

**ORIGINAL ARTICLE**

## **Constraints Faced by Coconut Growers in Value added Products of Coconut**

**\*A. S. Archana, V. Sakthivel, and K. Kanagasabapathi**

Department of Agricultural Extension, Faculty of Agriculture, Annamalai University, Annamalai Nagar,  
Chidambaram, Tamil Nadu, India

\*E-mail: [asarchanaagri@gmail.com](mailto:asarchanaagri@gmail.com)

### **ABSTRACT**

*Coconut, a versatile crop with many uses for its products is popularly known as "Kalpavriksham" (Tree of Heaven). India is the world's largest producer accounting for total annual production of 20,309 million nuts. Kanyakumari district stands fifth in the cultivation of coconut in Tamil Nadu. In this district farmers are facing a lot of problems in value addition and marketing of coconut. This study helps to identify those problems faced by farmers towards value-addition and marketing. The results suggest as well as recommendations, for the farmers to overcome the constraints. A total number of 300 respondents were identified from the selected twelve villages by using proportionate random sampling method. The data was collected through an interview schedule and analysed using the mean score. The constraints were marketing constraints, economic constraints, personal constraints, extension constraints, technological constraints, and physical constraints. The major marketing constraint was lack of infrastructure facilities to sell value-added products.*

**Keywords:** Coconut, Value addition, Constraints.

Received 11.04.2022

Revised 21.04.2022

Accepted 27.05.2022

### **How to cite this article:**

A. S. Archana, V. Sakthivel, and K. Kanagasabapathi. Constraints Faced by Coconut Growers in Value added Products of Coconut. Adv. Biores. Vol 13 [3] May 2022. 199-202

### **INTRODUCTION**

India is the world's third largest coconut-producing country, accounting for a total annual production of 20,309 million nuts. The coconut plants occupy approximately 2.17 million hectares of land, with the productivity of 9,346 nuts/ha [1]. The major coconut-growing states are Kerala (7,60,780 ha), Karnataka (6,24,030 ha), Tamil Nadu (4,37,570 ha) and Andhra Pradesh (1,11,380 ha) [2]. Value addition and product diversification have since long been recognised as the key to ensuring better income for the farming community and the sustainability of farming in our country. However, value addition and product diversification activities in India are minimal, as low as 7% [8] as the process is constrained by various technological, infrastructural, institutional and policy factors.

The export of coconut and its value-added products during the year 2021-22 was to the tune of Rs. 3236.83 crores which is 41.04% higher than the export figures of the previous year. This excludes the export of coir products which is expected to reach around Rs. 4000 crores. This makes the total estimated export of coconut and coir products at over Rs.7200 crores in a financial year. Exports valued over 900 million USD from a single crop, coconut is a remarkable achievement for the coconut sector [6]. The crop is cultivated mainly for the fruit, which yields kernel and water-based products like copra, coconut oil, desiccated coconut, coconut milk, virgin coconut oil, coconut milk cream, coconut milk powder, tender coconut water and other confectionery and beverage products [4]. Though it is an accepted fact that India holds a robust domestic market in the coconut sector, it is high time that India emerges as a major export player by upgrading its position in the global value chain of coconut exports [3]. One of the challenges faced by the coconut farmers is the declining or stagnating output prices compared to escalating input prices. By far, the most important reason for the tardy progress in coconut value addition sector is the lack of scalable cost-effective technologies suitable for small and marginal enterprises [7]. So, this study attempts to analyse the constraints faced by farmers in terms of value-added products making and selling.

## MATERIAL AND METHODS

The study was conducted in Kanyakumari district of Tamil Nadu state as this district is having maximum area under coconut. Three blocks, namely Rajakkamangalam, Kuruthencode and Agasthesswaram having highest area under coconut among all blocks were purposively selected. A total number of 300 respondents were identified from the selected twelve villages by using proportionate random sampling method. The constraints were categorized under the major heads namely physical constraints, extension constraints, personal constraints, economic constraints, technological constraints, and marketing constraints. A well-structured interview schedule for assessing the identified constraints were administrated through a three point continuum as 'major constraint' 'somewhat constraint' and 'not a constraint' with scores of 3, 2 and 1 respectively. The score for each constraint was obtained. The data collected through interview was tabulated and analysed using the mean score. Based on the mean score and rank order, the constraints were assessed.

## RESULTS AND DISCUSSION

### Constraints encountered by the coconut growers in value addition

The mean score and rank order of the constraints are presented in Table 1.

Table 1. Constraints encountered by coconut growers in value addition (n = 300)

S. No.	Constraints	Mean score	Rank
<b>I.</b>	<b>Marketing constraints</b>		
1.	Lack of infrastructure facilities to sell value added products	2.79	I
2.	Lack of market channels	2.44	II
3.	Lack of export avenues for value added products.	1.98	III
4.	Lack of market for non-branded products.	1.83	IV
5.	Lack of government assistance form the marketing department.	1.75	V
	<b>Grand mean</b>	<b>2.15</b>	
<b>II.</b>	<b>Economic constraints</b>		
1.	Lack of capital to purchase the equipment's and machineries required for preparation of value added products	2.55	I
2.	High cost of equipments and machineries	2.48	II
3.	Non-availability of credit	1.77	III
4.	Lack of remunerative price for value added produces	1.61	IV
	<b>Grand mean</b>	<b>2.10</b>	
<b>III.</b>	<b>Personal constraints</b>		
1.	Lack of time available for preparation of value added products due to involvement in farming.	2.23	I
2.	Lack of confidence in the preparation of product to the standards accepted by public	1.89	II
3.	Difficult to prepare	1.84	III
	<b>Grand mean</b>	<b>1.98</b>	
<b>IV.</b>	<b>Extension constraints</b>		
1.	Lack of training in value addition	2.40	I
2.	Lack of skilled labourers	1.72	II
3.	Extension personnel not assisting in value addition	1.41	III
	<b>Grand mean</b>	<b>1.84</b>	
<b>V.</b>	<b>Technological constraints</b>		
1.	Inadequate technology for commercial production	1.73	I
2.	Lack of research in value addition	1.42	II
	<b>Grand mean</b>	<b>1.57</b>	
<b>VI.</b>	<b>Physical constraints</b>		
1.	Non-availability of equipment's and machineries required for preparation of value added products	1.57	I
2.	Non-availability of raw materials	1.26	II
	<b>Grand mean</b>	<b>1.41</b>	

It could be seen from Table-1 that among the six major categories of constraints studied, marketing constraints (2.15) was expressed by most of the respondents followed by economic constraints (2.10).

The order of importance of other constraints were personal constraints (1.98), extension constraints (1.84), technological constraints (1.57) and physical constraints (1.41).

Marketing constraints

Regarding marketing constraints, lack of infrastructure facilities to sell value added products (2.79) was the major constraint expressed by most of the respondents. Value addition in fruits, vegetables and coconut is not very popular in the study area. Hence sufficient infrastructure facilities are not available. Hence the respondents reported this as a constraint.

This is followed by lack of market channels (2.44) which was reported as the second major marketing constraint. The majority of respondents stated that the study area does not have a proper and established marketing channel to promote value-added items. This finding is in line with the findings of Mohanasundaram [5].

Lack of export avenues for value added products is not available in the study area. Lack of export avenues for value added products (1.98) was reported as the third major marketing constraint. Lack of market for non-branded products (1.83) followed by lack of government assistance from the marketing department (1.75) were also reported as important marketing constraints by coconut growers.

#### **Economic constraints**

Lack of capital to purchase the equipments and machineries required for preparation of value added products (2.55) was the major economic constraint expressed by majority of the respondents. Majority of the respondents comes under 'Marginal farmers' categories. They lacked sufficient economic resources to purchase the equipment and machineries required for preparation of value added products. This might be possible reason for the above constraint. This is followed by constraints like high cost of equipments and machineries (2.48), non-availability of credit (1.77) and lack of remunerative price for value added produces (1.61) as expressed by the coconut growers.

#### **Personal constraints**

Lack of time available for preparation of value added products due to involvement in farming (2.23) was the major personal constraint expressed by majority of the respondents. They expressed that sufficient time is not available for preparing value added products. This is followed by personal constraints like lack of confidence in the preparation of product to the standards accepted by public (1.89) and difficult to prepare (1.84) as expressed by the coconut growers.

#### **Extension constraints**

Regarding extension constraints, lack of training in value addition (2.40) was the major constraint expressed by majority of the respondents. Lack of training facilities in the nearby area might be the possible reason that could be attributed.

Lack of skilled labourers (1.72) was the second reported major extension constraint. In this study area labourers are not having proper technical guidance and training for value added product of coconut. This finding is in line with the findings of Vignesh and Sekaran [9]. Extension personnel not assisting in value addition (1.41) were also reported as other important extension constraint by majority of the respondents.

#### **Technological constraints**

Inadequate technology for commercial production (1.73) was the major technological constraint expressed by majority of the respondents followed by lack of research in value addition (1.42). It is strongly believed that sufficient technology supported by research findings can enable the production of value added products in coconut.

#### **Physical constraints**

Regarding physical constraints, non-availability of equipment's and machineries required for preparation of value added products (1.57) was the major constraint expressed by a notable percentage of the respondents. Non - availability of raw materials (1.26) was also expressed as one of the important physical constraints. Value addition has not gained significance in the study area. The government may take steps for the availability of raw materials in the study area which may boost the production of value added products in coconut.

### **CONCLUSION**

According to the study's findings, the main barriers to value addition cited by coconut growers were lack of infrastructure facilities for selling value-added products, lack of market channels, lack of capital to buy the equipments and machineries needed to prepare value-added products, high cost of equipments and machineries and lack of training in value addition. The greatest solution to most problems is to promote value addition at the village level and assist in marketing the resulting products. The development professionals can assist the farmers in producing the value-added goods and marketing them locally,

within the nation, or outside. Government and non-governmental organizations may take action to promote the creation of value-added coconut products in order to raise the revenue of coconut growers.

## REFERENCES

1. CDB. (2020). Coconut Development Board, Ministry of Agriculture and Farmers Welfare, Kochi, Kerala. <http://www.coconutboard.gov.in/Satistics.aspx>.
2. Horticulture Division, Department of Agriculture and Cooperation, Ministry of Agriculture and Farmers Welfare, Government of India. 2019-2020. <https://agricoop.nic.in/en/statistics/state-level>.
3. Jayasekhar, S. and Neethumol Jacob. (2021). Coconut sector in India at the crossroads: a brief narrative. *Indian Coconut Journal*, Vol. LXIII (12): 12-16.
4. Kumaravel, S. (2020). Sell the shells opportunities for coconut shell based industrial products and consumer goods. *Indian Coconut Journal*, October, Pp: 17-24.
5. Mohanasundaram, P. (2015). Production problems faced by coir units: A study in Thanjavur district of Tamil Nadu. *International Journal Arts and Management studies*, Vol. 1(5): 11-19.
6. Rajeev Bhushan Prasad., Deepthi Nair, S. and Sona John. (2022). Message from the Editors desk. *Indian Coconut Journal*, Vol. LXV (1): 5.
7. Satheeshan, K.N., Seema, B.R and A.V. Meera Manjusha. (2020). A successful innovative model for promoting value addition with emphasis on coconut. *Indian Coconut Journal*, July, Pp: 10-16.
8. Saikumar, B.C., Manjunatha, A.V., Chengappa, P.G. and Nagaraj. (2010). Value addition in agriculture and allied sectors. *Journal of Global Economy, Research Centre or Social Sciences*, Vol. 6(4): 311-327.
9. Vignesh, G. and G.C. Sekaran. (2014). A study on coir industry with reference to Coimbatore district. *Global Journal for Research Analysis*, Vol. 3(7): 69-70.

**Copyright: © 2022 Society of Education.** This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.