



A study on cultivation pattern of coconut farmers in Theni District

Muthumani K¹, Dr. V Sathuragiri², Dr. V Padmanabhan³

¹ Research Scholar, Department of Commerce, Government Arts College (Autonomous) (Affiliated to Bharathidasan University, Tiruchirappalli), Karur, Tamil Nadu, India

² Associate Professor and Head, Department of Commerce with Computer Applications, Government Arts and Science College, Affiliated to Madurai Kamaraj University, Madurai, Aundipatti, Tamil Nadu, India

³ Associate Professor, Department of Commerce, Government Arts College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli, Karur, Tamil Nadu, India

Abstract

Coconut provide raw material support for the traditional industries of coir and oil milling. It is estimated that five million people dependent on this crop for their employment and livelihood. Major coconut production in the country primarily is in demand from consuming states for traditional products viz, matured nuts, tender coconut water, coconut oil, oilcake, coir and coir products. Nearly 90 per-cent coconut production is directed for traditional use in domestic markets. The most important traditional commercial product traded in the country has been the coconut oil. Therefor demand and supply of this single coconut product determines the price of raw coconut. More over the market share of coconut oil both in domestic and export market is declining due to tough competition, especially from palm and soybean oil prices. Diversification efforts made by the coconut oil industries have yielded limited success. Besides coconut oil and oil cake, the coconut processing industry traditionally has been confined to copra production, manufacture of coir and coir products only. Because the coconut processing sector remained confined to these traditional products, it has been observed that In spite of commendable achievements made in enhancing the production and productivity of coconut, the processing sector could not make much progress in the direction of diversification and value addition to coconut products.

Keywords: Cultivation, pattern, coconut, farmers

Introduction

The Indian economy relies heavily on coconut production. India is one of the first countries to cultivate coconuts. The country is the world's third-largest producer of coconuts. India produces 34 per cent of all coconuts in the globe. India is a prominent player in the international coconut trade. Currently, the crop is cultivated on 1.91 million hectares, yielding over 13000 million nuts every year. Traditional coconut-based industries in the country include copra processing, coconut oil extraction, and coconut manufacturing. India has achieved incredible progress in coconut cultivation in the past few decades, and is currently one of the world's top producers of coconuts. The main coconut-producing states in India are Tamil Nadu, Kerala, Karnataka, and Andhra Pradesh, which account for more than 90% of the country's total coconut production. Coconut growers face a variety of challenges in terms of production and marketing, including seedling problems, weather problems, water problems, disease problems, a lack of post-harvest management facilities, marketing problems, infrastructure/transportation problems, and a lack of adequate extension services.

Problem Statement

Coconut is considered to be the most important and useful tree among the tropical palms which gives coconut water, kernel, oilcake for cattle etc. It has been in cultivation in India from time immemorial. It perhaps yields more products of use to mankind than any other tree. Each and every part of the coconut palm is used in India. Since it is one of the leading commodities in agricultural exports, the production programme of the crop is of critical importance

in improving the efficient use of resources. The cost of production and net return obtained per unit, would determine the profitability of the crop. Though production is the initiation of the developmental process, it could bring less gain to the producers unless they exist an efficient marketing system. Coconut production play major role in forming the agro base industries namely production of coconut oil and other by products of coconut like coir industries, husk production etc. In view of the changed scenario in the coconut sector, it was felt necessary to revise the report on production and marketing of coconut and make fresh appraisal of the changing pattern of coconut production, trade and its ancillary industries. The coconut growers adopt the different methods of selling the coconut and facing a number of problems is also encountered. Hence, the present study focuses on cultivation pattern of coconut farmers in Theni district.

Literature Review

Ayyoob C.P *et al.* (2012) ^[2] conducted a case study on marketing cooperatives and attitude of coconut farmers. Study mainly examined coconut farmers' attitude towards the marketing co-operatives in Kerala. Region wise and affiliation wise study was conducted. Based on proportionate random sampling technique, 150 coconut growers from each region who were also members of co-operative coconut marketing societies were selected. Ranking judgment chi-square test and attitude index were used for the study and analysis. Finding of the study revealed that the attitude of growers towards the co-operative societies among the affiliation is significantly different. The attitude index showed that 9 out of 14

variables have not reached up to the level of positive attitude expected by the respondents. Chinniah M & Suresh (2013) [3] in their article analysed Coconut marketing in Coimbatore. Study examined factors related to marketing cost, producers share, marketing margin, and the marketing channel involved in coconut marketing in study area. Tamil Nadu stands first in terms of productivity among the leading coconut producing states of India. Further, Coimbatore district of Tamil Nadu showed highest productivity in comparison to other districts, therefore Coimbatore district was selected by the researcher as the study area. 100 coconut growers selected from the study area for collecting data through personal interview. In order to study the marketing channel, price spread and grower's share 20 market intermediaries were selected. Proportionate stratified random sampling technique has been used for selecting samples. Jayasekhar *et al.* (2014) [6] examined tender coconut market scenario in India through the case study of Kasargod district of Kerala. The study has examined marketing pattern, market structure, and marketing efficiency in the tender coconut chain. In the study sectoral system of innovation framework has been used to explain the technology generation-diffusion mechanism of the coconut sector in India. Six major components which constitute the coconuts innovation system in India were delineated and attempt has been made to understand the existing innovation process, relationships between various actors and the bottlenecks in the technology delivery mechanism. A complete enumeration of the tender coconut outlets in the Kasargod district was done with the assumption that all the tender coconut outlets are exclusively located on the roadside. Study concludes that tender coconut value chain of Kerala has been found middleman driven, which offers only a meagre value share to producers. Aravazhy E (2015) [1] based her study on marketing strategies of coconut value added products in Odisha. Study showed the limited availability of value-added coconut products in Odisha markets. Higher price of the available products leads to less acceptability in Odisha markets. Study also found the presence of middlemen in the marketing channels which prevent farmers from obtaining a higher share of the final product price. Jayanth. R & Marjana Begum (2015) [5] through their study analysed possibilities of value-added coconut products in Hyderabad. Survey revealed that value added coconut products enjoy very good demand in Hyderabad markets. Even the most innovative products are popular among the people and they are using different coconut-based products in their day to day life. Packaged coconut water is highly preferred as a

soft drink. Desiccated coconut, coconut milk and milk powder etc. are used for household purposes. Hyderabad market is also facing the problem of insufficient supply in response to demand. Jagadeesh K Mannekote & Satish V Kailas (2016) [4] based their study on opportunities and challenges of value addition to coconut products. Indian coconut economy is primarily linked with fresh coconut. About 50 per cent of nuts produced are converted in to copra, over 40 per-cent of the total nuts are consumed in the form of either fresh or tender nuts and consumed as coconut meal and coconut oil. Very small proportion is consumed as other coconut-based products. Study concludes despite the high potential for product diversification, value of coconut in India is depended mostly in terms coconut oil. Study suggested the need for delinking this dependency and the adoption of innovative value addition. Padma & Kothai Andal C (2016) in their paper analysed awareness of coconut farmers on value added products in Coimbatore district. The coconut farmers in the district have to sell the coconut either directly in the market or to the merchant in the locality. Some of them have their own industry for drying the coconut in the field and after that it is sold for coconut oil manufacturers. Study showed farmers are not much aware of coconut value added products. The study suggested the need of awareness campaigns among farmers on value added products. The market scope for value added products should be informed to the farmers through the popular Medias.

Objectives of the Study

1. To study the Cultivation Pattern of Coconut Farmers.

Methodology

The study is basically an empirical one based on data gathered from the respondents have been chosen for the study. A sample of 560 respondents has been chosen for the purpose of the study. Simple random sampling method is applied in this research for selecting the sample. For this study, the researcher used a well-structured questionnaire to collect the data from the respondents. The questionnaire related to Cultivation Pattern of Coconut Farmers. The researcher used Percentage analysis to analyze the Cultivation Pattern of Coconut Farmers. IBM SPSS 21 version was used for statistical purpose.

Results and Discussion

Cultivation Pattern of Coconut Farmers

The below table depicts the coconut farmers' cultivation patterns in Theni district.

Table 1: Cultivation Pattern of Coconut Farmers

Particulars	No. of Respondents	Percentage
Cultivated area	Below 2.5 acres	41.25
	2.5 to 5 acres	33.57
	Above 5 acres	25.19
Type of coconut palm planted	Dwarf coconut	63.21
	Tall coconut	36.79
Reasons to prefer coconut cultivation	Water source	20.89
	Profitability	36.96
	Less labour	40.89
	Lower cultivation costs	46.07
	Intercropping	48.75
	Climate suitability	51.61
	Less maintenance	53.04

	Permanent income	301	53.75
	Cash crop	327	58.39
	Less workload	336	60.00
Production period	3 years	138	24.64
	4 years	281	50.18
	5 years	141	25.18
Type of irrigation system used	Trip irrigation	202	36.07
	Basin irrigation	227	40.54
	Sprinkler	97	17.32
	Others	34	06.07
Coconut harvest rotation period	25 to 40 days	228	40.71
	41 to 60 days	276	49.29
	Above 60 days	56	10.00

Source: Primary Data

According to the data above, 41.25 per cent, 33.57 per cent, and 25.19 per cent of the 560 coconut farmers cultivate coconuts on less than 2.5 acres, 2.6 to 5 acres, and more than 5 acres, respectively. Farmers planted a dwarf coconut variety 63.21 per cent of the time and a tall coconut variety 36.79 per cent of the time. Water source, profitability, less labour, lower cultivation costs, and intercropping are among the reasons given by 20.89 per cent to 48.75 per cent of respondents for choosing coconut less workload are among the reason's respondents prefer coconut production, which production. Climate suitability, low maintenance, permanent revenue, a cash crop, and 24.64 per cent, 50.18 per cent, and 25.18 per cent of respondents, respectively, on the production time of coconut palm. Trip irrigation, basin irrigation, sprinkler irrigation, and other methods of irrigation are used by 36.07 per cent, 40.54 per cent, 17.32 per cent, and 6.07 per cent of respondents, respectively. According to 40.71 per cent, 49.29 per cent, and 10 per cent of respondents, the rotation time of the coconut harvest are between 25 and 40 days, between 41 and 60 days, and above 60 days, respectively.

Conclusion

The main output of coconut sector on the international market was copra, crude coconut oil and its derivatives. However, since last ten years diversified and innovative value-added coconut products are entering in the global markets. The market growth of these products like fresh coconut water extracted from tender or mature nuts, desiccated coconut powder, cold pressed virgin coconut oil, coconut sugar etc. found exponential growth. Despite India being dominant producer of coconut and ranks third in the total world production of coconut, it does not figure out in the list of leading value-added coconut products exporting countries. In order to overcome the inherent weakness of coconut sector, product diversification, by product utilisation and value addition are considered as better options available to the coconut industry. Value additions in each aspect of coconut-based production create more quality and adequate demand for the products.

References

1. Aravazhy E. Marketing strategies for coconut and its value-added products in Odisha. *Indian Coconut Journal*,2015:58(2):28.
2. Ayyoob CP, Usman M, Suresh A. Marketing cooperatives and attitude of coconut growers: a case study in Kerala state in India, 2012.
3. Chinniah M, Suresh G. Coconut marketing in Tamil Nadu. *Indian Journal of Research*,2013:3(5):34–38.

4. Jagadeesh KM, Kailas SV. Value addition to coconut—opportunities and challenges. *Indian Coconut Journal*,2016:59(1):18–20.
5. Jayanth RR, Beegum M. Hyderabad: a potential market for value added coconut products. *Indian Coconut Journal*,2015:58(2):26–27.
6. Jayasekhar S, Somasekharan, Chandran KP, Harilal KN. Whether an effective innovation system is inevitable for sectoral value chain development? Evidence from coconut sector in Kerala. *Agricultural Economics Research Review*,2014:27(4):25–33.
7. Patma D, Andal CK. A study on awareness of coconut cultivators on value added products in Coimbatore district. *International Journal of Advanced Research in Computer Science and Management Studies*,2016:4(3):55–60.