



Publisher homepage: [www.universepg.com](http://www.universepg.com), ISSN: 2663-7820 (Online) & 2663-7812 (Print)

<https://doi.org/10.34104/cjbis.024.01470155>

**Canadian Journal of Business and Information Studies**

Journal homepage: <http://www.universepg.com/journal/cjbis>

Canadian Journal of  
**Business and  
Information Studies**



UNIVERSE PUBLISHING GROUP  
[www.universepg.com](http://www.universepg.com)

## Status of Coconut Farmer-Marketers: A Review towards Sustainable Production Options

Cesario B. Mestidio III<sup>1,2\*</sup>

<sup>1</sup>Capiz State University, Main Campus, Roxas City, Capiz, Philippines; and <sup>2</sup>Local Government Unit, Sara, Iloilo, Philippines.

\*Correspondence: [cesariomestidio@gmail.com](mailto:cesariomestidio@gmail.com) (Cesario B. Mestidio III, Agricultural Technologist, Local Government Unit, Sara, Iloilo, Philippines).

### ABSTRACT

Coconut is one of the Philippines' most significant crops, with the country ranking second largest producer of coconuts among Southeast Asian countries. However, quality of nuts produced dropped and competitive performance on the global scale was low. This study determined the production capability and challenges encountered by coconut farmer-marketers in the province of Capiz to provide insights into sustainable production options. This was a descriptive-correlational study, which utilized a validated and reliability tested researcher-made survey questionnaire translated to local dialect. The 382 respondents consisted of the members of the coconut farming associations in the province of Capiz. The data gathered were processed using the Statistical Package for Social Sciences, employing tools such as frequency, percentage, mean, t-test, Analysis of Variance and Pearson r. The results revealed that the coconut farmer-marketers were capable of producing coconuts but encountered moderate levels of challenges. Differences were found in age, estimated monthly household income, and number of years as coconut farmer-marketers, and high to very high relationships were found between level of challenges encountered and production capability.

**Keywords:** Challenges, Coconut farming, Production capability, Sustainable, and Production option.

### INTRODUCTION:

The coconut, also known as "tree of life," is one of the Philippines' most significant crops. Coconut farming has been an integral part of country's economy. Despite the ranking as second largest producer of coconuts among Southeast Asian countries, it dropped drastically in quality of nuts produced. Thus, performing low on its competitive nature of market on a global scale. In October 2020, public and private stakeholders convened to strengthen coconut sector in the Philippines. Among the focus of discussion was the continuing low productivity of the coconut sector, which faces issues such as landlessness and poverty.

According to the Philippine Coconut Authority Deputy Administrator, Roel Rosales, coconut trees in the Philippines produce an average of 44 coconuts every year. This is much lower than Indonesia's production rate, generating around 17 million metric tons of coconuts each year (GrowAsia, 2022).

Furthermore, according to the study of Gurbuz and Manaros, (2019) coconut farmers are currently the poorest people in agriculture, and they are far poorer than they were 30 years ago. This can be attributed to the practice in marketing coconuts.

Coconut farming has also been a thriving industry in the province of Capiz. In August 2023, the Department of Trade and Industry (DTI) conducted a series of training on desiccated coconut processing, recognizing the potential having the Philippines as the world's top exporter of desiccated coconut, followed by Indonesia and Sri Lanka. Every producer knows that marketing is just as crucial as production because it adds value to the product, generates income for the producer, and tells the producer whether or not to continue the production. To achieve their goals and expectations, producers rely on the state of the market and accounting for the resources on hand and exploring ways to most effectively use them based on projected demand (Kalimuthu *et al.*, 2020).

To increase coconut production and exports of raw and processed coconut products, researchers need to conduct a comprehensive assessment of the current state of coconut production, and assessment of barriers to increasing coconut production. Most studies on coconut farmers were focused on production like land tenure, pest control, quality of planting materials, and fluctuating global market prices for coconut-based products. This study differs from these studies since this focused on the supply chain as a whole and technology utilization, which is essential nowadays in farming and marketing. Hence, this study assessed the status of production of coconut farmer-marketers and their challenges based on the Systems Theory of (Bertalanffy, 1969; Pinca *et al.*, 2024). to implement a deliverable and provide for sustainable production options. It provides a framework for promoting the sustainability of coconut production with the coconut farmers, marketers, processors, traders, and consumers, as well as the natural and physical environment, considering supply chain and the available technology to improve its agricultural practices. The interactions among these components are influenced by various factors, such as government policies, market trends, and technological advancements.

This study determined the level of production capability and challenges encountered by the coconut farmers in the province of Capiz. It established whether there were significant differences in the production capability and challenges encountered by the coconut farmers when grouped according to

profile. Additionally, it established if a significant relationship existed between the dependent and independent variables presented to gain insights towards enhancing the options available for coconut production.

#### **METHODOLOGY:**

This was a descriptive-correlational study. The researcher used quantitative data collected and analyzed them to find out if there was cause and effect relationship in the level of production capability and challenges encountered by coconut farmer-marketers in the province of Capiz. A descriptive research design, data collection, and data analysis methods were selected to determine the level of production capability and challenges faced by coconut farmer-marketers towards sustainable coconut production options available to coconut farmers. This study was conducted in the 13 municipalities in the province of Capiz with coconut farmers' associations. The study included 382 respondents from a population of 8,690 coconut farmers in the province. They were identified through stratified proportional random sampling of associations represented in the study. This sample size was calculated using the Cochran formula.

Data were gathered through a researcher-made survey questionnaire as research instrument, which was validated by six experts in the field of public administration and the coconut industry. Moreover, all statements and items were either retained, revised, or removed as recommended by the validators. The validated survey questionnaire was then reliability tested to 30 participants from the municipality of Panay, Capiz, not included in the actual survey. A reliability coefficient of 0.922 proved that the questionnaire was reliable and was conducted to the respondents. To analyze the data gathered, statistical tools, such as frequency, percentage, and mean were used as descriptive statistics. The researcher also employed Analysis of Variance (ANOVA), and Pearson are Moment Correlation as inferential and correlational statistics set at 0.05 alpha.

For this study, the questionnaire was translated to the local dialect for easy understanding of respondents with minimal education. It was reviewed by a psychometrician to ascertain that each statement or

question was valid, will not harm the mental health of the respondents nor hurt their feelings. A consent form was made part of the questionnaire to ensure that participant's privacy was not compromised and invaded without prior consent, guaranteeing that information they will give will be unidentified to anybody other than the researcher. They were also made to understand that the research may be read by future students of the course and other stakeholders of the university. They were also made to understand that they can refuse to answer the questionnaire and may stop answering anytime they feel no longer comfortable to do so. The researcher was personally there to answer queries or read to them the questionnaire if they are unable to do so. The researcher made sure that all information received from them were acknowledged and accurately represented. Data collected were at the custody of the research until no longer needed in this study. Although COVID-19 is no longer a threat, the researcher still encouraged the respondents, their association and barangay officials, the researcher and his assistant to use face mask and disinfect materials before and after using them.

## **RESULTS AND DISCUSSION:**

### **Level of Production Capability of Coconut Farmers as a Whole**

The production capability of the coconut farmers in the province of Capiz as a whole and in terms of supply chain and technology is reflected in **Table 1** with 3.51 grand mean, having a "capable" verbal interpretation. Two production capability components showed that supply chain had a total mean of 3.69, while technology had a total mean of 3.32. Both components had verbal interpretations of "capable", respectively.

The result implies that the coconut farmers of the province of Capiz are capable in terms of supply chain and technology. They perceive themselves as capable because the government provided them with trainings, linkages with private and government agencies, and received financial assistance through their associations. Likewise, the result also means that there is a big gap in becoming highly capable, which means that coconut farmer-marketers in Capiz need to do more to improve production and marketing of coconut products and not just focus on traditional market they

UniversePG | [www.universepg.com](http://www.universepg.com)

used to supply. This infers that the respondents possess the capability to produce quality coconut farm products. This can also be understood that the coconut farmers believe that with the right amount of support and opportunities such as linkages with technology providers, good planting materials, and financial assistance to buy the right equipment they need, trainings in product development, designing, packaging and marketing strategies, they have the capability to increase production, compete in the market, and provide the market with coconut products to meet its current and future demands. Moreover, this also means that coconut farmers perceived themselves as having the capability to improve their performance if presented with the right technology to enhance coconut production and quality coconut products needed by the changing preference of the market, particularly in coconut oil and coconut sugar industry, which remains unexplored by coconut farmers in Capiz.

The research conducted by Javier, (2020) presented that the Philippines continues to hold the top spot in the world for coconut production. This presents an outstanding opportunity for local coconut farmers and marketers to discover new avenues for success and financial gain in this niche. He outlined several important avenues for modernization in which coconut farmers can get involved. These include mass replanting hybrids to increase the main coconut productivity itself; intercropping or rigorous, sustainable manifold canopy farming of coconut; optimizing coconut fruit and vegetative parts use by turning them to product variation like virgin coconut oil, coconut flour, bottled coconut water, and coconut sugar; and downstream integration with the production of oleo chemicals used in detergent and cosmetics as well as the production of copra meal as animal feed to assist the poultry and livestock sectors. Javier also made the point, though, that in order to increase their leverage and improve their position in the market, coconut farmers must turn away from issues related to production. It is imperative to build connections with food processors and integrate into the contemporary trade supply chain.

The result of this study conformed to that of Hutapea and Siallagan's, (2023). It was noted that inventory

management is crucial in the coconut farming sector since it has a direct impact on sales and revenue. Storage plays a vital role in this administration. They suggested using technology to create a real-time system that would track demand trends and automate tasks like stock rotation, refilling, and recording, all of which are currently done by hand, in order to enhance managerial performance. Additionally, they discovered that the farmers' technical and business abilities in running their coconut fields are lacking.

The study of Moreno *et al.* (2020) disagreed to the result of this study. They emphasized that farmers'

technical and entrepreneurial abilities in operating their coconut farms are lacking. They claimed that supply chains intended for coconuts in the Philippines are complex and multifaceted, extending from the location where they are produced to the nation's domestic and international markets. Due to the supply chains' restricted information flow to downstream channel players, such as traders who purchase coconut from farmers in copra form and set the price of coconut, producing high marketing costs, coconut farmers struggled to maximize production and marketing of coconut products.

**Table 1:** Level of Production Capability of Coconut Farmers in the Province of Capiz.

Variables	Total Mean	Verbal Interpretation
Supply Chain	3.69	Capable
Technology	3.32	Capable
Grand Mean	3.51	Capable

Mean Range	Verbal Interpretation
4.21 – 5.00	Very Capable
3.41 – 4.20	Capable
2.61 – 3.40	Moderately Capable
1.81 – 2.60	Slightly Capable
1.00 – 1.80	Almost not Capable at All

Source: Data from the researcher

**Level of Challenges Encountered by the Coconut Farmers as a Whole**

Coconut farmers in Capiz have faced with difficulties in producing and marketing their products. **Table 2** presents the challenges encountered by coconut farmers in the province of Capiz with 3.28 grand mean and “moderately challenging” verbal interpretation. The three components of level of challenges had means ranging from 3.20 to 3.36, all of which were verbally interpreted as “moderately challenging”. Technology advancement received the highest total mean (3.36), then market trends (3.28), and government policies (3.20) as the lowest mean of the three components. However, of the three components, they find technological advancement to be more challenging. The result can be implicated that coconut farmers of the province of Capiz faced moderate levels of difficulty in farming coconuts and selling products. This also conforms to the previously discussed result of this study on production capability, which technology also ranked the lowest. This result further

implies that the coconut farmers perceived themselves as having low production capability because they experienced difficulties, especially in accessing, using, and possessing technologies that could increase the quality of their coconut produce. The findings supported the statement released by the Department of Agriculture (DA) Press Office, under Republic Act (RA) 11524 that in order to carry out the Coconut Farmers Industry Development Plan for the following five years, the government used an initial 75-billion-peso coconut levy. Ordoñez, (2023) of the Inquirer, however, reported that the billions in cash and assets of the coco levy fund, which could potentially aid the impoverished coconut farmers, were in danger of being misused.

The result agreed to Castillo and Ani, (2019) that the country's coconut farmers had not yet reaped the full benefits of the coconut levy money, despite evidence indicating that the revenue was utilized to actively support initiatives aimed at assisting the farmers. In the same way, in their study, Gurbuz and Manaros, (2019) discovered that the coconut farmers expe-

perienced serious internal production issues, low and inconsistent prices for coconut products, a low and

vast stretch of land connecting the farm to the market route, and intercropping.

**Table 2:** Level of Challenges Encountered by Coconut Farmers in the Province of Capiz as a Whole.

Variables	Total Mean	Verbal Interpretation
Government Policies	3.20	Moderately Challenging
Market Trends	3.28	Moderately Challenging
Technological Advancements	3.36	Moderately Challenging
Grand Mean	3.28	Moderately Challenging

Mean Range	Verbal Interpretation
4.21 – 5.00	Very Challenging
3.41 – 4.20	Challenging
2.61 – 3.40	Moderately Challenging
1.81 – 2.60	Less Challenging
1.00 – 1.80	Least Challenging

Source: Data from the researcher

### Differences in the Level of Challenges Encountered by the Coconut Farmers when Grouped according to Profile

**Table 3** presents the differences in the level of challenges encountered by the coconut farmers when grouped according to their profile. The result revealed that there were significant differences in the level of challenges encountered by the coconut farmers when age, estimated monthly household income and number of years as coconut farmer were considered because the p-value of 0.000 for age, 0.000 for estimated monthly household income, and 0.011 for number of years as coconut farmer were less than 0.05 alpha. On the other hand, no significant differences were established when gender, highest educational attainment and size of coconut farm was considered because the p-value of 0.184 for gender, 0.93 for highest educational attainment and 0.283 for size of coconut farm were greater than 0.05 alpha.

The result further showed that the difference in the challenges encountered by coconut farmers in terms of age lies between 28 to 37 years old and 58 years old and above, 38 to 47 years old and 58 years and above, and lastly between 48 to 57 years old and 58 years old and above. In terms of estimated monthly household income, the difference lies between poor and middle income coconut farmers, and lower middle income and middle income coconut farmers. While looking at the difference in the level of challenges in terms of number of years as coconut farmer, the result dis-

closed that the difference lies between three years and below and four to six years, and between three years and below and seven to nine years and 3 years and below and 10 years and above. The result implies that the coconut farmers of the province of Capiz perceive their challenges encountered to be the same when they are grouped according to gender, highest educational attainment, and size of coconut farm, while they differ in their perception when grouped according to age, estimated monthly household income, and number of years as coconut farmer. The result further indicates that the age of the coconut farmers is a factor to look into when challenges encountered are considered. Since the age 58 years old and above differs from almost all of the other age groups, this can be understood that the level of challenges with older coconut farmers can be lowered because of their years of experience and wider knowledge in the coconut farming industry, they have more access to supply, farm materials, and market compared to younger or new coconut farmers, they have more funds since they have gained wealth from the industry or has more financial support system. The result of the study of Gurbuz and Manaros, (2019) disagreed with the result of this study. Their study showed that educational attainment affects the production income of coconut farmers. Additionally, age is a factor to consider when looking into the income of coconut farmers. Although not significantly associated, they found that as the age of farmer’s increases, their income decreases.

**Table 3:** Differences in the Level of Challenges Encountered by Coconut Farmers when Grouped according to Profile.

Variables	t-value/F-value	p-value	Remarks
Age	7.507	0.000	<i>s</i>
Gender	1.770	0.184	<i>ns</i>
Highest Educational Attainment	1.824	0.093	<i>ns</i>
Estimated Monthly Household Income	4.546	0.000	<i>s</i>
Number of Years as Coconut Farmer	3.749	0.011	<i>s</i>
Size of Coconut Farm	1.274	0.283	<i>ns</i>

p-value >0.05 = not significant

p-value <0.05 = significant

Source: Data from the researcher

**Differences in the Level of Production Capability of Coconut Farmers when Grouped according to Profile**

Table 4 presents the differences in the level of production capability of the coconut farmers when grouped according to their profile. The result revealed that there were significant differences in the level of production capability of the coconut farmers when age, estimated monthly household income, and number of years as coconut farmers were considered because the p-value of 0.000 for age, 0.004 for estimated monthly household income, and 0.006 for number of years as coconut farmers were less than 0.05 alpha. On the other hand, no significant differences were established when gender, highest educational attainment and size of coconut farm was considered because the p-value of 0.324 for gender, 0.416 for highest educational attainment, and 0.609 for size of coconut farm were greater than 0.05 alpha. The result also showed that the difference in the level of production capability of coconut farmers as to age lies between 28 to 37 years old and 58 years old and above, 38 to 47 years old and 58 years old and above, and between 48 to 57 years old and 58 years old and above. In terms of estimated monthly household income, the difference lies between poor and middle income coconut farmers, and lower middle income and middle income coconut farmers. While looking at the difference in the level of challenges as to number of

years as coconut farmers, result reflected that difference lies between three years and below and four to six years, and between 3 years and below and 10 years and above.

The result implies that the coconut farmers in the province of Capiz perceive their level of production capability to be the same when they are grouped according to gender, highest educational attainment, and size of coconut farm, while they differ in their perception when grouped according to age, estimated monthly household income and number of years as coconut farmer. The result also indicates that the age of the coconut farmers is a factor to look into when production capability is considered. Since the age 58 years old and above differs from almost all of the other age groups, this can be understood in two ways. One is that because of their experience, their maturity, experience, and wisdom are things that coconut farmers, government program implementers, and other partners and stakeholders recon with. Their inputs earned from their long years of farming, producing and selling coconuts and coconut products command respect and are most often a source of wisdom and advice.

**Table 4:** Differences in the Level of Production Capability of Coconut Farmers when Grouped according to Profile.

Variables	t-value/F-value	p-value	Remarks
Age	6.931	0.000	<i>s</i>
Gender	0.974	0.324	<i>ns</i>
Highest Educational Attainment	1.014	0.416	<i>ns</i>

Estimated Monthly Household Income	3.506	0.004	<i>s</i>
Number of Years as Coconut Farmer	4.256	0.006	<i>s</i>
Size of Coconut Farm	0.611	0.609	<i>ns</i>

p-value >0.05 = not significant  
 p-value <0.05 = significant  
 Source: Data from the researcher

**Relationship between Levels of Challenges Encountered and Level of Production Capability of Coconut Farmers in the Province of Capiz**

The relationship between the level of challenges encountered by coconut farmers of the province of Capiz and their level of production capability is reflected on **Table 5**. The result revealed a significant relationship, high to very high relationship between the challenges encountered by the coconut farmers and their perception of their level of production capability because the Pearson r correlation was 0.770 with a p-value of 0.000, which was less than 0.05 level of significance. Furthermore, the result also disclosed that there is a positive association between these variables. Therefore, the hypothesis stating that there is no significant relationship between the challenges encountered by the coconut farmers of the province of Capiz and their level of production capability was rejected.

The result of the study implies that the coconut farmers of the province of Capiz are experiencing difficulty in farming coconut and marketing their products and this difficulty affects their production

capability, thus, when challenges encountered are high, production capability decreases and vice versa. Furthermore, this is very true, especially when it comes to accessing quality coconut planting materials. When there is poor quality of planting materials or the needed quantity for the season is low, the production capability is also affected and yield is expected to suffer too. Likewise, when prices of copra, being the major coconut product sold in the market by coconut farmers, fluctuates, the income of coconut farmers decreases, may result to deficit and may affect the production of the next cycle/season.

Zainol *et al.* (2023) in their review of the coconut value chain in Malaysia concluded in their study that challenges such as technological, political, socio-economic, and environmental factors impact coconut productivity, requiring policies like subsidies, farm settlement schemes, free tax for farmers and research to enhance production in the coconut value chain.

**Table 5:** Relationship between the Respondents’ Level of Production Capability and Level of Challenges Encountered

Variables	N	Mean	Pearson Correlation	Degree of Relationship	p-value	Probability
Level of Production Capability	382	3.51	0.770	High to very high relationship	0.000	<i>s</i>
Level of Challenges Encountered	382	3.28				

Level of significance at 0.05  
 Source: Data from the researcher

**Insights towards Enhanced Production Options**

This study was conducted to find out the level of production capability and level of challenges encountered

by coconut farmer-marketers to gain insights on how production may be enhanced and to provide them

several options to take in enhancing their production and marketing. Thus, the following are forwarded:

The coconut farmer-marketers in Capiz had been in coconut farming and marketing industry for a long period of time. They have gained varied experience, stayed in this industry despite its ups and downs and had overcome the challenges of the environment, market, government, and industry itself had thrown their way many times. With this, it can be said that these farmers are here to stay, that they will do everything in their capability to sustain the industry that fed their families. Thus, given the opportunity to grow will be very welcome to them. It is then in this context that they need further assistance from the government in the form of training to cope with the changing demand and technology to match the development of products to answer the increasing demand for coconut water, coconut oil used for medicines and cosmetics, and coconut sugar. The trainings may include production techniques, product development, technology updating, proposal preparation, fund sourcing, accounting systems and marketing. However, data also showed that most of the coconut farmer-marketers were old and comprised the population of those with highest educational attainment. This means that younger farmers possess low level of education and experience in coconut farming. This will necessitate intervention for them to be able to use advance technology, analyze market trends, and employ various marketing strategies. Trainings mentioned above may be focused in this age group. These can be in the form of simple, yet efficient practices to enhance productivity like trimming old leaves, cleaning crowns and around the bottom of the palm, composting, and using high-yielding coconut planting materials that will enable them to produce around 100 nuts per year after only 3 to 4 years.

Moreover, market trends showed increasing demand for coconut oil and coconut water used in cosmetics and medicines, however, coconut farmer-marketers in Capiz focused only on selling copra and young coconut fruits. This traditional practice limits their capabilities to earn more. None of them produces coconut sugar, which is now gaining popularity due to its low glycemic property and is considered a healthy option for people suffering from diabetes. This product

is also found profitable both for local and international market, an opportunity not explored by coconut farmer-marketers in Capiz. To provide production options to coconut farmer-beneficiaries, there is a need for government governing bodies to enhance assistance to them by strengthening farmer organizations and channel funds to these organizations to acquire modern production equipment to produce demand driven products to capture both local and global markets. They need to be linked with marketing experts to enhance their capabilities to present their products in the global market. Marketing assistance can be in the form of branding their products, securing certifications and adherence to standards like submitting for food and drugs certification, developing the right packaging, develop a strong online presence, and developing the sense of professionalism in conducting business such as timeliness of response to communications, production, delivery and actions to complaints.

#### **CONCLUSION:**

The coconut farmer-marketers perceive themselves to possess the capability, both in supply chain and technology, to continue producing coconut products, however, this level of capability is not enough to sustain the coconut industry in the province of Capiz as well as provide their families with income to support the daily needs of their household. The gap in their capability emanates from the ageing population of coconut farmers who lacks the adeptness to the fast changing technology driven production system, the lack of technical support and access to marketing to develop in demand products and financing for the acquisition of technology, high yielding planting materials and trainings to improve their skills and knowledge.

Most of the coconut farmer-marketers are older. Moreover, the lack of technology application in both production and product development continue to cause low household income despite the long period of continued coconut farming. When government assistance to coconut farmers in terms of provision of high yielding coconut planting materials are not available and coconut farmers do not have funds to acquire this on their own, this causes them difficulty and the challenge is extended to delay in operation,



low production, resulting to income and inability to address demand or comply with contracts to both supplier and market distribution channels. When this assistance is extended on time with additional support from the government in terms of linkages and trainings, operation is healthy, production is increased, income is augmented, and capability to grab market opportunities for new products is possible, thereby increasing income and expanding operations to support global marketing.

#### ACKNOWLEDGMENT:

In the course of this research, the researcher would like to thank the Local Government Unit of Sara, Iloilo, the respondents, and the College of Management at Capiz State University-Main Campus, Roxas City, Capiz, for their essential support.

#### CONFLICTS OF INTEREST:

There is no conflicts of interest as declared by the author.

#### REFERENCES:

- 1) Bertalanffy, L. (1969). General System Theory. [https://archive.org/details/generalsystemthe0000bert\\_f7s2](https://archive.org/details/generalsystemthe0000bert_f7s2)
- 2) Castillo, M. and Ani, P.A. (2019). The Philippine Coconut Industry: Status, Policies and Strategic Directions for Development. *Food and Fertilizer Technology Center E-Journal for the Asian and Pacific Region*. <https://ap.ffc.org.tw/article/1382>
- 3) Department of Agriculture, (2021). RA 11524: A game changer that will modernize, industrialize Phl coconut sector. <https://www.da.gov.ph/ra-11524-a-gamechanger-that-will-modernize-industrialize-phl-coconut-sector/>
- 4) Grow Asia, (2022). Public and private stakeholders convene to strengthen the Philippine coconut sector.
- 5) Gurbuz, I. and Manaros, M. (2019). Impact of Coconut Production on the Environment and the Problems Faced by Coconut Producers in Lanao, Del Norte Province, Philippines. Research Gate, Scientific Paper Series Management, *Economic Engineering in Agriculture and Rural Development*, 19(3), 2019.
- 6) Hutapea, P.N. and Siallagan, M. (2023). Predictive Analysis for Inventory Management of Coconut Warehouse (Case Study: Banio Lahe-wa. *Inter J. of Current Science Research and Review*, 06(11). <https://ijcsrr.org/wp-content/uploads/2023/11/44-2911-2023.pdf>
- 7) Javier, E. (2015). Modernization of the Coconut Industry. Agricultural Sciences Division, National Academy of Science and Technology, Philippines.
- 8) Kalimuthu, M. *et al.* (2020). Crop Prediction using Machine Learning. 2020 Third International Conference on Smart Systems and Inventive Technology, Research Gate. [https://www.researchgate.net/publication/347155834\\_Crop](https://www.researchgate.net/publication/347155834_Crop)
- 9) Moreno, M.L., Kuwornu, J.K. & Szabo, S. (2020). Overview and Constraints of the Coconut Supply Chain in the Philippines. *Inter J. of Fruit Science*, 20(2), S524-S541. <https://doi.org/10.1080/15538362.2020.1746727>
- 10) Ordoñez, E. (2023). What's happening with the coco levy fund? Inquirer.net, Philippine Daily Inquirer. <https://business.inquirer.net/434454/whats-happening-with-the-coco-levy-fund>
- 11) Pinca JM, Labausa FS, and Cruda NE. (2024). Influence of digital marketing strategies on purchase intention, *Can. J. Bus. Inf. Stud.*, 6(3), 73-90. <https://doi.org/10.34104/cjbis.024.073090>
- 12) Zainol, Fakhrol, Arumugam, Nalini and Afth-anorhan, Asyraf. (2023). Coconut Value Chain Analysis: A Systematic Review. *Agriculture*, 13, 1379. <https://doi.org/10.3390/agriculture13071379>

**Citation:** Mestidio III CB. (2024). Status of coconut farmer-marketers: a review towards sustainable production options, *Can. J. Bus. Inf. Stud.*, 6(4), 147-155. <https://doi.org/10.34104/cjbis.024.01470155> 