

Constraints and suggestion of rainfed and irrigated *rabi* jowar producers in Osmanabad, Maharashtra

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ABSTRACT

A purposively selected sample of 96 respondents from Osmanabad district was surveyed. A specially designed interview schedule was administered on the respondents to find out the constraints and suggestions faced by *rabi* jowar growers. Data pertained to the year 2005-2006. Frequency and percentage method were used to the present study. The results revealed that irregular supply of electricity (81.25 per cent), high rate of fertilizers (79.17 per cent), difficulties in control of weed (79.14 per cent), lack of rainfall (72.92 per cent), non-availability of labour in time (70.08 per cent) and low rate of jowar in market (60.42 per cent) were the major constraints faced by *rabi* jowar growers. Regarding suggestions they suggested the provision of training with regard to disease control (79.17 per cent) and provision of low rate of fertilizers with availability at village level (75.00 per cent).

Key words : Constraints, Suggestion *rabi* jowar

INTRODUCTION

Jowar [*Sorghum bicolor* (L.) Moench] belongs to family gramineace. The world sorghum is derived from latic word 'sargo' meaning rising above *i.e.* growing taller than other crops in the field. It is commonly known as the great millet due to large size of grains among millets and vast area under it. In the world, jowar is cultivated over 43.75 million hectares, production 54.15 million tonnes of grains with an average yield of 1238 kg/ha. India is major jowar growing country in the world. According to Indian budget 2005 *rabi* jowar was cultivated 5.00 million hectares with production 5.0 million tonnes and productivity was 420 kg/ha. In Maharashtra, jowar is grown mainly as rainfed crop. The area under *rabi* jowar is 32.32 lakh hectares with production 1832 thousand tonnes and productivity 568 kg/ha. Among the dry fodders jowar kadbi is very much preferred and liked by all types of livestock namely drought animals, milch animals and pet animals. Alternative uses of jowar is the need of the day. Jowar can be beneficially utilized on industrial scale for production of different value added products. This crop have importance in the cropping pattern of the farmers. Keeping in view above aspects, the need was felt to study the problems faced by *rabi* jowar growers was undertaken.

MATERIALS AND METHODS

The study was purposively conducted in Osmanabad district, because of large area under *rabi* jowar. Kallam and Paranda tehsils were selected from Osmanabad district on the basis of highest area under *rabi* jowar crop. Four villages from each of tehsil were selected on the

basis of highest area under rainfed as well as irrigated *rabi* jowar. Six rainfed and six irrigated *rabi* jowar growers were selected from each of the villages. Thus, from eight selected villages, size of sample for each of the categories was sixteen. In this way 48 rainfed *rabi* jowar growers and 48 irrigated *rabi* jowar growers consisted with ninety six cultivators were selected for present study. Cross sectional data were collected from the sample farmers by personal interview method with the help of pretested schedule, data pertained to the year 2005-2006. Frequency and percentage method were used to analyze the data in the present study.

RESULTS AND DISCUSSION

Constraints faced by rainfed *rabi* jowar growers were calculated in frequency and percentage and are presented in Table 1. In regard to constraint faced by rainfed *rabi* jowar growers, about 79.17 per cent of jowar growers expressed as high rate of fertilizers as a major constraints. Next in order, cold weather condition and lack of rainfall was also major problem which was expressed by 72.92 per cent of jowar growers. Similarly, attack of *chikta* and *kani* diseases was also expressed by 66.67 per cent of jowar growers as one of the major constraints followed by non-availability of labour in time (62.50 per cent), low rate of jowar in market (60.42 per cent) and difficulty in control of weed (52.08 per cent). It is important to note that some of constraints found minor but important in which non-availability of loan in time was expressed by 43.75 per cent of jowar growers followed by that of irregular supply of electricity (41.67 per cent), inadequate transport facilities (37.50 per cent), high rate of ploughing by tractor (33.33 per cent) and inadequate irrigation

Table 1 : Constraints of rainfed and irrigated *rabi* jowar growers

Sr. No.	Constraints	Rainfed <i>rabi</i> jowar growers		Irrigated <i>rabi</i> jowar growers	
		Frequency n=48	Percentage	Frequency n=48	Percentage
1.	Difficulties in control of weed	25	52.08	38	79.14
2.	Attack of <i>chikta</i> and <i>kani</i> diseases	32	66.67	21	43.75
3.	Cold weather condition and lack of rainfall	35	72.92	24	50.00
4.	Irregular supply of electricity	20	41.67	39	81.25
5.	High rates of ploughing by tractor	16	33.33	17	35.42
6.	Inadequate irrigation facilities	10	20.83	16	33.33
7.	Non-availability of labour in time	30	62.50	37	70.08
8.	High rates of fertilizers	38	79.17	36	75.00
9.	Inadequate transport facilities in village	18	37.50	20	41.67
10.	Low rates of jowar in market	29	60.42	22	45.83
11.	Non-availability of loan in time	21	43.75	15	31.25

facilities (20.83 per cent).

It is also observed from the table that constraint faced by irrigated *rabi* jowar growers, irregular supply of electricity was 81.25 per cent which was the major problem faced by irrigated *rabi* jowar growers. Next in order, difficulties in control of weed was also major problem which was expressed by 79.14 per cent of irrigated *rabi* jowar growers. Similarly non-availability of labour in time was expressed by 70.08 per cent of the growers as one of the major constraint followed by cold weather condition and lack of rainfall (50.00 per cent). It is important to note that some of the constraints found minor but important in which low rates of jowar in market (45.83 per cent), attack of *chikta* and *kani* diseases (43.75 per cent), inadequate transport facilities in village (41.67 per cent), high rate of ploughing by tractor (35.42

per cent), inadequate irrigation facilities (33.33 per cent) and non-availability of loan in time (31.25 per cent). These results were in conformity with the results obtained by Kunnal *et al.* (1984) with regard to high prices of fertilizers.

Suggestions of rainfed and irrigated *rabi* jowar growers:

Suggestions of rainfed and irrigated *rabi* jowar growers were calculated in the form of frequency and percentage and are presented in Table 2. It was observed that 79.17 per cent of the rainfed jowar growers suggested the provision of training in regard to disease control. Similarly, provision of low rate of fertilizers with availability at village level was suggested by 75.00 per cent of the rainfed jowar growers. Next in order early sowing of *rabi* jowar, provision of low interest rate,

Table 2 : Suggestions of rainfed and irrigated *rabi* jowar growers

Sr. No.	Suggestions	Rainfed <i>rabi</i> jowar growers		Irrigated <i>rabi</i> jowar growers	
		Frequency n=48	Percentage	Frequency n=48	Percentage
1.	Availability of cheap and effective weedicides	22	45.83	36	75.00
2.	Provision of training in regard to disease control	38	79.17	20	41.66
3.	Early sowing of jowar	30	62.50	21	43.75
4.	Supply of electricity regularly	17	35.14	34	70.83
5.	Subsidisation of diesel prices for reducing the cost of tractors services	14	29.17	16	33.33
6.	Proper utilization of available resources through improved irrigation system	8	16.67	12	25.00
7.	Contract system for harvesting	26	54.17	35	74.92
8.	Provision of low rate of fertilizers with availability at village level	36	75.00	38	79.17
9.	Creation of transport facilities	15	31.25	18	37.50
10.	Provision of high rate of jowar	25	52.08	16	33.33
11.	Provision of loan with low interest	29	60.42	19	39.58

contract system for harvesting and provision of high rates of jowar were suggested by 62.50 per cent, 60.42 and 54.17 and 52.08 of the jowar growers, respectively. It was clear that some of suggestions were minor but important in which availability of cheap and effective weedicides was suggested by 45.83 per cent of jowar growers followed by supply of electricity (35.14 per cent), creation of transport facilities (31.25 per cent), subsidization of diesel prices for reducing cost of tractor was suggested by 29.17 per cent and proper utilization of available resources (16.17 per cent) of the growers.

It is also observed from the table that 75.00 per cent of the irrigated jowar growers suggested the availability of cheap and effective weedicides to weed control. Next in order, contract system for harvesting, supply of electricity regularly and provision of low rate of fertilizers with availability at village level was suggested by 74.92, 70.83 and 79.17 per cent of the growers, respectively. It was clear that some of suggestions were minor but important in which early sowing of *rabi* jowar (43.75 per cent), provision of training in regard to disease control (41.66 per cent), creation of transport facilities in village (37.50 per cent), provision of high rate of jowar (33.33 per cent), subsidization of diesel prices for reducing the cost of tractor services (33.33 per cent) and proper

utilization of available resources through improved irrigation system (25.00 per cent) were suggested by the irrigated *rabi* jowar growers.

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