

A CONSTRAINT ANALYSIS ON PRODUCTION OF DESICCATED COCONUTS IN COIMBATORE DISTRICT OF TAMILNADU

¹ G.Srinivasan, and ² RP.Surega Sri

¹Associate Professor and²P.G.Scholar, Department of Agricultural Economics,

Faculty of Agriculture, Annamalai University,
Annamalai Nagar,Tamil Nadu-608002

Abstract: Coconut meat which is shredded and dried to remove moisture is called as Desiccated Coconut(DC). About 4000 tonnes of Desiccated Coconut is manufactured annually in India and it is also the important source of foreign exchange. The export revenue over the decade has increased by 55.43 per cent. European and American countries are major market for Desiccated Coconut and constitute over 72 per cent of the international market. With this background, the study makes a modest attempt to investigate the production of Desiccated Coconut and their problems in Coimbatore district with following specific objectives: to identify problems in Desiccated Coconut production in the study area and to analyze selected Desiccated Coconut units by SWOC method. The sample consists of 19 Desiccated Coconut units selected from Coimbatore district of Tamil Nadu. Based on the tonnes of installed capacity per month, Desiccated Coconut units were classified into small, medium and large sized units. The data collected were subjected to relevant method of analysis to work out averages, percentages and ratio. Garrett ranking technique was carried out to evaluate the problems faced by the processors were found out and ranked. SWOC analysis was carried out to find the strength, weakness, opportunities and challenges faced by the Desiccated Coconut unit processors. The results showed that consumer preference is the major problem which ranks first with the Garrett score of 79.17 and it causes major loss to the Desiccated Coconut production units followed by the problem of high capital requirement and high machinery cost with the Garrett score of 65.75 and 59.99. From the study, it is concluded that investment on Desiccated Coconut is economically viable and economic viability improves with the size of the units. This study suggested that ensuring timely availability of raw material and labour will address the problem of under utilization of installed capacity Desiccated Coconut units in the study area.

Index terms: Desiccated Coconut, Installed Capacity, Economic Viability

I. INTRODUCTION

The coconut palm is known as versatile tree which supports livelihood of many farm households in the primary sector. In India, out of the total production of coconuts, about 5 per cent is consumed in the tender form for drinking purposes and the rest is utilized as mature nuts for household and religious purposes and for the production of edible copra, milling copra and desiccated coconut.

In India, in the year 2016-2017 the area (2082.0 in million hectares) and production (16486.0 in million nuts) of coconut is maximum. In this, Kerala occupies maximum area of 772.43 million hectares and production of 5137.00 million tonnes of coconut followed by Karnataka and Tamil Nadu. The coconut is cultivated in all the 31 districts of the Tamil Nadu. It is grown in coastal belts as well as in interior parts. However, Coimbatore district ranks first in maximum area of coconut growing areas with the area coverage of 83341 hectares.

Coconut meat which is shredded and dried to remove moisture is called as desiccated coconut(DC). One of the most common forms of DC is an unsweetened, powdery product which is produced by drying shredded coconut and then grinding the shreds. Production of DC started in the country way back in 1952. DC can be stored at room temperature and is used in preparation of chocolates, dusting for the outer layer of sweets, cakes, muffins etc., and in the preparation of puddings and ice cream. About 4000 tonnes of DC is manufactured annually in India. Also, the DC is an important source of foreign exchange. The export revenue over the decade has increased by 55.43 per cent. European and American countries are major market for DC and constitute over 72 per cent of the international market.

India export maximum quantity of 702.00 million tonnes with the value of 1059.39 lakhs and the minimum export of 11.804 million tonnes with the value of 17.64 lakhs to Kuwait.

With this background, the study makes a modest attempt to investigate the production of Desiccated Coconut and their problems in Coimbatore district with following specific objectives:

1. To identify problems in Desiccated Coconut production in the study area and
2. To analyze selected Desiccated Coconut units by SWOC method.

II. RESEARCH METHODOLOGY

The sample consists of 19 Desiccated Coconut units selected from Coimbatore district of Tamil Nadu. Based on the tonnes of installed capacity per month, Desiccated Coconut units were classified into small, medium and large sized units. The Desiccated Coconut units with a capacity of less than 120 tonnes per month were considered as small units, units with 120-155 tonnes per month were considered as medium units, and units with greater than 155 tonnes per month were considered as larger units.

The data collected were subjected to relevant method of analysis to work out averages, percentages and ratio. Garrett's ranking Technique was employed in the present study, as it examines the various constraints in the order of their importance. The respondents were asked to rank their problems in Desiccated Coconut production and marketing. In the Garrett's ranking technique these ranks were converted into per cent position by using the formula.

$$\text{Per cent Position} = 100 \times (\text{Rij} - 0.5) / \text{Nj}$$

Where,

Rij = Ranking given to the ith attribute by the jth individual

Nj = Number of attributes ranked by the jth individual

By referring to the Garrett's table, the per cent positions were estimated and converted into scores. Then the scores of the various respondents for each of factor were added and the mean values were estimated. The mean values thus obtained for each of the attributes were arranged in descending order. The attributes with the highest mean value was considered as the most important one, followed by others in that order. SWOC analysis was carried out to find the strength, weakness, opportunities and challenges faced by the Desiccated Coconut unit processors.

III.RESULTS AND DISCUSSION

The general characteristics of Desiccated Coconut entrepreneurs revealed that, out of the total Desiccated Coconut units, 6 units (31.58%) are small, 7 units (36.84%) are medium sized and 6 units (31.58%) are large sized units. In case of small sized units one unit (16.67%) was partnership firm and remaining 5 units (83.33%) were sole proprietorship firms. In case of medium sized 3 units (42.86%) were partnership and the remaining 4 units (57.14%) were sole proprietorship firms. Whereas in large sized, 3 units (50%) were partnership and the remaining 3 units (50%) were sole proprietorship firms. As a whole 7 units (36.84%) were partnership and remaining 12 units (63.16%) were sole proprietorship firms.

Nearly 52.64 per cent (10 entrepreneurs) of the total entrepreneurs operating Desiccated Coconut units as an independent occupation, 5.26 per cent (1 entrepreneur) of them operate it as a continuation of family business, 36.84 per cent (7 entrepreneurs) of them operate it as an additional business firm and 5.26 per cent (1 entrepreneur) have taken up Desiccated Coconut enterprise as an allied agricultural activity.

Regarding location of the units, 2 units (33.33%) of small sized units were located in rural areas, remaining 4 units (66.67%) were located in urban areas and 1 unit (14.29%) of medium sized units was located in rural area, remaining 6 units (85.71%) were located in urban areas and in case of large sized units, 3 units (50%) were located in rural areas and remaining 3 units (50%) were located in urban areas.

Analysis of Garrett Ranking Technique in Desiccated Coconut production

The problem in the Desiccated Coconut production units are ranked orderly according to Henry Garrett Ranking Technique along with the score interpreted in the table.1 as given below

Table.1: Analysis of Garrett Ranking in Desiccated Coconut production

S.No	Problems Identified	Garrett Score	Rank
1	Consumer Preference	79.17	I
2	Capital Requirement	65.75	II
3	High Machinery Cost	59.99	III
4	Price Factor	50.00	IV
5	Availability of Skilled Labour	43.97	V

From the table.1, it is concluded that consumer preference is the major problem which ranks first Garrett score of 79.17, which causes major loss to the Desiccated Coconut production units followed by the problem of high capital requirement and high machinery cost with the Garrett score of 65.75 and 59.99. Price factor was identified and ranked as fourth with the Garrett scores of 50.00, because each Desiccated Coconut production unit selling the main and by-product in different prices. Availability of skilled labour was identified and ranked as fifth problem with the Garrett score of 43.97. Due to more number of agro industries in the study area (Coimbatore district), the availability of skilled labour is a problem focussed on Desiccated Coconut units.

SWOC analysis of Desiccated Coconut production

The Strength, Weakness, Opportunities and Challenges of Desiccated Coconut production units are analysed and listed in table.2 as given below

Table.2: Strength, Weakness, Opportunities and Challenges of Desiccated Coconut Production Units.

<p>STRENGTH</p> <ol style="list-style-type: none"> 1. The Desiccated Coconut production unit is a part of rural industry which employs the rural youth. 2. Wide range of coconut products both edible and non-edible parts available for the export. 3. Better utilization of natural resources. 4. Entrepreneurial opportunities for those who have industry in rural areas. 	<p>WEAKNESS</p> <ol style="list-style-type: none"> 1. Preference to fresh coconut over Desiccated Coconut in view of consumer choice. 2. Lack of awareness of availability of Desiccated Coconut. 3. Lack of aggressiveness among entrepreneurs to promote the product. 4. Availability of skilled labour. 5. High machinery cost and their spare parts. 6. Fluctuation in the price of the main and by-product.
<p>OPPORTUNITIES</p> <ol style="list-style-type: none"> 1. Good prospects for value added products (Virgin Coconut Oil, Geotextiles, etc.,) 2. Increasing export opportunities. 3. Alternative fuel demand (coconut methyl ester-biodiesel) 4. Information technologies (IT) enabled market intelligence available. 5. Scope for utilization of CWC, SWC infrastructure facilities 	<p>CHALLENGES</p> <ol style="list-style-type: none"> 1. Competition from the other tropical oils such as palm oil and palm kernel oil. 2. Procurement of raw nuts from various places. 3. High fluctuations in tariff rate policy 4. Small, medium scale processors face competition from large scale industries

IV.CONCLUSION

From the study, it is concluded that investment on Desiccated Coconut is economically viable and economic viability improves with the size of the units. There occurs better utilization of natural resources and the industry yield the profit on both edible and non-edible parts for the export. The policy implications that are emerged from this study are : (i)Credit terms on easy terms has to be ensured to establish large sized Desiccated Coconut units.(ii)Creating awareness about availability and advantages of Desiccated Coconut has to be taken up to widen the domestic market for Desiccated Coconut(iii)Ensuring timely availability of raw material and labour, will address the problem of under, the utilization of installed capacity(iv)Modernize the processing units will increase the production efficiency and improve the economies of scale to make Desiccated Coconut price competitive both in domestic and international market and (v)Desiccated Coconut may be included in the list of agricultural commodities promoted by APEDA for exports.

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