



Study the Socioeconomic Characteristics of Maize Grower in Aurangabad District of Maharashtra, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The present study was designed to study the socioeconomic characteristics in Aurangabad district has been purposively selected for the study because Vijapur and Gangapur tehsils having highest area under maize crop as compared to other tehsils in the Aurangabad district. The average age of the maize grower was 30 -40 years. This indicated that, maize growers were in adult age group. The educational status was evaluated which shows 5 per cent maize growers were illiterate. It is revealed that, 25 per cent were primary school level, 11.67 per cent were at college level, 11.67 per cent at SSC level, 46.66 per cent at HSC level. This indicated that the maize growers in the study area were educated, upto college level. In case of maize growers, that in case of maize growers, 95 per cent of the farmers sole occupation was Agriculture. While 1.66 per cent farmers were

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involved in both Agriculture and Business, and 3.34 per cent were involved in agriculture and service. In case of *kharif* maize growers, it was seen that, 35.02 per cent male, 31.91 per cent female, and 33.07 per cent of children. The maize growers had livestock within their farm. About 31.15 per cent had one bullock pair, 33.96 per cent of buffalo, 34.89 per cent of cow respectively. In case of maize growers, 33.34 per cent of the sample farmers had less than 2 hectares of land holding and 48.33 per cent of the farmers had 2 to 4 hectares of land while 18.33 per cent of the sample farmers had more than 4 hectare of land holding. The means majority of the farmers having 2 to 4 ha farmers. The proportionate irrigated area was 94.19 per cent. Net sown area was 100 per cent. While Gross cropped area was 100 per cent and cropping intensity was 143.21. The proportionate area under maize crop was 17.80 per cent. Followed by cotton, onion and wheat was 23.40, 14.11, 11.21, per cent. This indicated that, the cropping pattern of the maize growers was dominated by maize alone. The cropping intensity 143.21.

Keywords: Maize; socioeconomic characteristics; cropping pattern; land holding.

1. INTRODUCTION

Zea mays L., Maize, Ch.no. ($2n = 20$), family: (Gramineae) Origin: (Mexico) One of the most adaptable developing crops, maize can grow in a variety of agro climatic settings [1-4]. Because it has the largest genetic yield potential of all the cereals, maize is referred to as the "queen of cereals" internationally. It produces 36 per cent (782 metric tonnes) of the world's grain production and is grown on about 150 million hectares in roughly 160 nations with a broad variety of soil, climate, and management approaches. Its production in the next season is anticipated to reach 24.51 MMT (2020-21).

Total supply would be 25.2 MMT as a result. primarily during the 80 per cent-covering *kharif* season [5-8]. In India, maize makes up nearly 9 per cent of the nation's food supply. Maize serves as a basic raw material as an ingredient in thousands of industrial products, including starch, oil, protein, alcoholic beverages, food sweeteners, pharmaceutical, cosmetic, film, textile, gum, package and paper industries, etc [8,10,11]. In addition to serving as a staple food for humans and high-quality animal feed, maize also serves as a raw material for thousands of other agricultural products.

2. MATERIALS AND METHODS

For the 2020-21 study year, survey method of data collection was used for collection of data from the selected area. The Aurangabad district has been purposively selected for the study because Vaijapur and Gangapur tehsils having highest area under maize crop as compared to other tehsils in the district. From the each tehsil, three villages were selected on the basis of highest area under of maize crop production. The villages viz., Bhaygaon, Khandala and Ekodi sagaj from Vaijapur tehsil, villages viz.,

Katepimpalgaon, Akole wadgaon and Manjari from Gangapur tehsil and Ten cultivators from each village were selected. 10 *kharif* Maize growers was randomly selected from each selected villages. Thus from 6 villages, 60 growers was selected. Farmers were interviewed in person at their farm and residence.

Statistical tools applied: Frequency, Percentage, Average.

3. RESULTS AND DISCUSSION

3.1 Socio Economic Characteristics of Maize Growers

With respect to different socio-economic characteristics in relation to maize growers were calculated and are presented in Table 1. The result indicated that in the age group, 21-30 years there was 25 per cent farmers, in 31-40 years age group there was 36.67 per cent farmers, in 41-50 years age group there was 25 per cent farmers and above 50 years age group there was 13.33 per cent farmers were present. That means most of the farmers were 31-40 age group and capable for working. This result were conformity with the result obtained by Thombare et al. (2020) in regard to socio economic characteristics of maize growers.

The result indicated that 46.66 per cent farmers were educated up to higher secondary level, 25 per cent farmers were educated up to primary level, 11.67 per cent farmers were educated up to secondary level, 11.67 per cent farmers were educated up to college level and 5 per cent farmers were illiterate. That means 95 per cent farmers were literate, so they can easily understand about policies and recommendations related to agriculture. (Table 1).

The result indicated that in the average family size 6.11 there was 35.02 per cent males, 31.91

per cent females and 33.07 per cent were children.

The result indicates that 95 per cent farmers were engaged in agriculture sector, 3.34 per cent were engaged in service sector and 1.66 per cent were engaged in business sector. That means majority of the farmers were engaged in Agriculture (Table 1).

Average land holding 3.61 ha 48.33 per cent farmers have up to 2 to 4 ha land holding, 33.34 per cent farmers have up to 2 to 4 ha land holding and 18.33 per cent farmers have above 4 ha land holding. That means majority of the farmers having 2 to 4 ha farmers (Table 1).

The result indicated that 34.89 per cent farmers were possess cows, 33.96 per cent farmers were possess buffalos and 31.15 per cent farmers were possess bullock pairs. That means farmers were possess both milch and draft animals (Table 1).

Land use pattern of maize growers were studied and are presented in Table 2 The result indicated that the irrigated area was 94.19 per cent, while rainfed area was 5.81 per cent. That means most of the land was under irrigation. There was 100

per cent net sown area. 5.17 ha area was gross cropped area. The cropping intensity was 143.21. The average size of land holding was 3.61 ha (Table 2).

3.2 Cropping Pattern of Maize Growers

Cropping pattern of maize growers were calculated and are presented in Table 3 the result indicated that the farmers grow their crops in three seasons. *kharif*, rabi and summer. The result indicated that the 5.17 ha was the gross cropped area. Out of gross cropped area, under maize crop it was 0.92 ha 17.80 per cent. 0.73 ha area was under onion crop 14.11 per cent. Cotton is the main crop in the selected area having 1.21 ha. area. 23.40 per cent. 0.43 ha area was under green gram 8.31 per cent. 0.32 ha area was under ginger. 6.18 per cent. Then 0.58 ha area was under wheat. 11.21 per cent. 0.42 ha area was under sorghum 8.12 per cent. 0.37 area was under onion. 7.15 per cent. 0.19 ha area was under maize. 3.67 per cent. That means the total area under *kharif*, *rabi* and *summer* was 69.82 per cent 19.33 per cent and 10.82 per cent respectively. This result revealed that 143.21 per cent was the cropping intensity and 30.18 per cent was the double cropped area. (Table 3).

Table 1. Socio-economic status of maize growers

Sr. no.	Particular	Number (N=60)	Percentage
1.	Age in year 21-30 years	15	25
	31-40 years	22	36.67
	41-50 years	15	25
	Above 50 years	08	13.33
2.	Education		
	Illiterate	3	5
	Primary	15	25
	Secondary	07	11.67
	Higher secondary	28	46.66
3.	College level	07	11.67
	Family size	6.11	
	Male	2.14	35.02
	Female	1.95	31.91
4.	Children	2.02	33.07
	Occupational level		
	Agriculture	57	95
5.	Service	02	3.34
	Business	01	1.66
	Land holding	3.61	
6.	Up to 2 ha	20	33.34
	2 to 4 ha	29	48.33
	Above 4 ha	11	18.33
6.	Livestock position		
	Bullock pair	1.00	31.15
	Buffalo	1.09	33.96
	Cow	1.12	34.89

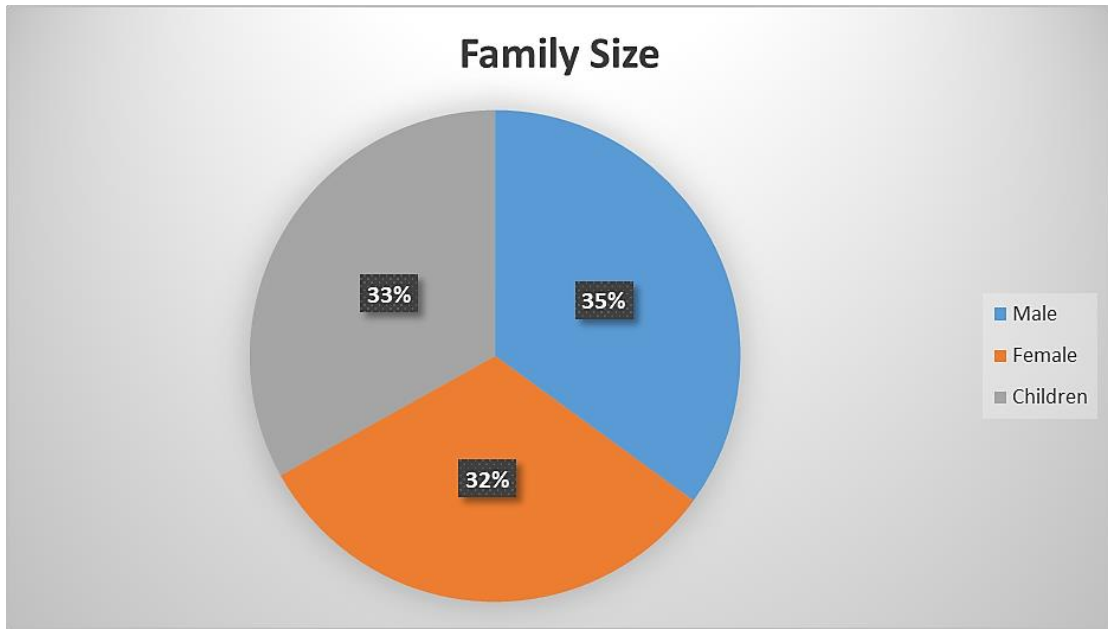


Fig. 1. Socio-economic status of maize growers

Table 2. Land use pattern of maize grower

Sr. no.	Particulars	Area (ha)	Per cent
1.	Irrigated area	3.40	94.19
2.	Rain fed area	0.21	5.81
3.	Net sown area	3.61	100
4.	Total area	3.61	100
5.	Gross cropped area	5.17	---
6.	Cropping intensity	143.21	---

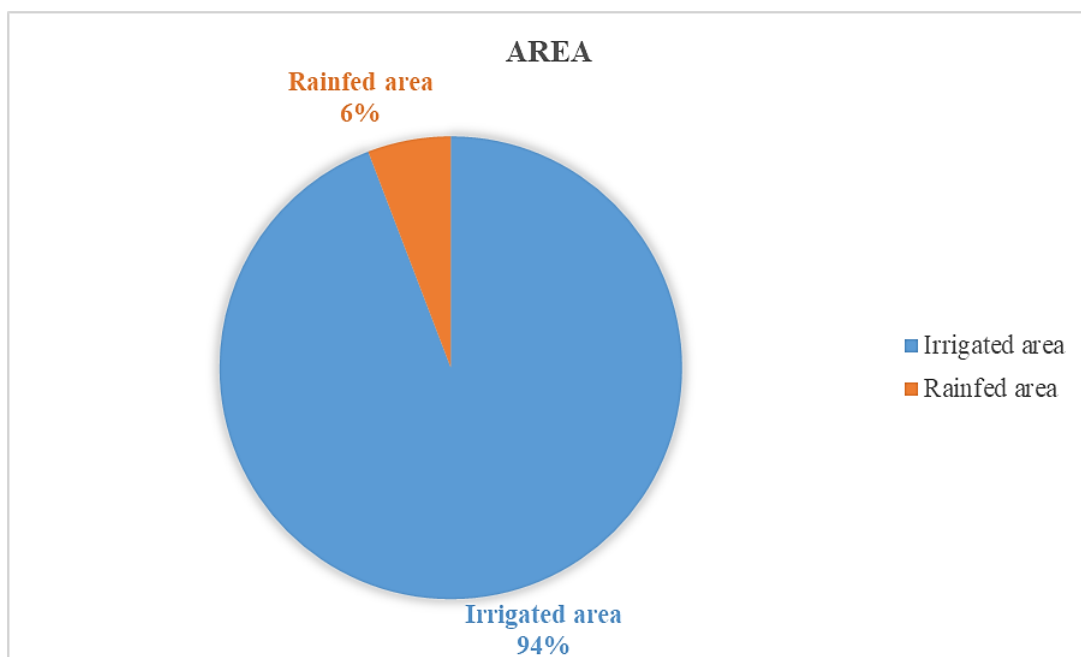


Fig. 2. Land use pattern of maize grower

Table 3. Cropping pattern of maize growers

Sr. no	Particular	Area (ha)	Per cent
A.	<i>Kharif</i>		
1	Maize	0.92	17.80
2	Onion	0.73	14.11
3	Cotton	1.21	23.40
4	Green gram	0.43	8.31
5	Ginger	0.32	6.18
6	Subtotal	3.61	69.82
B.	<i>Rabi</i>		
7	Wheat	0.58	11.21
8	Sorghum	0.42	8.12
9	Subtotal	1.00	19.33
C	<i>Summer</i>		
10	Onion	0.37	7.15
11	Maize	0.19	3.67
12	Subtotal	0.56	10.82
13	Gross cropped area	5.17	100
14	Double cropped area	1.56	30.18
15	Net cropped area	3.61	69.82
16	Cropping intensity		143.21

4. CONCLUSION

The average age of the maize grower was 30 -40 years. This indicated that, maize growers were in adult age group. In case of maize growers, that in case of maize growers, 95 per cent of the farmers sole occupation was Agriculture. In case of *kharif* maize growers, it was seen that, 35.02 per cent male, 31.91 per cent female, and 33.07 per cent of children. The maize growers had livestock within their farm. About 31.15 per cent had one bullock pair, 33.96 per cent of buffalo, 34.89 per cent of cow respectively. In case of maize growers, 33.34 per cent of the sample farmers had less than 2 hectares of land holding and 48.33 per cent of the farmers had 2 to 4 hectares of land while 18.33 per cent of the sample farmers had more than 4 hectare of land holding. The means majority of the farmers having 2 to 4 ha farmers. The proportionate irrigated area was 94.19 per cent. Net sown area was 100 per cent. While Gross cropped area was 100 per cent and cropping intensity was 143.21.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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