**A Study on Futuristic trends on Cultivation and Marketing Practices of Coconut Growers in Erode District**

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***Abstract***

Value added products from Agriculture have been playing a predominant role in the economic development of India as well as futuristic trend of economic viability of farmers and prefererable choice of buying product by the consumers. In this dimension, coconut cultivation is premier horticulture crops which will be treated as export as well as subsistence of small growers in India. Especially, Southern part of India has occupied predominantly from the Horticulture. Despite of, flexible in nature of cultivation and secure of income from coconut cultivation while compared with other vegetables, a larger number of issues faced by the farmers recently. Western part of Tamilnadu zone is one of the fertile land and received both South west monsoon and North East monsoon for ample of resources and channel for more peculiarities on logistics for sale of coconut which is carried out cultivation and procured from the Coconut Growers. At the same time, the Growers will become a part of trading activities in order to equip their sale for earning profit .This paper has highlight the issues from observation and empirical in nature with find solution for value added products of coconut in futuristic trends.

**Introduction**

In India coconut cultivation is heterogeneous type of practices where adopt by the coconut growers in various geographical zone and water some availability, the seashore area, river, basin, cancel water supply and bore well are the so called irrigation methods. But, the accessibility has not been served to the coconut growers.

Similarly, marketing channels and accessibilities are unable to fulfil their price while fluctuating trend. Subsequently, the labour cost with maintenance charge of coconut cultivation along with manures, selection of saplings, pesticides, forecasting measures on matured coconut cutting and engaged tender coconut supply from the growers are acute problem in recent days.

The requirement of coconut and its related goods services are consume in recent days. Mostly, they are pure coconut oil, coir, pith for nursery (saplings include export) ornamental roof for malls, hotels in metro cities have utilised dry leaf etc… this much of consumption are fulfilled by current supply from the coconut growers. they have done their processing works partially under traditional method, and modernised equipment also whereas climbing tree for plucking, process of standardisation are utilised modern equipments recently, many of the growers who shown internet to modernised their works in future. The purpose of cost of logistic and labour, save time for processing. It has to be utilised equipment in future. It also distribution of supply and consumer’s accelerated buying behaviour of coconut related products in future. Therefore, this study will make an attempt to find the solution for coconut growers facilitating functions of futuristic trends in order to modern equipment utilisation.

**Statement of the problem**

The past 2 decades, the practices of coconut cultivation by the growers were optimum utilisation of inputs and consumed coconut for oil and food related aspects. Later on, its wage was gradually increased in domestic level and export also. It perhaps wider of cultivation in the plain region in southern part of India. Especially in Tamilnadu got sufficient irrigation and gradual yield which is more than equal to other vegetable crops.

But geographically particular zone only suitable for potential of cultivation irrigation. The effect of equipments for maintained and hybrid varieties of coconut cultivation in Tamil Nadu had been raised the production in recent years. The valued added products are familiar among the coconut growers. They are coir, pith, coir compact, “coconut seeval” for confectionery ingredients in bakery, ‘Neera’ water for medicinal purpose etc. if these trends would have been continuous and improve in future, the consumers will get benefit for pure coconut oil. Similarly, the coconut small growers also will get benefits from the maintenance work. Such as weeding, plucking of coconut they have to access of modernized equipment.

The purpose of organise farming practices and its extension by the farmers who are going to extend the cultivation. It emphasises on larger number of coir compost, coir pith preparation oil manufactures are increased in future. Hence, what the influencing factors are for increased the coconut cultivation in semi- Tropic areas in Tamil Nadu. Is there any affecting factor for irrigation during summer from cannel water supply and mismatched rainfall? How for it access with the operational activities of coconut growers and consumer’s preference of buying for value added products in future? Hence, this study will focus on coconut growers cultivation practices in future in order to fulfilment of user’s requirement with reference to Erode District.

## Objectives

* To study the socio-economic background of the coconut growers in Erode district.
* To analyze the challenges faced by the Coconut Growers for coconut cultivation.
* To assess the cultivation practices and benefits by the coconut growers in future

**Methodology**

This study is basically from descriptive in nature with empirical evidence primary data have been comprises of gathered information and subsequent process of data analysis were carried out by SPSS. The suitable tools for statistical analysis are chi – square, factor analysis.

**Sampling Design**

This study has been adopted for simple random sampling . The selection of the respondents were identified for each 20 respondents from the mass cultivation areas , namely; Cumbam, Utthamapalayam, Chinnamanur, Periyakulam,Palayam, Varushanadu.

**Results and Discussion**

The results were drawn from the data had been classified and analysed with suitable statistical tools such as Chi square and Factor analysis.

**Table -1**

**Age of the respondents with Duration of cultivation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Age of the respondents**  **Duration of cultivation** | **6 – 10 years** | **11 – 20 years** | **21 – 30 years** | **Above 30 years** | **Total** |
| **21- 30 years** | 6  50.0% | 6  50.0% | 0  0.0% | 0  0.0% | 12  100 % |
| **31 -40 years** | 5  17.9% | 17  60.7% | 1  3.6% | 5  17.9% | 28  100 % |
| **41 – 50 years** | 0  0.0% | 6  20.0% | 17  56.7% | 7  23.3% | 30  100 % |
| **51- 60 years** | 6  17.1% | 5  14.3% | 6  17.1% | 18  51.4% | 35  100 % |
| **Above 61 years** | 0  0.0% | 0  0.0% | 0  0.0% | 5  100.0% | 5  100 % |
| **Total** | **17**  **15.5%** | **34**  **30.9%** | **24**  **21.8%** | **35**  **31.8%** | **110**  **100 %** |

Source: Primary Data

There is significant associate between Age of the respondents with duration of cultivation status at 0.01 percent level.chi – square value in 72.915.

Age is determinant factors for ascribed characteristics in socio economic background. Besides, if has considered with business and livelihood aspects, the person who has completed for matured stage with legitimate way of decision making. Moreover, it has connectivity with experience for cultivation and its related knowledge where gathered through observation. Table explains that the category of age with the cultivation duration of coconut goodness who covered 60 per cent of the respondents are 31 to 40 years have cultivated upto 11-20 years of duration. The category of 51 to 60 years, 56 per cent of them engaged 21 to 30 years of duration. Next to the category of 51 – 60 years, 51 per cent of them are engaged above 30 years of duration.

**Table -2**

**Farm size and Processing of Value added Products**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Irrigation type**  **Farm size** | **Nuts dry for oil making** | **Coir compost** | **Supply for Food process Industry** | **Coir pith export** | **Sealed Pac Tender coconut supply** | **Total** |
| **2-5 AC** | 23  82.1% | 0  0.0% | 0  0.0% | 5  17.9% | 0  0.0% | 28  100.0% |
| **5-10 AC** | 23  45.1% | 17  33.3% | 5  9.8% | 6  11.8% | 0  0.0% | 51  100.0% |
| **11-15 AC** | 1  5.0% | 0  0.0% | 12  60.0% | 0  0.0% | 7  5.0% | 20  100.0% |
| **16-20 AC** | 5  45.5% | 0  0.0% | 0  0.0% | 0  0.0% | 6  54.5% | 11  100.0% |
| **TOTAL** | **52**  **47.3%** | **17**  **15.5%** | **17**  **15.5%** | **11**  **10.0%** | **13**  **11.8%** | **110**  **100.0%** |

Source: Primary Data

There is significant associate between Processing of Value Added product with farm size of coconut growers at 0.01 percent level.chi – square value in 107.658.

Value added processing of coconut Grower’s have been emerging trend in major coconut hub areas in India. At the same time , the purpose of facing issues by trader’s negotiation and price fluctuation of coconut price, the farmers(coconut growers) itself become a trader with their product which will be treated as value added products .This much of components are preferable choice of consumers in recent days and future also. Table shows that 82 per cent of the Coconut Growers are belonged to 2-5 acres of cultivation having engaged the process of coconut oil manufacturing( after plucking of coconut is going to make dry from sunlight) either they sold for oil mill or they are going to sale in local area or demand base ordering place.( 23 persons out of 52) . Next to the category of 11-15 acre holders are going to supply (sale) for their coconut is food process industry. This can be utilised for confectionery items in bakery or sweet stalls.(12 persons out of 17) About 54 per cent of the larger farm size holders ( coconut Growers) having a plan for sealed packing tender coconut supply ( 6 persons out of 13) .It is inferred that coconut grower’s processing activities are essential for market trend and choice of consumers in order to balancing price fluctuation of coconut bye products.

**Table -3**

**Number of Trees with labour cost per day**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Labour cost per day**    **Number of tress** | **Men 500**  **women 400** | **Men 550**  **Women 450** | **Men 600**  **Women 500** | **Total** |
| **100 – 150** | 0  0.0% | 6  50.0% | 6  50.0% | 12  100.0% |
| **150 -300** | 18  78.3% | 5  21.7% | 0  0.0% | 23  100.0% |
| **301 – 500** | 5  13.9% | 31  86.1% | 0  0.0% | 36  100.0% |
| **501 – 700** | 0  0.0% | 7  100.0% | 0  0.0% | 7  100.0% |
| **701 – 900** | 16  72.7% | 6  27.3% | 0  0.0% | 22  100.0% |
| **901 – 1200** | 5  50.0% | 5  50.0% | 0  0.0% | 10  100.0% |
| **Total** | **44**  **40.0%** | **60**  **54.5%** | **6**  **5.5%** | **110**  **100.0%** |

Source: Primary Data

There is significant associate between labour costs per day with number of trees status at 0.01 percent level.chi – square value in 94.144.

The growers who engaged mixed type of crops with vegetables and coconut cultivation is said to be “Sall – type“is each and every corner of boundaries. This type of cultivation is led the sources and efforts have been made by the growers who provide the inputs where applied with existing vegetables or other equivalent crop. They do not concentrate for the yield of coconut except the off – season of vegetables. These inputs are more than enough for the maintenance of coconut. But, labourers coconut have been entirely changed and concentrated for bulk type of cultivation and “Sall – type” of coconut cultivation. In the “Bulk – type” cultivation, labour utilisation is only for maintenance f coconut trees and not for vegetable. At the same time, the wage provision s takes place for the income generated through both vegetables and periodical procurement of coconut. Table explains about the challenges and anachronism of labour concept and engaged labourers who pertains to horticulture and agriculture is unsuited for the coconut growers. The growers who belonged to “Bulk – Type” cultivation is going to provide the wage is 50 per cent of them are mentioned Rs. 500 for men and 400 for women, another 50 per cent f the growers who mentioned that Rs 600 for men and 450 for women labour while they engaged only coconut cultivation. But, the income is generated only coconut cultivation not for vegetables. The category of 201 – 300 tree holders (Growers) who provide the wage Rs 800 for men and 550 for women are 50 per cent of wages have considered only extraordinary situation not for always, because of these grower’s land is small size. Therefore, they do not encourage labourers mostly, instead of labours, the maintenance works carried out by themselves.

**Table - 4**

**Factor –I**

**Socio Economic Background with land premises**

|  |  |  |
| --- | --- | --- |
| **Variable code** | **Variable** | **Factor loading** |
| 3 | Age of the respondents | .441 |
| 7 | Own land lease | -.265 |
| 22 | Place of seed preference | .430 |
| 10 | Cultivation in acres | .472 |
|  | Engine value | 3.825 |
|  | % of variance | 23.90 |
|  | Cumulative % | 23.90 |

Source: Primary Data

Independent variable: Age of the respondents

The socio – economic background has been directly influenced with the factors of cultivation by coconut growers. The independent variables are representing for age. The analysis which is propound is order to assess the growth and productivity of coconut growers where pertains to range of land holding and selection o seeds and preference of agencies like: government nursery specific zone of private nursery and own preparation of sapling. In this respect, the ownership of land is adversely affected (factor loading -.265) for the overall cultivation. Whereas, the factor loading value is more or uses same from the principal compound analysis (.441, -.430, .472.)

**Factor – II**

**Expenses with cultivation practices**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable code** | **Variable** | | **Factor loading** |
| 8 | Main occupation | | .755 |
| 7 | Own land lease | | .230 |
| 10 | Cultivation in acres | | .631 |
| 14 | Expenses for cultivation ploughing | | .117 |
| 15 | Expenses for cultivation manure | | -.530 |
| 16 | Expenses for cultivation pesticide | | .832 |
| 11 | Number of trees | | .551 |
| 24 | Coconut – produced per piece row | | -.428 |
|  | Engine value | | 3.003 |
|  | % of variance | | 18.767 |
|  | | Cumulative % | 42.671 |

Source: Primary Data

Independent variable: Occupation

The independent variable for occupation is determinant for the classification of expenses of coconut cultivation. However, the influencing and affecting factors are also one of the factors which are subsequent issues for small growers, because it, the large size land holders who assist with monetary aspects are covered from another sources either directly and indirectly, the factors loading from cultivation in acre of land holders either, own land and lease land (.631). This is directly associated with the expenses on pesticide. At the same time manure expenses are adversely against the ploughing, pesticide. Thus, primary occupation for coconut cultivation is affecting from price, land holding, labour cost etc**.**

**Factor –III**

**Cultivation and issues**

|  |  |  |
| --- | --- | --- |
| **Variable code** | **Variable** | **Factor loading** |
| 5 | Annual income | .494 |
| 7 | Own land lease | .115 |
| 11 | Number of trees | .753 |
| 24 | Coconut – produced per piece of row | .337 |
| 21 | Cropping pattern | .488 |
| 27 | In which season will get more piece of coconut | .640 |
| 31 | Labour cost per day | .802 |
| 33 | Coir pith compost – price | .288 |
|  | Engine value | 2.301 |
|  | % of variance | 14.383 |
|  | Cumulative % | 57.054 |

Source: Primary Data

Independent Variable: Income

The independent variable annual income is Represent for the influencing factor of coconut cultivation and its maintenance charges. The factors loading .802 is associate with seasonal yield for coconut pieces where preferred from the growers. The parallel factors are number of coconut tree and its yield, cropping pattern are depends upon the income generated by the growers.

**Conclusion**

The present study made a systematic effect on studying cultivation practices and value added product of coconut growers in Erode district. Obviously says; the approaches and practices of small growers who undertake the cultivation of coconut is entertained with mixed crops and bulk type of coconut in order to avoid the gap for off – season income and continues focus on industrial type of work which is engaged by themselves . But, ultimately they are facing marketing issues due to the quality of coconut is not sufficient for ordering with traders and less facilitating problems on logistics and transport. This can be avoid in future. The part of maintenance activities of coconut farm is going to modernized and extend the cultivation under large size. The practice of trade mechanism is partially undertaken by the coconut growers with their potential of value added product which will be demand driven approaches in international market trend. The Coconut Board also going to facilitate the required components of marketing activities on value added products by the Growers where engaged mass level production.

**References:**

1.Niraj Kumar and Sanjeev Kapoor, 2010, “Agricultural Economics Research Review”, 2010 Conference, Vol. 23, p411-418.

2. Sivarajah and Ponniah, 2010, “IUP Journal of Applied Economics”, Vol. 9 Issue 3, pp 97-113.

3. Ayoob, Usman, C.P. and Mohammed Suresh. A, Jan 2012 “Advances in Management”, Vol. 5 Issue 1, p32-40.

4. George, ThomasV, Krishna Kumar V, Subramanian P, Murali Gopal and Alka Gupta, Nov 2012, Central Plantation Crops Research Institute, Kasaragod, Kerala “Organic Farming in Coconut – Feasibility, Technological Advances and Prospects”, Indian Coconut Journal, pp 22-31.

5.Chinniah M and Suresh G (2013), “Coconut Cultivation in Tamil Nadu- An Economic Analysis”, Research paper, *International Journal of Scientific Research*, 2(3), 62-63.

6.R Sivasenan and S Prabin (2013), “Problems and Prospects of Coconut Industries in Kanyakumari District of Tamil Nadu”, *International Journal of Management*, 4(6), pp.135-144.

7.Periasami G and P Karthikeyan (2015), “Problems and Prospects of Coconut Cultivation in Erode District”, *Golden Research Thoughts*, 4(11), pp.1-12.

8.R Sathya and V Murugesh (2015), “Agriculture Marketing with Special Reference to Coconut Marketing in Pollachi Taluk”, *International Journal of Novel Research in Marketing Management and Economics*, 2(2), pp.11-120.

9. Rajendran S (2002), “Coconut Economy and Neera Tapping”, *Economic and Political Weekly*, 37(43), pp. 4361-4362

10.Report of the FAO High level Expert Consultation on Coconut Sector Development in Asia ands the Pacific Region-30 October -01 November 2013, Bangkok ,Thailand

11. Yesurajan & Sankaranarayanan(2020) **“** An Analysis Of Coconut Production In Tamil Nadu- India nternational Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211 Volume 8, Issue 8, August-2020,