



## Original Research Article

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## Socio Economics Characteristics of Maize Growers in Karimnagar District of Telangana State, India

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The present investigation was undertaken with a view to study the socio economic characteristics of maize growers in Karimnagar district of Telangana. The study was administered by selecting a sample of 120 respondents from 10 villages. Multistage sampling design was used in selection of district, mandal, village and sample growers. Relevant data on various aspects of socio economic status were illuminated using a pre tested structured schedule and through personal interview method. Results revealed that majority of the growers were of middle age (47 yrs) and were educated up to primary school level. A vast majority of the respondents had medium family size and agriculture as main source of occupation. In addition to this, most respondents had small land holdings and low area under maize cultivation. In regards to number of livestock's and investments in commonly used assets, it was gathered that majority of the respondents had medium number of livestock's and low level of investments in commonly used assets. With respect to elasticity of production, results revealed that coefficient of multiple determinations ( $R^2$ ) were 0.78 which indicated 82 per cent of variation in maize production was due to variation in all explanatory variables. F-value was calculated to 6.29 which indicated that some of the variables were significantly influencing the production.

### Introduction

Telangana is the one of the largest producer of maize in India. As concerned to Telangana state in the year 2013-14 area, production and productivity of maize was 7.52 lakh ha, 35.24 lakh tonnes and 4685 kg/ha. In Karimnagar during 2013-14 maize was cultivated 1.14 lakh hectares with the production of 6.24 lakh tonnes and productivity 5463 kg/ha. It was the second highest productivity among 10 districts followed by Khammam. An attempt had been made to study selected personal and socio economics characteristics of maize growers in

the Karimnagar district. It had been proven beneficial to know socio economics status of the growers to identify the challengers faced and establish their knowledge about improved farming practices. This in turn would help relevant stake holders to formulate appropriate policies which would give an added boost to the industry.

### Materials and Methods

The present study was conducted in Karimnagar district of Telangana state, where two Mandals namely Bheemadevarapally and

Elkathurthy were selected. Following this, lists of maize growing villages were obtained from district Agricultural officer and five villages from each mandal were selected randomly. Hence total number of villages selected was ten. The list of maize producers cultivating maize for last one year was obtained from Gram Sewak and using simple random sampling technique, twelve growers from each village were selected randomly. Thus the sample size was worked out to 120.

A pre tested structured schedule was used to collect related data for year 2013-14. The respondents were interviewed at their homes and in some cases at common place in the village. The purpose of the study was also explained to the respondents.

## **Results and Discussion**

### **Mean, S.D and COV of socio economic characteristics of maize grower**

The socio economic characteristics of maize growers were calculated and presented in Table 1. Results revealed that average age of maize grower was 47.08 years. With respect to education, it was gathered that maize growers were educated up to Primary School level (2.29).

The average family size of the growers was calculated to be 4.9 members and in relation to occupation level, it was gathered that agriculture was the main source of livelihood of the farmers (1.46).

The average land holding of the farmers in the area was calculated to 4.23 hectares. Results further highlighted that average area under maize was 1.02 hectares and average numbers of livestock were estimated to 4.09 herds. The investments in commonly used assets were calculated to be Rs. 10,942.58.

### **Frequency distribution of maize growers with respect to socio economic status**

#### **Age (years)**

The age of maize growers at the time of interview were recorded and are presented in the Table 2 below.

The results above reflect that majority of the respondents in the study area were of middle age category. Age range of this group was between 39 and 52 years. Another 30.83 per cent and 24.17 per cent belonged to young and old age category respectively.

#### **Education (years)**

Formal education plays an important role in capacity building, enhances comprehensive skill, and raises productivity ability of an individual. This in turn improves problem solving capacity of individuals. With view of above, education level of sample respondents was studied.

Results above highlight that only handful of the respondents had higher secondary and college level education, 18.33 per cent and 13.33 per cent respectively. Majority of the respondents (37.50 per cent) had primary education followed by high school level 30.83 per cent (Table 3).

#### **Family size**

Family size refers to the number of individuals present in respective households. The family size of the respondents were studied and presented in Table 4 given below.

The perusal of results above shows that 10 per cent of the respondents had small family size between 1–4 members. Another 28.33 per cent had large family size (8–10 members) while

majority of the respondents (61.66 per cent) had medium family size of 5-7 members.

### **Occupation level**

The respondents were divided in 3 broad categories with respect to their occupation level. Findings are presented in Table 5 below.

Results above highlight that majority of the respondents had farming (agriculture) as their source of occupation (70 per cent). Another 13.33 per cent of the respondents had agriculture plus business as their source of occupation. Some 16.66 per cent of the respondents had agriculture and service as their source of living.

### **Land holdings (ha)**

Land holdings refers to total land area either cultivated or uncultivated which was in possession of the respondents at the time of interview. As per the size of the land holdings, respondents were divided into 3 broad categories given in Table 6.

The results above indicate that majority of the respondents (43.33 per cent) had small land holding, between 0.8-2.4 hectares. Another 36.66 per cent had medium size of land holdings between 2.5-6.0 hectares while only 20 per cent of the respondents had large size of holdings between 6.1-10 hectares of land.

### **Area under maize (ha)**

The maize growers on the basis of the area under maize cultivation were classified into 3 different categories.

Results from table 7 depicts that most of the respondents (45.83 per cent) had small area under maize cultivation. Another 35.00 per cent and 19.16 per cent of the growers had medium and large area under maize cultivation respectively.

### **Number of livestock's**

The number of livestock's includes bullocks, cows, goats, and buffalos present on farms at the time of investigation. The numbers present were recorded and presented in table 8 below.

**Table.1** Mean, S.D and COV of socio economic characteristics of maize grower

Particular	Mean	S.D	COV (%)
<b>1. Age of farmer (years)</b>	47.08	7.061	14.99
<b>2. Education (4 quantum score)</b>	2.29	1.032	45.04
<b>3. Family size (No)</b>	4.90	0.956	19.51
<b>4. Occupation level (3 quantum)</b>	1.46	0.766	52.25
<b>5. Land holdings (ha)</b>	4.23	3.003	70.90
<b>6. Area under maize</b>	1.02	0.451	44.08
<b>7. Number of livestock's</b>	4.09	2.034	49.63
<b>8. Commonly used assets (Rs)</b>	10,942.58	8982.78	82.09

(N = 120)

**Table.2** Distribution of maize growers according to their age

Particular	Frequency	Per cent
<b>1. Young (25 – 38)</b>	37	30.83
<b>2. Middle (39 – 52)</b>	54	45.00
<b>3. Old (53 – 65)</b>	29	24.00

(N = 120)

**Table.3** Distribution of sugarcane growers according to their Education level

Particular	Frequency	Per cent
<b>1. Primary (1 – 4)</b>	45	37.50
<b>2. High School (5 – 10)</b>	37	30.83
<b>3. Higher Secondary (11 – 12)</b>	22	18.33
<b>4. College level</b>	16	13.33

(N = 120)

**Table.4** Distribution of sugarcane growers according to their family size

Particular	Frequency	Per cent
<b>1. Small (1 – 4)</b>	12	10.00
<b>2. Medium (5 – 7)</b>	74	61.66
<b>3. Large (8 – 10)</b>	34	28.33

(N = 120)

**Table.5** Distribution of maize growers according to their occupation level

Particular	Frequency	Per cent
<b>1. Agriculture (1)</b>	84	70
<b>2. Agriculture + Business (2)</b>	16	13.33
<b>3. Agriculture + service (3)</b>	20	16.66

(N = 120)

**Table.6** Distribution of maize growers according to their land holdings

Particular	Frequency	Per cent
<b>1. Small (<math>&gt;0.8 - \leq 2.4</math>)</b>	52	43.33
<b>2. Medium (<math>&gt;2.4 - \leq 6.0</math>)</b>	44	36.66
<b>3. Large (<math>&gt;6.0 - \leq 10.0</math>)</b>	24	20.00

(N = 120)

**Table.7** Distribution of maize growers according to the area under maize

Particular	Frequency	Per cent
<b>1. Small (<math>&gt;0.4 - \leq 0.8</math>)</b>	55	45.83
<b>2. Medium (<math>&gt;0.8 - \leq 1.6</math>)</b>	42	35.00
<b>3. Large (<math>&gt;1.6 - \leq 3.2</math>)</b>	23	19.16

(N = 120)

**Table.8** Distribution of maize growers according to number of livestock's

Particular	Frequency	Per cent
<b>1. Low (<math>&gt;1 - \leq 3</math>)</b>	36	30.00
<b>2. Medium (<math>&gt;3 - \leq 6</math>)</b>	65	54.16
<b>3. High (<math>&gt;6 - \leq 10</math>)</b>	19	15.83

(N = 120)

The data presented above highlights that majority of the respondents (54.16 per cent) had medium number of livestock's on farm. Another 30.00 per cent and 15.83 per cent had high and low number of livestock's on farm respectively.

In conclusion, the findings revealed that most of the maize growers were of middle age category with education level of up to primary school category. With respect to family size and occupation level, most of the growers had small family size and agriculture as their main source of occupation. It was further depicted

that majority of the growers had small land holdings and low area under maize cultivation. A great majority of the respondents had medium number of livestock's on their farms while investment in commonly used assets was found to be of low level.

The coefficient of multiple determinations ( $R^2$ ) was calculated to be 0.78. This showed that 78 per cent of the variation in the yield was due to variation in all explanatory variables.

## References

- Aduba A., Onojah, Joseph J., and Olufemi A. (2013). Relationship between farmers socio economic characteristics and maize production in Nigeria. *Global Journal of current research*, 1(4):124-131p
- Ebojea C.O., Ayiende T.B., and Akogwu G. (2012). Socio economic factors influencing the adoption of Maize in Kaduna state, Nigeria. *Journal of Agril sciences*, 2(1):18-32p.
- Thangaraja, A.C., Karthikeyan, Ashok M., and Rajasekaran R. (2008). Socio economic Characteristics of the Dry land farmers in Dindigal district of Tamilnadu. *Madras Agril Journal*, 95(1-6); 120-128p.

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