals that Hassan and Holenarasipura leading maize regulated markets on the basis arrivals. Above two markets receive it supply of maize from surrounding area and for flung regions and taluk with in the district and from outside the district. The annual turnover of the Agriculture produce transacted at APMC exceeded 300 crore and less for an equal amount of produce is transacted through private traders, middleman, commission agents etc.

Marketing efficiency of different channels in the study area, identifying market channel in the study area as below:

Table-2: Price Spread in Marketing of Maize in Study Area

Sl.No	**Market Channels**	**Price Received by Farmers**
1	Producer	2100
	Wholesalers	2500
	Price spread	400
2	Producer	2500
	NAFED	2500
	Price spread	0000

Note: Producer- Wholesaler and Producer-NAFED

Source: Field survey

Above table shows Price spread in marketing of maize in the study area. In identified market channel-I is Producer-wholesaler, in this producer received price of 2100 and wholesaler received 2500 in the study area. This was clearly indicating that the price spread or rate difference between producers and wholesaler was 400. Another channel producer-NAFED, farmers sell their maize through this channel, there no difference between farmers received price and market price. Hence, maize farmers sell their commodity directly to NAFED, then only they get maximum price, in case producer would not get NAFED facilities, farmers have sell their products through the middleman. So, the interference of middle farmers will get very less price comparatively market price.

Findings of the paper:

- In study area there are 6 main agricultural markets were there. Hassan and Holenarasipura leading maize regulated markets on the basis arrivals. Above two markets receive it supply of maize from surrounding area and for flung regions and taluk with in the district and from outside the district. The annual turnover of the Agriculture produce transacted at APMC exceeded ` 300 crore and less for an equal amount of produce is transacted through private traders, middleman and commission agents. Identifying market channel in the study area are Producer-middlemen and Producer-NAFED.
- In identified market channels one is Producer- wholesaler, in this channel producer received price was ` 2100 and wholesaler received ` 2500 in the study area. This was clearly indicates that the price spread or rate difference between producers and wholesaler was ` 400. Another channel producer and NAFED, farmers sell their maize through this channel there no difference between farmers received price and market price. Hence maize farmers sell their commodity direct to NAFED they have got maximum price, in case producer could not get NAFED facilities, farmers have sell their product through the middleman. Hence the interference of middle farmers will get very less price comparatively market price.

Suggestion:

Marketing facilities should be made easy by the government in this digital era since everyone having mobiles, so e-Marketing information system should be implemented and trained for farmers and broadcasting of marketing information through mass media should be made regularly. Co-operative farming should be encouraged for the benefit of farmers. Organic farming should be encouraged.

Conclusion:

It can be concluded that, main motive behind the production and marketing of the maize by the farmers is to financial, social, technical support for getting more income and fair price for the crop. Government awareness programmes and other training programmes by commercial banks, co-operative banks and industrial organizations has to be undertaken to encourage the farmers to cultivate maize. Through maize is one of the food crops of India, the farmers are facing many problems, regarding labour, cost of cultivating, harvesting losses, pests and insects, credit problems, water problems or they may be fair price problems. Maize cultivation is still a mass cultivation of food grains. If government helps the maize farmers to overcome from these problems, no doubt there will be a bumper maize crop production can be achieved. Since, increase in production of maize is for meeting domestic and export requirement, increases the income and livelihood of the farmers and also helps in increasing rural employment and overall developments in agricultural sector, because it is the backbone of our economy.

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