

MAJOR CONSTRAINTS AND SUGGESTIONS IN THE PRODUCTION AND MARKETING OF SORGHUM IN KHARGONE DISTRICT OF MADHYA PRADESH

A.M. Rajput¹, K.K. Saxena² & Binu Mathew³

ABSTRACT

The study was carried out to find the constraints in production and marketing of sorghum and measures to overcome it. Two tehsils Kasrawad and Bhikangaon of Khargone district were selected for study. Eight villages were selected randomly among sorghum cultivated village. Farmers were categorized into three groups namely small (0-2 ha), medium (2.1-4 ha) and large (4.1 and above). Nine farmers were selected from each village. The number of farmers in each size group was 3 in number from a village. Total sample size was 72. Input output ratio of small, medium and large size group were 1:1.72, 1:1.61 and 1:1.56 and 1:1.63 for overall. It was found from the study that marginal land was used for cultivating sorghum crop among large and medium farmers. In marketing of sorghum it was found that 22.35 per cent of the consumer's price was accounted for marketing cost. 61 per cent of consumer's price was received by the producers. Low market price of the produce and long duration of the sorghum crop were the major constraints reported by framers. Alternative use of sorghum has to be found out and short duration varieties have to be developed for the sorghum improvement.

Key words: Constraints, Marketing, Production, and Suggestions.

INTRODUCTION :

Sorghum [*Sorghum bicolor* (L) Moench] was one of the four major food crop in the world. It was a staple food for more than 300 million people living in Asia and Africa. Further, it supplied fodder to millions of animals. In supplying nutrition to human race, it stands fourth in importance. The earlier positions being held by wheat, rice and maize. Tropical Northeast Africa was believed to be the centre of origin of sorghum. Sorghum has a wide range of adaptability and potential for grain production. It was preferred for its adaptability to harsh environment especially on marginal land of rainfed agriculture.

In India, Maharashtra was the main producer of sorghum, which account for 49 per cent of total production of country followed by Madhya Pradesh and Andhra Pradesh. Sorghum was utilized mainly for human consumption as a staple food grain and straw for livestock, in areas where it was grown. Grain was also being used as a source of feed for livestock and poultry. As a result of green revolution, increased grain production in rice and wheat leads to serious shortage of fodder; further increase in the consumption of dairy and milk product has aggravated scarcity of fodder. Sorghum was ideal forage due to its quick growth, high fodder yield and good nutritional quality and suitability for utilization in various forms like green chop, silage and hay. Sorghum grains are mainly used as raw material in beer industry, in making starch poultry feeds and other products. Sweet sorghum was used in making jaggery, sugar and industrial alcohol.

METHODOLOGY :

Khargone district was purposively selected for this study as it is one of the most important sorghum growing district in Madhya Pradesh. Two tehsils namely Kasrawad and Bhikangaon were selected purposively which had the highest area under sorghum cultivation. A list of all the villages growing sorghum, falling under Kasrawad and Bhikangaon were prepared. Then from this list 8 villages were selected randomly having the area under sorghum cultivation. From each of the selected villages, a list of sorghum growers was arranged in an order i.e. according to the size of holding. The farmers were categorized into three different size viz., small (up to 2 ha), medium (2.1 to 4 ha) and large (above 4 ha) farms 9 farmers from each selected villages were selected randomly under above three size groups. The number of farmers in each size group was 3 in number. Thus the present study has accounted total of 72 farmers. For working out the producers share in consumers price, marketing cost and margin in the one selected market, 10 producers were selected randomly irrespective of their size of holding.

RESULTS AND DISCUSSION :

Major constraints: This section of the analysis deals with the identification of major constraints in sorghum production on all the three different size groups of holding. During the study, which was carried out when the data were collected from farmers of eight villages. Common problems faced by each group of farmers are given below :

1. Competitiveness of sorghum compared with other crop—Study reveals that incremental cost ratio is

1. Professor 3. P.G. Student, (Agril. Eco.and Farm Managt.,) COA, Indore (M.P.) 2. Prof.& Head (Ext.Edu.) (JNKVV), COA, Jabalpur.

in favour of competing crop. Profits are important in the content of realization of meeting cash need of the farm household. The price offered for sorghum hybrid were quite low compared to there counter part namely cotton and soybean.

2. Market price fluctuation—It was extracted from the farmer's views that the market price fluctuations are common in Bhikangaon and Khargone mandi. Prices are also very low. Thus farmers would not be able to get reasonable market price of their produce.

3. Producers share was low in selling price—It was noted that producers share in selling price was low. Producer pays a lot of amount in various marketing services during marketing. It was seen that Rs.40 per quintal was charged only for storage, and transportation charges. Middleman also claimed 6 per cent commission.

4. Lack of credit facilities—Since cotton in primarily grown in this region, local lenders do not give credit for sorghum crop. Sorghum produce is largely consumed in their respective household of the producer. Thus, money recovery becomes difficult task for the lenders.

5. Change in food habit—Change in the average consumption of sorghum in Khargone district has deceased. This was due to the poor taste of hybrid sorghum, and also due to the subsidize rate of wheat and rice.

6. Increase pest and disease incidence—Reports of pest and disease attack in improved varieties were found common. Smut, stiga was the common disease found in this region.

7. Costly seed—It was also told by farmers that purchase of M-51 variety seed from Kasrawad and Bhikangaon were found costly. Small size group farmers purchase seed of this variety from local agents, who get substantial profit. The profits of agents thus increase the cost of cultivation.

8. Long duration of sorghum crop—Long duration of sorghum crop on the field was other major constraint reported by farmers of different size of holding. Sorghum is long duration crop, whereby early wheat of rabi cannot be sown on time.

Major constraints in production of sorghum (1999-2000)

Constraints	Number of farmers reporting overall constraints			
	Small	Medium	Large	Overall
A. Seed constraints				
(i) Knowledge of improved varieties	7 (28)	14 (56)	17(68)	38(50.6)
(ii) Use of last year seeds varieties	16(64)	12(48)	4(16)	32(42.6)
(iii) Low yield of recommended	4(16)	7(28)	11(44)	22(29.3)
(iv) High price of seed	13(52)	12(48)	9(36)	34(45.33)
B. Lack of credit facilities	18(72)	8(32)	4(16)	30(40.00)
C. (i) Lack of soil testing facilities	4(16)	8(32)	16(64)	28(37.3)
(ii) Reduction in soil fertility	13(52)	16(64)	12(48)	31(41.33)
D. Others				
(i) Change in food habits	5(20)	8(32)	17(68)	30(40)
(ii) Unfavourable product price	14(56)	9(36)	12(48)	35(46.6)
(iii) Increase of disease and pest	9(36)	11(44)	8(32)	28(37.3)
(iv) Shortage of labour	3(12)	8(32)	14(56)	25(33.3)

Note Figures in parentheses indicate percentage to total

9. Reduction in soil fertility—It was told by the farmer that sorghum crop is high nutrient feeder. Whereby subsequent crop after sorghum get affected.

10. No soil-testing laboratory available—There is no soil-testing laboratory in near by districts to test soil nutrients. As a result the farmers are unaware of the balanced doses of nutrients required in groundnut crop production.

11. Migration of labourers—Since last ten years, the labourers are going to the Gujarat state for better opportunities in the industries or for sugarcane harvesting during the harvesting period as wages are higher in Gujarat state. As a result farmers are facing the problem of insufficient labour in the study area, which is compelling them to pay higher wages to labourers.

CONCLUSION :

Productivity and profitability are essential for keeping sorghum competitive. Alternate uses may create market demand for raw material and make sorghum production remunerative. There are good options available now for value addition i.e. Syrup production, Jaggery production, Ethanol, Liquid glucose and dextrose from grain, Spirit, Starch and Poultry feed :

REFERSENCES

1. Girase, K.A., Desai, B.R. and Kable, L.P. (1994). Constraints in adoption of recommended kharif jowar production, 19(1): 114-116.
2. Nahatkar, S.B., Gautam, J.S. and Jaulkar, A.M. (1999). Analysis of marketed surplus of major crop in Tawa Command Area of Madhya Pradesh. *Indian J.Agric.Res.*,33(3):202-208.
3. Patil, S.S.; Hiremath, K.C.; Kunnal, L.B. and Sadagath, S. (1989). A study on output growth in jowar and its effect on market arrival and prices. *Mysore J.Agric.Sci.*,23(2): 240-243.
4. Pawar, N.D. (1998). Factor governing marketable surplus of jowar in Marathwada region of Maharashtra. *Agric. Marketing*, 41:30-34.

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