

LIVELIHOOD CHANGE IN A PHILIPPINE COCONUT FARMING VILLAGE: A CASE STUDY IN LAGUNA PROVINCE

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ABSTRACT This is a study on livelihood transformation in a rural village in the Philippines. It documents the economy of the village during the period of the late 1960s to the 1990s. While the coconut industry has been a major source of livelihood in this village, the village people still sought other economic opportunities. From the 1960s, they worked as seasonal workers in lowland farms, planted vegetables in the mountains, and raised hogs.

This research shows that livelihood transformation in this village was facilitated by a combination of several factors: desire of the people to continuously improve their economic situation, opportunities offered by improved infrastructure such as roads, existence of markets for their products (vegetables, hogs), and the favorable land conditions within and in the surrounding areas of the village. The livelihood of this village is not solely dependent on an export-oriented coconut industry, but rather on the wise use of the land and the economic opportunities offered by the domestic market.

Key Words: Coconut industry; Vegetable farming; Upland; Economic transformation.

INTRODUCTION

Coconut farming is a dominant economic activity in rural Philippines. It is one of the country's major economic bases. This paper presents how the economy of a village has been changing from the late 1960s to the 1990s. It shows how people in the village were able to use other economic opportunities to augment their income from coconut farming. This village (S village) is located in the town of Nagcarlan, province of Laguna. It is about 120 kilometers from Metro Manila, the capital of the Philippines. The Philippines has a mainly agriculture-based economy. Its coconut industry developed greatly during the American colonial period with the exportation of coconut products to the lucrative American market. Coconut farming is mainly done by small landholders, and few coconut plantations exist.

The domestic market for coconut products developed generally during the 1970s along with two other major agricultural crops - rice and corn. Southern Tagalog leads in the production of coconut products and has become the Philippines' coconut industrial production center.

The coconut industry is a major industry of the Philippines at present. It is an important export industry as explained by the following statistics:

1. One-third of the country's arable agricultural land (about 3.31 million hectares) is planted with coconut covering 64 out of a total of 78 provinces.
2. The Philippine coconut industry supplies 65% of the traded coconut products

- in the world market, and 64% of global coconut oil requirement.⁽¹⁾
3. It earns an average of US\$ 800 million per year from the export trade and contributes about 5% of the country's total annual merchandise export receipts.
 4. About 24 million Filipinos or one-third of the Philippine population directly or indirectly benefit from the coconut industry. A million and half Filipinos are coconut farmers or farm workers.⁽²⁾

GENERAL VIEW OF S VILLAGE

Laguna province is a southern neighbor of Metro Manila. It has 175,973 hectares and a population of 1,965,872 as of 2000. Its economy is mainly agriculture-based though towns nearer to Metro Manila are changing to an industrial economy. It is part of the so-called Southern Tagalog region.⁽³⁾

Hilly and mountainous areas constitute 82.7% of the total land area of Laguna province (Provincial Planning and Development Office, 1998). These areas are commonly referred to as "itaas" (upland) by the local people.

Lowland and upland areas in Laguna province have different climates. The lowland area has clear, dry and rainy seasons, while the upland area is rainy all year round. Geographic and climatic characteristics influence the economic activities in the province. Lowland areas in the province are devoted to rice farming and sugarcane cultivation.

During the last two decades, industrial and residential/commercial estates were established in some of the former rice and sugarcane fields in the lowland towns nearer to Metro Manila. Upland areas, on the other hand, are mainly for coconut farming. The province has 86,062 hectares of agricultural land or 48.7% of the total land area. Coconut farms cover 62,956 hectares or 73% of the total agricultural land. They constitute the main industry of the province (Provincial Planning and Development Office, 1998: 10).

Nagcarlan is in the southeastern part of the province. It has lowland areas bordering towns along Laguna lake, the biggest lake in the Philippines, and hilly and mountainous areas in the southern, western and eastern parts.

S village is 320 m above sea level in the southern part of Nagcarlan, facing the slope of Mount Banahaw (2,117 m above sea level). It has a total area of 40 hectares, and a population of 559 people in 142 households in 2000.

HISTORICAL BACKGROUND OF LIVELIHOOD TRANSFORMATION IN S VILLAGE

Coconut cultivation is the most important livelihood in Laguna historically speaking. Laguna has been a major producer of coconut liquor (*lambanog*). It was the *lambanog* production center in the middle of the nineteenth century (Mallat, 1983: 265-266). It later developed into a coconut industrial center in

the Southern Tagalog Region during the American colonial period.

When S village was formally recognized as a village administrative unit in 1903, coconut farming was already in place in the form of coconut oil and *lambanog* production. There was no rice farming. Copra production became the main livelihood activity in S village during the early American colonial period.

In 1909, when free trade between the United States and the Philippines began, S village started to produce copra. Exportation of copra and other coconut products was the main industry of Laguna by 1930. By this time, copra production had become the major livelihood in S village. Since copra was used to produce coconut oil for export to the world market, the economic condition in S village was affected by fluctuations in the price of coconut oil on the world market.

In 1929, the Great Depression in the US hit the Philippine coconut industry hard. The price of copra fell sharply in the early 1930s in Laguna. Villagers survived the economic crisis by producing coconut oil and *lambanog* instead of copra. In addition, they cultivated root crops and rice in the mountains. During the Japanese occupation period (1941-1945), copra production stopped. Villagers produced coconut oil and *lambanog* and bartered them for rice in the lowland. Owning land is a great advantage to the villagers because they can shift from farming coconut to other agricultural crops, adapting to change in the economic situation in the areas surrounding the village.

Livelihood change in S village was influenced also by the development of rice fields in the rice-producing district in lowland Laguna toward the end of the 1950s. Rice production increased with two rice crops a year, made possible by the irrigation system. This caused a labor shortage in the rice-producing district. Planting and harvesting rice were usually done by day laborers from other areas.

With the decline of the price of copra in the 1950s, which caused less copra production and less income in S village, the labor shortage in the rice producing lowland areas provided an alternative source of livelihood. The villagers became migrant workers in these rice producing districts. They also cultivated tomatoes in the mountains. As a result, their livelihood activities expanded from upland to lowland, and they marketed both their labor and agricultural products in the lowland.

LIVELIHOOD OF S VILLAGE IN THE 1970s

I. Decline of Coconut Farming Activities

During the decade of the 1970s, S village stopped producing copra. They sold matured coconuts to traders instead. Copra production was done by those with sufficient capital to buy coconuts. This change in S village's coconut industry occurred when the government set up a national system of collect-

ing, processing and exporting coconut products. It resulted in a coconut trade monopoly. Under this system, copra and coconut oil obtained a higher price in the export market. But the profit from the increased price of coconut products did not go to the coconut farmers. The traders benefited from the system. They controlled the buying price of fresh coconuts. The villagers wanted to sell their coconuts to other traders who would pay a higher price but could not do so. The current middle persons were their friends, or relatives or people they had been dealing with for a long time. Also, traders provided them with loans whenever they needed money to pay for debts, medical care, funerals, or marriages. The relationships that developed went beyond commercial transactions, making it difficult to cut ties with the traders (Sevidal, 1975).

At the same time, the national government launched a program to increase rice production under its Masagana 99 program.⁽⁴⁾ This is part of the Philippines' "green revolution".⁽⁵⁾ Financial and technical support programs were established for the rice farmers along with infrastructural development in the form of irrigation systems and farm-to-market roads. This program benefited the lowland areas of Laguna where rice fields abound, and left behind the upland areas where coconut farms dominate. Coconut farmers did not get the same support from the government as those given to rice farmers.

The low profit in coconut farming, caused by the new national trading system of copra, turned some of the villagers to a more profitable vegetable farming.

II. Cultivation and Sale of Vegetables

In 1969, jeepneys⁽⁶⁾ began servicing S village to go to the town. These vehicles began to replace horses to bring goods to the town. They provided faster and easier transportation of goods and people to the markets in Nagcarlan and other towns in Laguna and neighboring provinces. Villagers can directly rent jeepneys to bring their vegetables to the markets.

Due to better access to the lowland, some villagers in the middle of 1970s rented farmland in the lowland town of Pila (Laguna) to cultivate vegetables. They stayed there during weekdays and went back to the village on weekends. They rented jeepneys and sold vegetables in the neighboring province. They were farming in the lowland until 1983, when lowland landowners started farming themselves. The villagers expanded their vegetable farming beyond Laguna during the same period. They bought lands in the towns along the Sierra Madre mountain range in Quezon province. They sold the vegetables in the markets in Laguna.

When the Manila South Super Highway was extended from Metro Manila to Calamba town in Laguna in 1978, access to Metro Manila became easier. The transportation of vegetables to Metro Manila began. This new market for agricultural products of S village did not extend to coconuts.

A product that could have been sold in Metro Manila by the villagers is *buko* (young coconut). It is sold as fresh drink. Metro Manila *buko* supply

mainly comes from Batangas and Quezon provinces. The villagers in S village, however, did not want to engage in the business of selling *buko* to the markets in Metro Manila despite easier transportation. They could not afford to take the risk of bringing *buko* on a consignment basis. Buyers in Metro Manila do not pay upon delivery of *buko*. Instead, the payment is made only after the *buko* had been sold to consumers. And the payment is made only for the actual number of *buko* sold. Since the villagers are small landholders, they could not afford to sell their coconuts in an uncertain and very competitive market.

NEW LIVELIHOOD IN THE 1980-1990 PERIOD

The 1980s saw a change of livelihood in S village. A new generation took responsibility for the livelihood of their families. The road in S village was cemented resulting in increased use of jeepneys for transportation. A new economic opportunity encouraged the young villagers to undertake new economic activities.

I. Hog-raising

Hog-raising started in S village in the 1980s. The villagers raised hogs in their backyards. In 1969, the government introduced a program for breeding pigs in S village. But the project did not succeed. In the 1980s however, a renewed interest in hog-raising arose.

A multi-purpose cooperative in S village called Masilayan Cooperative re-introduced hog-raising. The Cooperative encouraged the villagers to raise hogs with feed that it could supply. It also offered to buy the hogs afterward. Also, a hog-feed company provided free seminars on hog-raising to the villagers, giving out free feed and hog-raising manuals. The villagers who had the capital bought female hogs and bred them. They also raised the piglets for four months. Those who did not have the capital contracted their services to raise hogs for four months. The hogs were then sold to either the Cooperative or middle persons. Breeding pigs is a very profitable but risky business. Mother pigs can be susceptible to diseases.

At present, 63 households out of a total of 142 households engage in hog-raising. They are not into full-time hog-raising work however. They are engaged in several other economic activities at the same time.

II. Anthurium Farming

Anthurium (*Anthurium Andreanum* Lind.) was first planted as an ornamental plant in the gardens of S village. But after a woman from a neighboring village started selling it in late 1990s in the market in Nagcarlan, the villagers began planting anthurium for commercial purposes. Anthuriums are used as decoration in school events, marriage ceremonies, funerals, and religious events. They stay

fresh for 2 weeks. Upland climate and soil suit anthuriums, making anthurium farming feasible in S village.

Anthuriums are easily grown. They start flowering a year after planting, and stay blooming all year round. In August 2000, a dozen seedlings of anthurium cost six pesos (10 US cents). A dozen anthuriums sell for 40 pesos (75 US cents); bigger size anthuriums sell for 50 pesos (90 US cents) per dozen. In contrast, one coconut is sold for one peso and sixty centavos (around 1 US cent). Labor cost is about 40% of the price, leaving a profit of 96 centavos (less than 1 US cent) per coconut. The big difference in the selling price of anthuriums and coconuts made anthurium farming attractive to the villagers.

Anthurium farming spread to other upland villages. In 1990, the market for anthuriums from S village expanded beyond the local town market to include Metro Manila.

III. Selling Used Clothes

Selling used clothes started as another source of livelihood in S village in 1980. A woman in her 30s used savings from the income of her husband who was a construction worker in Saudi Arabia to buy used clothes imported from Japan and the US. She sold the clothes in markets in lowland towns, using jeepneys to transport her goods. Her business succeeded and she started to employ her sisters, female relatives and other village women. Others followed her example.

IV. Migration for Work

In the 1980s, many unmarried villagers in their late 30s and 40s were not doing agriculture-related work. They migrated to San Pablo City and Metro Manila after graduating from elementary school or high school. They worked as waiters or waitresses, salesclerks, office workers, factory workers and security guards. They raised their families eventually in San Pablo city or Metro Manila. But years later, they drifted back to S village. During the 1980-1989 period, 10 families returned to S village. In the 1990-1999 period, 24 families came back.

The high cost of living in Metro Manila, including the cost of education for the children, left them with no option but to return to S village. During the two periods when families returned to S village, the Philippine economy was hit by a series of major problems from the coup attempts in the late 1980s to the natural disasters (earthquakes, volcanic eruptions, typhoons) in the early 1990s that slowed further economic growth and led to higher inflation. Those who returned to S village helped out in the coconut industry and in other agriculture- and non-agriculture-based activities.

S VILLAGE TODAY

A land use survey by the author in 2000 shows that coconut is the main crop of S village. Bananas, lanzones (*Lansium domesticum* Jacq.), other fruits, and anthurium flowers are the secondary crops. They are intercropped in the coconut farms. The villagers own coconut farmland outside S village too. Their combined coconut farmland ownership (within and outside S village) averages 1.1 hectares. One family has a bigger combined coconut farmland area of more than 1 hectare but less than 10 hectares, most of which are located outside the village.

Villagers also own or use farmlands outside S village for rice and vegetable cultivation. Vegetable farmlands are on the mountainside (more than 500 m above sea level) with an average area of 3 hectares per family. They also cultivate government-owned land (700 m above sea level) on the slopes of Mounts Banahaw and San Cristobal (1,470 m). They grow tomatoes, kidney beans, cabbages, chayote, eggplant, sweet potatoes, radishes and mustard.

Based on the author's survey of 142 households in S village, 65 households (46%) own coconut farmland and engage in other agricultural activities. 61 of the 65 households engage in coconut farming, 17 farm vegetables and 4 farm rice as additional economic activity. The remaining 4 households do not cultivate coconut, only vegetables. All of them derive additional income from hog-raising.

77 households (54%) derive income as agricultural workers. Some do not own coconut farmland but work as farm caretakers and coconut farm hired workers. They also harvest vegetables as day laborers. Agriculture-based work has 40 types. Villagers engage in various types of work because no single type of work provides sufficient income or continuous employment. A typical villager has a "side" job. Household members do not always work together or engage in the same livelihood. Villagers interviewed say that they had engaged in several different kinds of work in their lifetime.

I. Coconut Cultivation

Most coconut plants in S village are more than 50 years old. Old coconut farmers who own them would say "Nobody can cut my coconut plants before I die." They would justify this by saying that the coconuts plants are the most important trees in the Philippines. They are the "tree of life".

This attachment to the aging coconut plants prevents the cutting of old ones to be able to plant new high-yielding coconut varieties, or other crops. The old farmers leave the management of the coconut farms to their sons, sons-in-law, and relatives, but they still retain the power to decide on what to do with the coconut plants.

Some villagers who inherited the coconut farms from their parents want to replace coconut plants with rambutan trees (*Nephelium lappaceum* L.), because rambutan has a higher price and is more in demand. They think of chang-

ing the crop due to the declining price of coconuts in recent years. There is a law however (Coconut Preservation Act of 1995) which prohibits the cutting down of coconut plants unless permitted by the Philippine Coconut Authority.⁽⁷⁾ The law is meant to protect the coconut industry. The government promotes the planting of high-yielding new varieties of coconuts to replace old coconuts plants which now yield less.

The parent-farmers' refusal to cut down coconut plants contrasts with their children's view that they should use the coconut plants in a more profitable way.

Making coconut lumber bring good profit according to the children. The parents however value the coconut plants as wealth given by their own ancestors, who decades ago labored hard to plant the coconuts. The parents believe that the coconuts plants, though old and yielding less, are part of the family and cannot be taken away.

The villagers continue to engage in coconut farming by selling coconuts to traders who process them into copra. One trader owns a *koprahan* (a place where coconut meat is dried as copra) in S village.

The traders bring the copra to the coconut oil mill in Manila, and the copra residue is sold to hog feed factories in Batangas. When the villagers were still making copra they sold their copra to the coconut oil mills in Laguna.

II. Vegetable Farming

At present, 21 households in S village cultivate vegetables on the slopes of Mount Banahaw and San Cristobal. They walk or ride on horseback for two hours to reach their mountain vegetable farms. Older generations cultivate vegetables as husbands and wives. At present, many women in their 30s and 40s prefer to do non-agricultural work. This prevails despite the good market for vegetables at present. Men in their 20s and 30s, who do not have any job, do vegetable farming. They work with their brothers and relatives. Older generations would bring the vegetables themselves or carry them by horses to the market in Nagcarlan. At present, traders from Nagcarlan, other towns in Laguna and Batangas, and Metro Manila go up to the nearest point to the vegetable farms using jeepneys to buy the vegetables at certain appointed times. This system eases the burden of farmers in selling the vegetables to the market themselves.

III. The Role of Women

The livelihood in S village has a clear division of labor along the gender line especially in coconut farming. Men worked on coconut farms by harvesting and transporting coconuts. Men also had the initiative in producing copra and *lambanog*. Wives may help their husbands in these activities. All household members cultivate vegetables, and farm rice. But women are mainly the sellers

of vegetables in the market. Since coconut farming is the main livelihood men are the center of economic activities.

Women were mainly responsible for selling vegetables starting in the 1970s. One household bought 1.5 hectares of land in Quezon province in the latter half of 1970 to cultivate tomatoes. This was an initiative of a daughter (in her 20s) in the household. During the harvest season, she rented jeepneys and sold tomatoes once a week with other women who were farming in the same area for the town markets in eastern Laguna.

Before 1990, women mostly stayed in S village helping out on coconut farms and planting secondary crops. From 1990, they began to be more active in non-agricultural activities. Women in their 30s and 40s disliked agricultural work such as going up the mountain and staying there for a week to farm vegetables. 38 kinds of non-agricultural work (not including hog-raising or pig-breeding in 2000) are found in S village. 22 kinds of such work are done inside S village, and 18 of them are done inside the home. Women engage in 9 kinds of work including *sari-sari* (sundry) store business, dressmaking, cultivating anthurium, baking bread, making traditional sweets, making banana chips, making coconut charcoal, wrapping sweets and bread, and making tablecloths.

The men engage in 3 kinds of work, including making *bolo* (knife) sheaths, repairing tricycle tires, and metal-welding. Men and women engage in making slippers and noodles. For the rest of the non-agricultural jobs, both men and women share the work.

CONCLUSION

The livelihood in S village has been changing based on the condition and system of the coconut industry. When the price of copra fell, their production concentrated on coconut oil and *lambanog*. They also engage in other agricultural activities such as vegetable farming. Between the late 1960s and 1990s, the people of S village expanded their economic activities in both lowland and upland areas. Whenever there is economic hardship, women engage in income-generating activities. Women's high adaptability to the changing economic environment brought new types of livelihood to the village and expanded their economic activities beyond their upland farms.

This adaptability is possible for a number reasons. First, most people in S village are small landholders (with lands within and outside the village) and thus can use the land more efficiently. Second, the land and climate conditions within the village and on the slopes of Mounts Banahaw and San Cristobal provide alternative agricultural livelihood. Finally, the village is not far from the markets within Laguna, neighboring provinces and Metro Manila due to the improved transportation system.

NOTES

- (1) There are two kinds of coconut oil: oil from copra and oil made from fresh coconuts. Copra is dried coconut meat. Oil is either squeezed out from copra or produced by frying fresh coconut meat. The two oils are distinguished by the process of production as well as by quality. The copra oil is exported to the world market.
- (2) Ginintuang Masaganang Ani (GMA) Coconut Program, online. www.da.gov.ph
- (3) The Southern Tagalog Region is located south of Metro Manila and consists of 11 provinces. It has a total area of 1,355.9 square km with a population of 11.8 million (or 15.4 % of total Philippine population of 76.5 million) as of 2000.
- (4) Masagana 99 literally means abundance 99. Masagana means abundance in Tagalog, while 99 is the goal of having 99 cavans (4.4 tons) of rice harvest per hectare. This plan was meant to increase rice production and help rice farmers achieve economic self-sufficiency (Umehara, 1992: 381-383).
- (5) The International Rice Research Institute (IRRI), located in the northern part of Laguna, played a significant role in the introduction of high-yielding rice varieties. It extended support to rice farmers in the towns surrounding it. It has a major role in promoting the green revolution through its new hybrid rice varieties.
- (6) The word jeepney is derived from the word jeep – the American military vehicle. Jeeps left behind after the second world war were redesigned as public transport. The body and chassis of jeepneys are now locally made. They use imported engines – mostly re-conditioned, second-hand Japanese engines.
- (7) An Act Providing for the Regulation of the Cutting of Coconut Trees, Their Replenishment, Providing Penalties Therefor and for other Purposes (Republic Act No. 8048).

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