

Price Behaviour of Maize and Marketing Challenges of Maize in Davanagere, Karnataka

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ABSTRACT

Maize (*Zea mays* L) is one of the most versatile 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 potential among the cereals. It is cultivated on nearly 150 m ha in about 160 countries having wider diversity of soil, climate, biodiversity and management practices that contributes 36 % (782 m t) in the global grain production. The primary objective of the current research is to bring out the MSP of maize, price behaviour and the marketing challenges. The study was conducted in the Davanagere District of Karnataka to analyze the MSP and Constraints in Maize marketing and price behaviour. 40 farmers were selected randomly from each different village. The marketing constraints have been measured on the parameters of storage facility, price fluctuations, payment issues and transportation.

Key Words: Agricultural commodity, Maize, MSP, Price Behaviour, Marketing Challenges

Introduction:

Maize known as Queen of Cereals, also called corn is one of the most important cereal crops of the world. Maize distinguished botanically as *Zea mays*, belongs to the grains family Graminae. Maize ranks as the major grain crop worldwide. Maize, which is the only food cereal crop that can be grown in different seasons requires moderate climate for growth. It grows well in loamy soils but surplus or poor rains adversely affect yields as well as quality. Depending on colour and taste, maize is classified into two broad groups: yellow and white. Yellow maize is traditionally used for animal feed. It comprises the total world maize production and is grown mostly in northern hemisphere countries. White maize which is generally considered as a food crop requires more favourable climatic conditions. Thereby, it is produced only in limited countries. As well, based on the size and composition of endosperm several hybrid of maize exist viz. dent corn, flint corn, popcorn, sweet corn, etc. Maize is an important staple food in many parts of the world. Maize is used as an important raw material in food processing, feed industry and in various other industrial applications.

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yield potential among the cereals. It is cultivated on nearly 150 m ha in about 160 countries having wider diversity of soil, climate, biodiversity and management practices that contributes 36 % (782 m t) in the global grain production.

The United States of America (USA) is the largest producer of maize contributes nearly 35 % of the total production in the world and maize is the driver of the US economy. The USA has the highest productivity (> 9.6 t ha⁻¹) which is double than the global average (4.92 t ha⁻¹). Whereas, the average productivity in India is 2.43 t ha⁻¹. In India, maize is the third most important food crops after rice and wheat. According to advance estimate it is cultivated in 8.7 m ha (2010-11) mainly during Kharif season which covers 80% area. Maize in India, contributes nearly 9 % in the national food basket and more than Rs. 100 billion to the agricultural GDP at current prices apart from the generating employment to over 100 million man-days at the farm and downstream agricultural and industrial sectors. In addition to staple food for human being and quality feed for animals, maize serves as a basic raw material as an ingredient to thousands of industrial products that includes starch, oil, protein, alcoholic beverages, food sweeteners, pharmaceutical, cosmetic, film, textile, gum, package and paper industries etc.

Recent trends (2003-04 to 2008-09) in growth rate of area (2.6 %), production (6.4 %) and productivity (3.6 %) of maize in India has been of high order and experienced highest growth rate among the food crops. Since 1950-51, the area, production and productivity of maize have increased by more than 3.4, 12 and 4.5 times from 3.2 m ha, 1.7 m t and 547 kg ha⁻¹ to current level of 8.17 m ha, 19.33 m t and 2414 kg ha⁻¹, respectively due to increasing maize demand for diversified uses. In India, the maize is used as human food (23%), poultry feed (51 %), animal feed (12 %), industrial (starch) products (12%), beverages and seed (1 % each). With the increasing trends of maize production, the projected demand of maize (22.73 m t) by the end of XIth five year plan (2011-12) will be achieved through improved maize production technologies focused on 'Single Cross Hybrids'.

Objectives:

The primary objective of the current research is to bring out the MSP of maize, price behaviour and the marketing challenges.

Need for the Research Problem:

The increasing trend in the area, production and productivity of Maize in Karnataka is grown over a period of time due to the cultivation in all the three seasons in an area of 936,000ha, with an annual production of 273,000 tonnes and productivity of 29 tonnes/ha. The major area is under kharif cultivation with hybrids. Non availability, changing MSP, susceptibility to downy mildew disease, marketing challenges apart from the climatic variations in all the seasons are the concerns for the growers. The current study is an attempt to analyse the price behaviour of Maize and marketing challenges in Davangera, Karnataka.

Methodology:

The study was conducted in the Davanagera District of Karnataka to analyze the MSP and Constraints in Maize marketing and price behaviour. 40 farmers were selected randomly from each different villages. After that, a preliminary survey was conducted in the selected villages, wholesaler, retailer, processing unit, mills and consumers in market of Davanagera district to know the Value Constraints in marketing of Maize through proportionate random sampling technique and the secondary data on prices of maize in Karnataka State were collected from krshimaratvahini and research articles from the National Journals, annual report of Agriculture.

Area of the Research:

Davangere district carved out of the three districts namely Chitradurga, Shimoga and Bellary derives its name from Devanagari. With creation of the new district on 15th August 1997 with Davangere as its headquarters, the district was given the name of the headquarters called Davangere. It is Located at the centre of Karnataka, about 262 kms from the state capital Bengaluru and spread across 6 taluks Davangere, Harihar, Jagalur, Honnali, Channagiri and Harapanahalli. Following is the Agricultural profile of the Davagere-

- ❖ Major cultivation of sugarcane, rice and maize takes place in the district.
- ❖ Dry land is available which is suitable for cultivation of fruits and vegetables.
- ❖ Gherkin processing, marigold dye processing, ground nut oil extraction units are existing food processing units in the district.
- ❖ Food processing industries provides the highest employment in the district.
- ❖ There are 3 sugar industries and many small rice mills in Davangere district.

Table 1 – Minimum Support Price of Maize (Rs.per.Quintal)

S.No	Variety	Year	MSP	Increase in MSP
1	Hybrid/Local	2017-18	1425	65
2	Hybrid/Local	2016-17	1365	45
3	Hybrid/Local	2015-16	1325	45
4	Hybrid/Local	2014-15	1310	-
5	Hybrid/Local	2013-14	1310	125
6	Hybrid/Local	2012-13	1175	195
7	Hybrid/Local	2011-12	980	100
8	Hybrid/Local	2010-11	880	40
9	Hybrid/Local	2009-10	840	15
10	Hybrid/Local	2008-09	825	-

*Source: krshimaratvahini.kar.nic

The interpretation of the above **Table-1** reveals that there has been an increasing trend of MSP from the year 2009-13, drop of 70/- in the year and increasing trend again from the year 20015-18. The MSP for the Year 2017-18 is 1425/-, MSP for the period of 2016-17 was 1365/-, MSP for the year 2015-16 was about 1325/-, the MSP for the period of 2014-15 is 1310/-, MSP for the year 2013-14 was 1310/-, MSP for the year 2012-13 was 1175/-, the MSP for the year 2011-12 was 980/-, MSP for the period 2010-11 was 880/- and MSP for the year 2009-10 was about 840/-.

Table 2 Marketing Challenges of Maize

S.Lo	Challenges	SA in %	A In %	NA/DA In %	DA In %	SDA In %
1	Lack of storage facilities	80	15	-	05	-
2	Accessibility to price changes	65	20	-	15	-
3	Price fluctuations	70	30	-	-	-
4	Produce unsold in Market	78	12	-	10	-
5	Low prices	60	35	-	05	-
6	Problems of selling produce late	75	25	-	-	-
7	Distant market	90	10	-	-	-
8	Delay in Payment	86	14	-	-	-
9	Lack of Transport Facility	70	30	-	-	-
10	Problem of commission charge	58	22	-	20	-

*Source: Research tool

Constraints: The results presented in the **Table-2**, shows that 80% of the farmers strongly agree to the fact that lack of the storage facilities is one of the important constraint of marketing of Maize followed by 15% of the farmers agreed and only 05% of the farmers disagreed. Majority of the farmers (65%) strongly agreed that accessibility to the price changes, followed by 20% of farmer's agreeing and 15% of the farmer's disagreeing. 70% of the farmer's strongly agreed to the price fluctuations followed by 30% of the framer's agreeing. Produce unsold is been strongly agreed by the 78% of farmers followed by 12% agreeing and 10% disagreeing. The low price has been strongly agreed by 60% of the farmer's followed by 35% disagreeing and 05% disagreeing. The problems of selling produce late has been strongly agreed by 75% of the farmer's followed by 25% of the farmer's agreeing. Distant market, Delay in Payment, Lack of Transport Facility, Problem of commission charge have been strongly agreed by 90%, 86%, 70% and 58% of the farmers as the constraint followed by 10%, 14%, 30% and 22% agreeing to the same.

The **Table-2** also reveals the fact that distant market, storage facilities and delay in cash payments have been rated highest as the leading constraints in marketing of Maize.

Suggestion:

The collection of the produce of the farmers at the village, the cooperative societies or the regulated market committee could help in mitigating transportation cost. To triumph over the inconvenience related to lack of technical guidance, is a need for integrated efforts on the part of extension agency and university in both research and development as well as transfer of technology for better reach out to farming community. To overcome the problem related to delayed payments, there is a need on the part of APMC to have strict regulation of practices to ensure prompt receipts of sale proceeds by the farmers. Efforts are to be made to provide market information through multi media for better decision making and to realize a better price decides stabilizing in prices.

Conclusion:

The results indicated that problem of not sending the produce outside, price fluctuations, forced sale, delay in cash payment, problem of selling produce late, lack of transportation facility and problem of low price were serious constraints in marketing of Maize. The collection of the produce of the farmers at the village itself, by the Co-operative societies or the regulated market committee could help in mitigating transportation cost. To overcome the problem related to lack of technical guidance, is a need for integrated efforts on the part of extension agency and university in both research and development as well as transfer of technology for better reach out to farming community. Efforts are to be made to provide market information through multi media for better decision making and to realize a better price decides stabilizing in prices. The study concluded that, the Prices of Maize were Maximum during for the year 2017-18 and major constraints being distant market, storage facility and payment.

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