

RESEARCH ARTICLE :

Social economics traits of pea growers in Kota region of Rajasthan

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SUMMARY : The present study were aimed to study the social economic traits of pea growers in Kota region of Rajasthan. Kota region consists of five districts, out of which three districts namely Bundi, Kota and Tonk were selected purposively on the basis of maximum area under pea cultivation. Two tehsils from each identified districts were selected on the basis of maximum area under pea cultivation. Thus, in all six tehsils were taken for the present study. It was found that out of the total respondents, 44.00 per cent respondents were from middle age group of 34 to 56 years, whereas 23.00 per cent farmers were from old age group (above 56 years) and only 33.00 per cent were found in the young age group *i.e.* below 34 years. Findings indicated that 30.50 per cent farmers were in the illiterate group while, 43.50 per cent farmers were in the literate group (upto secondary level) and only 26.00 per cent of total respondents were educated above secondary level in the study area. It is evident from the study that out of 200 respondents, 39.00 per cent farmers were from general caste, while 22.50 per cent farmers were from other backward caste (OBC) category and 18.00 per cent farmers were from schedule caste (SC), only 20.50 per cent respondents were from the schedule tribe group. Further, it was found that 19.00, 20.00, 23.00 and 38.00 per cent small farmers were from SC, ST, OBC and higher caste group respectively. Whereas, 17.00, 21.00, 22.00 and 40.00 per cent marginal farmers were found from SC, ST, OBC and higher caste group respectively. The study reported that majority (65.00%) of total respondents belonged to agriculture as a main occupation whereas, 22.50 per cent and 12.50 per cent respondents were found to be from service / business + agriculture and agriculture with caste occupation group, respectively. It was also reported that among marginal respondents, 68.00, 12.00, and 20.00 per cent had agriculture, agriculture with caste occupation and agriculture + service / business occupation respectively. While, 62.00, 13.00 and 25.00 per cent small farmers possessed agriculture, agriculture with caste and agriculture + service/ business occupation, respectively.

KEY WORDS :

Social economics, Pea growers, Tribe

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BACKGROUND AND OBJECTIVES

In India, pea occupies on area of 370.0 thousand hectares with the production of 3517.0 thousand mt (Anonymous, 2011). Pea is

grown as winter vegetable in the plains of north India and as summer vegetable in the hills. It is cultivated in Uttar Pradesh, Madhya Pradesh, Himachal Pradesh, Punjab, Haryana, Rajasthan, Maharashtra, Bihar and Karnataka,

which contributing to 67 per cent of the total production. Pea is a cool season crop best suited to production in the temperate regions. In the warmer areas of the tropics pea is restricted to production in the cooler highlands. Temperature between 7° and 24°C are suitable for plant growth but optimum yield are achieved between 13° and 21°C. It is relatively tolerant to frost when compared with solanaceous and cucurbitaceous crops. Blossoms and pods are susceptible to frost, whereas leaves and stems are relatively tolerant. Seed germinates better at the soil temperature of 10-18.3°C. The pea crop is produced primarily under rainfed conditions but can also be irrigated. Irrigations most common for the fresh market crop. Pea is the major vegetable crop of *Rabi* season in Kota region of Rajasthan. The productivity is low of this crop as compared to recommended by the scientists. Looking to the above facts, the present study aimed to find out the knowledge of farmers about improved pea cultivation technology.

RESOURCES AND METHODS

The present study was conducted in Kota region of Rajasthan. Kota region consists of five districts, out of which three districts namely Bundi, Kota and Tonk were selected purposively on the basis of maximum area under pea cultivation. Two tehsils from each identified districts were selected on the basis of maximum area under pea cultivation. Thus, in all six tehsils were taken for the present study. Total twenty villages were identified on the basis of proportionate sampling from the selected tehsils. To select the respondents, a comprehensive list of all pea growers was prepared for all villages.

Thereafter, the farmers were categorized into two groups *i.e.* small and marginal on the basis of pea cultivation. The respondents were selected randomly from each category of the farmers. It was planned to select 10 respondents *i.e.* five in each category from the each selected village. Thus, the total sample size of the study was 200 respondents. Data were collected through prestructured interview schedule. Thereafter, data were analysed, tabulated and interpreted in the light of the objective.

OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well as discussions have been summarized under following heads:

Age :

On the basis of their age, the respondents were classified into three categories on the basis of mean and standard deviation. The data presented in Table 1 reveal that out of the total respondents, 44.00 per cent respondents were from middle age group of 34 to 56 years, whereas 23.00 per cent farmers were from old age group (above 56 years) and only 33.00 per cent were found in the young age group *i.e.* below 34 years.

A close observation to the data further show that 25.00 per cent marginal farmer and 21.00 per cent small farmers were observed in the old age group. While, 46.00 and 42.00 per cent marginal and small farmers, respectively were in the middle age group of 34-56 years. In the category of young age group, 29.00 per cent marginal farmers and 37.00 per cent small farmers were

Table 1 : Distribution of respondents on the basis of their age

Sr. No.	Age group	Marginal farmers				Small farmers		Total	
		Frequency		Per cent		Frequency		Per cent	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent		
1.	Young (below 34 years)	29	29.00	37	37.00	66	33.00		
2.	Middle (34-56 years)	46	46.00	42	42.00	88	44.00		
3.	Old (above 56 years)	25	25.00	21	21.00	46	23.00		
	Total	100	100.00	100	100.00	200	100.00		

Table 2: Distribution of respondents on the basis of their education

Sr. No.	Education	Marginal farmers				Small farmers		Total	
		Frequency		Per cent		Frequency		Per cent	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent		
1.	Illiterate	30	30.00	31	31.00	61	30.50		
2.	Literate (upto secondary level)	46	46.00	41	41.00	87	43.50		
3.	Educated (above secondary level)	24	24.00	28	28.00	52	26.00		
	Total	100	100.00	100	100.00	200	100.00		

reported in the study area. Further, analysis of table shows that there was variation in the age of both the categories of pea growers.

The findings are supported by the findings of Vashishtha (2011) who observed that majority of chilli growers (58.76%) belonged to the age group of 31 to 55 years. Whereas, 58 (24.16%) chilli growers were reported from age group of upto 30 years and remaining 41 respondents (17.08%) were found in the above 55 years age group. The results are also supported by the findings of Kumari (2006).

Education :

To develop an understanding about the level of education of selected respondents, they were classified into three categories, *i.e.* illiterate, literate (up to secondary level) and educated (above secondary level). Their frequencies were counted and converted into percentage for both the categories of respondents. It is evident from the Table 2 that 30.50 per cent farmers were in the illiterate group while, 43.50 per cent farmers were in the literate group (upto secondary level) and only 26.00 per cent of total respondents were educated above secondary level in the study area.

A further glance at the data in the table reveals that nearly equal number of marginal and small farmers (30 and 31) were illiterate. Only 24.00 and 28.00 per cent marginal and small farmers, respectively were educated above secondary level. Whereas, 41 small farmers and 46 marginal farmers were literate upto secondary level. From the above discussion, it can be concluded that good

number of small and marginal farmers were either literate and educated in Kota region of Rajasthan. Similar findings were reported by Nandwana (2004) who found that majority of the respondents (40.48%) were illiterate followed by literate (33.33%) and educated (26.19%).

Caste :

A perusal of data incorporated in Table 3 reveals that out of 200 respondents, 39.00 per cent farmers were from general caste, while 22.50 per cent farmers were from other backward caste (OBC) category and 18.00 per cent farmers were from schedule caste (SC), only 20.50 per cent respondents were from the schedule tribe group. Further, analysis of table shows that 19.00, 20.00, 23.00 and 38.00 per cent small farmers were from SC, ST, OBC and higher caste group, respectively. It was also found that 17.00, 21.00, 22.00 and 40.00 per cent marginal farmers were found from SC, ST, OBC and higher caste group, respectively.

The present findings are in line with the findings of Sharma *et al.* (2004-05) who found that 38.85 per cent respondents belonged to general caste, 31.14 per cent were from OBC caste, 30 per cent belonged to SC and ST caste in the study area.

Occupation :

Observation of Table 4 shows that majority (65.00%) of total respondents belonged to agriculture as a main occupation whereas, 22.50 per cent and 12.50 per cent respondents were found to be from service / business + agriculture and agriculture with caste occupation group,

Table 3: Distribution of respondents on the basis of caste

(n=200)

Sr. No.	Caste	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Schedule caste	17	17.00	19	19.00	36	18.00
2.	Schedule tribe	21	21.00	20	20.00	41	20.50
3.	Other backward caste	22	22.00	23	23.00	45	22.50
4.	Higher caste	40	40.00	38	38.00	78	39.00
	Total	100	100.00	100	100.00	200	100.00

Table 4 : Distribution of respondents on the basis of occupation

(n=200)

Sr. No.	Occupation	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Agriculture	68	68.00	62	62.00	130	65.00
2.	Agriculture with caste occupation	12	12.00	13	13.00	25	12.50
3.	Agriculture + Business / Service	20	20.00	25	25.00	45	22.50
	Total	100	100.00	100	100.00	200	100.00

respectively.

Further analysis of table reveals that among marginal respondents, 68.00, 12.00, and 20.00 per cent had agriculture, agriculture with caste occupation and agriculture + service / business occupation, respectively. While, 62.00, 13.00 and 25.00 per cent small farmers possessed agriculture, agriculture with caste and agriculture + service/ business occupation, respectively. During the study it was observed that caste like barber, carpenter, potter, weaver etc. are dependent on the agriculture with caste occupation because they have small and marginal size of land holding in the study area. Nearly sixty five per cent farmers were purely dependent on agriculture occupation for their livelihood in Kota region of Rajasthan. Similar findings have been reported by Meena (2001) and Sharma *et al.* (2004-05).

Income level :

With a view to classifying the respondents on the basis of their annual income, three categories were formulated *i.e.* low, medium and high income group. It is evident from the Table 5 that 46.50 per cent of the total respondents were from medium income group (Rs. 49000-97000 per year). While, 20.50 and 33.00 per cent respondents were observed in the low (upto Rs. 49000 per year) and high (above Rs. 97000 per year) income group, respectively. The close observation of data in table further shows that 50.00 per cent small and 43.00 per cent marginal farmers were noted in the income group of Rs. 49001-97000 per year.

Whereas, 37.00 small and 29.00 marginal farmers had income above Rs. 97000/- per year from all the

sources. It was interesting to note that 28.00 per cent marginal and 13.00 per cent small farmers possessed income upto Rs. 49000/- per year. Further, analysis of table clearly shows that small farmers had more income than marginal category of farmers.

Findings are supported by the findings of Menariya (2000) who observed that 37.30 per cent respondents had annual income between Rs. 21000 to 30000 per year. Results of the study are also in line with the findings of Vashishtha (2011) who observed that 50.41 per cent respondents had their annual income from Rs. 52987 to 88014 per annum from all sources and 33.75 per cent chilli growers had their family income upto Rs. 52986 per year, while remaining 15.84 per cent farmers earned their family income more than Rs. 88014 per cent annum from all sources in the study area.

Social participation :

The respondents were classified into three groups *viz.*, low participation, medium participation and high participation on the basis of participation in different organizations. The data presented in Table 6 show that majority of the farmers had medium social participation and 27.50 per cent farmers showed high social participation. Whereas, 19.00 per cent pea growers possessed low social participation in various organisations.

Further analysis of data show that 17.00 marginal and 21.00 small farmers were reported in low social participation group. While, 35.00 small and 24.00 per cent marginal farmers were observed in high social participation group. Likewise, 59.00 per cent marginal

Table 5: Distribution of respondents on the basis of income level

(n=200)

Sr. No.	Income level	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Low (upto Rs. 49000/year)	28	28.00	13	13.00	41	20.50
2.	Medium (Rs. 49001-97000/year)	43	43.00	50	50.00	93	46.50
3.	High (Above Rs.97000/year)	29	29.00	37	37.00	66	33.00
	Total	100	100.00	100	100.00	200	100.00

Table 6 : Distribution of respondents on the basis of social participation

(n=200)

Sr. No.	Social participation	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Low participation	17	17.00	21	21.00	38	19.00
2.	Medium participation	59	59.00	44	44.00	103	53.50
3.	High participation	24	24.00	35	35.00	59	27.50
	Total	100	100.00	100	100.00	200	100.00

and 44.00 per cent small farmers had medium level of social participation in various organisation in the study area. The above findings are in agreement with Mewara (2005) who reported that 44.00 per cent and 38.00 per cent tomato growers were found to have membership in more than one organisation and one organisation, respectively. However, 18.00 per cent of them had no membership in any social organisation.

Family type :

Table 7 indicates that majority (73.50%) of total respondents belonged to joint families and remaining 26.50 per cent respondents reported to the families which are nuclear in composition. A close observation of table further shows that 69.00 and 78.00 per cent small and marginal farmers, respectively were from joint family group whereas, rest 31.00 per cent small farmers and 22.00 per cent marginal farmers were reported from nuclear family. It is interesting to note that majority of both the categories of farmers followed the joint family concept, the reason behind this may be that more human power is required for successful raising of agricultural crops.

The present findings are in accordance with the findings of Nandwana and Pandya (2007) who reported that 67.46 per cent respondents had joint family

composition. Sharma *et al.* (2004-05) indicated that respondents having nuclear family were 62.58 per cent and joint family 37.71 per cent.

Family size :

The data presented in the Table 8 vividly corroborate that 63.00 per cent total respondents were from large families (more than five members) and rest 37.00 per cent were from small families containing upto 5 members. Table further shows that 57.00 per cent small farmers and 69.00 per cent marginal farmers, respectively belonged to large families, whereas 43.00 per cent and 31.00 per cent small and marginal farmers, respectively belonged to small family size group. It means that majority of respondents of both the categories having more than five family members in the study area.

The present findings are in agreement with the findings of Mewara and Pandya (2007) who reported that 48.00 per cent of tomato growers had medium size family and 46.00 per cent had small size family. Similar findings have also been reported by Vashishtha (2011) who found that 50.00 per cent of chilli growers were from medium family group having 4 to 8 members followed by 26.65 per cent respondents having large family group, while 23.35 per cent respondents possessed family size upto four members.

Table 7 : Distribution of respondents on the basis of family type

(n=200)

Sr. No.	Family type	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Single	22	22.00	31	31.00	53	26.50
2.	Joint	78	78.00	69	69.00	147	73.50
	Total	100	100.00	100	100.00	200	100.00

Table 8 : Distribution of respondents on the basis of family size

(n=200)

Sr. No.	Family size	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Small family (upto 5 members)	31	31.00	43	43.00	74	37.00
2.	Large family (more than 5 members)	69	69.00	57	57.00	126	63.00
	Total	100	100.00	100	100.00	200	100.00

Table 9: Distribution of respondents on the basis of extension contact

(n=200)

Sr. No.	Extension contact	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Low contact	22	22.00	29	29.00	51	26.50
2.	Medium contact	67	67.00	55	55.00	122	61.00
3.	High contact	11	11.00	16	16.00	27	13.50
	Total	100	100.00	100	100.00	200	100

Table 10 : Distribution of respondents on the basis of cosmopolitan outlook (n=200)

Sr. No.	Cosmopolitan outlook	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Low cosmopolitan outlook	39	39.00	17	17.00	56	28.00
2.	Medium cosmopolitan outlook	43	43.00	59	59.00	102	51.00
3.	High cosmopolitan outlook	18	18.00	24	24.00	42	21.00
	Total	100	100.00	100	100.00	200	100.00

Table 11 : Distribution of respondents on the basis of economic motivation (n=200)

Sr. No.	Economic motivation	Marginal farmers		Small farmers		Total	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Low motivation	34	34.00	21	21.00	55	27.50
2.	Medium motivation	52	52.00	59	59.00	111	55.50
3.	High motivation	14	14.00	20	20.00	34	17.00
	Total	100	100.00	100	100.00	200	100.00

Extension contact :

To get an overview of extension contact, the respondents were categorized into three groups *i.e.* low, medium and high extension contact on the basis of mean and standard deviation. Data presented in Table 9 reveal that majority of pea growers *i.e.* 122 (61.00%) were found to have medium extension contact, whereas, 26.50 per cent and 13.50 per cent pea growers were categorized in low and high extension contact, respectively.

Data further indicate that 22.00, 67.00 and 11.00 per cent marginal pea growers had low, medium and high extension contact, respectively. Whereas, in case of small farmers 29.00, 55.00 and 16.00 per cent respondents were placed in low, medium and high extension contact group, respectively. Further analysis of table clearly indicates that more or less similar pattern was found in both the categories of respondents with regards to their extension contact in the study area. Similar findings have been reported by Vashishtha (2011).

Cosmopolitan outlook :

With a view to classify the respondents on the basis of their cosmopolitan nature, three categories were formulated *i.e.* low, medium and high cosmopolitan. The data presented in Table 10 show that out of total respondents, 28.00 per cent farmers were from low cosmopolitan group and 51.00 per cent farmers were found in medium cosmopolitan group. Whereas, only 21.00 per cent farmers were high cosmopolitan in nature.

Further analysis of data reveals that 17.00 per cent

small farmers and 39.00 per cent marginal farmers were from low cosmopolitan group. While, 59.00 per cent small and 43.00 per cent marginal farmers were reported in medium cosmopolitan group. The high cosmopolitans were found in 24.00 per cent small farmers and 18.00 per cent marginal farmers with regard to agricultural technology. Further analysis of table clearly indicates that the small farmers were more cosmopolite for getting information about pea cultivation technology than marginal farmers.

Economic motivation :

The data presented in Table 11 indicate that 55.50, 17.00 and 27.50 per cent of total respondents had medium, high and low level of economic motivation, respectively. A comparative view of economic motivation of small and marginal farmers shows that 59.00 per cent small farmers and 52.00 per cent marginal farmers possessed medium level of economic motivation. The high level of motivation was shown by 20.00 per cent small farmers and 14.00 per cent marginal farmers. Whereas, low level of motivation was found in 21.00 per cent small farmers and 34.00 per cent marginal farmers.

Therefore, it was concluded that as far as economic motivation is concerned, the small and marginal farmers were more or less equally motivated for pea cultivation in the study area.

The above findings are in eco with findings of Mewara and Pandya (2007) who observed that majority of tomato growers (70.00%) had medium level of economic motivation followed by 20.00 per cent who

had higher level of economic motivation, only 6.00 per cent of tomato growers had low level of economic motivation.

Conclusion :

It was evident that 55.50, 17.00 and 27.50 per cent of total respondents had medium, high and low level of economic motivation, respectively. A comparative view of economic motivation of small and marginal farmers showed that 59.00 per cent small farmers and 52.00 per cent marginal farmers possessed medium level of economic motivation. The high level of motivation was shown by 20.00 per cent small farmers and 14.00 per cent marginal farmers. Whereas, low level of motivation was found in 21.00 per cent small farmers and 34.00 per cent marginal farmers.

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