

# Understanding Coconut Business Operations in Traditional Rural Areas in Fiji

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**Abstract:** The purpose of this paper is to evaluate coconut business operations in rural areas in Fiji. The poverty rate in rural areas is higher compared to the urban centres. The rural area of Fiji is often confounded by inadequate services and limited opportunities to improve livelihoods. The rural economy is primarily dependent on natural resources. From a national perspective, agriculture is considered the backbone of the economy, which implies the significant role that the sector plays in national development. Agriculture is quite diversified and is mainly based on subsistence in nature in Fiji. Coconut, for instance, is a crop that is cultivated alongside other crops and even in livestock grazing areas. Senile palms on copra estates also exist and have been planted through a monocropping system. Coconut, known as the tree of abundance, has the capacity to provide downstream high-value commodities. Although the crop cannot solely satisfy household expenditure in rural areas, it provides a safety net for households. The study seeks to understand the coconut business model(s) adopted by four communities in the rural areas of Fiji. Using these locations, it was established that there are various factors that influence the operation of coconut businesses. From this, a holistic approach is recommended to minimise the gaps that inhibit the efficient coconut industry.

**Keywords:** coconut, agribusiness, rural areas, agriculture, Fiji

## INTRODUCTION

The Republic of Fiji is an island group in Oceania with a population of 0.9 million people, 36.5% of whom live in poverty in rural areas (The World Bank, 2022). The nation's economy is mainly fueled by the tourism sector and remittances among other sectors (The Heritage Foundation, 2023). Although the tourism sector had recovered exceptionally after the pandemic, the natural resource sectors have been slow to recover (Reserve Bank of Fiji, 2023). Among the demographics of poverty, 36.5% in the rural area compared to 14% in the urban area; the Eastern Division recorded the highest poverty rate of 39.2% and was followed by the Northern Division of 29%, Western with 26.2% and Central with 18.8% (The World Bank, 2022). Rural areas are often challenged with inadequate infrastructure and essential services along with limited economic opportunities. Therefore, the rural economy of Fiji is highly dependent on natural resources, particularly agriculture.

Agriculture has the greatest potential to improve rural livelihoods compared to other sectors (The World Bank, 2023). The sector comprises various commodities in crops and livestock; is mainly subsistence in nature; dominated by smallholders with farm area less than 1 Ha (Singh-Peterson and Iranacolaivalu, 2018). Farm land in Fiji is estimated to be 194,768.6 Ha – 54.1% under traditional ownership, 23.7% native lease, 13.9% freehold and 6% state lease (Ministry of Agriculture, 2021a). Agriculture remains the most promising sector for the future of economic recovery regardless of slow progress.

Value chain analyses are appropriate approaches to evaluate the business models of coconut agribusiness in rural areas (Zainol et al., 2023). Value chain actors include farming units, processors agents, distributors, and other organisations that provide additional – sometimes peripheral - support (Abdulsamad, 2016). Furthermore, the value chain (and the business model, in general) is governed by formal and informal institutions, as pointed out by Lin (2020), Wara (2020) and Mwachofi (2016). Formal institutions leaned more toward the structure political, economic, and social interactions' of a society; informal institutions, on the other hand, are unwritten values and norms that a community conforms to (LibreTexts Social Sciences, 2024). The types of institutions governing a community are crucial because

they influence decision making regarding norms and values, livelihood, gender participation, resource allocation (Duncan et al., 2020, Curry et al., 2021, Bryceson and Ross, 2020, Doss and Quisumbing, 2019). Understanding the business model for agricultural commodities requires a holistic approach that acknowledges the interconnectedness of institutional systems that influence and are influenced by business operations (Sathana, 2017).

Coconut (*Cocos nucifera* L.) is an agricultural commodity that has contributed to income and food security, particularly in rural areas of the island group. The crop grows in abundance in Fiji - it comprises approximately 3,500 ha of land area (68% of total permanent crop land area); 90% of coconuts grow in farm area within 0.5Ha and 4 ha of land (Ministry of Agriculture, 2021a, Lin, 2021). The crop has provided for 4, 178 households (6% of total agriculture households in Fiji) (Ministry of Agriculture, 2021a). The harvest volume was 35,000 metric tons in 2020, a value of 42 million FJD; Coconut export was valued at 14.8 million FJD (Ministry of Agriculture, 2021a, Cava, 2022). Coconuts are a crop with many uses and can improve livelihood.

The Pacific Coconut Industry Chain Map, Figure 1 provides a summary of the flow of coconuts throughout the value chain. Emphasis is based on the processes for the various downstream products for which there are potential markets. Figure 1 illustrates the range of income-generating opportunities that exist in the coconut industry. Copra continues to dominate the coconut industry with virgin coconut oil (VCO) showing potential to supply a niche market at price premiums. However, obtaining a price premium requires a strong branding image supported by relevant certifications (PHAMA Plus, 2019). Support programmes have been established to revive Fiji's coconut industry over the years (Ministry of Agriculture & Waterways, 2024, Pacific Community, 2024). This study contributes to the existing literature on rural entrepreneurship, particularly in traditional communities around Fiji. The purpose of this work is to further investigate the factors that can improve coconut business activities.

The agribusiness model is dynamic in nature. There are various factors that influence the operation: increasing the risks and uncertainty of operating the agribusiness. The coconut value chains are influenced by additional natural environments, such as domestic and international demands, and supply and high costs of production (McGregor and Sheehy, 2017, Lin, 2021, Naik et al., 2015, Castillo and Ani, 2019). Natural phenomena such as unpredictable rainfall, increased pest severity, and frequent tropical cyclones adversely affect nut production and consequently decrease supply along the value chain (Zainol et al., 2023). The growing concern for global warming and climate change exacerbates the current problem (Bourdeix and Sourisseau, 2021). Further, price volatility due to global supply from other countries and price competition from substitutes have a direct effect on the local market (McGregor and Sheehy, 2017, Moreno et al., 2020).

The coconut agribusiness model is influenced by market access, geographical location, infrastructure and support services, and resource endowment, which determine the success or failure of business operation particularly in rural areas engaged in coconut (Lin, 2021, Kumar and Agrawal, 2023, McGregor and Sheehy, 2017, PHAMA Plus, 2019). Additionally, success of the value chain, and the business model in general, lies in establishing relationships based on trust, shared vision, culture and principles amongst the actors or stakeholders (McIntyre et al., 2019). Attempts to revitalise the Fiji coconut industry have been hampered by lack of coordination at all levels of the industry, inadequate support services, and lack of long-term policies that promote coconut-based farming systems (Bula, 2008). Thus, there are internal and external factors that influence coconut marketing and consequently contribute to a complex value chain.

The goals and nature of business in traditional rural communities of iTaukei differ from those of urban areas. Resource ownership is communal, based mainly on mataqali [clan] ownership (Sakai, 2023). Also, costs of production is shared among the wider community (Steven and Vunibola, 2021). Consequently, benefits from rural business operations are shared among the community rather than by the sole entrepreneur (Vunibola et al., 2022). The key institutions governing rural communities in Fiji are better understood through the concept of a three-legged stool by the late statesman Ratu Sir Lala Sukuna. The

stool comprises the government [matanitu], the church [lotu] and the land [vanua]. Land in this context refers to traditions and customs based on beliefs passed down generations. However, there remains a challenge in acknowledging the presence and influence of institutions in community-based activities (Magiri et al., 2022, Kumar and Agrawal, 2023, Nenci et al., 2023, Tolinggi et al., 2023).

A systems approach would be required in a transformative innovation for any business – targeting technological progress and social and organisational transformation (Wulandari and Alouw, 2021, Mont et al., 2019, Kairupan et al., 2023). Social and organisational transformation can take the form of rural entrepreneurship, focusing on business conducted in rural areas. An important aspect that can contribute to both social and organisational transformation is human capital. Knowledge, which comprises the three dimensions of merit, motivation, and creativity, contributes to institutions. Institutions, consequently, influence the governance and operation of the business (Akbar et al., 2024).

Coconut agribusiness, in particular, would require the adoption of effective and efficient processing techniques from the entire palm rather than the kernel alone (Grass Ramirez et al., 2023). Furthermore, training and capacity building are highly encouraged for villagers to use resources more fully and consequently maximise financial returns, thereby enhancing rewards for effort from ventures (Ninh, 2021, Hinton et al., 2020, Wulandari and Alouw, 2021, Dantin, 2023).

## **METHODOLOGY**

The methodology follows Saunder's research approach in understanding and determining methods (Melnikovas, 2018). The business model operates in a dynamic environment and thus requires a holistic approach to examine the factors that influence the operation. The underlying philosophy in the study is pragmatic, accepting that the business model is influenced by existing theories, yet exposed to innovation and new ideas (De Waal, 2021). The studies used triangulation of case studies that included household interviews, value chain analyses, and participant observation methods (Turner et al., 2017).

Case studies were conducted in four rural communities actively involved in coconut business. The communities were determined by purpose sampling based on the following criteria: (1.) Coconut to be one of the top five agriculture enterprises; (2.) Each community located on one of the main islands or maritime zones of Fiji; (3.) Each community had to be actively involved in the coconut business. Thus, the sample included four rural communities that were actively involved in the coconut business. The village of Saqani is located along Natewa Bay in the second main island of Fiji, Vanua Levu. The village of Navuni'ivi is located on the other side of the Navitilevu Bay, the second largest bay in the country located on the main island, Viti Levu. Cicia Island is in the South-East Island group, Lau. Rabi Island, on the other hand, is located in the north east of Fiji, part of the Northern Division.

Data were collected through 10 talanoa sessions in each of the sites (a total of 40 semiformal focus group discussions that included representatives of the women's group, household members, and headmen), five semi-structured interviews with middlemen identified from rural household discussions (an average of two weeks was spent at each of the four sites). The findings are presented using thematic analysis and each case study is analysed using standard components of value chain analyses. Data have been presented using a thematic approach. Furthermore, the findings are tabulated using key attributes extracted from the literature on how to examine business models by Puie (2019) and the value chain analysis toolkit by Smith et al. (2020).

## **RESULTS (Case Studies)**

### **SAQANI**

#### **STUDY SITE DESCRIPTION**

The village of Saqani is located on the western side of Natewa Bay in Vanua Levu. It is one of the 57 localities in the Saqani district in the Cakaudrove province, comprising approximately 381 agricultural households with an average of 5 members per household (Ministry of Agriculture, 2021b). Residents of

this area depend on kava, taro, and marine resources for their livelihood. The fertile land supports various cropping systems, and the village is powered by a generator, the water is sourced from rainwater collection tanks. However, telecommunications and internet access are often disrupted due to poor coverage of the mobile network. While Savusavu town serves as the primary center, Labasa town is also accessible by bus, although road conditions can be unfavorable.

### **CURRENT VALUE CHAIN AND CHALLENGES**

The village typically supplies fresh kernels to the mill in Savusavu. A truck regularly collects mature nuts piled along the road; each nut priced according to size. Some households also sell copra in its wet or dry form. Occasionally, middlemen purchase coconuts or copra from households and then sell them to the mill. The women's group made an effort to produce virgin coconut oil, but tests conducted in Suva indicated that there is still room for improvement in the quality of the oil.

### **NAVUNI'IVI**

#### **STUDY SITE DESCRIPTION**

The village is located on the eastern side of Navitilevu Bay in Viti Levu. The village is part of the 102 households (with an average of three members per household) in the district of Navitilevu, Ra (Ministry of Agriculture, 2021b). Sources of income include the sale of whole mature nuts, brooms, and seasonal fruit crops such as lime. Electricity is supplied from main power lines and is maintained by cash power. The nearest main centre is Rakiraki, north-west of Navuni'ivi. A fibreglass boat can be hired for 80 FJD or 10 FJD per head to cross the bay to the other side, where other modes of transport are required to travel to Rakiraki. There is stable internet access and telecommunications.

### **CURRENT VALUE CHAIN AND CHALLENGES**

The village supplies mature nuts mainly to the municipal market in Rakiraki. Other coconut products include brooms, crude oil, VCO, and baskets. While brooms are likely intended for sale, oil and baskets are mainly for home consumption. The value chain is mainly characterised by the direct sale of mature fresh nuts to the domestic market. There is also the possibility of selling coconuts to middlemen, who then resell in Rakiraki. The middlemen in this case bear the cost of transportation once the coconuts are transported across the bay.

The geographical location of Navuni'ivi is a hindering factor in business operation. The high costs of transportation can discourage households from 1.) supplying nuts on a consistent basis; 2.) Tapping into other coconut enterprises that add more value but incur additional capital investment. The normal route of transportation includes crossing the bay via fibreglass boat and either boarding public bus along the Kings Highway, hiring carrier truck or hitching. Another alternative mode of transportation is to board a truck from Navuni'ivi, which only runs on certain days of the week. The route of the truck is often inaccessible and the seats limited, with villagers competing for a spot in the early hours of the morning. In addition, coconut activities are done primarily by individual households rather than as a community. The individualistic nature of the coconut business would also mean that households have relatively higher production costs and lower profitability compared to sharing activities and costs with the community.

### **CICIA**

#### **STUDY SITE DESCRIPTION**

The island makes up a district in the Lau group comprising five coastal villages. The island consists of approximately 181 households, an average of four members per household (Ministry of Agriculture, 2021b). Sources of income include coconut, handicraft in the form of mats, and, in rare cases, yams. The island depends mainly on agriculture and marine resources for its survival. The island relies on



generators in the village and natural reservoirs for electricity and water supply. The Internet and telecommunications were only available on certain spots on the island.

### **CURRENT VALUE CHAINS AND CHALLENGES**

Coconut activity in Cicia is mainly focused on copra production, VCO, crude oil, baskets, and brooms. Coconut business is mainly operated by the community, either clan or village, except Selavo (a sole-trading business). Middlemen play an important role in connecting producers with the market. Although the business in each village is primarily managed by the women's associations, the community members gather on a specific day in the week to assist with the labour-intensive tasks of VCO production. Successive stages beyond milk extraction are mainly handled by women; this includes sun drying the oil for a minimum of two weeks to obtain the preferred quality, packaging, and delivery to the next point of sale. Relatives residing on one of the main islands, Viti Levu would either sell products on behalf of the producers in the island or take ownership of the products and sell for their own.

In a society characterised by collectivism, it is understandable that members will conduct themselves in a manner that is deemed appropriate by the entire community. A violation of the norms and beliefs would result in one being ostracised. Individuals in the study sites are identified with their village and to be disowned by the very core of their identity would be unbearable to a certain extent. The village community is involved in all the phases of value addition, production, and marketing of VCO. However, there remains a need to comply with the production standards to maintain quality oil. There was a case in one of the villages where the oil sent to an export market was completely stopped because of poor quality oil. That one mistake cost the women a potential market for their oil. The struggle remained to secure more market share compared to other producers.

### **RABI**

#### **STUDY SITE DESCRIPTION**

Rabi is home to the Banabans, who originally hail from Kiribati. The island, which consists of four villages, is also a recognised district of the Cakaudrove Province. Households depend on agriculture and marine resources for food and income security. The villages are located on the western side of the island, whereas the eastern side, although not suitable for human habitation, is used for farming. Water is sourced from a natural reservoir and electricity is supplied through the village generator. The most common mode of transportation on land is three-ton trucks that run in between villages daily. The western side is accessible by fiberglass boat or hiking up the hills that separate the west from the east side.

### **CURRENT VALUE CHAIN AND CHALLENGES**

The main coconut business, Banaban VCO, is located in the village of Tabwewa. The business is managed by the former head of the women's association and supported by six full-time workers and two casual workers. The factory normally buys mature nuts every Friday. In addition to this, coconut sap or sugar is produced on the island and supplied to interested buyers such as Marama Niu, where it is subsequently used in downstream production. The factory runs on a generator, and the VCO is mainly sun-dried for a minimum of two weeks or until the oil passes the sensory tests: clear, fragrant scent and nutty taste. The downstream production and diversified packaging of VCO products give the island a competitive edge in the domestic VCO market. The products also tell a story of resilience and perseverance – a boost in the marketing of the products. The oil is sold under the Banaban VCO brand in retail outlets on the two main islands. The social media platform, Facebook, is also another tool used to connect with customers. However, there remains the risk of inconsistent supply of coconut products. Clear communication and trusted relationships built over time between the producer and customer support the efficient flow of resources along the value chain. Rabi VCO is prized for its favourable attributes – however, sun-drying for a minimum of two weeks is a major determining factor for quality oil. There have been times when

supply does not occur due to the oil not being ready. Bad weather, lack of transport, and lack of raw material supply are some causes for the inconsistent supply. Furthermore, the Rabi Council of Leaders had provided support to the factory by assisting with start-up operating costs.

## DISCUSSION

The broader value chain map illustrated in Figure 3 divides the actors and the influencing parties of the value chain into three sections, according to the role of each actor in the value chain. The core, denoted by the orange colour, comprises the main actors, including farmers providing raw materials, processors that convert raw materials into final products, and distribution channels that connect processors to end customers. Middlemen play a pivotal role in connecting producers with end-customers. Merchant intermediaries take ownership of coconut products and typically sell them under their brand. Agent middlemen normally do not take ownership of the coconut products, but simply find buyers, either intermediate ones or end customers, on behalf of producers. The middle portion of the map, denoted by blue dashed lines, comprises supporting actors who assist in bringing the coconut product through the value chain. This group of actors facilitates the communication, transportation, financing, marketing, and dissemination of research and development in the coconut business. The outer section, colour-coded with green dashed lines, represents the different institutions that govern the entire value chain. The core institutions identified in the case studies included government, nongovernmental organisations, the “vanua” (culture, tradition, and norms) and religion. More explanation is presented in Table 1.

The coconut has the potential for downstream production. However, the case studies indicate the importance of meeting standards and securing markets for sustainable coconut operations. The downstream production of VCO, for example, emphasises following proper procedures such as overnight fermentation and 12 full-sunshine days for drying. The end result is a clear oil without rancid taste. The absence of this main attribute resulted in the loss of market for a women’s association in one of the study sites. Furthermore, a centralised processing point, such as the Rabi factory and the Savusavu mill, minimises the risks of producing inferior quality products and the relatively high costs associated with complying with standards, such as the Codex Alimentarius. It is more convenient for the villagers to sell whole kernels and copra to the respective outlets in the market than to participate in downstream production, the latter incurring relatively high production and marketing costs. From the case studies, it is advisable to get a centralised processing unit; this will centralise risks and costs and bring together relevant expertise to properly manage the two factors.

The downstream coconut production is capital-intensive and labour-intensive in nature. Firstly, acquiring capital would attract maintenance and fuel costs to operate. However, there is an exception for the manually operated compressor that extracts milk from freshly grated coconuts. Support services such as adequate water supply and electricity are essential in coconut business operation, especially for semi- and processed products. In other instances, the preparation of nuts (collection, harvesting, cutting, and delivery between plantation and market) can be labour intensive in nature. The lack of capital to support or substitute these activities makes it more challenging, hence the crucial role of social capital. The concept of solesolevaki, whereby members of the wider community contribute to coconut production, becomes central like a business operation (pooling labour required to carry out tasks).

Social capital, collectivism, solesolevaki – the ideology surrounding communal living and resource sharing is one strength that can be harnessed for the betterment of coconut enterprises in village settings. This was noted in the Cicia village activities: although the VCO business was managed by the women’s group, the rest of the community would dedicate a certain number of days in their calendar to collect and prepare coconuts for further processing. Rabi, on the other hand, portrayed a slightly different perspective. The idea of collectivism is reflected in the members of the community who supply whole coconuts to the factory on a given day of the week for a price per nut. The successive stages of production from here onwards are carried out by the workers in the factory.

The main determining factors on the nature and structure of business models are the motives of the actors in the value chain behind their participation, cultural norms and beliefs, quality of products, nature of coconut products, timely and consistent supply of products and the story behind the products. The motivations of each value chain actor within the various study sites are primarily profit oriented. Each actor wishes to operate in a manner in which they are receiving some returns from their contribution to the agribusiness. While the profit for sole-trading businesses, individual household activities, and support services from middlemen and transport providers maybe centred on self-gain, the profit gained from group-based activities seeks to benefit the entire community. Motives are influenced by the governing institutions in the various villages. For example, culture shapes one's perceptions and principles (Teariki and Leau, 2023).

The dynamic nature of coconut agribusiness makes it difficult to identify optimum solutions or innovations for the industry in Fiji. The enabling environment comprises institutions, resources and services that assist in business operations. The vanua, lotu and matanitu determine norms and principles in society, especially in a traditional setting. Further, support from external factors such as nongovernmental organisations and civil societies, academic institutions, financial institutions, and infrastructure providers would boost production in rural areas. Transformative innovation through technological progress and social and organisational transformation would prove effective through the collaboration of the main actors in the value chain with the institution and external parties such as that highlighted by Wulandari and Alouw (2021) in Figure 2. Similar sentiments were presented by Sagena (2020) and Lin (2020) and in the development of agriculture development in the South Pacific by Magiri et al. (2022).

## CONCLUSION

The business models identified in the case studies are influenced by various factors such as geographical location, accessibility to markets and the institutions that govern individual households and the community. Innovation in coconut agribusiness cannot be dealt with separately due to the dynamic nature of the operation and the diversity of the value chain. A systems approach was required to understand the issues in coconut agribusiness. An enabling environment for successful coconut agribusiness in rural areas requires a transformation in social and organizational aspects of operation as well as technological progress reflected in higher productivity.

In this paper, the following points were learnt:

- The role of the institution is as important as the roles of the supporting actors and the main actors in the value chain. Institutions such as government, religion, tradition and custom influence decision-making in these areas and thus, need to be reflected in the value chain map.
- Inadequate infrastructure and other support services continue to be a challenge for rural areas and these issues are directly related to the geographical location of the communities. The high costs of transportation and inadequate communication put rural communities at a disadvantage in the chain. Communication breakdown results in information asymmetry in the value chain, and some actors are using this to their advantage. For example, middlemen on the mainland are more familiar with the market prices and consumer behaviour as compared to the villagers producing the oil. The villagers, determined to sell their products, will do so at whatever price the middlemen give.
- There is still a need for more capital in rural coconut production. Capital in this sense refers to better machinery and financial support for operation and marketing. Replacement of labour with capital can boost worker productivity – minimising the efforts and hours required to produce coconut products. Although assistance is available in this regard, the cost of repayment may be a big hurdle in the viability of the business if other factors such as infrastructure, market access and transportation are not addressed. Further, processes in production must adhere to standards such as the Codex Alimentarius.

- It is important for rural households engaged in coconut agribusiness to take ownership of the business operation. Human capital plays a pivotal role in institutional sustainability and consequently in business viability. Through capacity-building approaches, the villages are better equipped and empowered to manage businesses.
- Inclusion of culture as an influential institution in value chain governance. The concept of a three-legged stool is present in the Fijian society and should be recognised in agribusiness.

When studying the business model in rural areas of Fiji, it is evident that tradition and custom greatly influence one's behaviour. Integrating the concept of solesolevaki into coconut agribusiness would involve breaking down activities involved in coconut production (nut collection, processing and delivery) into various days of the week and according to various groups.

The proposed schedule would better suit permanent residents in rural communities and can be a viable source of income through proper management.

**ACKNOWLEDGEMENT**

This work was supported by the Australian Centre for International Agricultural Research through the Pacific Agriculture Scholarships, Support & Climate Resilience Programme. Special acknowledgement to the four communities visited – for their hospitality and willingness to share their knowledge and experiences. Additionally, to Dr Ramona Sulifo – for her invaluable guidance in this research.

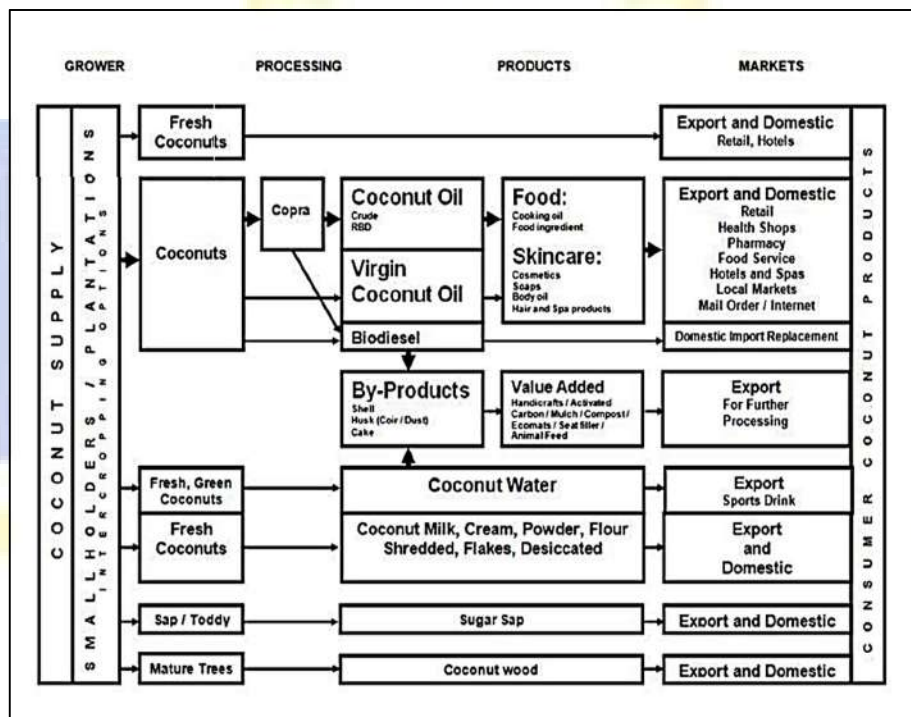
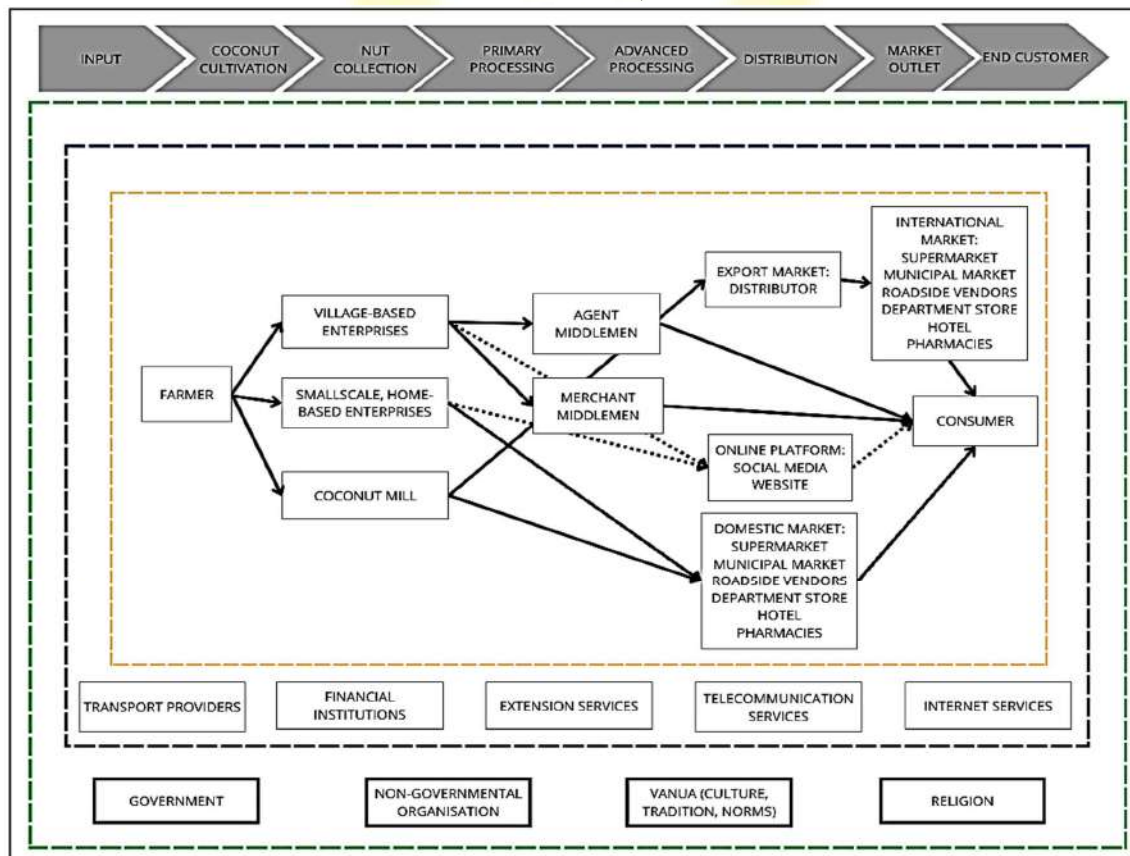


Figure 1: Map of the Pacific Coconut Industry Chain (Source: PHAMA Plus, 2019)



Aspect	Institution				
	SME	Local Government	Research Institute	Coconut Association	Financial Institution
Capacity Building	Human resources training	Agricultural extension and assistance	Community agriculture school	Provision of production and marketing data and information	
Technology Transfer	Total Quality Management implementation	Demonstration plot and agro-processing unit pilot development	Rural-based technology development	Best practice benchmarking	
Market Access		Product certification		Organizing business meetings	
Financial Support	Credit collateral	Incentives for financial institutions			Business Credit

**Figure 2:** Innovation system model for integrated coconut industry development (Wulandari and Alouw, 2021)



**Figure 3:** Value chain map of coconut agribusiness

Stage of processing in the value chain	Main Actor	Supporting Actor	Details
Input supply	Coconut households	Extension officers	The Ministry of Agriculture provides planting materials through extension officers stationed in the areas. In addition, rural households replant coconuts from existing palms.
Coconut cultivation Nut collection	Farmer or farming households	Transport providers	The primary role is to collect coconuts from standing palms and prepare for the next actor. For coconuts supplied as whole nuts, not much is being done but copra and oil production normally requires dehusking, grating and for oil especially, milk extraction for further processing.
	Coconut Mill	Transport providers	Buy whole nuts or copra either in wet or dry form from agriculture households. The mill in this case takes on the task of extracting coconut milk through dehusking, grating and smoking (in the case of copra).
Primary processing	Village-based enterprises	Financial institutions Middlemen	Normally, village-based companies are involved in the primary processing of coconut, which includes oil production and, to some extent, downstream products such as soaps and lotions. The middlemen assist in finding buyers for the products either by selling on behalf of producers or buying from producers and selling under individual brand name.
	Small-scale enterprises (individually owned)	Financial institutions	Similar to village-based enterprises, small-scale entrepreneurs are mainly involved in coconut oil production either as crude oil or VCO. Most of the time, the middleman is an agent for the entrepreneur – linking buyers to producers. Financial institutions offer grants and loans to assist in operation.
	Coconut Mill	Transport providers	The mill extracts the coconut flesh from the kernel and then the oil for further processing. The oil is then incorporated into other downstream products to be sold in supermarkets or sold at wholesale for further downstream production.
Advanced processing	Small- and medium-scale enterprises	Financial institutions	This phase normally requires downstream production from crude oil, VCO and copra. Downstream products include skincare and hair care products, food products and fibre.
Distribution	Mill Small- and medium-scale enterprises	Internet provider Middlemen	This is mainly for export markets, whereby producers can take advantage of on-line platforms to sell the products or allow other firms to sell under their own brand name.
Market outlet	Retail outlets Hotel boutiques Municipal Market Roadside markets	Middlemen	The role of the middlemen is to link producers to markets. The market for coconut products varies between coconut commodities and between communities. The wide range of coconut market outlets captures a wider range of consumers.

End customer	Consumers	Retail outlets Municipal markets	The customers' willingness to buy is determined by various factors, including quality production, the name behind the brand, and the benefits of consuming the coconut product.
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