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TO STUDY THE ROLE OF ARECA NUT IN ECONOMIC GROWTH OF KADAMTALAANDAMAN AND NICOBAR ISLANDS

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ABSTRACT:

Agriculture is now one of the most important sectors in the Indian economy. Areca nut Cultivation is one of the major livelihoods of farmers of Kerala and Karnataka. Labor Problems in every sector is leading to mechanization of processes. Agricultural sector is also facing such problem due to which most of the farmers tend to give up the practice. Areca nut cultivation is a long process involving harvesting, separating the fruits from bunches, moving the areca nut to ground, drying, de-husking, separating, bagging. Several machines are being developed to help farmers to aid the aforementioned processes. Areca nut collecting and bagging machine is a new one among them. The machine is intended to collect areca nuts from ground directly to gunny bags fixed in a moveable trolley. After the bag is filled the trolley can also be used to move the bags to store rooms. The machine is operated by single person so that farmer himself can use it. In addition, since the machine doesn't use any power units, it can be used anytime. Since the machine is manually driven, the machine is made lightweight materials to reduce the user effort. The major enabling mechanism in the machine is an inversion of slider crank mechanism that pulls the areca nuts from ground. A belt driven Conveyer carries the collected areca nuts up into the bags.

Keywords: Arecanut Growers, Arecanut Cultivation.

1. INTRODUCTION

The development and an improvement in agroindustry are essential to boost economic growth because the primary sources of low income's people are from agricultural sectors. This research aimed to measure the value addition and find the best strategy to add value of areca nut. This research used economical value-add formulation, which is the value of output less cost of inputs, IFAS, EFAS and SWOT analysis to ascertain the best strategy for development areca nut agroindustry. The result found out the value addition of areca tannin and natural dye were Rp 130.000 and Rp 105.000, respectively. Based on EFAS and IFAS analysis the total score of internal strategic factor was higher than external strategic factors, which were 3.00 and 2.53, respectively. Therefore, developing the downstream products of areca nut can be improved by focusing on strategies to strengthen internal factors. Furthermore, based on the result of quantitative model of strategy, the development of areca nut agroindustry can be done by maximizing opportunities and overcoming all factors that become weaknesses. Therefore, the most suitable strategies for the development potential products of areca nut are facilitate and improve market information of areca nut downstream product for all of stakeholders and promoting and enhancing technological innovation to accelerate technological adoption of the farmers.[1]

2. REVIEW OF LITERATURE

Miftahul Jannah (2021),This research used economical value-add formulation, which is the value of output less cost of inputs, IFAS, EFAS and SWOT analysis to ascertain the best strategy for development areca nut agroindustry. The result found out the value addition of areca tannin and natural dye were Rp 130.000 and Rp 105.000, respectively. Based on EFAS and IFAS analysis the total score of internal strategic factor was higher than external strategic factors, which were 3.00 and 2.53, respectively. Therefore, developing the downstream products of areca nut can be improved by focusing on strategies to strengthen internal factors. Furthermore, based on the result of quantitative model of strategy, the development of areca nut agroindustry can be done by maximizing opportunities and overcoming all factors that become weaknesses. Therefore, the most suitable strategies for the development potential products of areca nut are facilitate and improve market information of areca nut downstream product for all of stakeholders and promoting and enhancing technological innovation to accelerate technological adoption of the farmers. [1]

Satheesha K. M., Rajanna K. S. and Krishna Prasad K. (2023), These days, the involvement of computer science in agriculture and food science is expanding. Classification and fault identification of diverse products employ a variety of Artificial Intelligence (AI), soft computing approaches, and methodologies, which contribute to higher-quality products for consumers. The position of Arecanut in the international and Indian markets, as well as the application of computer vision and image processing to a system for categorizing and grading Arecanut, are the main topics of this article [2].

The economic growth of the nation is greatly influenced by the agricultural sector. With 18.5 percent of the GDP, it serves as the foundation of the Indian economy. Every agricultural commodity is required. a focused quality evaluation that is more reliable and accurate. Currently, hand-performed categorization and grading procedures completely rely on people's hands for distinguishing various kinds of fruits and vegetables. An automated mechanism must be put in place to do this. Reduce the quantity of work required, the time needed to finish the process, and the number of mistakes. Specifically, the main cash crop in India is the Arecanut. Family is significant as a source of renewal, tradition, and culture. This review aimed to provide detailed information about Arecanut processing using AI techniques (ML/DL) and image processing approaches to increase productivity and help farmers. Image analysis based on texture and color aspects will be helpful to farmers in evaluating and classifying items based on color and quality. With this study, automation of the categorization of Arecanut and developments in AI methodology will reduce processing costs.

3. RESEARCH OBJECTIVES

To study the role of Areca nut in economic growth of Kadamtala Andaman and Nicobar Islands.

4. RESEARCH METHODOLOGY

Research methodology is one of the most systematic ways to take care of an issue. Itis methodical in nature. It is an exploration of studying how research takes place.Basically, Research Methodology is the systems by which researchers approach theirwork of illustrating, simplifying and anticipating marvels. It is characterized as thestudy of methods by which data or knowledge is acquired.

Research Design -Descriptive research is a type of research which is factual in nature. The descriptiveresearch is used widely for the meaning of the focused structure of a market/fragment,or the picture of the conduct of associations or gatherings of employees. The primaryobjective of this type of research is to outline the information and qualities about whatis being examined. The research targets in descriptive research are for the mostimportant part to illustrate the qualities of employees viz. statistic financial, geographic,and psychographic and benefits looked for.

Multiple cross-sectional design has been used and to control potential sources of error attempt has been made. An instrument developed for collection of primary information.The pilot testing of questionnaire was done and necessary changes were made.It was checked whether the questions asked in the questionnaire are related to the objectives and all objectives are covered by the questions.

Primary Data - A questionnaire survey was conducted for the purpose of the study.

Secondary Data - Secondary data is the data, which already exists. Secondary data was collected mainly through the internet, websites and some are taken from books and articles.

Sampling Design –Purposive sampling method was used.

Sample Size–Target to 350, actual receive 300 filled questionnaires

Statistical tools –Arecanut cultivator perceptions towards different aspects were measured by using of Likert scale.

5. STATISTICAL ANALYSIS

1. Out of 350 sample size, 300 numbers of respondents were participated for socio economic condition due to Areca Nut, out of that 100% respondents are in opinion of “Improved”.

Table No. 001- Socio economic condition due to Areca Nut

S. No	Category	Respondents	Percentage
1	Improved	300	100.00
2	Not Improved	0	0.00
	Total	300	100

However, numeric value in “Improved“ category were 100%. It is proved that there is no chance of error during survey and hence it considered.

2. Out of 350 sample size, 300 numbers of respondents were participated for paddy to areca nut, out of that 100% respondents are in opinion of "Earn more profit".

Table No. 002- Reason shifting from paddy to areca nut			
S. No	Category	Respondents	Percentage
1	Earn more profit	300	100.00
2	Other	0	0.00
	Total	300	100

6. CONCLUSION

The findings indicate that the cultivation of arecanut in Kadamtala, Andaman and Nicobar Islands improving the economic condition. As on present scenario farmers are applied techniques and quality improvement practices. Poverty and poor citizens specifically women involvement in cultivation, processing of arecanut is increase jobs which help them for survive and fulfil the need of their family. During survey it was observed critically that many allied areas of arecanut creating direct and indirect jobs.

7. LIMITATIONS

1. Confidentiality – Confidentiality of the employees in institution, and it may be the one of the reason respondents may not give the factual information.
2. Authenticity of the information supplied –To check authenticity of responses, some questions were repeated in the different form and crosschecking was done wherever it was possible.
3. Respondent bias – As often experienced in personal interview-based questionnaire, it may bias the respondent's replies and the personal interests. Attitudes of interviewers can cause them to interpret responses differently.

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