



Research Article

STUDY ON SOCIO- ECONOMIC PROFILE OF THE SELECTED PULSES GROWING FARMERS IN MAHABUBNAGAR DISTRICT OF TELANGANA STATE

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Received: June 13, 2018; Revised: June 22, 2018; Accepted: June 23, 2018; Published: June 30, 2018

Abstract: The study was conducted to investigate the socio economic characteristics of selected pulses farmers in Mahabubnagar district of Telangana State. The State of Telangana was selected purposively for the study as the investigator hails from the state. Out of 31 districts of Telangana State, Mahabubnagar district was selected purposively for the study. In this district, the blocks recorded highest area was selected. In each block two villages with highest area under cultivation of particular crop were selected. The sample frame work includes selection of three crops, three blocks and six villages purposively. From each selected village, 20 respondents were selected randomly thus making a sample of 120 respondents for the study. The average age, education and experience of the sample farmers was 54.17, 84.17 and 52.5 percent respectively, agriculture as their primary occupation 65.83 percent, had small farm size 26.67 percent, medium annual income 55 percent, had contact with extension agencies 64.17 percent and medium family size 49.17 percent.

Keywords: Socio-economic, Pulses Farmers, Telangana, Mahabubnagar

Citation: Vinaya Kumari M., *et al.*, (2018) Study on Socio- Economic Profile of the Selected Pulses Growing Farmers in Mahabubnagar District of Telangana State. International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 10, Issue 12, pp.- 6428-6431.

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Introduction

India's agricultural sector is one of the largest in the world today in terms of production of foodgrains and other agricultural commodities. With over 60 million tonnes of buffer stock, India is not only a self-sufficient country now but also an exporter of food grains to many countries [1]. India, being a predominantly agriculture-based economy, Pulses are one of the important food crops globally due to higher protein content enjoys a largest producer of pulses in the world, both in quantity and variety, once a net exporter and presently turned into one of the largest importers of pulses. The country has exported 1,24,883.94 MT of pulses to the world for the worth of Rs. 1,140.13 crores/ 171.07 USD Millions during the year 2016-17. The main regions with high productivity are Punjab, Haryana, Western Uttar Pradesh, West Bengal delta region, coastal Andhra Pradesh, Tamil Nadu, Kerala, coastal and eastern Karnataka and some parts of Maharashtra (www.apeda.com). In India Pulses are grown in around 24-26 million hectares of area producing 17-19 million tonnes of pulses annually. India accounts for over one third of the total world area and over 20 percent of total world production. Pulses are an important component of Indian diet in the predominantly vegetarian society. Besides being a rich source of protein required for human health, they are also important for sustainable agriculture. The average requirement of protein per head per day for each kg of body weight of the human being is 1 gm, for majority of vegetarian population in India, Pulses are 20 to 25 percent protein by weight which is double the protein content of wheat and three times that of rice and essential component of Indian diet as Dal, Roti or Bhat which denotes complete and satisfying food. In developing countries like India, pulses play an equally important role in irrigated and rainfed area by improving physical, chemical and biological properties of soil and functions as "mini nitrogen factory", builds-up a mechanism to fix atmospheric nitrogen in their root nodules and thus meet their nitrogen requirements to a great extent and pulse crop residues are also major sources of high quality livestock feed in India [2].

Pulses are grown in all three seasons. The three crop seasons for the commodity are: Arhar, Urd, Moong, Lobia, Kulthi and Moth in Kharif, Gram, Lentil, Pea, Lathyrus and Rajmash in Rabi and Greengram, Blackgram and Cowpea in Summer

Socio- Economic Profile of Sample Farmers

Socio-economic analysis is need to have a comprehensive idea on specific study area which may help the researcher to suggest better location-specific feasible solutions for the improvement. Generally, the socioeconomic analysis focuses on identifying the adaptive capacity of individuals or communities based on their internal characteristics such as age, education etc. The socio economic characteristics of the respondents include educational status, age, family size, income, farming experience, category of the farmers as per the size of the holding.

Methodology

Description of the study area

The study pertains to three major pulses namely Red gram, Bengal gram and Green gram in Mahabubnagar District of Telangana State, hence three crops were studied in three blocks namely, Redgram in Narva, Bengalgram in Uttoor, Greengram in Damaragidda as they were the major cultivating areas of those respective crops.

Sampling Design

The study was intended to study the socio economic profile of selected pulses growing farmers. For this based on the area cultivated one district selected to study the Redgram, Bengalgram and Greengram were purposively selected. In this district, the blocks recorded highest area was selected. In each block two villages with highest area under cultivation of particular crop were selected.

The sample frame work includes selection of three crops, three blocks and six villages purposively. Among two villages respective crop cultivators were identified and actual sample farmers were selected by following simple random sampling technique. In each village about 20 farmers were selected there by making a sample of 120 from three blocks. The data of the selected pulses farmers were obtained through personal interview method with the help of pre-tested interview schedule for the agricultural year 2017-18 based on farmer's recall.

Tools of Analysis

Descriptive/tabular analysis involving the computation of simple average and percentages were employed to present the data regarding the socio-economic profile of the respondents.

Results and Discussion

Educational status of the respondents

Educational status of the farmers was one of the important criteria because it decides relative exposure of the farmers to new agricultural technology, interaction with traders, access to information and exports there by determining the decision making process of the farmer. The educational status is presented in [Table-1] for respondents cultivating Redgram in Narva, Bengalgram in Utkoor, Greengram in Damaragidda Blocks. From the Table it is noticed that in Narva block, 6 out of 40 respondents were illiterate, constituting to 15 percent of sample. The number of respondents educated upto Primary standard were 8 (20 percent), the number of respondents educated upto Middle high school were 8 (20 percent), while the number of respondents with education Intermediate were 12 (30 percent) and the number of respondents with education Graduation and above were 6 (15 percent). It is clear from the table that in Narva block 15 percent of the respondents were illiterate and remaining 85 percent of the respondents were literate. Among the Bengalgram farmers of Utkoor block the literacy level of sample farmers were about (80 percent). Among the literate's farmers with education upto primary were highest with (32.5 percent) of sample farmers, Sample with educational qualification of Middle high school were 7 (17.5 percent). The number of respondents with education upto intermediate were 9 (22.5 percent), while the number of respondents with education Graduation and above were 3 (7.5 percent). There were 20 percent of illiterates in the sample. Hence it could be concluded from the table that majority of sample farmers were literate in Utkoor block also. It can be inferred that literacy level of sample farmers in Damaragidda block was about (87.5) among the respondents. Among the literates, sample farmers with education upto primary 11 (27.5 percent), 10 (25.00 percent) of sample respondents had studied upto Middle high school followed by 9 (22.5 percent) of respondents studied upto intermediate. only 5 (12.5 percent) of sample respondents had studied upto graduation and above. The pooled average of pulses growers in the study area shows that 26.67 percent of the respondents were educated up to primary. There are 25.00 percent educated upto intermediate, 26.67 percent were primary and 11.67 percent were graduation and above, only 15.83 percent were illiterates. Therefore majority of the respondents in the study area is given importance to the minimum education.

Age group of the respondents

Age of the farm family head largely determines productions decisions of the farm as per many studies. It is also indicates the experience of the farmer in farm business. The particulars of the age of respondents for Redgram in Narva, Bengalgram in Utkoor and Greengram in Damaragidda are presented in Table 3.2. It is observed from the Table that 20 percent of Redgram farmers in Narva block are in the age group (young age upto 35 years), were as 52.5 percent respondents were age group (middle age 36-55 years) and 27.5 percent were in the age group of (old age 56 and above). Among Utkoor block Bengalgram farmers about 20.00 percent were in the age group of (young age up to 35 years), 57.5 percent of the sample respondents were in the age group of (middle age 36-45 years) and about 22.5 percent were in the age group of (old age 56 and above). About 52.5 percent of Greengram farmers from Damaragidda block, the sample farm respondents were fall into the age group of (middle age 36-55 years). Among them 25 percent of farmers were in the age group of (old age 56 and

above) and 22.55 percent were in the age group of (young age up to 35 years). It can be inferred from the table that pooled average among pulses growers, 20.83 percent were in the age group of up to 35 years, 54.17 percent were in the age group of 36-55 years and 25 percent were in the age group of 56 and above, thus it can be inferred that there were majority of farmers, with age group of 36- 55 years age group cultivating Redgram, Bengalgram and Greengram, propagation of new cultivars new practices will be easy since the farmers were middle age and literate. These results are line with the findings of Kumar Saini, *et al.*, (2017) [3,4].

Description of occupational distribution in different crops of Farms Group

[Table-3] revealed that size of the farms group in numbers for Redgram, Bengalgram and Greengram of farmers were 40, 40 and 40 respondents respectively. Primary occupation was highest in Redgram farmers (70 percent) followed by Bengalgram farmers (65.00 percent) and in case of Greengram farmers (62.5 percent) respectively. This makes the sample average for primary occupation was 65.83 percent for different farms size groups. Secondary occupation for Redgram, Bengalgram and Greengram sample respondents were 17.5 percent, 20.00 percent and 22.5 percent respectively and the sample average for secondary occupation was 20.00 percent among different crops size of farms group. Tertiary occupation for Redgram farmers (12.5 percent) followed by Bengalgram farmers (15.00 percent) and Greengram farmers (15.00 percent) respectively. This makes the sample average for tertiary occupation was 14.17 percent in different crops of farms groups. These finding are supported by the findings of Samarpatha, *et al.*, (2016) [5].

Description of sample size of households/ family size of different crops

The data with respect to the family size was presented in [Table-4] Redgram farmers in Narva block exhibited that 47.50 percent of the sample households were medium, with four to six persons per family, 30 percent of the sample were less than four members (small) per household. About 20 percent of the farm families were large size with 7-9 members and 2.5 percent of the families were 10 & above. Among Bengalgram farmers of Utkoor block, 50 percent of the households had medium size family with four to six persons per family, 37.5 percent of the households had less than four members (small) per household and about 12.5 percent were large families with 7-9 persons per family. Among the Greengram sample farmers of Damaragidda block, 50 percent farmers were in the medium size family with four to six members, 30 percent of the household were in the size group of less than four members about 15 percent were in the group of persons with 7 to 9 family size and 5 percent of the families were 10 & above. Medium and small family sizes were prevalent among sample farmers and existence of large family is losing its importance as nuclear families are gaining importance in all the three blocks even though they were located geographically separate.

Land holding pattern of the respondents

The size of land holding plays an important role in determining farm income, cultivation practices and production efficiency as well as marketable surplus. From [Table-5] it was inferred that among the Redgram sample farmers in Narva block marginal farmers constituted to 12.5 percent (average farm holding size of 1.28 ha), small farmers were 45 percent (average farm size of 1.82 ha), medium farmers were 17.5 percent (average farm size of 3.27 ha) and large farmers were 25 percent (average farm holding size of 5.28 ha). The average farm holding size was 2.95 ha. As presented in [Table-5] among Bengalgram farmers in Utkoor block, 20 percent were marginal farmers, 50 percent were small farmers, 15 percent were medium farmers and 15 percent were large farmers. The average farm holding size was 0.7 ha, 1.48 ha, 2.53 ha and 5.83 ha for marginal, small, medium and large categories respectively. The average farm size for the sample was 2.65 ha. Greengram farmers in Damaragidda block showed 20 percent were marginal farmers with average land holding size of 0.8 ha, 52.5 percent were small farmers with average land holding 1.58 ha, 15 percent were medium farmers with average land holding 2.8 ha and the remaining 12.5 percent were large farmers with average land holding 4.96 ha. The average farm size for the sample as a whole was 2.53 ha.

Table-1 Detail description of Literacy in Different Size of Farm Group, Number of Respondents = 120

S N	Educational Status	Redgram Narva Block	Bengalgram Utkoor Block	Greengram Damaragidda Block	Pooled Average
1	Illiterates	6 (15.00)	8(20.00)	5(12.5)	6.33(15.83)
2	Primary	8(20.00)	13(32.5)	11(27.5)	10.67(26.67)
3	Middle High School	8(20.00)	7(17.5)	10(25.00)	8.33(20.83)
4	Intermediat	12(30.00)	9(22.5)	9(22.5)	10(25.00)
5	Graduation and above	6(15.00)	3(7.5)	5(12.5)	4.67(11.67)
	Total Sample	40(100.00)	40(100.00)	40(100.00)	40(100.00)

Note: Figures in parentheses indicate percentages to the sample in respective Blocks

Table-Age group of the respondents

S N	Age Group (Yrs)	Redgram Narva Block	Bengalgram Utkoor Block	Greengram Damaragidda Block	Pooled average
1	Young age up to 35 yrs	8(20.00)	8(20.00)	9(22.5)	8.33(20.83)
2	Middle age 36-55 yrs	21(52.5)	23(57.5)	21(52.5)	21.67(54.17)
3	Old age 56 above	11(27.5)	9(22.5)	10(25.00)	10(25.00)
	Total sample	40 (100.00)	40 (100.00)	40 (100.00)	40(100.00)

Note: Figures in parentheses indicate percentages to the total sample in respective districts

Table-3 Detail description of occupational distribution in different crops of Farms, Group, Number of Respondents = 120

SN	Particulars	Redgram Farmers	Bengalgram Farmers	Greengram Farmers	Total number of samples
1	Size of farms group (in numbers)	40	40	40	120
i	One occupation (Primary occupation)	28(70.00)	26(65.00)	25(62.5)	26.33(65.83)
ii	Two occupation (Secondary occupation)	7(17.5)	8(20.00)	9(22.5)	8(20.00)
iii	Three occupation (Tertiary occupation)	5(12.5)	6(15.00)	6(15.00)	5.67(14.17)
		40(100.00)	40(100.00)	40(100.00)	40(100.00)

Note: Figures in the parenthesis indicates percentage to the total size of farms group

Table-4 Detail description of sample size of households/ family size of different crops

SN	Family size	Redgram	Bengalgram	Greengram	Pooled average
1	Less than 4	12(30.00)	15(37.5)	12(30.00)	13(32.5)
2	4 to 6	19(47.5)	20(50.00)	20(50.00)	19.7(49.17)
3	7 to 9	8(20.00)	5(12.5)	6(15.00)	6.3(15.83)
4	10 & above	1(2.5)	0(0.00)	2(5.00)	1.0(2.5)
	Total sample	40(100.00)	40(100.00)	40(100.00)	40(100.00)

Note: Figures in the parenthesis indicates percentage to the total size of farms group

Table-5 Land holding pattern of the respondents

SN	Category of farmers	Redgram Farmers	Average farm size	Bengalgram Farmers	Average farm size	Greengram Farmers	Average Farm size
1	Marginal farmers (<1 ha)	5(12.5)	1.28	8(20.00)	0.7	8(20.00)	0.8
2	Small farmers (1-2 ha)	18(45.00)	1.82	20(50.00)	1.48	21(52.5)	1.58
3	Medium farmers (2-4 ha)	7(17.5)	3.27	6(15.00)	2.53	6(15.00)	2.8
4	Large farmers (4ha and above)	10(25.00)	5.28	6(15.00)	5.83	5(12.5)	4.96
	Total	40(100.00)	2.95	40(100.00)	2.65	40(100.00)	2.53

Note: Figures in the parenthesis indicates percentage to the total size of farms group

Table-6 Annual Income of the Respondents

SN	Particulars	Redgram Farmers	Bengalgram Farmers	Greengram Farmers	Total number of samples
1	Annual income	40	40	40	120
i	Very low (Below ₹20,000)	2(5.00)	4(10.00)	3(7.5)	3(7.5)
ii	Low (₹20,000 – 40,000)	8(20.00)	6(15.00)	4(10.00)	6(15.00)
iii	Medium (₹40,000 – 60,000)	20(50.00)	22(55.00)	24(60.00)	22(55.00)
iv	High (₹60,000 and 80,000)	6(15.00)	5(12.5)	4(10.00)	5(12.5)
v	Very high (Above ₹80,000)	4(10.00)	3(7.5)	5(12.5)	4(10.00)
		40(100.00)	40(100.00)	40(100.00)	40(100.00)

Note: Figures in the parenthesis indicates percentage to the total size of farms group

Table-7 Farming experience of the sample respondents

Category	Redgram	Bengalgram	Greengram	Sample average
Low (10-24 years)	10(25.00)	7(17.5)	8(20.00)	8.33(20.83)
Medium (24-38 years)	20(50.00)	23(57.5)	20(50.00)	21(52.5)
High (38-52 years)	10(25.00)	10(25.00)	12(30.00)	10.67(26.67)
	40(100.00)	40(100.00)	40(100.00)	40(100.00)

Note: Figures in the parenthesis indicates percentage to the total size of farms group

Table-8 Contact with Extension Agency

SN	Category	Redgram farmers	Bengalgram farmers	Greengram farmers	Sample average
1	Maintain contact	28 (70.00)	24(60.00)	25(62.5)	25.67(64.17)
2	Do not maintain contact	12(30.00)	16(40.00)	15(37.5)	14.33(35.83)
		40(100.00)	40(100.00)	40(100.00)	40(100.00)

Note: Figures in the parenthesis indicates percentage to the total size of farms group

Annual Income of the Respondents

Income level of the farmer was one of the important criteria from the [Table-6] it is noticed that in Redgram farmers 5 percent were annual income very low (below 20,000). The number of respondents upto 20 percent were annual income low (20,000 to 40,000), while the number of respondents 50 percent were medium income (40,000 to 60,000), 15 percent were high annual income (60,000 to 80,000) and 10 percent were very high annual income (80,000 and above). Hence it could be concluded from the Table that majority of sample farmers were annual income (40,000 to 60,000). Among the Bengalgram farmers the annual income of the farmers was about 15 percent were low (20,000 to 40,000), 10 percent of farmers annual income were very low (below 20,000), 55 percent were medium annual income (40,000 to 60,000), 12.5 percent were high annual income (60,000 to 80,000) and 7.5 percent of the respondents were very high annual income (80,000 and above). Hence it could be concluded from the Table that majority of sample farmers were average annual income (40,000 to 60,000). Among the Greengram farmers 7.5 percent of the respondents were very low annual income (below 20,000). 10 percent were low annual income (20,000 to 40,000), 60 percent were medium annual income (40,000 to 60,000) followed by 10 percent respondents were high annual income (60,000 to 80,000) and 12.5 percent of respondents were very high annual income (above 80,000). Hence it could be concluded from the Table that majority of the sample farmers annual income (40,000 to 60,000). These finding are supported by the findings of Neethi and Sailaja, (2014) [4].

Farming experience of the sample respondents

The number of years a farmer has spent in the farming business may give an indication of the practical knowledge he has acquired on how he can overcome certain inherent farm production and adoption problems, in order to have efficiency in crop management it is essential that farmers have experience in raising a particular crop. From the [Table-7] it is noticed that in Redgram farmers from Narva block Majority (50 %) of the sample farmers had 24 to 38 years of experience followed by those with 10 to 24 years (25%). The percentage of farmers cultivating redgram for greater than 38 and 52 years was (25%) respectively. Among the Bengalgram farmers from Utkoor block Majority (57.5 %) of the sample farmers had 24 to 38 years of experience followed by those with 10 to 24 years (17.5 %). The percentage of farmers cultivating Bengalgram for greater than 38 to 52 years was (25 %). It can be inferred that majority of Greengram farmers in Damaragidda block was about (50 %) had 24 to 38 years of experience followed by with 10 to 24 years (20 %). The percentage of farmers cultivating Greengram for greater than 38 and 52 years was (30 %). The pooled average of pulses growers in the study area shows that majority 52.5 percent of the respondents were having 24–38 years of farming experience. There are 20.83 percent were having 10-24 years of farming experience and 26.67 percent were 38-52 years of farming experience. The results were in conformity with that of (4).

Contact with Extension Agency

A good agricultural extension system was required to enhance the efficiency of farmers. Extension serves as a key linkage in the process of transferring technology from lab to land. For improving productivity, the contacts between farmers and extension network is crucial. From the [Table-8] it is observed that in Redgram farmers from Narva block 70% were maintain contacts with Extension agency and 30 percent of the respondents were not maintain any contacts. Among the Bengalgram farmers from Utkoor block 60% were maintain contacts with Extension agency and 40% were not maintain any contacts with Extension agency. Greengram farmers in Damaragidda block showed 62.5 % were maintaining contacts with Extension agency and 37.5% were not maintaining any

contact with Extension agency. The average of the farmers with extension contact was found to be 64.17% but 35.83% of the farmers were not maintaining any contact. Thus, there is still need to create awareness about the benefits of having contacts with extension agency to those who were not having any contact. The same result was generated by Samarpitha, *et al.*, (2016) [5].

CONCLUSION

Pulses make a significant contribution in terms of protein and energy provision to the households in India. Once a net exporter and presently turned into one of the largest importers of pulses, which helps to increase the socio-economic condition of the farmers. The average age of the sample farmers was 54.17 years indicating that majority of the farmers in the study area were middle aged, were actively taking part in pulses cultivation. About 84.17 percent of the farmers were educated, as majority of respondents had small farm size with medium income, medium family size 49.17 percent, agriculture as their primary occupation, majority of the farmers were found to have contact with extension agencies which is crucial for improving productivity.

Application of research: main aim of the research area is knowing the socio-economic data of the farmers those who are growing the major pulses in Mahabubnagar district of Telangana state

Research Category: Agriculture economics

Acknowledgement / Funding: Author thankful to Sam Higginbottom University of Agriculture, Technology and Sciences, Allahabad, Uttar Pradesh, 211007

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Research project name or number: PhD Thesis

Author Contributions: All author equally contributed

Author statement: All authors read, reviewed, agree and approved the final manuscript

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

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