



Research Article

CONSTRAINT ANALYSIS ON CASHEWNUT PROCESSING UNITS IN SRIKAKULAM DISTRICT OF ANDHRA PRADESH

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Abstract: The study has attempted to examine the present status of cashewnut processing units in Srikakulam district of Andhra Pradesh and also to identify the constraints associated with the running of the cashewnut processing units. Per day processing capacity was taken into consideration for the selection of the processing units. Relevancy rating was used to identify the major constraints of the owners. The study revealed that, 292 cashewnut processing units are currently functioning across the 38 mandals of the Srikakulam district and among them 67 per cent processing units were functioning in Palasa (145) and Mandasa (51) mandals only. Regarding the problems of processing units, high working capital requirement and higher taxation were the most prominent. Shortage of skilled labour, irregular power supply, unavailability of raw materials in domestic market and inadequate storage facilities were the other major problems reported by the owners of the cashew nut processing units. The study suggests for the establishment of Cashew Industry Development Board for the effective functioning of the processing units and also for the establishment of processing units in other regions of the district, on cooperative basis.

Keywords: Relevancy rating, Constraints, Cashewnut processing units, Cashew industry

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Introduction

Cashew is a native of Eastern Brazil, and was introduced in India by the Portuguese [1] nearly five centuries ago i.e., during 16th century. The crop is mainly grown on the waste lands in high rainfall areas for its nuts and to check soil erosion. Hence it is considered as 'Gold mine' of waste land as it requires low inputs for production. In the early years it was only a crop for afforestation and soil conservation. It has now emerged as one of the most important dollars earning plantation crops in India.

The Indian cashew industry is export oriented and generates foreign exchange through the exports. Mainly three cashew products are traded in international market - raw nuts, cashew kernels and cashew nut shell liquid (CNSL). The fourth product - the cashew apple or false fruit is an edible food rich in vitamin C is generally processed and consumed locally. The raw cashewnut, which is the main commercial product of the cashew tree will be either exported or processed prior to export. Processing of raw nut yields kernel, shell, rejection and husk. Cashew kernels are consumed in the form of snacks and used in confectionery. Shell is used for manufacture of particle boards for packaging industry. Presence of CNSL in the shell makes these boards moth and heat resistant. Tannin can be extracted from the brown skin (testa or husk) of the kernel. It has applications in leather industries.

The share of agricultural products in the total export earnings of the country during 2016-17 (April 2016 to March 2017) is 6.65 percent and cashew kernels ranked 7th among them contributing 4.30 percent of the agri products exports through exports [2]. This accounting to 0.29 percent of the total foreign exchange earnings of the country through exports. The total export of cashew kernels from India during 2016-17 was 82,302 M.T. valued at Rs. 5168.78 Cr. (US \$ 771 Mln) [3]. This represents the importance of the cashewnut processing units in the global trade and also the associated benefits in terms of employment generation [4].

The growth of this type of industries is utmost important in case of the bifurcated Andhra Pradesh state as it generates employment and also provides good source of revenue to the government. Hence in this situation the research was undertaken to identify the present status of cashewnut processing units in Srikakulam district and to identify the constraints associated with the running of the cashewnut processing units in the study area.

Materials and Methods

The present study was conducted in Srikakulam district of Andhra Pradesh, since Srikakulam district was the main processing centre for cashewnut in Andhra Pradesh state. Out of the 38 mandals, two mandals namely Palasa and Mandasa mandals having highest concentration of cashewnut processing units were selected purposively. After selection of mandals, a list of cashewnut processing units were prepared and further divided into two categories based on the total quantity processed per day i.e., Category I (upto 1000 Kg) and category II (above 1000Kg). From each category 5 processing units were selected randomly for detail investigation. Thus total 10 cashewnut processing units were selected. The primary data required for the study was collected through personal interview method from the owners of the processing units and the secondary data from the year 2006-07 to 2015-16 was collected from various sources like Directorate of cashew and Cocoa Development and District Industry Centre-Srikakulam, to fulfil the stated objectives. The data collected was tabulated to draw meaningful inference.

Constraint Analysis using Relevancy rating

The constraints faced by the processors were calculated by subjecting the opinions of the owners of units on constraints to relevancy rating and ranking of the same according to their importance.

Table-1 Mandal wise Cashewnut Processing units in Srikakulam District (2016-17)

SN	Name of the mandal	No. of cashewnut Processing units	Total no of workers	SN	Name of the mandal	No. of cashewnut Processing units	Total no of workers
1	PALASA	145 (49.6)	4343(53.52)	20	SARAVAKOTA	3	70
2	MANDASA	51(17.4)	1299(16)	21	TEKKALI	5	138
3	V.KOTHURU	21	603	22	SANTHABOMMALI	2	36
4	MELIAPUTTI	14	338	23	KOTABOMMALI	4	86
5	SOMPETA	6	118	24	JALUMURU	2	54
6	KOTHURU	5	107	25	SARUBUJILI	0	0
7	VEERAGHATTAM	0	0	26	BURJA	1	17
8	SEETHAMPETA	0	0	27	SANTHAKAVITI	1	23
9	KANCHILI	5	186	28	RAJAM	0	0
10	ICHCHAPURAM	0	0	29	G.SIGADAM	1	24
11	KAVITI	1	12	30	AMADALAVALASA	1	52
12	PATHAPATNAM	2	46	31	NARASANNAPETA	0	0
13	BHAMINI	1	17	32	POLAKI	0	0
14	NANDIGAM	6	207	33	GARA	4	111
15	HIRAMANDALAM	0	0	34	SRIKAKULAM	1	23
16	PALAKONDA	1	28	35	PONDURU	2	56
17	VANGARA	0	0	36	LAVERU	1	10
18	R.AMADALAVALA	2	47	37	RANASTALAM	0	0
19	L.N.PETA	2	54	38	ETCHERLA	2	46
Total				Srikakulam District		292(100)	8151(100)

Source: District Industry Centre - Srikakulam

Table-3 Constraints in cashewnut processing units

SN	Problems	Category-1		Category-2		Overall	
		Relevancy rate	Rank	Relevancy rate	Rank	Relavency rate	Rank
1	High working Capital	0.93	1	0.93	1	0.93	1
2	High Taxation	0.93	1	0.93	1	0.93	1
3	High initial Investment	0.93	1	0.73	2	0.83	2
4	Shortage of skilled labour	0.80	2	0.46	3	0.63	3
5	Irregular power supply	0.66	3	0.40	4	0.53	4
6	Supply of rawnuts	0.66	3	0.33	5	0.495	5
7	Recovery of kernels	0.46	4	0.40	4	0.43	6
8	Procedure in getting finance	0.46	4	0.40	4	0.43	6
9	Loss during Storage	0.40	5	0.40	4	0.40	7
10	Transportation of rawnuts	0.46	4	0.33	5	0.395	8
11	Space for storage	0.33	6	0.46	3	0.395	8
12	Transportation of final products	0.33	6	0.33	5	0.33	9
13	High Interest rate	0.33	6	0.33	5	0.33	9
14	Shortage of fuel & fuel wood shortage	0.33	6	0.33	5	0.33	9

The owners were asked to rate the constraints on a three-point relevancy continuum.

$RC_i = (Total\ score\ of\ all\ the\ respondents\ for\ the\ i^{th}\ constraint) / (Maximum\ on\ the\ continuum \times Total\ number\ of\ respondents)$

The ranking of each constraint was made according to its relevancy coefficient such that the constraint having the highest relevancy rating is ranked 1st and subsequent rank given according to the scores obtained in that order [5].

Results and Discussion

Mandal wise Cashewnut Processing units in Srikakulam District

The details of cashewnut processing units and total number of workers engaged in the units in different mandals of Srikakulam district was given in the [Table-1].

From the [Table-1] we can observe that, there are 292 cashewnut processing units currently functioning across the 38 mandals of the Srikakulam district. Out of the 292 cashewnut processing unit 67 percent processing units were functioning in Palasa (49.6 %) and Mandasa (17.4 %) mandals and remaining are distributed in different mandals. The variation in number of workers was observed, as per the number of processing unit in various mandals. About 70 percent workers (5642) engaged in 196 cashewnut processing units in Palasa (53.52 %) and Mandasa (16 %) mandals of Srikakulam district.

Thus, it can be concluded that majority of the cashew nut processing units are concentrated in the Palasa and Mandasa mandals with 145 and 51 respectively.

Growth of the Cashewnut Processing units in Srikakulam district

The year wise number of cashewnut processing units in Srikakulam district was provided in the [Table-2]

Table-2 Number of cashewnut Processing units in Srikakulam district

Period	No. of cashewnut Processing units
2007-08	220
2010-11	250
2011-12	251
2012-13	255
2013-14	277
2014-15	284
2015-16	290
2016-17	292

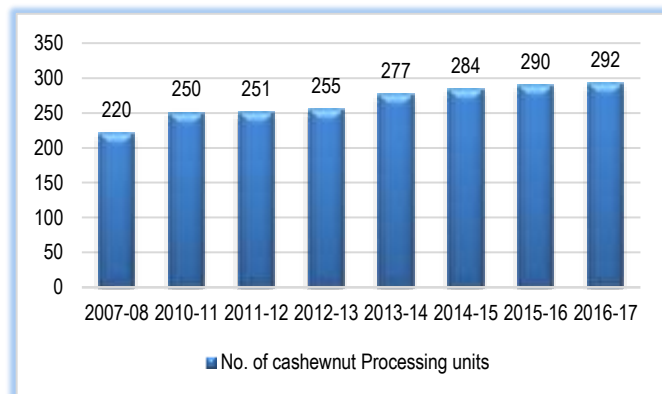


Fig-1 Number of cashewnut Processing units in Srikakulam district
From the [Table-2], we can observe that 220 cashewnut processing units were functioning during 2007-08, and it has increased to 292 during 2016-17. There was an increased trend in the growth of the cashewnut processing units from the year 2007-08 to 2016-17.

Overall, it could be concluded that, only 72 cashewnut processing units has increased during the period 2007-08 to 2016-17. It indicates a good sign in Srikakulam district, and it may be due to the profitability business in the study area.

Constraints in cashewnut processing units

Relevancy rating was employed to analyse the constraints faced by the cashewnut processing unit owners with respect to procurement problems, storage problem, processing problems, problem in marketing of nuts and financial problems.

From the [Table-3], at the overall level we can observe that the high working capital (0.93) and high taxation (0.93) were the major problems faced by the owners of the processing units. Next to these constraints, high initial investment (0.83), shortage of skilled labour (0.63), irregular power supply (0.53), supply of rawnuts (0.495), recovery of quality kernels (0.43), loss during storage (0.4), transportation and distance from procurement site to processing unit (0.395) were the major problems faced by the owners the processing units.

With respect to the individual category, after high working capital, high taxation and high initial investment, space for storage was the major constraint for the category - II units, but it was ranked least in case of Category-I units. Supply of raw nuts and irregular power supply are the major constraint reported by the category-I units after high working capital, high taxation and high initial investment. The high working capital was associated with the cost of the raw material as it contributes a major share in the investment in cashew processing industry. For successful running of the processing unit's capital is must. Non availability of adequate capital on easy terms might be posing the problems to the owners. This can be solved by adopting suitable policy measures by the financing institutions in the area. The lack of availability of skilled labour was another constraint faced by the owners. This may affect the quality of the final produce. This can be solved by giving proper training on grading to the labour.

The category-I processing units were facing the problems of irregular power supply [6]. The dependency of the processing units on the electricity has to be considered in all the situations. The electricity department may ensure a continuous and adequate electricity supply to these units during peak season, as owners of the large processing units can go for the arrangement of generator which may not be possible with category – I processing units. The other major constraint faced by the category – I processing units was the supply of raw nuts, since the majority of the processing units are situated in the two mandals, there was a high competition for the raw materials making them unavailable for the small cashewnut processing units. In case of category – II processing units, lack of sufficient storage facilities was the major problem. This problem can be solved by creating common rural godowns in a collective manner in the area.

Conclusion

Mandal wise cashewnut processing units in Srikakulam district was tabulated and it was found that Palasa and Mandasa mandals constitute the majority of cashewnut processing units and also the total number of workers. Out of the 292 cashewnut processing unit 67 percent processing units were functioning in Palasa (49.6) and Mandasa mandal (17.4) and remaining covers in different mandals. Regarding the problems of processing units, high working capital requirement and higher taxation were the most prominent. Shortage of skilled labour, irregular power supply, unavailability of raw materials in domestic market and inadequate storage facilities were the major problems reported by the owners of the cashew nut processing units.

Suggestion

There may be a provision for the establishment of Cashew Industry development board for the effective functioning of the processing units in the study region, as a fact that there were no correct details of workers employed in the processing units and the level of business transactions

Existence of a large number of cashew processing units in the study region will created an un-healthy competition among the processing units with respect to procurement of limited quantity of raw nuts. There is a scope for establishment of

processing units in other regions of the district, on cooperative basis.

Application of research: In the establishment of cashewnut processing units in the potential areas, the constraints of the present study will be helpful.

Research Category: Cashewnut processing units

Abbreviations: RC - Relevancy coefficient, DIC – District Industry Centre

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Study area / Sample Collection: Srikakulam district, Palasa and Mandasa mandals

Cultivar / Variety / Breed name: Cashew

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.

Ethical Committee Approval Number: Nil

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