

Socio-Economic Characteristics and Problems of Sugarcane Production and Marketing in Nellore District, Andhra Pradesh



Economics

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Introduction:

Sugarcane is one of the most important commercial crops of the country at present it is grown in most of the Indian states to varying extent. It has become a crop of great socio-economic importance in the country. Nearly 45 million growers are involved in the cultivation of sugarcane and sugarcane crop based industry provides employment to more than 3.50 lakh skilled and unskilled workers in the manufacturing of sugar, khandarsari and gur.

In India, during 2011-12, the area under sugarcane crop was 5.09 million hectares with a total production of 347.87 million tonnes (Directorate of Economics and Statistics & Ministry of Agriculture, 2012). The sugar industry is the second largest agro industry in India, next to textiles.

In Andhra Pradesh, Sugarcane is grown in 2.40 lakh hectares. It is largely grown in Vishakapatnam, West Godavari, Medak, Chittoor, Krishna, Vizayanagaram, Nizamabad, Srikakulam and Nellore Districts with 90 per cent of the area under this crop. About 167.30 lakh tonnes of sugarcane is produced in the state (2011-12) (Directorate of Economics and Statistics & Ministry of Agriculture, 2012). From this about 11, 18000 tonnes of sugar is produced. The present study was carried out to analyse the cost concepts and farm income measures in production of sugarcane. The popular sugarcane varieties in the study area were Co7805, 83V15, 86V96 and 298.

Material and Methods:

Based on the largest area under sugarcane, two manadals viz; Kovur and Buchireddypalem of Nellore district were selected for the study. After arranging the villages in the descending order of magnitude based on the acreage under sugarcane cultivation, two villages from each mandal were selected. The selected villages were Kovur and Gangavaram from Kovur mandal and Rebala and Buchireddypalem from Buchireddypalem mandal. The list of sugarcane growers was prepared for each of the selected villages with the help of the records of the Village Administrative Officers. 20 small farmers and 20 large farmers were selected randomly from each selected village. Hence the total sample size was 80 sugarcane growers consisting of 40 small farmers and 40 large farmers. The required information was collected from the selected respondents using a pre-tested schedule. The collected information was analysed using the following tools.

Results and discussion:

The socio-economic profile shows the social and financial status of farm families. In this section, the size of the farm and the farm inventory are discussed.

Family composition and family labour availability on the selected farms.

The composition of family in respect of male, female and children and the family labour availability are presented in table-1. It is observed from the table-1 that the family size ranged from 6.36 members on small farms to 4.97 members on large farms with an overall average of 5.65 members on combined farms. The composition of the family with respect to female and children was marginally larger on small farms compared to large farms.

Table 1: Family composition and family labour contribution on selected farms.

Sl. No.	Particulars	Small	Large	Combined
1.	Family composition			
	Male	2.28 (35.85)	2.77 (55.73)	2.52 (44.60)
	Female	1.83 (28.77)	1.20 (24.14)	1.51 (26.73)
	Children	2.25 (35.38)	1.00 (20.12)	1.62 (28.67)
	Total	6.36 (100.0)	4.97 (100.0)	5.65 (100.0)
2.	Family farm workers			
	Male	2.07 (61.42)	-	1.03 (61.31)
	Female	1.30 (38.58)	-	0.65 (38.69)
	Children	-	-	-
	Total	3.37 (100.0)	-	1.68 (100.0)

Note: Figures in parentheses indicate percentages to the total.

It is evident from the above that the participation of family members in farming was confined to small farms. On small farms, familylabour available for farm work was constituted by 2.07 males and 1.30 females. The same on combined farms was 1.03 males and 0.65 females.

Average size of land holding of sample farms

The scale and efficiency of production and income earning capacity depends upon the size of the holding. Table-2 presents the land holding particulars of the sample farmers.

Table 2: Average size of landholding of sample farms (Area in hectares)

Sl. No.	Particulars	Small	Large	Combined
1.	Irrigated dry land	0.55 (56.70)	1.76 (43.56)	1.15 (46.22)
2.	Irrigated land	0.42 (43.30)	2.28 (56.44)	1.35 (53.78)
3	Total area	0.97 (100.0)	4.04 (100.0)	2.51 (100.0)
4	Area under sugarcane	0.81 (83.50)	2.55 (63.11)	1.68 (67.20)

Note: Figures in parentheses indicate percentages to the total.

The average size of holding varied from 0.97 hectares in the case of small farms to 4.04 hectares on large farms, with an overall average of 2.50 hectares. Of the 0.97 hectares operated by small farmers, the share of irrigated land was 0.42 hectares (43.30 per cent) and that of irrigated dry land was 0.55 hectares (56.70 per cent). On large farms, the irrigated land constituted 2.28 hectares (56.44 per cent) and the irrigated dry land 1.76 hectares (43.56 per cent). In the study area, the main sources of irrigation were canals, tanks, tube wells and filter points. The area under sugarcane which was a selected enterprise for an economic analysis ranged from 0.81 hectares on small farms to 2.55 hectares on large farms. This constituted 83.50 per cent of the total area on small farms and 63.11 per cent on large farms. The proportionate area allocated for sugarcane cultivation appeared

to be lesser on large farms compared to small farms.

Asset structure of sample farms

The study of the farm assets reveal the economic background of the farmer. The risk bearing ability of the farmers largely depends on the value of the assets owned. The particulars of farm assets per hectare according to size groups are presented in Table 3.

Table 3: Asset structure of sample farms (in Rupees /ha)

Sl. No.	Particulars	Small	Large	Combined
1.	Value of land	5,37,500.00 (87.13)	5,62,102.00 (90.91)	5,49,801.00 (89.02)
2.	Value of wells	37,538.46 (6.09)	18,906.25 (3.06)	28,222.35 (4.57)
3	Value of farm buildings	2,153.84 (0.35)	1,562.50 (0.25)	1,858.17 (0.30)
4	Value of machinery and implements	13,340.36 (2.16)	23,135.90 (3.74)	18,238.13 (2.95)
5	Value of livestock	26,355.37 (4.27)	12,603.13 (2.04)	19,479.25 (3.15)
6	Value of total assets	6,16,888.03 (100.0)	6,18,309.78 (100.0)	6,17,598.90 (100.0)
7	Without land value	79,388.03 (12.87)	56,207.78 (9.09)	67,797.90 (10.97)

Note: Figures in parentheses indicate percentages to the total.

The per hectare value of assets ranged from Rs. 6,16,888.03 on small farms to Rs. 6,18,309.78 on large farms with an average of Rs. 6,17,598.90 on pooled farms. Further, it was noticed that land, the basic resource which supports the production of all farm commodities was the single most valuable asset on the sample farms. The share of land value increased from 87.13 per cent on small farms to 90.91 per cent of the total value of assets on large farms. The per hectare value of land was higher on large farms (Rs. 5,62,102) as compared to small farms (Rs. 5,37,500). Lands of large farmers might be having better accessibility and more physical amenities and hence the value was higher.

An assessment of value of assets excluding land revealed that the value of assets other than land varied from Rs. 79,388.03 on small farms to Rs. 56,207.78 on large farms while the same was Rs. 67,797.90 on pooled farms. It is observed that value of assets without land showed an indirect relationship with the size of the farms. Coming to the machinery and implements, its value was Rs. 13,340.36 on small farms and Rs. 23,135.90 on large farms. The higher value of these assets reveals the fact that large farmers were more inclined to possess a variety of farm machinery and implements to carry on farming given their size of holding. In respect of farm building and wells, it was small farmers with whom the value of the same (Rs. 2,153.84 and Rs. 37,538.46) was relatively higher over large farms (Rs. 1,562.50 and Rs. 18,906.25). The value of the fixed resource gets distributed over the size of the holding and hence the trend. Small farmers had invested more on livestock (Rs. 26,355.37) compared to large farms (Rs. 12,603.13). This might be due to the maintenance of milch cattle treating them as a supplementary enterprise by the small farmers.

Problems in production and marketing

An opinion survey was carried out for the sample of 80 farmers regarding the problems faced by them in the production and marketing of sugarcane. The important problems as indicated

by the sugarcane growers are presented in Table 4.

Table 4: Problems in production and marketing

Sl. No.	Particulars	Percentage to the total respondents
I	Production problems	
1	Shortage of labour	100
2	Non availability of quality seed material.	70
3	Scarcity of fertilizers	80
4	Incidence of pests and diseases	40
5	Power cuts and irregular supply of electricity	100
II	Marketing problems	
1	Cutting permit	52
2	High transportation costs	80
3	Lack of proper roads	30
4	Low product price	60

All the growers were unanimous in their opinion about the problems of scarcity of labour during peak seasons and irregular power supply. Scarcity of fertilizers was the other problem of concern as 80 per cent of the selected farmers reported the same. 70 per cent of the farmers had complaints regarding non availability of quality seed material. Incidence of pests and diseases, though was not a serious problem, yet 40 per cent of farmers opined this particular problem.

With respect to problems of marketing, majority of farmers (80 per cent) expressed their concern about high transportation cost. About 60 per cent of the respondents indicated low price for the output as one of the problems of sugarcane cultivation. Delay in getting cutting permit was the problem for 52 per cent of the farmers 30 per cent of the sample farmers expressed their concern about the inadequacy of infrastructural facilities (roads).

Conclusions:

The average size of the family was 6.36, 4.97 and 5.65 members in the case of small, large and combined farms indicating inverse relationship with the size of the holding. The participation family members in farming was confined to small farms only.

The average size of the holding for the sample as a whole was 2.50 hectares with 67.20 per cent of total area under sugarcane. Obviously, the average size of land holding of large farmers (4.04 ha) was higher than that of small farmers (0.97 ha). The area under sugarcane was 0.81 ha (83.50 per cent) and 2.55 ha (63.11 per cent) on small and large farms respectively.

The per hectare value of assets ranged from Rs. 6,16,888.03 on small farms to Rs. 6,18,309.78 on large farms with an average of Rs. 6,17,598.90 on combined farms. The land value was to the extent of 89.02 per cent of the total value of farm assets on combined farms. The trend was more or less same on both the size groups.

The major problems of production and marketing were irregular power supply, scarcity of human labour and fertilizers and high transportation cost.

REFERENCE

- 1) Basavaraj, K. and Kunnal, L.B., 2002, Constraints in production, marketing and processing of soybean. Rural India, 65 (4): 68-71. | 2) Nagpure, S. C., Jhakare, A.B., Khandare, A.P. and Patil, R.K., 2004, Economics of sugarcane production in Vidarbha Region of Maharashtra State. Rural India, 67 (6-7): 123-125. | 3) Kushdeep Dharni, Ramandeep Singh and Sonika Sharma, 2007, Sugarcane Market Scenario. Prog. Farm., 43(11):16-2 | 4) Anonymous, 2012, <http://www.worldsugarstat.com> |