

Change and Resiliency of Traditional Labor Institutions in Response to the
Effects of Special Economic Zones: The Case of Mariveles, Bataan,
the Philippines

by

DATOON Rodmyr Francisco

DISSERTATION

Submitted in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy in International Development

GRADUATE SCHOOL OF INTERNATIONAL DEVELOPMENT
NAGOYA UNIVERISTY

Approved by the Dissertation Committee:

ITO Sanae (Chairperson)

USAMI Koichi

KUSAKA Wataru

Approved by the Faculty Council: March 7, 2018

Acknowledgement

I am indebted to the Japanese people and the Japanese government for giving me the opportunity to pursue a doctoral degree in Nagoya University. This dissertation is also not possible without the guidance of my supervisor Sanae Ito and my sub-advisers Koichi Usami and Wataru Kusaka. I will be forever grateful to them for being generous with their time and wisdom and for guiding me through the research and the writing of this dissertation. Special thanks are also in order to all my *sempai*, *kohai*, and to all the students who became my classmates throughout my time in GSID for their valuable comments, suggestions and inputs in this dissertation. Last but not the least I would like to give special thanks to the people of the villages of Town Site and Biaan, to the employees of the Authority of the Freeport Area of Bataan and the officers of the municipal government of Mariveles for sharing with me their time and their life stories.

Table of Contents

	Page
Acknowledgement	
List of Tables	
List of Figures	
List of Acronyms	
Chapter 1: Introduction	1
1.1. Statement of the Problem and Purpose of the Study	1
1.2. Background of the Study	3
1.3. Methodology	5
1.3.1. Research sites	5
1.3.2. Data collection	9
1.3.3. Analysis of data	10
1.4. Organization of the Dissertation	15
Chapter 2: Review of Literature	18
2.1. Importance of Traditional Institutions	18
2.2. Importance of Norms	20
2.3. Rural Industrialization and the Agrarian Question	23
2.4. Rural Industrialization and Agrarian Change	24
2.5. Agrarian Transition Theories	26
2.6. Rural Resistance Theories	27
2.7. Institutional Hybridity and Resilience Theories	30
2.8. Summary	35
Chapter 3: Rice Farming Before the Establishment of the SEZ	39
3.1. Farming Practices Before the Establishment of the SEZ	39
3.1.1. Land preparation	41
3.1.2. Transplanting	41

3.1.3. Weeding	44
3.1.4. Harvesting	44
3.1.5. Threshing	46
3.2. Features of the Institutions of <i>Cabecilla</i> and <i>Humusan</i>	47
3.2.1. Institution of <i>cabecilla</i>	48
3.2.2. Institution of <i>humusan</i>	50
3.3. Milled Rice and Fresh Paddy Markets	53
3.4. Local Capital Market	54
3.5. Social Relations in the Farming Villages	55
3.5.1. Social context of interaction	55
3.5.2. Traditional gender roles in rice farming	58
3.6. Summary	60

Chapter 4: The Special Economic Zone and Changes in the

Town of Mariveles	62
4.1. Opening of the SEZ	62
4.1.1. The need for SEZs in Philippines	62
4.1.2. Advantages and disadvantages of SEZs	64
4.1.3. Early years of the SEZ in the town of Mariveles	67
4.2. Evolution of the SEZ	70
4.2.1. Companies in the zone	71
4.2.2. Education, age and skill requirements	72
4.2.3. Contractualization	73
4.3. Similarities of the FAB with other SEZs in the Philippines	74
4.4. Employment Structure of the Two Villages	76
4.4.1. Generational shift in employment structure	77
4.4.2. Household occupation by gender	80
4.5. Waning Preference for Rice Farming	81
4.6. Summary	84

Chapter 5: Changes in Traditional Labor Institutions and Farming Practices

5.1. The SEZ and Scarcity of Laborers in the Farm	86
---	----

5.2. Changes in Traditional Labor Institutions and Practices in Planting and Harvesting	87
5.2.1. Shift to broadcasting and disappearance of the institution of <i>cabecilla</i>	87
5.2.1.1. De-feminization of rice farming	90
5.2.1.2. Low use of new varieties of seeds and lower production	95
5.2.2. Retention of the institution of <i>hunusan</i> and creation of harvest groups in the village of Town Site	98
5.2.3. Shift to hiring waged laborers in harvesting in the village of Biaan	100
5.3. Rise of New Actors and Barriers in Farming	101
5.4. Rise of Bargaining Power of Laborers	102
5.5. Summary	104
Chapter 6: Resiliency of Traditional Labor Institutions	108
6.1. Community Norms and Farmers' Decision Making	108
6.2. Demise of the Institution of <i>Cabecilla</i>	109
6.3. Adoption of Wage Labor and Resiliency of the Institution of <i>Hunusan</i>	114
6.4. Reasons for the Resiliency of the Institution of <i>Hunusan</i> in the Village of Town Site	116
6.4.1. Advantages of the institution of <i>hunusan</i> over hiring waged laborers	116
6.4.2. Role of the fresh paddy market	119
6.4.3. Institutional adjustments	121
6.5. Preserving the Key Features of the Institution of <i>Hunusan</i>	123
6.6. The Fresh Paddy Market and the Disappearance of the Institution of <i>Hunusan</i> in the Village of Biaan	125
6.7. Summary	126
Chapter 7: Conclusion	130
7.1. Divergence from Hayami and Kikuchi's Findings on Institutional Change	130
7.2. Summary of Findings and Conclusion	133

Bibliography

142

Appendix

160

List of Tables

	Page
Table 1. Current land tenure and size of farms in the two villages	40
Table 2. Share of GDP and employment among economic sectors (in percent)	63
Table 3. Share of SEZs from total FDIs in the Philippines	64
Table 4. Share of PEZA SEZ from total national manufacturing exports (in percent)	65
Table 5. Employed workers in PEZA SEZs	66
Table 6. Place of residence of households in the Province of Bataan in the last 5 years, 2010, selected towns and cities (in percent)	69
Table 7. Companies inside the FAB according to products	72
Table 8. Number of manufacturing SEZs by region (as of April 2015)	75
Table 9. Employment by sector in selected cities and municipalities in the Province of Bataan, 2010	77
Table 10. Occupation of non-farm household heads and spouses (2015) and their parents (1970 and 1980)	78
Table 11. Occupation of non-farm households by gender in 2015	80
Table 12. Daily wages among selected jobs in the town of Mariveles as of 2015	83
Table 13. Farming practices before and after the establishment of the SEZ	87
Table 14. Average age of SEZ workers	93
Table 15. Average rice production in Bataan per cropping season, 2014 (in metric tons per hectare)	96
Table 16. Source of seeds and variety of rice planted by farmers	97
Table 17. Average cost of transplanting and broadcasting in the two villages (in PhP)	111
Table 18. Average fresh paddy production per hectare (in 46kg sacks)	115
Table 19. Monetary equivalent of <i>hunos</i> by cropping season (in PhP)	115
Table 20. Average growth rate of rice farming wages and farm-gate prices of dried paddy (in PhP)	120
Table 21. Comparison of the findings of this study to that of the study by Hayami and Kikuchi (1981)	130

List of Figures

	Page
Figure 1. Map of the town of Mariveles and the SEZ area	7
Figure 2. Population of the town of Mariveles and selected cities and towns in the Province of Bataan	68
Figure 3. Number of employed workers and companies in the FAB	71
Figure 4. Rice farming wages and non-agriculture basic wages in Region III, 1991-2012	83

List of Acronyms

AFAB	Authority of the Freeport Area of Bataan
BOI	Bureau of Investments
CEZA	Cagayan Economic Zone Authority
FAB	Freeport Area of Bataan
FAO	Food and Agriculture Organization of the United Nations
FDIs	Foreign Direct Investments
GDP	Gross Domestic Product
JY	Japanese Yen
NCR	National Capital Region
NFA	National Food Authority
PEZA	Philippine Economic Zone Authority
PhP	Philippine Peso
SEZ	Special Economic Zone
SBMA	Subic Bay Metropolitan Authority
TESDA	Technical Education and Skills Development Authority
TRLI	Traditional Rural Labor Institutions
US\$	United States Dollar

Chapter 1

Introduction

1.1. Statement of the Problem and Purpose of the Study

Since the 1960s, one of the more popular mechanisms for national governments of developing countries to attract foreign direct investments (FDIs), generate employment and foster economic development is to establish special economic zones (SEZs). As SEZs are being created more in rural areas in the aim for more inclusive development, industrialization is fast becoming a driver for agrarian change in the Philippines. Rural industrialization is widely believed to be an effective government policy in generating employment, especially for rural women and the landless. However, SEZs that spur industrialization compete for farm laborers, which, in turn, affect changes in traditional labor institutions.

Traditional labor institutions govern how labor is used in rural communities. In rice farming, the access to a reliable and affordable supply of labor is as vital as any farming input that affects the quality and quantity of rice production. Farming communities, through time, have developed labor institutions that offer specific normative guidelines that govern the organization, utilization and remuneration of labor. Traditional labor institutions also provide people benefits. For farmers, it allows them to gain access to laborers, especially during the most labor-intensive farming practices. For the landless rural people, it allows them to access land and thus, livelihood.

Thus, it is important to understand how SEZs and industrialization affect traditional labor institutions, because changes in traditional labor institutions might affect how people in

the communities sustain livelihoods. Furthermore, limited information is available in the literature regarding the negative effects of SEZs on farming practices and how these affect certain groups such as women and landless workers in the surrounding rural communities.

Current literatures on agrarian transitions explain that the penetration of the capitalist market tends to replace traditional labor institutions with market-based exchanges, such as waged labor, whereas, some studies document that traditional labor institutions have the ability to be resilient. Understanding why some traditional labor institutions change and why others remain resilient amidst the penetration of capitalist markets is crucial in order to inform policy debates concerning benefits of rural industrialization as a means of job creation in rural Philippines. Such knowledge can be useful to preserve other traditional labor institutions in order to maximize or take advantage of their benefits amidst changes brought about by modernization. This is especially important in the Philippines as national and local policy makers see SEZs as the answer for rural development and unemployment in rural areas.

This study aims to provide answers to the following research questions: How does the establishment of an SEZ affect traditional labor institutions and farming practices in its surrounding communities, and why do traditional labor institutions remain resilient while some are replaced?

By analyzing the interplay of village norms and social relationships, farming practices, farming costs, village employment structure and the rice and paddy markets, this study tries to illustrate the rationale and process of villagers in preserving their traditional labor institutions. The findings of this study illustrate that benefits from SEZs and rural industrialization are not always positive as it can lead to changes in farming practices that can limit people's access to livelihoods and bring about higher costs in farming. This study also illustrates the importance of traditional institutions as it plays an important role in people's access to resources and

employment. Thus, changes brought to it can have significant effects on peoples' livelihoods. Finally this study argues that the resilience of traditional labor institutions, amidst the penetration of capitalist markets, is possible. It, however, depends on the ability of people to make institutional adjustments in order to make it competitive against the alternative.

1.2. Background of the Study

A special economic zone (SEZ) is defined as demarcated geographical areas contained in a country's national boundary, which have rules for business that are different from the rest of the country, mainly for the purpose of providing ideal investment conditions with regards to trade, customs, taxation and a regulatory environment to attract foreign direct investments (FDIs) (Farole 2011, 23).¹ Such industrial enclaves have been proven to generate high employment and foster growth in developing countries (Wong and Chu 1984; World Bank 2008).

In the Philippines, SEZs are being established more and more in rural areas where payment for land and labor wages tend to be cheaper compared to those in highly urbanized areas.² Aside from growth in manufacturing, the influx of FDIs in rural areas creates secondary businesses such as construction, transportation, entertainment and tertiary industries. Various studies have highlighted the importance of developing the rural non-farm economy in alleviating poverty and fostering development.³ Because a large part of the poor in the Philippines reside in rural areas (Reyes et al. 2013), the government has decided to create employment in the rural regions of the country through the promotion of special economic zones (SEZs) in the regions outside the Philippine capital, Metro Manila. A law was passed in 1994 creating the Philippine Economic Zone Authority (PEZA) that oversees the creation,

promotion and operation of all SEZs in the country.⁴ Currently, there are 75 operating manufacturing zones in the Philippines, whereas 27 more are in the process of development.

Various studies have noted that SEZs in the Philippines generally create employment for rural people, especially the young and female population (Castro 1982; Warr 1984; Chant and McIlwaine 1995; Kelly 2000). However, other studies have documented that SEZs and the establishment of manufacturing factories in rural areas disrupt the rural labor market and the overall village life (Chantana 1993; Rigg 2001). Also, a major criticism of the SEZs is that its export-oriented nature does not allow it to have forward and backward linkages to the local economy, thus providing minimal benefits to the host community.

The establishment of SEZs creates a demand for labor that directly competes with the farm sector, which, in turn, can result in changes in traditional labor institutions that govern the access of poor people to resources, especially land, for livelihoods. Traditional institutions are defined as socially sanctioned clear specifications of the rules governing the rights to the use of scarce resources and their exchange based on the community norms of shared income, mutual help and social safety net (Hayami & Kikuchi 1981). These are different from capitalist markets, which are mainly based on immediate individual profit maximization. Most farming villages in the country have developed institutions to govern the rules of how labor is organized and remunerated in the most labor-intensive farming practices: transplanting and harvesting. Traditional labor institutions are mechanisms for the farming community to reduce transaction costs, ensure minimum subsistence and mitigate risks in farming, such as effects of typhoons, drought, pest infestations and the occasional low harvest. Changes in traditional labor institutions may not only change the way people access resources in rural villages, but also change the production process and livelihoods as well.

With the penetration of capitalist markets in rural areas, some studies (Friedman 1980; Sassen 1996; Giddens 2000) see the demise of traditional institutions as inevitable. Other studies (Polanyi 1944; Scott 1976; McMichael 1997; Turner and Caouette 2009) see conflict and contestation between traditional institutions and capitalist markets that, in turn, leads to resistance. Other studies (Sajor 2004; Harris-White et al. 2009; Pahl-Wostl 2009; Scott 2013), however, stress the ability of traditional institution to be resilient and evolve amidst the penetration of capitalist markets. There are two approaches in the study of institutional resilience in the literature. One approach sees resilience as the ability of an institution to return to its original form after the introduction of stresses. The other approach puts emphasis on the ability of institutions to adapt to stresses without losing its underlying norms. This second view is the focus of this study. With rural industrialization becoming a priority policy for many countries, studying how traditional labor institutions adapt and evolve is crucial for the people to continue to take advantage of its benefits.

1.3. Methodology

1.3.1. Research sites

In 1972, the Philippine government established the first SEZ in the Philippines in the rural town of Mariveles.⁵ It served as a showcase to demonstrate that the country and the government at that time can establish and operate a world-class SEZ that can be a model for future SEZs in other parts of the country. Because of its strategic location, the town of Mariveles was chosen to decongest Metro Manila and serve as a regional growth pole in the area.⁶ Since 1972, other SEZs have been located and developed in other areas in the

Philippines. What sets the town of Mariveles apart from other SEZ sites in the country is that the Freeport Area of Bataan (FAB) presents the only investment and growth driver in the immediate area, thus minimizing the effects of big cities, such as Metro Manila, and other economic growth drivers. The FAB is also an SEZ that is surrounded by agricultural areas. This is different from the Mactan Export Processing Zone and the Baguio Export Processing Zone, which are both located in cities. Furthermore, the FAB is different from the SEZs in the Southern Luzon Region, which also have agricultural areas nearby but are located in highly urbanized areas near the capital Metro Manila and other urban areas.

The town of Mariveles is located in the southernmost part of the Province of Bataan in the Central Luzon Region.⁷ Compared to other towns in the region, the town of Mariveles poses mountainous and hilly areas. This, however, did not dissuade the residents in the town from planting rice for their consumption and livelihood. Aside from the SEZ and rice farming, other livelihoods in the villages include planting corn, cassava and fruit-bearing trees. The town has coastal communities in which households fish for a living.⁸

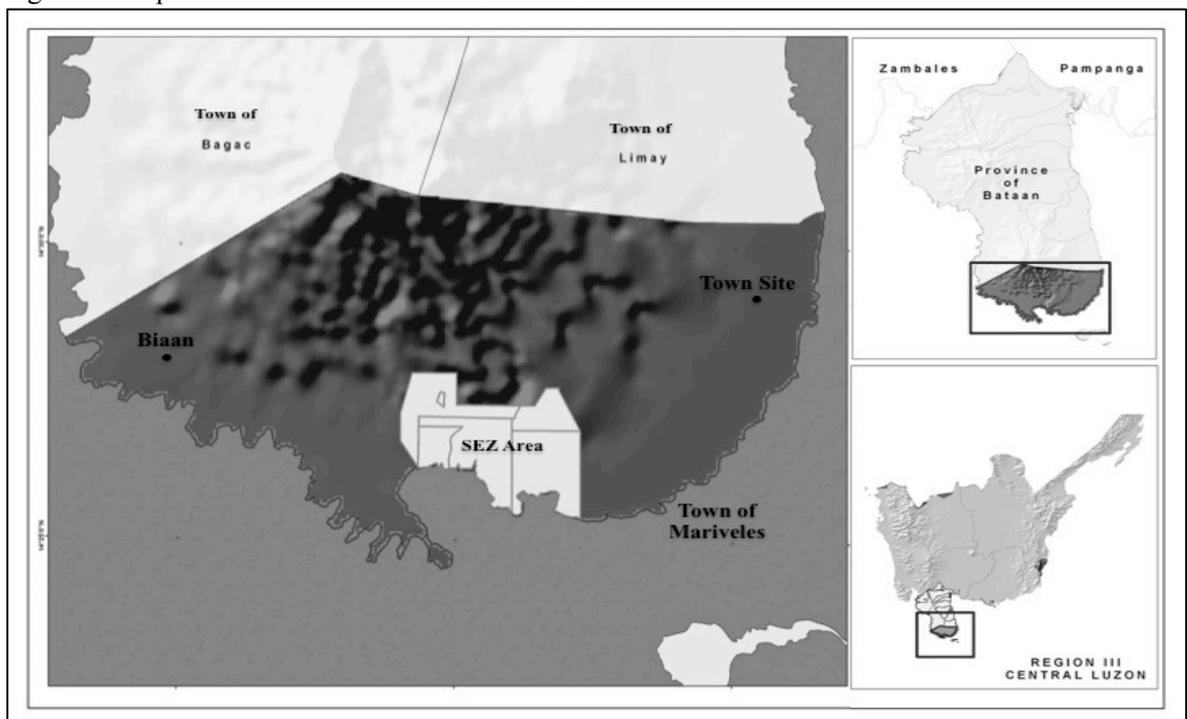
The current local government has prioritized the development and promotion of the industrial sector of the local economy. The policies of the local government have been geared toward promoting more companies to invest in the SEZ as well as improving infrastructure and facilities to host these companies. Examples of these policies are offering skills training for the demands of the factories, national and international investment promotions and promoting local commercial establishments that cater to the zone.

The FAB is dominated by foreign companies, with a small presence of local companies. The products produced in the SEZ, such as bags, clothing apparel, light metals and chemicals, are geared towards the international market and are largely exported after the manufacturing

process. Some well-known products that are made in the FAB are Jansport Bags, Coach Luxury Bags, Essilor lenses and Dunlop-Slazenger tennis balls.

With a high demand for low-skilled laborers and minimum wages higher than agricultural wages, the FAB has created a wave of adjustments in farming practices and traditional labor institutions in the town of Mariveles. As SEZs and industrial investments move more toward the rural areas in the Philippines, the town of Mariveles provides a representative case for future and current SEZs in the country.

Figure 1. Map of the town of Mariveles and the SEZ area



Source: Mariveles Municipal Planning and Development Office (2015)

The two villages of Town Site and Biaan were selected because they are the two largest rice-producing villages in the town. These two villages also represent the two main parts of the town. The village of Town Site is located in the part of the town called Upper Mariveles, named because of its higher elevation, whereas the village of Biaan is located in the part of the town called Lower Mariveles. These two villages are approximately at the same distance of 30

km from the center of the town and from the SEZ. It takes about 30 to 40 minutes to travel from the village centers to the center of the town.

The village of Town Site is located along the main provincial highway that connects the town to the whole province. Residents of the village take buses or public utility jeepneys to travel to and from the center of the town. These public jeepneys and buses are filled with SEZ workers in the morning, afternoon and evening as factories in the SEZ operate in three eight-hour shifts.

Aside from rice farming, some villagers in the village of Town Site find livelihood from planting corn and other crops in the uplands. Some villagers gather firewood and make charcoal for a living. Others earn income from cultivating mango trees. Residents can also engage in commercial activities in the village and in the town. The village of Town Site has a small built-up area where a small market is located and residents can engage in commercial activities such as operating small stores, small eateries, barbershops and beauty salons. Villagers also find employment in the commercial establishments in the town center and in other cities in the province. At the time of the survey, the village had a total of 1,370 households, of which 44 were farm households.

The provincial highway ends at the center of the town. Smaller municipal roads connect the village of Biaan and other villages in Lower Mariveles to the rest of the town. Villagers in the village of Biaan take small vehicles such as public utility jeepneys and tricycles as their main means of transportation. Although the village has a larger total land area, compared to that of the village of Town Site, the village of Biaan had a smaller population of 520 households. Twenty-eight of these were farm households.⁹ The village of Biaan does not have a built-up area for commercial activities. Biaan residents buy their daily needs from the market in the center of the town or from small neighborhood stores. Aside from farming, villagers in

Biaan plant root crops in the uplands mainly for home consumption. Some villagers raise livestock in their backyards. These are mainly for home consumption and, from time to time, are sold to their neighbors if there are family occasions.

The two villages have small fishing communities. However, interviews among fishermen indicated that fishing has become greatly unreliable as a source of income due to the diminishing amount of catches in recent years. Like farm laborers, fishermen prefer working in the SEZ and in construction projects.

1.3.2. Data collection

There are four main groups of respondents in this study. These are 1) farm households, 2) non-farm households, 3) farm laborers and 4) key informants. A household is characterized as “farming” when the household head’s main occupation is rice farming. Households with household heads not working as rice farmers are characterized as “non-farming.”

A complete enumeration of 44 and 28 farm households were surveyed in the villages of Town Site and Biaan, respectively. In order to acquire a sample of non-farm households, this study utilized proportional stratified random sampling with *sitio* or hamlet of the village serving as a stratum. This was done in order to get a realistic representation of the village households since *sitios* may have different characteristics in terms of level of development, available livelihoods, size of population and accessibility to markets and services. One hundred non-farm households were sampled from each village.

The survey was conducted from February to August 2015. A structured questionnaire was used to acquire information on socio-economic characteristics of households as well as their past and present livelihoods. Household heads and their spouses were asked to recall the

occupation or the main source of livelihood of their parents in 1970 and 1980 in order to compare the occupational structure of the village before the establishment of the SEZ and the occupational structure of the village at the time of the study.

The survey questionnaire for farm households utilized questions that acquire data on rice production costs and revenue, disposal, labor use and other farming practices from the last wet and dry seasons.¹⁰ In addition to the survey, various interviews were conducted among key informants. Key informants were selected through purposive and snowball sampling. The key informants that were interviewed were old farmers and farmer leaders, farm laborers and labor leaders, old and young residents of the two villages, former and current SEZ factory workers, factory managers, village officials and municipal officials. Key informant interviews focused on the relationships among farmers and laborers as well as other residents in the two villages, and how the SEZ resulted in changes in farming practices and the use of labor in the two villages. The survey and key informant interviews were supplemented by field observations.

The survey and interview questionnaires were constructed with the help of the local government officials, village officials and other key informants to enhance the validity and appropriateness of the data. The data were also presented to the key informants to enhance the validity of results. The average conversion rate during the time of the study was 1 Philippine Peso (PhP) equaling 0.37 Japanese Yen (JY) and 44 U.S. Dollars (US\$).

1.3.3. Analysis of data

This study will treat the establishment of SEZs in rural areas as a form of capitalist market penetration that triggers agrarian change through the distortion of the farm labor market for farming. The establishment of such zones creates demand for low-skilled labor in factories

and auxiliary industries, which compete with farming, that, in turn, results in the scarcity of laborers in the farm. This scarcity of laborers is the trigger that will make farmers decide whether to change or continue the practice of traditional labor institutions.

Descriptive statistics from the household survey will be utilized to analyze the effects of the SEZ on the employment structure of the households and farming practices of farmers in the two villages. Descriptive statistics will also be utilized to show the difference between the employment of the households in 1970 and 1980 and the households in 2015. It will also be utilized to show the similarities and differences of farming practices between the two villages in terms of labor use and costs, farming input costs, production, disposal and marketing and socio-demographic characteristics of farmers.

Descriptive data will also be used to compare changes in the amount of labor utilized by farmers in their farming practices. Both descriptive data and the narratives from the respondents' interviews will be utilized to analyze the changes in traditional labor institutions and the access of different groups in farming livelihoods.

This study will adopt Hayami and Kikuchi's (1981) approach in analyzing how farmers decide among different intervening factors and how they arrive at a decision to continue or discontinue the practice of traditional labor institutions. This approach assumes that norms and institutions of the farming community, by setting the rules of behavior, ensure a mutually beneficial transaction for individuals. This approach assumes that individuals are aware of the benefits that the norms provide them even though the potential return is indefinite and difficult to measure in quality and quantity. Such returns could be monetary or non-monetary benefits when they adhere to community norms of income sharing, reciprocity and patron-client relationships. In addition, such returns can be immediate or can be delayed.

The authors believe that institutional change is difficult since norms and institutions are based on shared values and beliefs.¹¹ However, they recognize that individuals are rational actors and changes in institutions are possible when individuals deem that the benefits they gain from the institution are outweighed by the alternative.

This approach is closely related to the concept of moral economy espoused by Scott (1976). Human behavior, including economic behavior, in Scott's moral economy, is based on the community's concept of what is "socially just." For Scott (1976), human behavior, including economic behavior, is influenced by the shared moral standards of the community, which are embodied in its norms and institutions. He identified the norms of subsistence ethic and patron-client relationships as examples. These norms serve as "rules of thumb" in relating or transacting with other people in the community and individuals get or receive benefits based on what is perceived as just by the community (Scott 1976). The moral economy approach also assumes that market and non-market exchanges are embedded in a cultural environment (Booth 1994; Sayer 2000). Thus, it focuses on the ways economic activities are influenced by norms and the ways norms are affected by economic activities (Sayer 2000: 80). This does not mean, however, that individuals are void of rationality or agency. For Scott (1976), behavior is a result of the individual's assessment of what is "socially just"—and therefore socially rational—based on the shared moral standards of the community.

The moral economy approach is challenge by Popkin (1979). Coming from the rational choice economics perspective, Popkin argued that peasants, even those in pre-capitalist societies, are purely egoist and profit-seeking individuals and are not altruists. According to Popkin (1979), egoistic individuals do not have incentives to adhere to community norms, as these are inefficient and do not translate to individual profit. Popkin (1979) argued that economic behavior is solely motivated by profit and utility maximization.

Hayami and Kikuchi (1981) distanced their work from rational choice economics and from Popkin's work as they place high importance on the roles of norms and institutions in affecting human behavior and the economic choices of individuals. They argued that it is rational for individuals to adhere to norms and institutions as these provide them benefits. Hayami and Kikuchi (1981) argued that egoism does not conflict with altruistic behavior.¹² A farmer, for example, can provide employment to others in the village under the norms of income sharing and patron-client relationships even though it is more expensive, because conforming to community norms is an efficient way to economize supervision costs (Hayami and Kikuchi 1981, 19).¹³

However, Hayami and Kikuchi's approach differs from the moral economy of Scott (1976) as they characterized individuals as rational actors who are able to decipher advantages and disadvantages by themselves, which may be different from what the community deems as "socially just." In contrast, Scott's analysis tends to assume that what is collectively rational is also individually rational (Feeny, 1983).¹⁴ Hayami and Kikuchi's approach also differed from other moral economists as they reject the argument that individuals are purely altruists at all times. This is consistent with Becker's (1974) argument that individuals are altruists to the extent that the return of his or her altruism exceeds the cost of being an altruist. Becker's (1974) model suggests that villagers will violate the community institution if the return from violation exceeds the cost. According to Hayami and Kikuchi (1981), instances where villagers can gain from violating institutions include changes brought about by new technologies and changes in resource endowments in the community.

Profit for farmers will be derived by calculating the difference between the imputed monetary costs they are paying the laborers through in-kind shares vis-à-vis the value of what they would be paying if they pay the prevailing daily wages. Profit for laborers will be derived

by calculating the difference of the imputed value of the in-kind shares compared to wages. The same method was used by Hayami and Kikuchi (1981) in analyzing the motivations of farmers and laborers in choosing to adhere to community norms or deciding to make changes in existing community institutions. A thematic analysis of the responses from the interviews will be utilized to analyze the reasons for the adherence of people to the community norms and the short-term and long-term as well as the monetary and non-monetary benefits they get from practicing them. Furthermore, the effects of government policies on labor, such as minimum wages and contractualization in the SEZ, and the effects of other markets, such as the fresh paddy market and the informal capital market in the two villages, will be taken into consideration in the analysis of the decision of farmers and laborers.

Adopting the evolutionary institutional resiliency approach advocated by Pahl-Wostl (2009), Young (2010), Herrfahrdt-Pahle and Pahl-Wostl (2012) and Sjostedt (2015), this study will analyze whether traditional labor institutions are resilient by examining if the underlying norms or the defining features of traditional labor institutions are preserved and continue to be exercised amidst the changes and adjustments in their practices. The defining features of traditional labor institutions will be identified from a thematic analysis of the interviews of farmers and laborers, as well as the interviews of residents of the two villages.

The factors that lead to the preservation or disappearance of traditional labor institutions and the factors that contribute to institutions changing or retaining its underlying norms will be analyzed from farmers' narratives. These narratives will be taken from the interviews. Farmers and laborers will be asked how changes in farming practices affect their relationship with each other and how changes affect the conduct of community norms in recruiting, supervising and remunerating laborers. Common practices regarding loaning capital for farming and selling their products will also be asked. Farmers, laborers and other villagers

will be asked how changes or retention of these practices affects the conduct of norms between the farmers and laborers in recruiting, supervising and remunerating laborers. This will be supplemented with the field observations of the author and findings from others that have studied the traditional labor institutions of *hunusan* and *cabecilla* and other traditional labor institutions in the Philippines and other countries.

1.4. Organization of the Dissertation

This dissertation is composed of seven chapters. This first chapter serves as the introduction, which aims to present the discussion of the background and the methodology of the study. The second chapter locates this dissertation in the academic debate by presenting the review of literature on effects of rural industrialization in rural communities, penetration of capitalist markets and agrarian change and institutional resiliency.

Chapter 3 discusses the characteristics of the town of Mariveles and the two villages. It also gives a description of the farming practices and the social relations in the two villages before the establishment of the SEZ in the town. Furthermore, this chapter discusses the features of traditional labor institutions in transplanting and harvesting.

Chapter 4 discusses the characteristics of the SEZ and discusses how it evolved through the years. This chapter provides information on how the SEZ affected changes in the characteristics of the town and the two villages, especially in terms of employment structure.

Chapter 5 discusses how the SEZ and rural industrialization resulted in changes in farming practices in the two villages. It discusses which traditional labor institutions were changed, which remained resilient, how these changes impacted the way farm labor was organized, how it was remunerated and how people in the two villages accessed farming for

livelihood. Chapter 6 answers the question why some traditional labor institutions remain resilient and why others are discontinued. The chapter gives an analysis on the factors that were necessary for institutional resiliency and the factors that led to the disappearance of the institutions and the shift to wage labor. Finally, Chapter 7 summarizes the arguments and presents the conclusions of the study.

Notes

- 1 This study uses the term SEZ as a general category that includes other related typologies of manufacturing zones such as special processing zones, export processing zones, free-port areas and industrial enclaves.
- 2 Traditional SEZ sites in the Philippines are the NCR and the highly populated areas in Southern Tagalog and Central Luzon (Hill 2003).
- 3 The relationship between developing the non-farm economy in rural areas and development is further discussed in the study of Hagblade (2007), Estudillo and Otuska (1999) and Estudillo et al. (2007). The authors tend to agree that non-farm employment reduces poverty and complements the agriculture sector.
- 4 PEZA grants operating companies in the SEZs incentives such as tax exemptions and tax holidays, exemption from duties and tariffs, permanent residence status of foreign nationals and faster processing of business permits. This was enumerated in detail in the study of Manasan (2013; 3).
- 5 The SEZ was first named as the Bataan Export Processing Zone (BEPZ) when it opened in 1972; the SEZ is now called the Freeport Area of Bataan (FAB).
- 6 Wong and Tiongson (1980) defined a growth pole as a cluster of industrial companies characterized by a large-scale high growth and fast interaction among other industries. Philippine policy makers hoped that SEZs could act as growth centers that create a market for raw materials and agricultural products and absorb the surplus labor from traditional sectors.
- 7 This region is known as the rice granary of the country as it produces a large part of the Philippine rice output. According to the last government census in 2010, the town of Mariveles had a population of 112,707.
- 8 According to the municipal agriculture office, however, fewer catches have been experienced in recent years, making fishing an unreliable livelihood for the people.
- 9 The two villages have their own primary public schools. There is a public high school in Town Site but there are no high schools in Biaan. Biaan high school students have to go to the center of the town to study. There is only one university present in the town of Mariveles, which is located in the center of the town near the SEZ. Most students who do not want to study in this university go to the other towns in the province.
- 10 Wet season or the first cropping season of the year in the town Mariveles usually starts in June and lasts until October. The dry season or the second cropping season of the year usually starts at the end of November and lasts until early April.

- 11 The authors described traditional farming institutions as “sticky” because changes are challenged by time-honored community norms while people prefer not to abruptly change old institutions in adjusting or creating new ones.
- 12 Hayami and Kikuchi’s (1981) study can be argued as bridging moral economy and rational choice economics. Hayami and Kikuchi’s study can also be classified as belonging to the New Institutional Economics school of thought, which was gaining popularity during that time. The New Institutional Economics tried to answer the criticism of Neo-Classical Economics as it presented a more socialized view of an individual’s rationality as it considered the constraining effects of institutions on economic behavior of individuals. Hubbard (1997), Nee (1998) and North (1998) offer a more detailed explanation of New Institutional Economics and how it differs from Neo-Classical Economics, how it relates to other fields such as agriculture economics and sociology.
- 13 McAndrew (1994, 103) also argued that community institutions are not purely altruistic or egoistic and is open for economic considerations. He argued that the moral obligation to provide work for fellow farmers, patrons and clients or the willingness to exchange outputs and other resources is done in order to pursue individual goals, such as security, and to be assured of a reliable supply of labor in the future (McAndrew 1994, 104). Thus, it can be said that farmers are altruists until their altruism does not anymore earn them profit (McAndrew 1994, 104).
- 14 Feeny (1993) offered a criticism on the basic assumption of the Moral Economy approach as he argued that individual motives might not necessarily be consistent with the collective welfare of the community.

Chapter 2

Review of Literature

This chapter aims to locate this study within the academic debate by presenting a review of how important studies view the effects of capitalist market penetration and rural industrialization on traditional labor institutions. Furthermore, this chapter also presents the gaps in the current body of literature regarding resiliency and change in traditional labor institutions.

2.1. Importance of Traditional Institutions

Hayami and Kikuchi (1981) defined traditional institutions as the values sanctioned by norms of the community or society that give a clear basis for the rules governing the rights to the use of resources and their exchanges, including labor. While there are many traditional institutions that govern the use of different types of resources in different communities, this study will specifically focus on the institutions that govern the use of labor in farming communities.

Hayami (1999) made a distinction between community-based institutional employment and wage (or remuneration) determination mechanisms and the employment and wage determination of the capitalist market economy.¹ According to Hayami (1999, 85), the community is bounded by blood and personal ties, with economic principles that operate differently from a capitalist market economy, in which the prime motivation is to seek immediate profit. In contrast, the community principle on wage and employment determination is based on the norms of mutual help and income sharing (Hayami, 1999, 85-86). Adherence to

these traditional institutions have been proven to save on transaction costs in farming practices and provide a way to preserve a source of livelihood and subsistence for community members amidst technological and demographic changes.

Folke et al. (1998) see institutions as the basis or the rules of the society in the use of natural resources. For them, institutions are necessary as they link the social sphere to the ecological sphere. For Hopcroft (1998), local institutions are as important as state institutions in development as they shape costs and choices among people. In addition, institutions are also seen as a mechanism for the community to achieve cooperation and collective action in the supply of public goods (Aoki and Hayami 2001). Thus, village institutions, which set the rules of behavior in the use of resources such as labor, land and other inputs to farming and other rural livelihoods, are critical in influencing the production process in farming and the general access to livelihoods of the rural people (Hayami and Kikuchi 1981).

Institutions are defined by North (1998) as humanly devised formal and non-formal constraints such as laws and customs of behavior that define the incentive structure of economic activities of societies. Institutions also reduce uncertainty by providing individuals a basis of expectations for the actions of others (North 1990). Institutions can be classified as formal and informal. Formal institutions are defined as all kinds of legally binding norms, such as constitutions, laws and policies in the political system and the enforcement system (Pejovich 1999). On the other hand, informal institutions include cultural norms such as customs and moral values that are enforced outside of the formal structures (Helmke and Levitsky 2004).

This study focuses on informal institutions in farming villages. Specifically, this study focuses on traditional labor institutions that govern how labor is accessed, utilized and remunerated in planting and harvesting practices. Traditional institutions are described by Hayami and Kikuchi (1981) as socially sanctioned clear specifications of the rules governing

the rights to the use of scarce resources and their exchange. These socially sanctioned rules, according to the authors, are mostly based on the community norms of income sharing, reciprocity and patron-client relationships (Hayami and Kikuchi 1981). This study will adopt this definition and will be applied to labor as a resource, thus the community institutions governing the use of labor will be termed in this study as traditional labor institutions.

Many studies have shown the importance of traditional institutions as they influence the use of natural resources and labor in the community. Studies have also shown that traditional labor institutions are critical in influencing the access to livelihoods among people and the production process in agriculture. As labor continues to be one of the most vital inputs in production, changes in traditional labor institutions may not only transform the way people can utilize labor in rural villages but also change the production process and livelihoods as well.

2.2. Importance of Norms

Traditional institutions are based on community norms. Aldger (2003, 349), citing the case of a community in Vietnam, highlights the importance of norms as these create incentives for the sustainable and unsustainable use of natural resources. Nee (1998, 9) described norms as a form of capital that enables individuals to realize long-term benefits in exchange for short-term private gains. Conformity to these norms enables cooperation among individuals needed to achieve collective goods, which may not be possible if individuals acted on their own (Nee 1998, 9).

Hayami (2007) described social norms as “guideposts” in which communities promote cooperation and punish non-conformity. According to Hayami (2007), aside from providing rules of behavior in the use of resources, community norms have been crafted from the need to

ensure subsistence and provide a social safety net for disadvantaged members of the community. Conforming to village norms, according to Hayami and Kikuchi (1981, 20), can be an efficient way to enforce and police agreements and contracts in farming. Conformity to norms can thus provide farming communities with less supervision and transaction costs and can also lead to providing moral hazards against shirking behavior and stealing (Hayami and Kikuchi 2000). Furthermore, community norms have been found to have the capability to dictate or affect wages, productivity and even how labor in the community is utilized (Austen 2010; Rodgers et al. 2004). Norms like reciprocity and cooperation are also found to regulate market behavior by legitimizing or providing the moral basis for market outcomes such as wages (Austen 2010, 511).

Hayami (1999) argued that, in most peasant communities where risks to farming are high, mechanisms that determine wages and employment tend to stress the norms of income sharing and mutual help to ensure the subsistence of community members, especially the poorer ones. Scott (1976) advanced the concept of the moral economy which views community organization based on interpersonal interactions and moral principles, as one that determines not only social activities but also economic activities. Scott identified reciprocity and subsistence sharing as two norms that are deeply embedded and that provide structure and security in a peasant society.

Molm et al. (2007) defined reciprocity as an act of giving benefits to another in return from benefits received. According to them, reciprocity has both a utilitarian value and a symbolic or communicative value. On one hand, the utilitarian value enhances the individual utility of the recipient. On the other hand, the symbolic or communicative value enhances both the individual utility of the recipient and the social solidarity of the relationship (Molm et al. 2007, 199). The symbolic or communicative aspect of the exchange is what sets it apart from

market exchanges. For Scott (1972), reciprocity serves as the central moral formula for interpersonal conduct between peasants and people in the community. This norm dictates that peasants have the moral obligation to help one another. This definition closely resembles a type of reciprocity espoused by Sahlins (1972, 193), which is characterized as a transaction where the material side is repressed by the social side and where the return is indefinite and not qualified in quantity and quality, and the failure to give back does not result in the giver to stop giving.²

At the same time, the norm of subsistence sharing defines the minimal needs that must be met for the members of the community within the context of reciprocity (Scott 1976).³ In addition, Scott also identified the patron-client relationship norm as a necessary relationship in the normative distribution and access to resources in the community. Patron-client relationships are described as a mutual agreement between a person with higher wealth status or power and another who benefits from their support (Scott 1972). An example of this relationship is when patrons provide clients access to their land, thus providing them subsistence and security, and in return, clients provide their patrons an assured and docile labor supply. Furthermore, Hayami and Kikuchi (2000) described the patron-client norm as vital as it compels patrons, or those who are well-to-do in the community, to look after their poorer clients and provide income sharing and mutual help mechanisms to guarantee their minimum subsistence.⁴

Norms provide the guidelines for interaction among people. It is the basis for human behavior and can also influence economic action and transactions of people. Norms lay the basis for institutions. Norms lay the rules on how resources are shared among people with different social status and can also dictate the moral obligation for people to help each other.

2.3. Rural Industrialization and the Agrarian Question

Widely regarded as the most important issue regarding rural development in the 19th century, and still very much relevant in recent times, is the agrarian question posted by Marxist scholars. The agrarian question is mostly concerned with the political and social consequences of the transition of communities from the traditional mode of production and traditional exchanges to modern capitalist markets. The agrarian question is an inquiry regarding the make-up and the drivers of the capitalist transition of agriculture, which, in effect, is an inquiry on the trajectory of class struggles that transform pre-capitalist social relations of production as a basis for the development of the production process in farming (Bernstein 2010, 240).⁵ The accumulation of agrarian capital and the formation of class in the agrarian society are believed to be the main driving forces of change and the transition to capitalist production.⁶

Many scholars, however, started to question the relevance of the classic agrarian question in the globalized world today. McMichael (1997) calls for a “new agrarian question” that goes beyond class as the basis of analysis for agrarian transition. He suggests that a new agrarian question should be situated in a process of evaluation of not just local considerations but global considerations as well.⁷ Recent studies in agrarian change calls to go beyond class differentiation and capital accumulation as the dominant perspectives in analyzing the transition of agriculture, and to include a more diverse perspective on how the agrarian transition is being manifested in current times (Borras 2009; Bernstein and Byres 2001; Kelly 2011). Furthermore, instead of having an over-arching theoretical framework to the question of agrarian transition, Philip Kelly (2001) calls for the use of various conceptual lenses in studying agrarian change. He suggested that one of these lenses is viewing how the global economy is influencing changes in local livelihoods. In describing the changes in recent

empirical debates regarding agrarian transitions, Kelly (2011) also emphasized that the process of capitalist commodification of farming is not the only way rural areas are experiencing social and economic changes. Wider processes have been shaping agrarian production that includes migration, globalization, agricultural intensification, mechanization, urbanization and industrialization and environmental change, among others (Kelly 2001).

2.4. Rural Industrialization and Agrarian Change

Proponents of developing the non-farm economy stress its value in creating employment to absorb the surplus labor force from the subsistence sector, which results from the seasonal production of agriculture and the limited capacity of the land to keep up with population growth.

Many scholars tend to believe in the symbiotic relationship of the industry and agriculture sectors. Netting (1993) predicted that industrialization will not only absorb unemployed rural laborers but also bring about a larger market for agricultural products that will spur farmers to intensify their production and increase farm productivity. Furthermore, Grabowski (1995) sees rural non-farm activities providing incentives for innovation and productivity for agriculture as these enhance income diversity among farm households, which drives them to take more risks and innovate in their farming practices. It is perceived that increased manufacturing will make markets for agricultural products larger and eventually lead to overall growth in agriculture (Grabowski 1995). Similarly, according to the study of Lanjouw (2007, 63), linkages between the farm and non-farm sectors translate to higher non-farm incomes that can produce added investments in farming, leading to additional demand for farm laborers. On the other hand, there are also many scholars who believe that the relationship

is not symbiotic but rather parasitic. Wolf (1992), taking the case of Java in Indonesia, illustrated how rural factories were subsidized by the low living costs in the countryside, whereas factory employment did not contribute significantly to the improvement of the household income of the workers. Thus, although factories resulted in high employment rates in the villages, especially among young women, it did not translate to additional agricultural investments among farm households (Wolf 1992). Cases documented by Chantana (1993) in Thailand illustrated that, rather than creating incentives for agricultural productivity and additional employment, rural industrialization resulted in labor shortages as industrialization caused occupational shifts from farming, which, in turn, resulted in changes in the production process in farming and community life in general.

Rigg (2001, 103), citing the cases of Thailand and the Philippines, noted that some cases of rural industrial development complemented with agriculture. However, he warns that some cases also illustrated that rural industrialization can distort the local labor market and undermine agricultural productivity (Rigg 2001). Hagblade (2007, 48), citing different cases, illustrates that labor can be syphoned out of agriculture and into the industries, leaving the farm sector weakened. Studying SEZs, Warr (1989) warns that industrialization is an efficient way of absorbing surplus labor in rural areas. However, without the proper forward and backward linkages, benefits of SEZs are limited as an engine for development, especially in rural areas. Positive and negative effects of rural industrialization on farming and availability of farm laborers have been highlighted by different studies. However, as Kelly (2000, 94) states, there are still a few studies written about the effects of factory work on farming activities mediated in the labor market.

2.5. Agrarian Transition Theories

De Koninck (2004) defined agrarian transition as the transformation of societies from primarily non-urban populations dependent on agricultural production and organized through social structures to predominantly urbanized, industrialized and market-based societies.

Lewis (1979), in his dual economy model, predicted that the expansion of the modern sector will result in the modernization of the ideas and institutions of the traditional sector.⁸ He also described the expansion of the modern sector as predatory as laborers from the traditional sector will be taken by the modern sector, which may result in shortage of laborers that may, in turn, disrupt the village economy and village life in general.

Many scholars believe that the penetration of capitalism in agriculture will eventually wither away traditional institutions and replace them with capitalist markets. Popkin (1979) argues that individuals, even in the most traditional societies, are predominantly motivated to seek personal gains rather than care for the welfare of the community. Popkin also stresses that peasants benefit more and gain protection from capitalist markets than smaller markets by providing them a more reliable supply of food through the insurance of the value of money. Market expansion enables peasants to have more income opportunities and more control of their own economy, thus making them less prone to shocks of grain prices and disasters in farming (Popkin 1979).

Furthermore, many scholars believe that adoption of capitalist and western values, which are being accelerated by globalization, will result in the homogenization of diverse norms and institutions in favor of more capitalist values (Wallerstein 1974; Guehenno 1995; Sassen 1996; Tomlinson 1999; Giddens 2000). Scholars of Philippine agriculture have documented the replacement of family labor and the free exchange of labor among farmers in

favor of hiring waged laborers with improvements in rice technology and the penetration of the capitalist market in the countryside (Del Rosario 1980; Castillo 1982; Duhaylungsod 1989; Fegan 1989; McAndrew 1994; Kelly 1997). Experiences such as these among peasants around the world have prompted questions and inquiries among scholars regarding the incompatibility of traditional institutions with the inevitable penetration of capitalist markets (Friedmann 1980; Basu 1984; Sajor 2004). Friedmann (1980, 175) even came to the conclusion that complex institutions within the traditional peasant production provide barriers and resistance to commodification and therefore must “decompose” for the full development of capitalism to emerge and prosper.

Susan Mann’s (1990) research on the prevalence of non-wage labor in the U.S. agriculture sector suggests that existing theories that used to analyze economic behavior in the frame of capitalist industries might not be completely appropriate in explaining agricultural societies.⁹ Most economic sociologists argue that theoretical foundations of existing theories, mostly economic theories, are still based on an atomized view of the individual who is detached from others and the society. This is because the fundamental point of analysis for most theories still centers on rational choice and maximization of profit and efficiency. Thus, there is a need for a more socialized and socially embedded analysis of explaining economic behavior (Granoveter 1992; Nee 1998; Smelser and Swedberg 2005).

2.6. Rural Resistance Theories

As a counter to the proponents of agrarian transition, the rural resistance perspective highlights the negative effects of the adoption of the capitalist market among rural and agrarian societies.

Proponents of this perspective argue for the possibility of resistance against capitalist forms of markets, and thus provide an alternative to the view of the inevitable transition to capitalism.

Chayanov (1966) argues that peasants have the capacity of self-exploitation to resist proletarianization and even resist being integrated in the capitalist system.¹⁰ Chayanov's analysis points out the capacity of innovation among economic actors amidst the penetration of capitalism. His arguments suggest that capitalist transition is not necessarily a linear and straightforward adoption of the capitalist market in agricultural production.

Turner and Caouette (2009) have traced the contemporary literature on rural resistance to Polanyi (1944) and James Scott (1976). They differentiated the literature into two types, with one type, inspired by Polanyi (1944), focusing on open protests caused by structural forces, and the other type, inspired by Scott (1976), focusing more on hidden and everyday types of resistance caused by more micro and interpersonal relationships (Turner and Caouette 2009).

Polanyi (1944) mainly criticized the effects of an unregulated market economy to the other parts of society. He declared it as a threat to the very essence of human nature and has called for a "countermovement" to protect the society from the ill-effects of an unregulated market. Polanyi (1944) argued that pre-capitalist market economies are based on economic organization, which is explicitly tied with social relationships and center on the principles of reciprocity and redistribution. Thus, for him, the creation and the proliferation of the market economy had made individuals behave in rational profit-maximizing ways, which is contrary to human nature and presents ills to the society. Polanyi (1944) argues that market subordinates the rest of society to its laws by considering land, labor and money as fictitious commodities, which results in the disruption of traditional social institutions and organizations and force everyone to adapt the values of profit maximization and laws of a competitive market. This

will result in widespread social dislocation. Thus, Polanyi (1944) calls for a countermovement of the society to protect itself from the market economy and attempt to “re-embed” it to the society.¹¹

From a structural and a more macro view of resistance espoused by Polanyi (1944), Scott’s (1976) analysis of resistance focuses on the micro-level and community-level resistance manifested in the day-to-day interactions of community members with each other. In his groundbreaking book *The Moral Economy of Peasants*, Scott (1976) argued that people in peasant economies prefer transactions based on interpersonal relationships over the capitalist market as the former assures them subsistence and long-term benefits. Basing his analysis on the relationship between landlords and peasants and the peasant resistance in Southeast Asia, Scott argues that ensuring shared subsistence within the community is seen as more important than maximization of immediate individual profits. However, he observes that community organization based on moral principles and close interpersonal relationships in a subsistence-oriented farming economy tend to break down with the penetration of the market economy. Scott believed that the conflict between capitalist market systems and moral standards of community results in the rejection of and resistance against capitalist markets. As a response, being risk-averse, trying to retain their subsistence capacity and aiming to maintain or restore moral relationships amidst changes, many scholars argue that peasants resist the market through various hidden or mundane means such as protest, sabotage and shirking (Wolf 1971; Scott 1976; Scott 1985; Kerkvliet 1990).

There are also those who believe that the globalization age has presented agrarian societies with new challenges. McMichael (1997; 2010) believes that, more than the accumulation of capital and technological change, global forces such as the international trade, internationalization of agriculture, the rise of transnational corporations, and agro-

industrialization have compelled the peasantry and rural households to leave their lands and become waged laborers or intensify self-exploitation in order to remain in the land. According to him, these practices have contributed to the impoverishment of the world's peasants and small-scale farmers.¹²

2.7. Institutional Hybridity and Resilience Theories

Mainstream agrarian transition theories see the transition to the capitalist mode of production and disappearance of traditional institutions as inevitable. This view is challenged by the rural resistance perspective by presenting the possibility and the need of resistance against capitalist markets and the preservation of traditional institutions. However, the rural resistance perspective paints a dark picture of capitalism as it tends to highlight its negative aspects. Furthermore, both perspectives tend to disregard the possibility of the co-existence of both traditional institutions and capitalist markets.¹³

The concept of institutional resilience offers a middle ground between the rural transition and the rural resistance perspectives as it involves a certain degree of change and accommodation compared to resistance and a certain degree of continuity compared to transition.¹⁴ Currently, there are two different approaches in institutional resilience thinking in the literature, the equilibrium resilience approach and the evolutionary resilience approach.

The equilibrium resilience approach is defined by Holling (1973) as the ability of a system to absorb or accommodate shocks or disturbances without changing the system. This approach to resilience emphasizes the need for a system to “bounce back” or return to pre-existing conditions (Pike et al. 2010). It draws attention on how far a system can be displaced from a fixed point in the equilibrium and return to that point once the stress or disturbance has

passed (Young 2010). This approach is commonly applied in disaster management and rehabilitation but has found its way into the economic realm with it being used to address problems arising from economic crisis and market failures (Scott 2013). However, this approach, according to Scott (2013), is limited as it largely ignores human behavior, institutions, rules and ideologies, thus depoliticizing the process of how socio-ecological systems deal with shocks and stresses.

On the other hand, the evolutionary resilience approach rejects the assumption of the single-state equilibrium approach or a “bounce back” to normal pre-shock or pre-stress conditions. Sjostedt (2015) and Young (2010) argue that the evolutionary resilience approach also differs from the concept of institutional change espoused mostly by economists and some political scientists, which also based their assumptions on that institutions are in a state of equilibrium or tend to return to equilibrium after being exposed to shocks. In short, this traditional view of institutional change assumes that any change from the original institution, however small, constitute an entirely new institution. In contrast, the institutional resilience perspective views that adaptation and adjustments within institutions do not necessarily constitute a whole new institution or social system as long as the fundamental features of the institutions are preserved. Instead, the evolutionary resilience approach highlights the ability of the system to evolve and change with the emphasis on adaptive behavior (Scott 2013). In addition, Scott (2013) highlights that the evolutionary resilience approach recognizes the importance of norms, values and institutions in the evolutionary process.

Therefore, the evolutionary resilience approach will be adopted in this study as it provides the analytical tools in studying the adaptive capacity of institutions within a changing social-ecological environment, more specifically, the disturbances and stress that the creation of the SEZ presents on the farm labor market in the research site. The term institutional

resilience in this study will be used to refer to the institutional evolutionary resilience approach.

Institutional resistance has been broadly defined as the ability of institutions to withstand disturbances while still maintaining its ongoing functions and controls in order to provide stability and reduce uncertainty among its stakeholders (Holling and Gunderson 2002; Young 2010; Herrfahrdt-Pahle and Pahl-Wostl 2012). Young (2010) stresses that the institutional resilience approach emphasizes the ability of an institution or a social system to handle stresses in an adaptive manner from exogenous factors along with the maintenance of its key elements. In simple terms, institutional resilience is about managing continuity and change (Folke et al. 1998).

Herrfahrdt-Pahle and Pahl-Wostl (2012) identified 3 types of changes: persistence, adaptive change and transformation. Persistence can be associated with changes within the current framework of norms and values without questioning the underlying assumptions (Pahl-Wostl 2009). Such incremental changes are aimed to improve the system's performance. Adaptive change refers to the social system's response to shifts in ecological or social systems (Gunderson et al. 2006). This adaptation of institutions can be accompanied by a learning process that reviews the assumptions without changing the underlying norms (Pahl-Wostl 2009). Adaptive change thus means making appropriate trade-offs between continuity and change (Herrfahrdt-Pahle and Pahl-Wostl 2012). However, a transformation constitutes a change in the prevailing mental modes, norms and values, which, in turn, results in the creation of a fundamentally new institution (Pahl-Wostl 2009). Transformation usually happens when a social system finds a mismatch between its functions and its environment (Folke et al. 2010).

In the typologies given by Herrfahrdt-Pahle and Pahl-Wostl (2012) above, persistence and adaptive changes constitute institutional resilience since it involves a change that does not

alter the basic or underlying norms of a social system. These adaptations and adjustments are necessary for institutions to better itself or to continue to function along with changes in the socio-ecological environments in which it operates.

Hayami and Kikuchi's (1981) analysis of changes in the farming practices in the Philippines offers a good starting point in analyzing how traditional labor institutions change in regard to its socio-economic environment. Although coming from a perspective that emphasizes the single-state equilibrium approach in institutional change, the authors emphasized the constraining and sanctioning aspects of community norms. Their extensive analysis of Philippine rice farming villages illustrates that adjustments in norms and institutions that govern labor contracts tend to move toward the equilibrium of the price of labor. Hayami and Kikuchi's study found that traditional labor institutions and non-wage labor in agriculture change and adjust to approximate or match the prevailing wages. They cited a traditional labor institution in one rice village in the Philippines that adjusted harvest contracts to include more tasks when the value of in-kind shares from the harvest rose above the current farm wages because of the abundance of labor in the farm, thus creating a new arrangement. Thus, Hayami and Kikuchi's (1981) analysis took into consideration the relationship of norms, institutions and capitalist pricing mechanisms, such as wages, in explaining the economic behavior of farmers and laborers.

Although Hayami and Kikuchi (1981) did not discuss the concept of institutional resiliency as they concluded that the institutional adjustments constitute a creation of a new institution, the authors illustrated that traditional labor institutions have the capacity to change and adjust while maintaining its adherence to its underlying norms. Their study also presents the possibility of traditional labor institutions adapting to capitalist markets and not entirely disappearing nor resulting in any protest or resistance. Moreover, Hayami and Kikuchi's

(1981) study pioneered a framework to analyze changes in traditional institutions by taking into consideration the interplay of community norms and market forces in the farming economy.

Harris-White et al.'s (2009) study goes a step further by arguing that co-existence between traditional institutions and the capitalist market is possible. Studying traditional farming labor contracts in the upland communities in India, they argued that older institutions are not simply replaced by market-oriented production and exchanges as some institutions might weaken, whereas new ones might emerge but some might persist through an uneven process of hybridity and interdependence with capitalist markets. Central to this argument is that it is necessary for traditional labor institutions to be integrated to capitalist markets to survive and continue to be practiced by the community. Equally central to this argument is that institutions have the capacity to persist and be resilient through adaptation and adjustment.

Most scholars of Philippine agriculture have traced the transition to capitalism to the evolution of land structures, introduction and adoption of green revolution technologies, and the growth of the non-farm sectors in rural economies (Takahashi 1969; Estudillo and Otsuka 1999; Takashi and Otsuka 2009).¹⁵ However, there are studies that suggest that traditional reciprocal labor is still practiced despite the penetration of the capitalist market (Lopez-Gonzaga 1983; Voss 1983; Sajor 2004). There are some studies that suggest that capitalist penetration is a non-linear process as contract choices are still based on its “institutional-fit” with other aspects of farming (Chuma et al. 1990; Otsuka and Hayami 1990) and farming decisions are still affected by interpersonal networks and kinship (Fukui 1999). There are strong evidences provided by other studies that traditional labor institution can be resilient or even thrive side-by-side with modern capitalist markets (Grief 2001; Hayami and Kikuchi 2001; Hayami 2007; Harris-White et al. 2009).

2.8. Summary

This study aims to contribute to the literature that explains what is happening to traditional labor institutions with the penetration of capitalism and industrialization in rural areas. Studies have proven that traditional labor institutions are important in communities as it govern how labor is organized, utilized and remunerated. Traditional institutions are based on community norms, which provide the patterns of behavior that guide how community members interact with one another. Studies have shown that community norms and traditional institutions influence the use of resources in the community, including labor. Thus, changes among traditional labor institutions can directly affect access to livelihoods.

However, few studies, especially in recent years in the Philippines, have investigated institutional change in the agrarian landscape amidst industrialization and the creation of SEZs in rural areas of the country. Furthermore, few studies are available that take into consideration industrialization and the scarcity of laborers as a driver for agrarian change. In addition, only a few studies have investigated the effects of SEZs on institutional change in rural areas, whereas many others assume that rural industrialization benefit rural communities, especially women and the landless.

This study treats the establishment of the SEZ and its resulting rural industrialization as a form of capitalist penetration that initiates changes in the agrarian community. The dominant view on agrarian change is that traditional labor institutions, which govern the way labor is organized and utilized, slowly wither away with the penetration of the capitalist markets in farming as it is assumed that values based on capitalist market exchanges are adopted by rural communities, which enable them to discontinue traditional labor institutions.

An alternative perspective is presented by the rural resistance view, which emphasizes the negative impacts of capitalist penetration and advocates the possibility of resistance of traditional labor institutions to change or transition. This view, however, underscores the resistance to capitalist markets as the only way for traditional labor institutions to survive. However, there are scholars that offer a middle ground between the two perspectives as they argue for the possibility of co-existence and the complementarity between traditional labor institutions and modern capitalist markets.

In investigating institutional change and resiliency, two competing approaches are used by scholars. One is the equilibrium approach, which believes that resiliency of institutions depend on their ability to “bounce back” or return exactly to their state prior to the shock. On the other hand, the evolutionary approach centers on the belief that institutional resiliency is the ability of institutions to adapt to changes by undergoing adjustments without changing its core norms.

By studying the effects of the SEZ on the traditional labor institutions in two rice farming villages in the town of Mariveles, this study aims to contribute to the literature on the impacts of rural industrialization on how labor is utilized in rice farming in the Philippines. Furthermore, the results of this study aims to contribute to the literature and debates on institutional resiliency. Finally, it aims to contribute to the literature regarding the institutional change in agrarian communities with the penetration of capitalism in rural areas as it tries to explain why traditional labor institutions change.

Notes

- 1 Hayami (1999) identified examples of systems of organizing and remunerating farm laborers such as the *hunusan* and the *gama* in the Philippines and *bawon* and *ceblokan* in Indonesia.
- 2 Reciprocity, however, is different from altruism. According to Camerer and Fehr (2009, 56), altruism is defined as an actor taking costly actions to increase the payoff of another actor

- irrespective of the other's previous actions much like that of unconditional kindness. On the other hand, reciprocity is conditioned on the action of the other actor as people are willing to reward positive actions or punish negative actions even though it can cause a reduction in the material payoff among those who reward and punish (Camerer and Fehr 2009, 56). In simple terms, as Camerer and Fehr (2009) stated, acts of reciprocity are actions conditioned on the previous actions on another actor.
- 3 In Scott's (1976) work, he referred to the norm of subsistence sharing or income sharing as subsistence ethic.
 - 4 The norm of reciprocity plays an important role in the patron-client relationship. As Scott (1976, 170) notes, reciprocity or the mutual obligation between patrons and clients to give and preserve the transaction and the benefits that both parties receive from the relationship is what prevents the relationship from becoming exploitative.
 - 5 Even traditional Marxist scholars like Vladimir Lenin, subscribe to the linear view of transition to capitalist markets. Lenin (1967) believed that the formation of capitalist markets leads to differentiation among farmers. Those who have access to land and capital are able to further expand their production and eventually beat out smaller farmers and peasants. A process of polarization takes place as wealthier farmers become wealthier and poorer farmers and peasants are forced to sell their assets until they gradually become laborers or rural proletarians who sell their labor as waged laborers to the landowners.
 - 6 Traditional Marxists view that the further penetration of capitalist markets in the countryside favors groups that have access to and control of resources, resulting in the formation of classes (Berstein, 2010).
 - 7 McMichael (1997) argues that the forces of globalization have resulted in the internationalization and agro-industrialization of food systems, which have accelerated and have profound effects on de-peasantization and changes in the production process of small farms and peasants (McMichael 1997).
 - 8 This linear view can also be seen in classical sociology as reflected by the works of its founding fathers such as Durkheim, Marx and Weber. According to Mann (1990), Durkheim's division of labor in society, Marx's stages of economic growth and Weber's rational approach centered on the linear transition of the society from the traditional to a more modern one, which is largely based on western experiences. A more contemporary approach is seen in development studies with the modernization school and the famous five-staged economic growth by Walt Whitman Rostow (1960), which sees that the only path to development is to move away from traditional societies and towards a modern society characterized by an age of high mass consumption.
 - 9 Susan Archer Mann in her book *Agrarian Capitalism in Theory and Practice* (1990) asked the question why non-wage production still exists even in modern societies such as in the United States cotton industry. Her unique methodology took in consideration agriculture's seasonality, its vulnerability to the weather, the perishability of goods as well as the physiological and biological process of crops and livestock in her analysis of the transition from non-wage to wage labor in U.S. agriculture. She concluded that the natural peculiarities of agriculture makes agriculture different compared to other capitalist industrial sectors in the management and utilization of resources, including labor.
 - 10 As a response to Lenin, Alexander Chayanov (1966) argued that class formation in agrarian Russia was not a result of access to capital but was due to the location of the household in the demographic cycle. Unlike Lenin's arguments based on profit maximization and efficiency, the peasant households' main concern or their main calculation for economic action, according to

- Chayanov, is attaining the needs for simple reproduction while minimizing drudgery (Bernstein 2009).
- 11 Block and Somers (2014) cited Polanyi's work as a tool in understanding recent unemployment, inequality and the seemingly recurring global financial crisis the world has experienced in recent decades after the proliferation of neo-liberalism.
 - 12 As a response, McMichael (2010) calls for a "food sovereignty" movement that centers on the right of people to define their own agricultural policies through proper recognition of their own laws, traditions, customs, tenure systems and institutions and cultures. All in all, McMichael (2010, 302) assesses that the food sovereignty movement represents an anti-capitalist narrative to reverse the effects of neoliberal capitalism in order to achieve a more sustainable form of social reproduction.
 - 13 Other scholars also believe that changes brought about by exogenous factors are mediated by local actors and social structures, thus producing various kinds of institutional environments (Hart 1989; Kelly 2001; Campbell 2004).
 - 14 The concept of resilience was first applied in ecology by Holling (1973). It was used to explain how ecological systems respond to physical shocks or disturbances (Folke 2006). Through the years, the concept of resilience was adopted by social science scholars to explain the interplay between the ecological sphere and the social sphere, particularly on how communities respond to environmental crises and stresses (Scott 2013). According to Scott (2013), it was Aldger (2000) who was among the first to translate the concept of resilience into the social dimension by examining the direct relationship between social resilience and ecological resilience. It was also Aldger (2006) who highlighted the role of norms, values and the importance of institutions, which governs the rules how of resources are used for both achieving community and ecological resilience.
 - 15 Various studies have characterized Philippine agriculture, especially the rice-farm sector, as having a high degree of capitalist penetration (Ofreneo 1980; Hayami and Kikuchi 1981; Fegan 1989). In the agrarian transition of the Philippine countryside since the introduction of Green Revolution technologies in the 1960s and 1970s, Bautista (1983) argues that reactions to capitalist penetration are differentiated according to location, crops being planted and other socio-economic factors of the locality

Chapter 3

Rice Farming Before the Establishment of the SEZ

As discussed in Chapter 2, rural industrialization has been found to result in many changes in its surrounding communities. Thus, it is important to have a clear understanding of the social environment and the farming practices of the people before the SEZ was established in the town of Mariveles. In addition, it is important to discuss the source of capital of farmers and the market where they sell their crops as these also influence farming practices and the social relationships in the two villages. The objective of this chapter is to give a description of the rice farming practices in the town before the SEZ was established. Furthermore, this chapter provides the social context in which the community norms operate in the farming villages and how traditional labor institutions operate in the farming practices of planting and harvesting.

3.1. Farming Practices Before the Establishment of the SEZ

Malate (2015, 269) documented that the town of Mariveles, before the establishment of the SEZ, was underdeveloped, with poor roads, small population and poor commercial businesses, making agriculture the main source of livelihood in the town. Villagers work as farmers, fishermen, farm laborers and loggers. One old farmer interviewee recalled that, in the days of his youth, he can go out to sea and fish at night and, when they come back to shore in the morning, he immediately goes to the rice field and work as a laborer, and then go fishing again when nighttime falls. According to him, back then, food was not hard to find as one could get it from the sea, the forest and by working in the farms. Because of the town's remote location

and the lack of significant improvement in infrastructure, commerce and industry have not been developed in the town and agriculture and fisheries dominated its economy until the early 1970s.

According to farmers, past and current landlords in the two villages have shown minimal or no interest in investing in rice farming. They were content in renting out their land to their tenants in exchange for ten sacks of milled rice per hectare every cropping season.¹ As a result of the landlords' disinterest, management of the land fell under the authority of the farmer-tenants in the two villages. This still holds true until the time of the study. As seen in Table 1, most of the farmers in the village of Town Site today are leaseholders or tenants, whereas most of the farmers in the village of Biaan at present are landowners. However, in terms of decision making, being either an owner-farmer or a tenant-farmer has no significant difference. The village of Biaan has a larger average farm size but has a fewer number of farmers and farms. The average experience of farmers in rice planting is almost the same for the two villages at 32.88 years in the village of Biaan and 34.12 years in the village of Town Site.

Table 1. Current land tenure and size of farms in the two villages

Village	Land Tenure (households)			Size of Farm (ha)					Average Farm size (ha)	Average Years of Planting
	Owner	Leaseholder	Others	.01-0.5	0.6-1.0	1.1-1.5	1.6-2.0	2.1 or more		
Town Site	16	27	1	16	21	3	3	1	0.88	34.12
Biaan	17	11		10	8	6	1	1	1.05	32.88

Source: Author's survey (2015)

Rice farming practices in the past are generally a community affair, with institutions and norms governing how resources, such as farming tools, draft animals and human labor, are

utilized. Due to the lack of mechanization, most farming practices are labor-intensive, especially transplanting and harvesting.

3.1.1. Land preparation

Land preparation in the two villages, before the introduction of small hand tractors, used to be a communal affair among the farmers. Farmers used to own *carabaos* or water buffalos, which they use to till the land. However, not every farmer owned a draft animal as this involves capital investment.² Farmers who do not have *carabaos* usually borrowed from other farmers in exchange for their labor. Those who do not own *carabaos* offered their services in guiding the draft animal in tilling and harrowing the land and in repairing the bunds around the fields as payment for the rent of *carabaos* when it is their turn to till their lands.

The more *carabaos* a farmer can use, the faster they can finish preparing the land for transplanting. Thus, this provides farmers incentives to share their *carabaos* or offer their labor in exchange for the use of other farmers' *carabaos*. Also, the faster a farmer can finish preparing his or her land for transplanting, the sooner they and others can start working on their land.

3.1.2. Transplanting

Transplanting was the dominant crop establishment method in the two villages during the 1960s until the early 1970s. A one-hectare land typically needs 15-20 laborers to transplant in one day. The activity involves pulling seedlings from the seedbed and transplanting them in the main farm parcel. As far as farmers can remember, transplanting has always been paid daily

wages in the two villages. The number of planters usually depends on the budget of farmers to pay wages for laborers.

Hiring laborers in transplanting was not only a way of providing access for the landless to the land. It was also a way for farmers, specifically through their wives and daughters, to earn income from other farmers' farms to diversify their income and mitigate the risk of calamities and low harvests. Women consisted a significant part of the planting crew. Former women planters in the village expressed in the interviews that transplanting was an opportunity for wives and their young daughters to earn a living because there were only a few opportunities for women to earn a living in the village during those times.

Because proper timing in transplanting is very crucial to the growth of rice plants,—too late or too early transplanting can have a major effect on yield—farmers needed to be sure that they have access to a reliable number of laborers at a specific time. This need was filled by the institution called the *cabecilla*. In this traditional labor institution, a planting leader, who is called the *cabecilla*, recruited, organized and trained men and women for transplanting. Farmers in the two villages approached the *cabecilla* to schedule the day for transplanting. After sowing their seeds in the seedbed, farmers immediately approach the *cabecilla* to schedule a planting date. It is then the job of the *cabecilla* to mobilize skilled planters and bring it to the farmer's farm during the day agreed upon. *Cabecillas* prioritized farmers on a first-come-first-served basis. Back then, farmers in the two villages regularly hired their own respective *cabecillas* with whom they have developed trust throughout the years. They only went to another *cabecilla* if their regularly hired *cabecilla* is not available during their planting day.

This institution is mostly practiced in lowland rice field areas in the Philippines where transplanting is the popular method of crop establishment. A study by Nazarea-Sandoval

(1995, 100) cited that the usual *cabecillas* are elder women. Interviews among seasoned farmers in the two villages confirmed that most of the *cabecillas* back then were women. This is mainly because most planters were women, and as they gain influence, experience and skill in transplanting, they eventually become the leaders of planting groups. Usually, *cabecillas* maintained a group, which she or he regularly mobilizes for planting contracts, which were composed mostly by young women and housewives who do not have full-time livelihoods. This institution also served as a skill transfer from one generation to another as young girls and boys are recruited to the group and trained by older planters. When a *cabecilla* retires, the next most seasoned planter is promoted to take on the responsibility. Furthermore, it is the *cabecilla's* job to supervise and discipline the planters in order to make sure that the quality of transplanting is maintained. This means that the seedlings are planted in a straight line and the job will be finished in the time agreed upon.

The institution of *cabecilla* was beneficial for the farmers in the two villages as it made easier for them to find laborers and save on time, money and energy. This is especially important for older farmers who no longer have the physical ability to search the village for available planters. Furthermore and most importantly, as farmers stressed in the interviews, through the institution of *cabecilla*, farmers were assured that laborers will be available at the most optimal time of transplanting. This provides farmers a sense of certainty, according to the interviews among farmers.

Cabecillas were also responsible for disciplining the laborers against shirking. According to two former *cabecillas*, the reputation of the planting groups was the most important asset of the *cabecillas*. If the *cabecilla* and her planting group are seen as efficient and good, farmers will recommend the group to other farmers. But, once the planting group displays poor quality of work and if the members shirk, the *cabecillas* will be answerable to the

farmers and the risk of going to another *cabecilla* for the subsequent planting season will be high. For the laborers, the access to planting employment highly depended on building a good personal relationship with the *cabecilla* as well as showing good quality of work during transplanting.

3.1.3. Weeding

Farmers in the two villages made use of manual labor in weeding before the 1970s. Transplanting provides ample spaces between rice plants for manual weeding or physically removing weeds by hand. According to farmers, it is rare for them to use chemical herbicides in the old days. Some farmers narrated that they made use of exchanged labor for weeding, in which farmers with their household members perform weeding in a farmer's plot in exchange for that farmer's labor in their plot. However, the usual practice was that weeders were hired and paid by daily wage. Farmers express preference for female weeders as they believe that women are more agile than men in moving between the rice plants, which result in less crop damages. Together with transplanting, weeding was the main farming practice, in which women can earn income from rice farming.

3.1.4. Harvesting

Aside from transplanting, the next major activity involving a large quantity of labor is harvesting. Then and up to now, harvesting in the two villages is done manually. Before the introduction of mechanical threshers, the common practice in the two villages was that a laborer can get any amount of fresh paddy he or she can carry on his or her own back, which

will serve as their payment. The premise was that the more paddies the laborer can carry on his or her back, the stronger the laborer was, which shows how much he or she has harvested. After each laborer has taken each of their shares, the laborers will put the rest of the harvested paddy in one pile and haul it for the farmers to get it ready for threshing. This system of remuneration is called “*hunakan*” or sharing in the local dialect. After threshing, it is also customary for the harvesters to haul the sacks of fresh paddies from the farm to the farmers’ huts or houses for storage or to the side of the main hi-way for drying.

Unlike in transplanting, harvesting did not have a leader that organizes and manages laborers. Back then, harvesting was open to anyone in the village who would like to participate. Although harvesting was open to anyone in the village, relationships, through time, were built between farmers and laborers. Farmers developed patron-client relationships with their regular harvesters. Despite this, norms in the community dictate that farmers cannot refuse participation from anyone in the village. Harvesting work was extremely hard since rice varieties before were much shorter and more difficult to cut. Because of this, harvesting was mainly participated in by men as it was seen by farmers and men laborers as “too hard” for women to do.

The entry of the *tilyadora* threshing machines changed how harvest laborers was paid and organized. Because of the larger capacity, the machine enabled farmers to quickly thresh their paddies. It enabled the laborers to get their share immediately after threshing, which was an advantage for them since they don’t have to thresh their shares by themselves. This, however, required that the harvest crew put all of their harvest together in one pile and thresh it together unlike the individual piles before. This process marked the shift from farmers paying individual harvesters to paying them as a group. This also negated the advantage of the stronger laborers over the weaker ones, as all harvesters will get the same share.

Harvesters share among themselves ten percent of a farmer's harvest. No one in the two villages during the time of the study knew how the ten percent sharing rate in the institution of *hunusan* started, but farmers agree that it is the estimated amount of paddy that they pay harvesters ever since the old days when they would do the old way of harvesting and threshing.

3.1.5. Threshing

Like land preparation, threshing in the two villages used to be a community activity involving not just farmers but also their household members. Before the introduction of threshing machines in the two villages, threshing was done with *carabaos* until the late 1950s. After harvesting, the farmer, his or her fellow farmers and laborers piled up the farmer's un-threshed crops and let *carabaos* walk around it throughout the day. This was a community affair as farmers need as many *carabaos* as they can get. After paddies are threshed, the farmers and their household members gather the fresh paddy grains, winnow and clean the grains and put them into sacks to be ready for drying and make way for other farmer's un-threshed crops to be threshed.

This practice requires the farmers to share *carabaos* with each other in order for each individual farmer to thresh his or her harvest rapidly. Since non-mechanized threshing was also labor intensive, this practice allows a farmer access to additional labor in return for his or her own labor. As in land preparation, this practice was also vital for both farmers who own and do not own *carabaos*. For farm households who do not have *carabaos* to share, they offer their household labor in helping other farm households in hauling paddies, winnowing and sacking the threshed grains.

With the proliferation of machines such as hand tractors and mechanical threshers in the 1950s, this way of land preparation and threshing slowly faded away. As hand tractors and mechanical threshers became increasingly popular, fewer and fewer farm households owned *carabaos* that can be shared in the village.

Wealthy villagers in and outside the two villages invested in owning hand tractors and mechanical threshers. Farmers rented hand tractors from such owners and was paid in cash. The rent for the threshing machine and threshing labor was paid from a ten percent share from the harvest of the farmers. The entry of the *tilyadora* threshing machines put an end to *carabao* threshing in the two villages. This kind of threshing machines can accommodate a larger capacity and can thresh faster than previous models. New and smaller threshing machines have replaced the *tilyadora* threshing machines since the early 1970s.³

3.2. Features of the Institutions of *Cabecilla* and *Hunusan*

Farm mechanization was restricted in land preparation and threshing. Until the establishment of the SEZ in the town, the tasks of transplanting and harvesting remained labor-intensive activities, with farmers relying on the availability of laborers and the traditional labor institutions that facilitate the organization of laborers in the farm. These are the institutions of *cabecilla* and *hunusan*. The two institutions are different from hiring waged laborers. Instead of profit maximization and paying prevailing wages, the organization and remuneration of labor in the institutions are based on the community norms of income sharing, reciprocity and patron-client relationships. Certain features are present in the two traditional labor institutions that promote these norms and make them distinct from wage labor.

3.2.1. Institution of *cabecilla*

Three important features define the institution of *cabecilla*. These are labor organization, relationship between the *cabecilla* and farmers, and skills transfer. The way by which laborers are organized in the institution of *cabecilla* provides three benefits for the farmers. First, it saves farmers time and cost in searching for laborers. Second, it provides timely labor at the crucial time of transplanting, giving the farmers a sense of predictability. Finally, it saves farmers time in supervising the laborers.

A patron-client relationship is developed between the farmer and the *cabecilla* as the farmer provides livelihoods for the *cabecilla* and her group of planters. In return, the *cabecilla* provides the farmer reliable, organized, and supervised laborers. Through time, mutual dependency is developed between *cabecillas* and farmers. Loyalty is developed as farmers always hire the same *cabecilla* who he or she had good relations with. However, employment for the *cabecillas* and their planting crew still depends on the good graces of the farmers. Thus, it is incumbent for the *cabecillas* to develop and maintain a good relationship with the farmers. This is mostly done by providing farmers good and reliable services in transplanting.

Furthermore, a patron-client relationship is also formed between the *cabecilla* and the planters. The planters are dependent on the *cabecilla* as they are provided livelihood through the connections of the *cabecilla* to the farmers and through their good reputations. Membership in the group depends on building a good relationship with the *cabecilla*. This enhances the status and the authority of the *cabecilla* among the laborers. *Cabecillas* are directly responsible for laborers having access to livelihood opportunities. In return, laborers give the *cabecilla* their loyalty and their obedience during planting.

In addition, the institution of *cabecilla* facilitates skills transfer in transplanting. Because the membership of the group under one *cabecilla* is maintained, new recruits learn from the *cabecilla* as well as from the seasoned planters in the group. In the two villages, new recruits were composed of younger girls starting at 12-13 years of age. They learn on the job as the *cabecilla* brought the novice planters to their planting contracts. Without the *cabecilla* to supervise and guarantee the quality of transplanting, farmers will not hire novice planters in their farms and, thus, young women and men will not have an opportunity to gain the skills in transplanting and earn a living from the farm. This allows income sharing between men and women and among laborers who have different levels of experience in farming

Hayami (1978, 32) documented that, traditionally, transplanting in the Philippines through *cabecillas* was paid in lump-sum cash, which will then be divided among the members of the planting group according to a certain daily rate. In the two villages, the total payment depended on the size of the land being planted, the daily farm wages, and also the number of planters agreed upon by the farmer and the *cabecilla*. Compared to harvesting, most laborers don't want to be paid through in-kind shares because they have to wait for at least four months for the plants to grow and be harvested.⁴ *Cabecillas* were paid twice the amount of the daily wage. One payment was for the management of the harvest group and another for his or her labor as they also perform transplanting with the laborers.⁵

For the laborers, earning wages secures their income no matter what happens to the yields of the farmer. Whether farmers get a favorable harvest or not, planters will get the exact prevailing wage rate. However, the wage rate is influenced by many factors such as the labor market, the rise of living costs and the prices of commodities. Thus, compared to in-kind shares, this form of payment tends to provide an unpredictable environment for farmers in

terms of their capital requirements. Furthermore, compared to paying through in-kind shares, farmers are required to have capital or cash during planting to pay wages for the laborers.

3.2.2. Institution of *hunusan*

There are other labor institutions practiced in different parts of the Philippines during harvesting. Some studies have documented the use of reciprocal labor for harvesting (Sajor, 2004). However, the most common way of organizing and remunerating harvest laborers in lowland rice farming in the Philippines is the institution of *hunusan*. There are two distinct features of this institution. First is that it makes the harvest accessible to the community.⁶ The second is having in-kind sharing as the form of remuneration for labor.

Compared to the wage labor market in which the transaction is more impersonal, transaction in the institution takes on a more personal and social aspect. For non-farmers, this is a way for the landless to access land and gain livelihood opportunities in the farm. For the farmers, this is a mechanism for organizing laborers as it saves on cost in search and recruitment. Through this, a patron-client relationship is developed between farmers and the laborers.

The type of patron-client relationship explored in this study is different from the usual patron-client relationship discussed in the agrarian literature, which is mostly based on the relationship between the landlord and the tenant. Boyce (1993, 128) described the relationship of the landlord and the tenant as underpinned by a complex web of reciprocal and moral obligations but is usually symmetric in favor of the landlord. Scott (1872, 92) described this relationship as a dyadic exchange between persons in a higher and a lower socio-economic status, wherein the patron uses his or her own influences and resources to provide protection

and benefits to a client who reciprocates by offering support and personal services to the patron.

The patron-client relationship between farmers and laborers in the two villages is less asymmetrical and more equal. The social and economic standings of the farmers and the laborers are not far off as most farmers in the two villages of Town Site and Biaan are tenants or lease holders themselves and do not own the land. Furthermore, unlike the landlord in the current agrarian literature, most farmers do not have the financial capital or the political capital to provide much benefit to the laborers. Thus, on one hand, laborers benefited from the relationship strictly through access to land and livelihood as well as a source of loans in times of need, which can be paid by labor in future harvests. On the other hand, farmers benefited from the relationship by having a source of timely labor. It also enhanced their status in the community as patrons and providers of livelihoods, which benefits them in times of typhoons and low harvests when it is hard to find laborers in the village due to the low remuneration laborers will get from the low harvests. To put it in more simple terms, the patron-client relationship between farmers and laborers are less exploitative than the relationship between landlords and tenants. Also, as will be shown later in the study, there are times and circumstances during which the laborers benefited more from the relationship than the farmers.

Despite this, laborers become dependent on farmers for livelihood. Although most farmers do not own the land, they are seen as providers as they are the ones planting the crops and have the authority on the land. This enhances the status of the farmers as patrons because the more laborers join in harvesting their crops, the more laborers develop a sense of “debt of gratitude” to the farmers. This relationship is beneficial beyond harvesting. Laborers who participate in harvesting can be hired by farmers to perform land preparation, application of fertilizers and application of pesticides. The relationship is also beneficial beyond farming. In

times of need, laborers see farmers as their sources of loans. They usually loan money and borrow rice for home consumption. In return, farmers can call upon laborers whenever they need favors such as repairing their huts and houses.

Accessibility to the harvest was a way for farmers to earn income from other farms as they can work as laborers in the same way that other farmers work in their farms. Doing so diversified their income sources and mitigated the effects of disasters, pest infestation, flooding and other risks in rice farming.

By paying through in-kind shares, income sharing as well as risk sharing is also promoted in the community. Because the amount of income of the laborer depends on the amount of yield of the farmers, concern among laborers regarding the health of the farm and the crop is promoted. As a result, the farmers and laborers work together in ensuring that the quality and quantity of harvest will be good. This does not only translate to proper care of the crops during harvesting, but also in the daily care of the crops such as in pest management and water management throughout the cropping season.

In-kind shares also promote reciprocity. In times of good harvest, both farmers and laborers benefit, but farmers give more when they pay in-kind shares (when these are converted to cash) than when they pay wages. Through this form of remuneration, it is possible for the laborers to earn beyond the wages paid in other sectors during good harvests. On the contrary, during low harvests and times of disasters, laborers get lower monetary value from in-kind shares than that from wages. This promotes a give-and-take relationship between farmers and laborers.

This form of payment discourages shirking. As the income of the laborers depends on the quality of harvest, there was little need for supervision among farmers as laborers are

incentivized to work faster and to work honestly. The faster the work is finished means the faster the laborers can work in another farm and earn more.

This also provides an environment of stability and predictability for farmers and laborers. As the sharing rate of ten percent is maintained and practiced as a norm, it spares the farmers and the laborers from constant haggling or negotiation of wages. Moreover, for the farmers, this form of payment also spares them from loaning an additional capital to pay for wages. This is especially vital since the harvest is at the end of the cropping season when most farmers would have already spent their income from the previous harvest.

3.3. Milled Rice and Fresh Paddy Markets

Farmers had two choices; they can sell their products as fresh paddies or sell them as milled rice. After drying the paddies, farmers can sell to the milling houses. Farmers who did not want to dry and mill their paddies can sell it immediately in the fresh paddy market. This is also true for laborers who are paid with in-kind shares.

While some laborers preferred to keep their paddies for home consumption, other laborers preferred to have money at the end of the day to buy goods and services that their families needed. Participation to the fresh paddy market can be seen as the product of capitalist market penetration. According to Bautista (1983), farm production in the aim to sell to the market and buying from the market a significant proportion of goods for home consumption represent the most rudimentary dynamics of a capitalist production.

In the past, fresh paddies as payments were used solely for home consumption by laborers who have no access to land for farming. As other villagers gained the capital to purchase fresh paddies from farmers and from laborers, a demand for fresh paddies was created

and a market for it emerged. Laborers sold their in-kind shares to whoever in the village was willing to buy. This can be their fellow laborers, owners of threshing machines, and even non-farming residents of the two villages. These buyers invested in drying and milling the fresh paddies so that they can sell it at a higher price. The key, however, was that these buyers accumulated large quantities of fresh paddies so that they can maximize the labor they will put into drying and storing the paddies.

With the commercialization of the countryside and the change in living standards in recent decades, the fresh paddy market has become more important for laborers earning in-kind shares in order for them to convert their shares to money to buy other basic and non-basic goods and avail of basic services such as transportation, education, electricity, communications, etc. Fresh paddies became commodities that can be exchanged to purchase other goods and services. It was used not only for subsistence, but also to participate in other commodity markets. This kind of production in the aim to increase participation to commodity markets is widely acknowledged, in many parts of the world, as incorporation to capitalist markets (Harris-White et al. 2009, 512; Long 2011,10).

3.4. Local Capital Market

Like most farmers in the country, farmers in the two villages do not have access to formal credit institutions. The only option for farmers to access additional financing is to borrow from non-formal sources. *Takalanan* is the local term for the local informal capital market. Different actors participate in the *takalanan*. This may include owners of rice mills, rice traders, households who have a member working abroad or whoever has capital to spare in the village. *Takalanan* is only applicable to farmers. If a non-farm household in the village

borrow money from another household, they are not subjected to the same rates as the *takalanan*. On one hand, this is advantageous if one is loaning early or paying late, as the interest rate is not bounded by time. No matter when during the cropping season the farmer borrowed money, whether it was before land preparation or during the milling of rice, the borrower has to pay the lender the same interest rate. On the other hand, it has high interest rates.

Takalanan still exists in the town until today. During the time of the study, the farmers pay two sacks of fresh paddy for every PhP500 loaned to the creditor in the village of Town Site. In the village of Biaan, the farmers pay one sack of dried paddy for every PhP500 loaned to the creditor. Since one sack of fresh paddy can be sold for more than PhP550 whereas a sack of dried paddy can be sold for more than PhP1,000, it has a more than 100 percent interest rate. This current rate reflects the rates in the past according to farmers.

3.5. Social Relations in the Farming Villages

3.5.1. Social context of interaction

The institutions of *cabecilla* and *hunusan* are based on community norms that evolved to satisfy the needs of people for resources such as labor, and also for security and predictability in rice farming. With low investments in farming, lack of diversity of livelihoods in the two villages and the town, high risks associated with farming and the lack of access to capital among the farmers, social relations in the two villages evolved based on the interdependence of people to satisfy their needs. These needs provided the context for relations and interactions among people, which, in turn, served as the basis for norms and institutions.

As discussed earlier, before the entry of machines, the labor-intensive nature of rice farming forced farmers to rely on other farmers and other people in the village for the exchange of labor and draft animals in all farming practices. Furthermore, the risks involved in farming, such as drought, floods and typhoons, provided incentives to farmers to work in others' plots to diversify their income sources. This sharing of draft animals, labor and livelihood opportunities led to the promotion of the norms of reciprocity and income sharing among the farmers. Between farmers and laborers, it promoted patronage and patron-client relationship as farmers give landless laborers livelihood opportunities in return for a reliable labor supply. In time, institutions evolved to govern these relationships.

Furthermore, due to the lack of formal sources of capital for farming and other livelihoods, farmers subscribed to patronage among their landlords, machine owners in the town and owners of rice milling facilities. They were forced to do so in order to gain access to loans, which they use as capital for farming and household expenses. In return, these people gained the farmers' loyalty, which they can use to their advantage. Furthermore, loans are subject to interest rates from which landlords, machine owners and owners of milling facilities can earn from.

Farmers availed the services of specific machine owners and millers with the aim to develop a strong relationship with them. Farmers' patronage of machine owners and millers provided them another source of loans or capital. Aside from loans, machine owners and millers usually provided farmers flexible paying schemes subject to interest. In return, machine owners were assured of customers while earning from the interest of the loans. This was also true for millers as they are assured that farmers will sell to them in return for loans, sometimes even though there were other millers with higher buying prices.

With improvements in rice farming technologies that aim for more efficient use of labor and resources, interdependence among people in the farming community was disrupted. This was exemplified by the entry of machines in farming. Unlike before when farmers relied on each other for the sharing of draft animals and labor, mechanization allowed farmers to rely on themselves as long as they have the means to avail the services of machines. As a result, mechanization has enhanced the individualistic nature of the farmers, which had implications on their relationships. Some farmers expressed that, because of mechanization, farmers did not help each other anymore in land preparation and threshing unlike before. According to a farmer in the village of Town Site when describing current farmers at the village in the start of the cropping season:

In the old days, everybody shared equipment, *carabaos* and labor. Farmers were more connected as everybody knew what everybody was doing and we knew the problems each of us have. Now, farmers are on their own.⁷

Today, farmers in the two villages still help each other in terms of exchanging seeds, exchanging tips in farming, exchanging information about new fertilizers and pesticides in the market and taking turns in fixing their irrigation system. There are instances in the village of Town Site when farmers give other farmers seeds when they run out. Also, farmers in Biaan are active in organizing trainings for their fellow farmers. However, unlike before, they are not as reliant on each other for their farming practices.

On the contrary, farming technologies that emphasize the need for capital among the farmers without formal and fair credit sources can enhance the dependence of farmers on their patrons. The mechanization of land preparation increased the need of farmers for capital, as the

rent for the use of machines was paid in cash. These have incentivized farmers to further enhance their relationships with their landlords, machine owners and millers in the hope to gain access to loans and capital.

All in all, the norms of patron-client relationship, income sharing and reciprocity in the two villages stem from the need of farmers and farm laborers for labor, capital and access to livelihood opportunities. People build relationships with each other based on these needs and these norms served as the guidepost or rules for interacting with each other. Through time, traditional institutions evolved to govern the rules of how resources in the community are used, which includes labor in rice farming. This was seen in the two villages in the sharing of labor and draft animals in land preparation and threshing, and in the practice of the institution of *cabecilla* in transplanting and the institution of *hunusan* in harvesting. In turn, these institutions tend to promote the norms in its practices.

As the needs of people change and are addressed with advancements in technology and modernization, the interdependence among people tends to be weakened which, in turn, tends to affect the norms of the community. As the norms weaken, the institutions that affect the use of resources and labor in the community tends to also be weakened and changes may occur.

3.5.2. Traditional gender roles in rice farming

Although rice farming is perceived to be dominated by men, women in the Philippines are involved in a variety of tasks in rice farming, especially in practices such as transplanting, manual weeding and caring for the crops (FAO 2005; Koirala et al. 2015; Quisumbing 2014). In the Philippines, Fegan (1989) observed that the introduction of farm machines, such as the winnowing machine and the threshing machine, have taken much of the rice farming practices

away from women. In the town of Mariveles, before the introduction of farm machines, women participated in almost all farming practices such as transplanting, weeding, threshing, drying and milling.

An alternative method of threshing was done by women and children by stumping the crops using their feet. Once paddies were threshed, women and children gathered the grains, winnowed them and put them in sacks for storage. With the proliferation of machines such as hand tractors and mechanical threshers in the 1960s, this way of threshing slowly faded away in the village and threshing work became a man's activity as it involved heavy lifting and hauling of both threshing machines and sacks of grains.

However, women still dominated transplanting and weeding in the two villages. Fegan (1989, 171) cited that the introduction of the straight-row transplanting as a part of the Green Revolution technologies in the 1960s greatly benefited women. Before the establishment of the SEZ in the town, transplanting in the two villages was a rare activity for women, especially the housewives and young girls, to earn a living from.⁸

Agarwal (2011) estimated that major rice-producing regions in Asia are moving towards a feminization of agriculture, in which there is a growing proportion of women working in agriculture as men find jobs in the non-farm sector. However, other scholars have documented instances in Southeast Asia where a "de-feminization" of agriculture or the reduction in participation of women in agriculture is occurring due to farm mechanization, diversification of livelihoods and proliferation of non-farm employment in the rural areas. This proves to be true in the two villages of this study as from participating in almost all farming practices, women participation was relegated into transplanting and weeding before the establishment of the SEZ in the town and their roles further decreased with the proliferation of factories inside the SEZ.

3.6. Summary

The town of Mariveles before the establishment of the SEZ was mainly an agricultural town. Villagers made their living mostly from farming and fishing. The lack of access to capital among farmers have prompted them to develop patron-client relationships among their landlords, farm machine owners, millers and other villagers who have capital. Furthermore, the labor-intensive nature of farming and the risks associated with the livelihood have prompted them to develop interdependence with their fellow farmers and among landless laborers. This interdependence and patronage became the basis of the norms of income sharing, reciprocity and patron-client relationship. As time went by, these norms became the basis of traditional labor institutions that govern how labor was organized, utilized and remunerated in specific rice farming practices.

Like typical rice farming villages in the Philippines, the villages of Town Site and Biaan developed traditional labor institutions that govern the use of labor in two of the most labor-intensive farming practices. These were the institution of *cabecilla* for transplanting and the institution of *hunusan* for harvesting. The features of the two institutions offered farmers and laborers advantages, which they can use to have a more efficient recruitment, organization and supervision of laborers; mitigate the risks in farming such as flooding, drought, and typhoons; and mitigate some of the problems caused by the lack of access to capital. As a result, the institutions of *cabecilla* and *hunusan* remained vital in rice farming in the two villages for farmers to organize laborers. This was true until 1972 when the SEZ opened in the town, which spurred industrialization and the creation of non-farm employment.

Notes

- 1 This behavior is documented in the study of Fegan (1989) as he described rice farming in the Philippines as unprofitable, thus providing no incentives for landowners to invest in farming.
- 2 A *carabao* was an important property for a farmer. It is like owning a piece of land, according to one farmer interviewee.
- 3 Smaller threshing machines are more portable and are easier to carry around the farm. This enabled farmers to save time and cost of hauling in threshing. Smaller threshing machines are part of the Green Revolution technologies that were disseminated in the Philippines during the 1970s. Boyce (1993) presented a discussion on the positive and negative effects of Green Revolution technologies during this decade.
- 4 Farmers in the two villages narrated that, before the Green Revolution, the rice varieties that they were planting took more than 6 months to be harvested.
- 5 A *cabecilla* can choose not to work during actual transplanting and just supervise the planters. If they do this, they will only be paid once. This was common among old *cabecillas*.
- 6 Having the harvest accessible to the community provided a mechanism for income sharing and reciprocity. The access varies from place to place in the country. Fagan (1979, 251-252) documented that access to the institution of *hunusan* in Central Luzon can be open to anyone in the village. Some studies cite that participation in the institution is tied to other farming practices, such as weeding, and is thus accessible to people in the community who can also do additional tasks (Hayami 1981; Boyce 1993). There are also studies showing that access to the institution of *hunusan* is managed or controlled by individuals, especially in an environment where laborers are scarce (Kelly 2000). However, the general trend is that the institution permits the participation of people in the community. Hayami (1978, 32) cites that the institution of *hunusan* has traditionally been performed as a kind of community activity.
- 7 Interview with a farmer in the village of Town Site, June 15, 2015; translated from Tagalog. See Interview Transcript 1 in the Appendix for the full transcript of the interview.
- 8 All farmers interviewed in this study do not hire women as they perceive that harvesting is a difficult practice for women to perform as it involves lifting heavy sacks of paddies.

Chapter 4

The Special Economic Zone and Changes in the Town of Mariveles

This chapter aims to describe how the opening of the SEZ and the industrialization that it fostered changed the characteristics of the town of Mariveles. This chapter provides a discussion on how the SEZ resulted in changes in the employment of household members in the two villages from being mainly agriculture-based to manufacture-oriented and service-oriented livelihoods. Finally, this chapter discusses the effects of the SEZ on the use of labor in farming in the two villages.

4.1. Opening of the SEZ

4.1.1. The need for SEZs in the Philippines

As seen in Table 2, the agriculture sector of the country has declined, whereas the industry sector stagnated in recent decades. The decline of Philippine agriculture can be traced to the failures in land reforms; low investments in irrigation facilities, rural infrastructure and rural education by the government; and the lack of interest of the landlords to invest in farm machines, new varieties of seeds or expanded capital in rice farming (Fegan 1989).

Although still relied upon by much of the population, Estudillo and Otsuka (1999) documented that farming declined in importance among rural households in the Philippines as a source of income and employment opportunities. According to Estudillo et al. (2007), landless and land-poor households have a higher tendency to engage in non-farm activities due

to their constraints and lack of access to land. They also noted that the development of the non-farm sector of the rural economy has the capability to translate to higher household income, improved income distribution, reduction in poverty incidence and overall equitable growth in the country. As the population of the country increased, the agriculture sector was not able to provide livelihoods for most of the people. Thus, other sectors, such as the manufacturing industry, were expected to play a crucial role in the economic development of the Philippines.

Table 2. Share of GDP and employment among economic sectors (in percent)

Sector	GDP					Employment				
	1975	1980	1990	2000	2014	1970	1980	1990	2000	2014
Agriculture	30	26	27	16	10	52.1	51.3	44.9	38.3	30.0
Industry	31	36	33	31	33	17.1	15.2	15.7	15.4	16.1
Service	39	38	40	53	57	30.8	33.6	39.4	46.3	53.9

Source: National Economic and Development Authority (1980); National Statistical Coordinating Board (1991); National Statistical Coordinating Board (2001); Philippine Statistics Authority (2015f)

Note: 1970 and 1975 data were computed from the raw data from the National Economic and Development Authority (1980), 1980 and 1990 data were computed from the raw data from the National Statistical Coordinating Board (1991); 2000 data were computed from the raw data from the National Statistical Coordinating Board (2001); 2014 data were computed from the raw data from the Philippine Statistics Authority (2015f).

The lack of rural development, rapid population growth and chronic unemployment outside of the capital (Manila) and urban areas have prompted the national government to pursue an industrialization policy through the creation of SEZs.¹ These zones were seen by developing countries as a viable mechanism to attract foreign investments and generate employment (Warr 1989). Many scholars seemed to believe in the symbiotic relationship between the industry and agriculture sectors. Netting (1993) predicted that industrialization will not only absorb unemployed rural laborers but also bring about a larger market for agricultural products that will spur farmers to intensify their production and increase farm productivity. Also, learning from experiences of other newly industrialized Asian countries, Estudillo et al. (2007, 368) cites that the promotion of industrial clusters in rural areas can act

as hotbeds for innovation and concentration of trades, skilled workers and experienced managers. Also, Grabowski (1995) and Lanjouw (2007) highlighted that the linkage between the farm and the non-farm sectors can enhance the innovation and productivity of the farm sector. According to Remedio (1996), SEZs are the Philippine government's answer to industrial deficiency, employment generation, poverty alleviation and global competitiveness.²

4.1.2. Advantages and disadvantages of SEZs

There is no denying the positive role that SEZs played in the success of East Asian tiger economies in the 1960s and 1970s (Akinci and Farole 2011). Improvements in global transportation and communication technologies, as well as the greater movement of capital and trade due to globalization, has been regarded as the catalyst for the rapid proliferation of SEZs in the world. From 176 zones in 76 countries in 1997, it is estimated that there are more than 3,500 zones in 130 countries in 2008 (Akinci and Farole 2011).

Table 3. Share of SEZs from total FDIs in the Philippines

Investment Promotion Agency	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Board of Investments (BOI)	19.2	24.6	73.5	45.8	22.0	47.8	51.2	8.30	11.40	9.00	25.60
Philippine Economic Zone Authority (PEZA)	49.5	73.2	23.9	52.0	31.6	40.8	38.5	84.90	72.50	75.70	72.40
Clark Development Corporation (CDC)	28.7	1.1	1.2	1.4	4.9	0.7	5.1	3.70	13.30	7.30	1.60
Subic Bay Metropolitan Authority (SBMA)	1.6	1.1	1.3	0.9	41.5	10.1	5.2	2.80	2.70	7.90	0.23
Cagayan Economic Zone Authority (CEZA)										0.10	0.04
Authority of the Freeport Area of Bataan (AFAB)										0.03	0.10

Source: Philippine Statistical Authority (2015h)

Note: CDC and AFAB were removed from PEZA Jurisdiction in 2011.

Manasan (2013), however, cited that the Philippine SEZ experience has achieved mixed results. It was successful in increasing the FDIs in the country, expanding its manufacturing output and generating employment in the SEZ localities. As seen in Table 3 below, the share of FDIs attracted by PEZA SEZs from the total number of FDIs in the country has risen and taken a majority of the share in the last ten years. This trend is also seen in the share of manufactured exports as the share of PEZA SEZs has taken over the majority of the country's share in manufactured exports since 2000 (Table 4).

Table 4. Share of PEZA SEZ from total national manufacturing exports (in percent)

Year	Manufactured Exports (in billion US\$)	PEZA SEZ Share	Outside PEZA Share
1994	12.2	22%	78%
1995	15.8	27%	73%
1996	18.5	35%	65%
1997	21.6	49%	51%
1998	26.1	51%	49%
1999	31.7	50%	50%
2000	34.3	58%	42%
2001	28.6	68%	32%
2002	31.5	72%	28%
2003	32	85%	15%
2004	35.5	86%	14%
2005	36.9	86%	14%
2006	41.1	85%	15%
2007	42.8	86%	14%
2008	44	86%	14%
2009	33	87%	13%

Source: Modified from Manasan (2013, 3)

Perhaps the greatest achievement of the SEZ policy cited by scholars is the employment that it generated through the years. As seen in Table 5, the growth in employment among SEZs rapidly grew by almost eight times since 1994. Meanwhile, SEZs have been notoriously described as industrial “enclaves.” This basically means that they tend to not be integrated with the economic and social structure outside their borders. Akinci and Farole (2001, 4) cited that,

although various empirical researches have found that SEZs have come out positive in cost-benefit assessments, many economists still view SEZs as not the best solution to enhance a country's competitiveness due to its restrictions and its failure to extend their benefits outside their enclaves. Warr (1989) does not see SEZs as engines for development for countries in early stages of development. Although he admits that SEZs are effective in absorbing surplus laborers, he observed that it cannot solve the vast unemployment problem experienced by developing countries. Because of the lack of linkages to the domestic economy, Warr (1989) even described working in SEZs as like working in another country because only the laborers and their wages provide benefits to the host country. Manasan (2013) cited that domestic investments in the SEZs in the country have remained low, indicating the lack of orientation to the domestic market.

Table 5. Employed workers in PEZA SEZs

Year	Direct employment
1994	91,860
1995	121,823
1996	152,250
1997	183,709
1998	219,791
1999	247,076
2000	278,407
2001	289,548
2002	328,384
2003	362,851
2004	406,752
2005	451,279
2006	545,025
2007	593,108
2008	608,387
2009	611,058
2010	735,672

Source: Modified from Manasan (2013, 5)

4.1.3. Early years of the SEZ in the town of Mariveles

The SEZ in the town of Mariveles opened in 1972.³ At that time, the Philippine government presented it as a showcase to prove that the country can host a world-class SEZ in the hope of attracting multi-national corporations in the Philippines, boosting the manufacturing sector and promoting economic development (Warr 1989; Remedio 1996). For the residents of the town, the opening of the SEZ was a life-changing experience because for the first time in their lives, they were able to work in the formal sector in which the salary is regular and not seasonal and wherein multiple household members can gain regular and more reliable livelihoods and contribute to the household income. The pace of change was also fast as large number of jobs became suddenly available in the town.

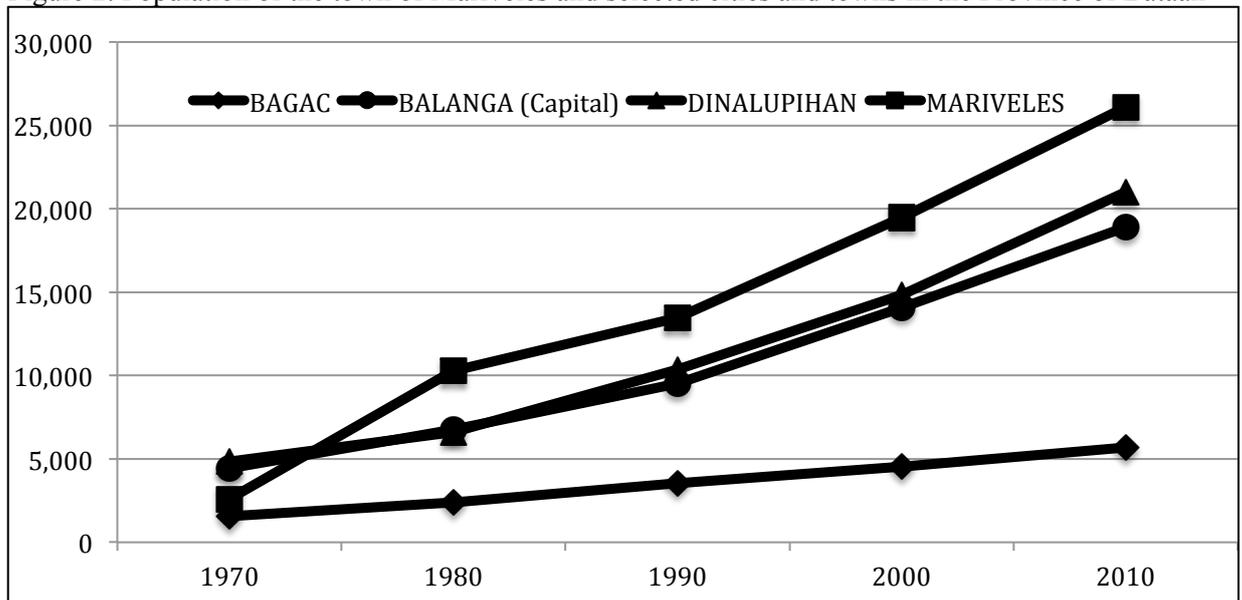
From the interviews among the households, a former SEZ worker expressed that if a person cannot have a job in the companies and in the factories during the early 1980s, it only means that the person is lazy. Another former SEZ worker reminisced:

During the old days, when the zone was booming with employment opportunities, it was a very happy place to be in because there were a lot of companies operating. People in the villages, too, were very happy because almost everybody could get work if they really try to look for it and apply.⁴

As factories were established in the town, the demand for commercial and service-oriented business also followed. Dormitories and apartments were established to house the workers from far villages and towns. The transportation sector also grew, as workers needed to get to and from their homes in the villages to the center of the town. As different auxiliary

services and establishments developed to support industries and factories, the SEZ created a demand for low-skilled laborers which, in turn, directly competed with farming. Furthermore, the SEZ changed the demographic landscape of the town. Migrants from nearby towns flocked to the town in search for jobs in the SEZ while some found employment in the auxiliary industries.

Figure 2. Population of the town of Mariveles and selected cities and towns in the Province of Bataan



Source: Philippine Statistics Authority (2015d)

As seen in Figure 2 above, a spike in the population in the town of Mariveles was experienced between 1970 and 1980 and, since then, the population of the town had been growing faster than that in other cities and towns in the province. In comparison with the two cities in the province, Balanga and Dinalupihan, the town of Mariveles experienced a rapid increase in population.⁵ Most of the migrants settled first in the center of the town near the factories then eventually relocated outwards to the more rural villages for cheaper housing. As can be seen in Table 6, the town of Mariveles has the largest number of households who trace

their residence from another province within 5 years of residence in the town in 1990 and 2000.

Table 6. Place of residence of households in the Province of Bataan in the last 5 years, 2010, selected towns and cities (in percent)

Province and Selected Cities and Municipalities	1990			2000			2010		
	Same City/ Mun	Other City/ Mun	Other Province	Same City/ Mun	Other City/ Mun	Other Province	Same City/ Mun	Other City/ Mun	Other Province
Bataan	93	2	5	94	1	3	97	1	2
City of Balanga	93	3	4	95	2	3	96	2	2
Dinalupihan	92	1	7	92	1	5	96	0	4
Mariveles	89	1	10	90	1	7	96	1	4
Bagac	95	0	2	97	1	1	97	1	2

Source: Philippine Statistics Authority (2015g)

The creation of jobs in the factories presented changes in employment between the sexes. Before the SEZ, women in the two villages can only find employment as planters, weeders, vendors and domestic workers doing laundry, ironing and working as housemaids. After the establishment of the SEZ, the garment and textile factories offered women jobs mainly as sewers. They were hired to make bags, clothes, dresses, etc. The factories enabled women, especially young and single women, to have a reliable source of income in the formal sector. This provided opportunities for women to earn a living with wages at par or equal to men.

In succeeding years, the SEZ has expanded as more investments poured into the SEZ. Industrial investments have been increasing in recent years and companies have been expanding and building additional structures and expanding their operations. These investments have also contributed to the demand for laborers outside the farm, more specifically, laborers for construction. Currently, construction laborers usually get four-month

up to six-month contracts that let them earn PhP350-400 a day. However, some laborers expressed that construction work is harder than farming as laborers have to work strictly from 8 a.m. to 12 p.m. and 1 p.m. to 5 p.m. Despite this, villagers prefer to work in construction as it assures them of a steady source of income for at least four to six months. Farmers expressed that, when there are big construction projects in the SEZ, it is very hard to find laborers, especially harvesters. In the village of Biaan, some farmers expressed that some laborers use those opportunities to haggle increase in farm wages.

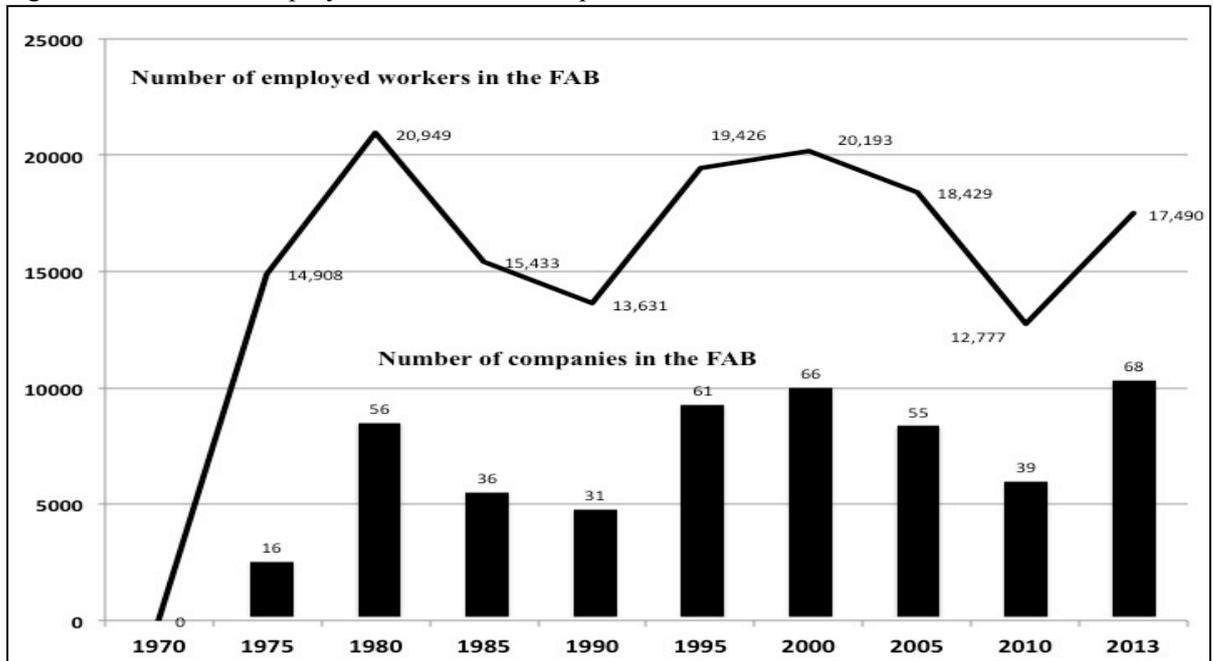
4.2. Evolution of the SEZ

From 1972, the SEZ became the main economic driver in the town of Mariveles other than farming. However, through the years, the SEZ experienced some changes. From being dominated by garment and textile factories, the zone has diversified to electronics and other products in recent years. Amidst diversification, garment companies still dominate the SEZ and the nature of production remained labor-intensive, creating a large demand for low-skilled laborers. Companies have searched for ways to reduce the cost of production through contractualization and fewer investments in training of new employees. This presented challenges in securing long-term careers in the factories among laborers. Furthermore, these policies incurred additional investments and costs on applicants. Nevertheless, despite changes in the SEZ and the challenges among the laborers, it still attracts a large number of laborers in the town and its villages.

4.2.1. Companies in the zone

As seen in Figure 3, investments fell from the late 1980s partly due to the deteriorating economic condition in the country during the end of the Marcos regime and partly due to frequent strikes and protests of labor unions. It slowly recovered in the 1990s only to fall again due to the international financial crisis in 2010. Investments were rapidly picking up with the revitalization of investment promotion after the creation of its own dedicated governing body, the Authority of the Freeport Area of Bataan (AFAB) in 2009. The influx of foreign investments in the SEZ in recent years and the expansion of the zone have resulted in a construction boom and generated employment for low-educated and low-skilled workers.

Figure 3. Number of employed workers and companies in the FAB



Source: Authority of the Freeport Area of Bataan (2015b)

The labor demand in the 1970s is described in the studies of Castro (1982) and Warr (1984) as requiring low skill and low education. Furthermore, Castro (1982) highlighted that

some companies even prefer inexperienced and unskilled laborers in order for them to pay the workers lower wages. As can be seen in Table 7 below, even in its early years, the SEZ was dominated by garment companies, which creates a high demand for sewers. In recent years, the zone has diversified to electronics and other products that created demand for assembly line workers. However, a large number of garment and textile companies mean that the zone still preserved its labor-intensive production, which creates the high demand for workers from the town and its nearby provinces.

Table 7. Companies inside the FAB according to products

Year	1970	1980	2010	2013
Wearing apparel/Garments	13	17	14	16
Handicraft	2	1	2	2
Electronics	2	7	2	3
Light metal products	1	6	8	11
Plastic Products	2	4	6	8
Leather Products	4	1	1	0
Light Mechanical Products	1	0	0	0
Automotive	1	1	0	1
Woodcraft	1	2	0	0
Textile Mills	2	4	2	3
Machinery	1	8	2	2
Shipyards	1	5	1	7
Chemical			1	2
Others				14
Total	31	56	39	69

Source: Wong and Tiongson (1980, 112); Authority of the Freeport Area of Bataan (2015a)

Note: 1970 data were adopted from Wong and Tiongson (1980, 112); 1980, 2010, 2013 data are from the Authority of the Freeport Area of Bataan (2015a).

4.2.2. Education, age and skill requirements

Philippine labor laws require workers to be at least 18 years old to work in a factory or manufacturing setting. Due to a large number of applicants, companies can afford to set a

minimum educational requirement of a high school graduate. According to one official from one company, “this is a way for companies to have a better quality of applicants.” Furthermore, garment and textile companies require prior training and accreditation from the government agency Technical Education and Skills Development Authority (TESDA) in hiring sewers. This is a stark difference from the practice of the companies in the 1970s and the early 1980s wherein companies provided in-house training for novice applicants in sewing and factory work and did not discriminate regarding age and education. However, this can be seen as a move by companies to cut on cost. Contractualization was a major factor in this, as companies have no incentives to train workers that will only be there for five months.

As a result, applicants have to undergo training in TESDA centers to acquire accreditation. Applicants pay the training fee gradually later on when they get hired in the factories. This, however, required additional investment on the part of the applicants as training can last up to six months. Applicants had to invest on transportation costs and their daily allowances. Today, the common practice is that girls and boys, after graduating from high school, enroll in a training center for six months, and then apply to the companies when they turn 18 years old. The same is also true for welders and metal craft workers.

4.2.3. Contractualization

Keeping the current jobs is not as easy as it was before when contracts were longer and companies gave successive contracts and regular positions to their workers. The Philippine Labor Code, amended in 1989, states that a worker who has been an employee of the same company for at least six months is entitled to health benefits, vacation leaves and other bonuses. Although the law aims to protect the welfare of workers, the companies exploited a

loophole in the law by deliberately giving five-month contracts to avoid paying enormous amounts of benefits and regularizing their huge work force. As a result, workers are forced to find another job in other companies when their contracts end. If they can't find work in a different company, they have to wait for five months in order to get hired in the same company again. This presented challenges in securing a long-term career among the workers. Furthermore, according to interviews among current SEZ workers, as more and more young people become eligible for work, it has become increasingly difficult to find jobs in the factories unlike before. Despite this, the SEZ workers expressed in the interviews that factory work still remains the preferred choice among the working population in the village.

4.3. Similarities of the FAB with other SEZs in the Philippines

As discussed earlier, the FAB is dominated by garment and textile companies. Compared to other SEZs in the country, which are dominated by electronic companies, this is a divergence from the current trend in the country. According to Manasan (2013), there was a shift in the nature of companies operating in Philippine SEZs in the last 30 years. From mainly producing garments and textiles, companies shifted to electronics manufacturing. Manasan (2013, 6) noted that nine out of ten companies in Philippine SEZs produce electronic parts.

However, the FAB shares many similarities with other SEZs in the country. Farole and Akinci (2011) documented that SEZs in developing countries generally attract low-skilled laborers and present opportunities for low-educated men and women. Perman et al. (2004) cites that such zones provide opportunities for people to enter the formal economy and often provide wages that are higher than that from the traditional sectors. In Philippine SEZs, electronics and wearing apparel manufacturing alike both require low-skilled laborers and also creates a high

demand for women laborers. Although electronic manufacturing requires greater skills than textile and garment manufacturing (Remedio 1996; Manasan 2013), both industries seemed to draw a large pool of human resources from the surrounding localities as assembly line tasks can be learned in a short period with no previous working experience required (Diokno 1989; War 1989; Remedio 1996). In recent years, government agencies have offered various training courses to help SEZ applicants with affordable tuitions and a favorable payment scheme for the workers.

Table 8. Number of manufacturing SEZs by region (as of April 2015)

Region	Operating	Being Developed
NCR	6	1
CAR	1	2
Ilocos	1	1
Cagayan Valley	1	-
Central Luzon	14	3
Southern Tagalog	33	5
Mimaropa	1	-
Bicol	1	3
Western Visayas	1	
Central Visayas	7	2
Eastern Visayas	1	2
Western Mindanao	-	1
Northern Mindanao	4	-
Southern Mindanao	2	2
Central Mindanao	1	1
ARMM	-	-
Caraga	1	4
Total	75	27

Source: Philippine Economic Zone Authority (2015)

Note: The AFAB, SBMA, CDC are included in Region 3 whereas the CEZA is included in Region 2.

This is seen in the Mactan Export Processing Zone, located in Central Philippines, as Chant and McIlwaine (1995) cited that the SEZ attracted women and men with high school education for manufacturing electronics and other products. Furthermore, Kelly (2000) cited that the Cavite Export Processing Zone, located in Southern Luzon, provided employment for high school graduates and rural folks. Furthermore, like the FAB in the town of Mariveles,

Kelly (2000) cited instances in which the Cavite Export Processing Zone caused scarcity of laborers in its surrounding rice farms. Moreover, the FAB shares the main criticism of SEZs in the Philippines and other countries as they lack the forward and backward linkages to the local economy aside from the labor demand they create (Warr 1989; Manasan 2013). Table 8 illustrates that recent years saw many SEZs being developed in other regions, while a great percentage of those future zones are dispersed among the regions outside NCR and Southern and Central Luzon.

This trend can be attributed to the desire and efforts of local governments in the provinces and municipalities to establish their own SEZs as they try to mimic the success of other local government units in enlarging their tax bases, creating employment and initiating economic development in their respective localities through the establishment of such zones. Thus, it is highly possible that other rural communities share the experiences of the town of Mariveles. The pace of change, the volume and the nature of employment that SEZs generate create significant changes in the surrounding communities.

4.4. Employment Structure of the Two Villages

The proliferation of factories resulted in the diversification of employment opportunities for village households. Today, the town of Mariveles has the highest employment in the manufacturing sector in the province. As can be seen in Table 9, the manufacturing sector employs 37 percent of the labor force in the town. This is higher than the bigger cities of Balanga and Dinalupihan and accounts for almost half of the employment in the manufacturing sector in the province. If this is compared to the nearby rural town of Bagac, which does not

have manufacturing factories and is purely agricultural, a stark difference can be seen between an industrial town and a typical Philippine rural town.

Table 9. Employment by sector in selected cities and municipalities in the Province of Bataan, 2010

Sector	Bataan		Balanga		Dinalupihan		Mariveles		Bagac	
	number	%	number	%	number	%	number	%	number	%
Agriculture Forestry and Fishing & Mining	34,505	16%	2,625	9%	694	14%	3,901	10%	2,740	38%
Manufacturing	29,154	14%	1,806	6%	1806	8%	14,346	37%	481	7%
Services	149,018	70%	23,893	84%	23,893	79%	20,661	53%	3,991	55%
Total	212,677	100%	28,324	100%	26,393	100%	38,908	100%	7,212	100%

Source: Philippine Statistics Authority (2015b)

4.4.1. Generational shift in employment structure

At the time of the survey, there were 44 and 28 farm households out of 1,428 and 510 households in the villages of Town Site and Biaan, respectively. As shown in Table 10, among non-farm household respondents in the two villages, employment of majority of the fathers and mothers of the current household heads and their spouses in 1970 and 1980 were connected to rice farming and fishing. In 1970, men worked mostly in rice farming and fishing while women remained in the household. The same was true in 1980 with the exception of a small number of men and women who found employment in the SEZ. Other occupations in those years include farming other crops, overseas work, charcoal making and working as a household helper. However, current non-farm household heads and their spouses displayed a more diversified employment structure compared to their fathers and mothers. Furthermore, the data show that there is a significant diversification away from agriculture and fishing as the main sources of livelihood among the households. More employment outside fishing and rice farming can also

be seen among non-farm household members 18 years old and above, excluding the household head and the spouse.

Table 10. Occupation of non-farm household heads and spouses (2015) and their parents (1970 and 1980)

Town Site	Current Households Heads' and Spouses' Parents								Current Households Heads and Spouses				Other household members 18yrs above			
	1970				1980				2015				2015			
	N	%	Male	Female	N	%	Male	Female	N	%	Male	Female	N	%	Male	Female
Rice Farming	26	20%	19	7	33	22%	25	8	0	0%	0	0	0	0%	0	0
Farming Other Crops	5	4%	1	4	0	0%	0	0	1	1%	0	1	0	0%	0	0
Farm Laborer	10	8%	6	4	10	7%	6	4	14	7%	14	0	4	4%	3	1
Fishing	13	10%	12	1	14	9%	12	2	26	13%	25	1	9	9%	9	0
FAB-Factory worker	0	0%	0	0	10	7%	4	6	56	28%	21	35	21	22%	9	12
Construction	1	1%	1	0	1	1%	1	0	10	5%	10	0	1	1%	1	0
Vendor	9	7%	4	5	12	8%	5	7	17	9%	5	12	1	1%	1	0
Overseas Work	2	2%	1	1	1	1%	1	0	8	4%	5	3	6	6%	5	0
Household	42	33%	4	38	44	29%	4	40	24	12%	0	24	0	0%	0	0
Unemployed	0	0%	0	0	0	0%	0	0	0	0%	0	0	38	39%	26	12
In School	0	0%	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0
Others	19	15%	12	7	27	18%	14	13	44	22%	20	24	17	18%	8	10
Total	127	100%	60	67	152	100%	72	80	200	100%	100	100	97	100%	62	35

Biaan	Current Household Heads' and Spouses' Parents								Current Households Heads and Spouses				Other household members 18yrs above			
	1970				1980				2015				2015			
	N	%	Male	Female	N	%	Male	Female	N	%	Male	Female	N	%	Male	Female
Rice Farming	16	15%	13	3	22	18%	17	5	0	0%	0	0	0	0%	0	0
Farming Other Crops	7	6%	3	4	0	0%	0	0	2	1%	1	1	0	0%	0	0
Farm Laborer	0	0%	0	0	0	0%	0	0	13	7%	12	1	3	3%	2	1
Fishing	29	26%	20	9	26	22%	16	10	31	16%	20	11	5	4%	5	0
FAB-Factory worker	0	0%	0	0	0	0%	0	0	24	12%	9	15	21	19%	11	10
Construction	5	5%	2	3	7	6%	4	3	24	12%	24	0	7	6%	7	0
Vendor	0	0%	0	0	0	0%	0	0	6	6%	4	2	1	1%	1	0
Overseas Work	20	18%	1	19	22	18%	1	21	1	1%	1	0	0	0%	0	0
Household	20	18%	4	16	24	20%	4	20	64	32%	1	63	0	0%	0	0
Unemployed	0	0%	0	0	0	0%	0	0	10	5%	10	0	49	44%	28	21
Others	13	12%	13	0	18	15%	15	3	25	13%	18	7	15	13%	10	5
In School	0	0%	0	0	0	0%	0	0	0	0%	0	0	11	10%	4	7
Total	110	100%	56	54	119	100%	57	62	200	100%	100	100	112	100%	68	44

Source: Author's survey (2015)

More than a quarter of the current non-farm household respondents in the village of Town Site reported employment in the SEZ as factory workers, with women finding more employment than men. Fishing still proves to be a major livelihood but a significant number of villagers found employment as vendors, construction workers and farm laborers. Other sources of employment include working as drivers of public transportation and welding. Women also find employment as vendors in the local market selling vegetables, meat, fishes and other goods.

Although SEZ employment in the village of Biaan is lower than that in the village of Town Site, it is the major source of employment in the village. A quarter of current non-farming men in the village of Biaan still rely on fishing as their main source of livelihood. Household heads find employment as construction workers and farm laborers. Most fishermen work as construction workers during the low season of fishing. They also work in the farm as laborers, but they prefer construction work because, for them, it is more reliable than seasonal farming. Other livelihoods among household heads in the village include welding, working as security guards in offices and factories, vending and driving public transportation.

It is important to note that the two villages have a low percentage of respondents that consider working as laborers in farming as their primary occupation. Also, almost half of the household members are unemployed. This is mostly due to the youth either dropping out from high school, which makes them ineligible for direct work in the factories, or being uninterested in working in farming and in fishing. They can, however, still work in the zone as construction workers, helpers in the factories, janitors and drivers for public transportation, if opportunities arise. This trend is also true among farm households, as most sons and daughters of farmers either want to work or find employment in the SEZ and its auxiliary industries.

4.4.2. Household occupation by gender

Table 11 below summarizes the occupation of current non-farm household members by gender in the two villages. As can be seen in the table, most SEZ workers in the two villages were women.

Table 11. Occupation of non-farm households by gender in 2015

Occupation	Town Site		Biaan	
	Men	Women	Men	Women
Rice Farming	0%	0%	0%	0%
Farming Other Crops	0%	1%	1%	1%
Farm Laborer	10%	1%	8%	1%
Fishing	21%	1%	15%	8%
FAB-Factory worker	19%	35%	12%	17%
Construction	7%	0%	18%	0%
Vendor	4%	9%	3%	1%
Overseas Work	6%	2%	1%	0%
Household	0%	18%	1%	44%
Unemployed	16%	9%	22%	15%
Others	0%	0%	17%	8%
In School	17%	25%	2%	5%
Total	100%	100%	99%	100%

Source: Author's survey (2015)

It is quite noticeable that a large number of women in the village of Town Site are employed in the SEZ at 35 percent. However, the SEZ employment among men at 19 percent is significant compared to other sectors. In the village of Biaan, the SEZ is also a significant employer as 17 percent of women and 12 percent of men directly work inside the zone. Women take advantage of the manufacturing companies' preference for female laborers in working as sewers and workers for production of semi-conductors. Other than from the SEZ, men in the two villages gain employment from fishing, construction, as farm laborers and other services such as vending and driving public transportation. Construction work has become

popular in recent years as the SEZ is expanding and more companies are setting factories inside the SEZ.

It is noticeable that, despite the presence of factories and industries, the two villages experience high unemployment rates. Results of the household survey show that unemployment rate was higher among men in the two villages. However, if one considers the 18 percent and 44 percent of housewife respondents in the village of Town Site and Biaan, respectively, then unemployment can be higher among women than one might think. These housewives indicated in the interviews that they are looking for possible sources of livelihoods to augment their household income.

4.5. Waning Preference for Rice Farming

Changes in the preference for farming work, especially among the Filipino youth, have been well documented (Kelly 1999; Canlas and Pardalis 2009; Manalo and van de Fliert 2013). The availability of factory work since the establishment of the SEZ has enhanced the preference among villagers to work away from the farm. Although factory work only last for five months at a time, it is seen among the respondents as more reliable than the seasonal farming and fishing. In recent years, construction work is preferred among farm laborers and fishermen, as projects run for six months or even longer. Furthermore, parents of non-farm and farm households alike aspire that their sons and daughters gain employment in the factories. This preference for non-farm employment can be seen from a statement expressed by a spouse of a farmer and a daughter of a farm laborer in the village of Town Site:

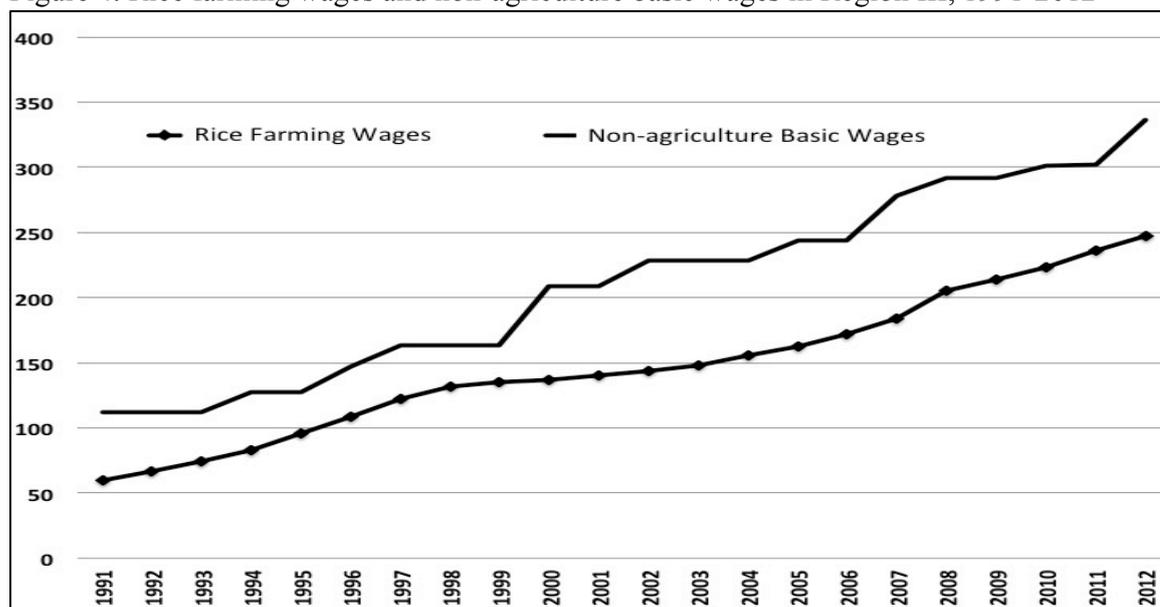
We really worked hard and did everything for our children in order for them to finish high school so they can find work in the zone. I don't want them to work in the farm like my husband and me.⁶

Among farm and non-farm households, farming has been seen as a “dirty” job. Farmers often both find humor and lament over the fact that their children don't want to get their feet muddy and dirty in the farm. There is irony in the fact that laborers have been greatly hard to find in the farm while the two villages experience high rates of unemployment. Migrants have come to the town in decades seeking employment but are not interested in farming. A statement of a nephew of a farmer in the village of Biaan sums up this waning preference for rice farming. When asked about the practices he knows about farming, he replied:

If you are asking me about what I know about farming, I cannot answer you because I do not know a thing about it. But if you are going to ask me about factory work, I can tell you everything about it because I worked in the factory before and I have just finished my contract.⁷

The waning preference for farming among the residents of the two villages, especially among the younger generation, is driven by a large discrepancy of daily wages between farm and non-farm employment. Figure 4 illustrates this gap as it shows that non-agriculture basic wages have been significantly higher than rice farming wages in Region III, where the town of Mariveles is located.

Figure 4. Rice farming wages and non-agriculture basic wages in Region III, 1991-2012



Source: Philippine Statistics Authority (2015e)

When compared to other forms of employment in the town, Table 12 illustrates that, aside from working in the zone, laborers earn significantly higher wages in construction and significantly more if they have skills in masonry and welding where they can earn twice or even four times the amount of farm wages. Furthermore, as expressed from the interviews with laborers, they prefer to work in construction as it basically allows them to earn the same rate as workers in the zone (but with no overtime pay) while providing them assurance and regularity of work because construction projects last for four to six months at a time compared to the seasonal nature of farming.⁸

Table 12. Daily wages among selected jobs in the town of Mariveles as of 2015

Sector	Daily Wage (in PhP)	Other Benefits
FAB Workers: Sewers and Assemble Line Workers	350	Overtime
Construction	350	-
Masonry & Welding	500 to 1000	-
Farm Laborer	250	Food

Source: Author's survey and interviews (2015)

4.6. Summary

The findings in this chapter suggest that the establishment of an SEZ in the agricultural town of Mariveles has resulted in many changes in the town. Due to the labor-intensive nature of garment and textile factories, which dominated the companies in the zone since 1972, the direct and indirect employment produced a high demand for low-skilled laborers, especially among women. This presented great benefits to the town of Mariveles and its villages. It transformed from a rural town to an industrial complex integrated to the global economy. This has been a welcome development in a country where unemployment and poverty is high in rural areas and such investments are seen as the only way to improve the situation.

Although the companies in the zone have enacted policies that aim to reduce cost such as contractualization and higher education and skills requirements, working in the zone is still highly regarded in the two villages, as it is one of the most high-paying employment that anyone can find without migrating to Manila or other countries. However, such labor policies may have created barriers for employment as the survey among the households indicates that there is still a high rate of unemployment in the two villages.

Nevertheless, the development of the SEZ was life-altering for the people in the town. Results from this study illustrated that there was a generational change in employment among the residents as there was a shift from mainly farming and fishing to manufacturing. Furthermore, the zone was found to benefit women as they tend to be more employed than men. However, the availability of jobs in the non-farm sector in the town has created a high demand for low-skilled laborers. In turn, this has directly competed with farming for laborers, with the farm sector losing out jobs to the SEZ and construction because of higher wages. The wide gap between wages in the farm and other sectors has contributed to the waning preference

of both farm and non-farm household members in the two villages to engage in farming as a livelihood.

Notes

- 1 Hill (2003) and Intal et al. (2008) described the Philippine manufacturing sector as a microcosm of the Philippine economy, with costly and misguided interventions, sporadic international orientation, poor infrastructure and low competitiveness. Due to the failure of the country to expand its manufacturing sector and achieve higher agricultural productivity amidst rapid population increase, high unemployment was experienced in the country in the past decades.
- 2 According to Saith (1991), rural industrialization is also seen by policy makers as an alternative to land reform to generate employment among landless rural workers. It is seen as less complicated compared to land reform because the latter has political implications.
- 3 The SEZ experienced a sluggish start in attracting investments due to the inadequate infrastructure available at that time such as roads, ports and electrification (Warr 1984; Remedio 1996; Malate 2015).
- 4 Interview with a former SEZ worker in Town Site village, June 23, 2015; translated from Tagalog. See Interview Transcript 2 in the Appendix for the full transcript of the interview.
- 5 Balanga is the largest city and the capital of the Province of Bataan.
- 6 Interview with a spouse of a farmer in the village of in Town Site, June 23, 2015; translated from Tagalog.
- 7 Interview with a nephew of a farmer in the village of Biaan, July 4, 2015; translated from Tagalog. See Interview Transcript 3 in the Appendix for the full transcript of the interview.
- 8 The PhP350 SEZ daily wage is higher than the national daily income threshold of PhP250 for a family of 5 to survive set by the national government as of 2015.

Chapter 5

Changes in Traditional Labor Institutions and Farming Practices

As discussed in the previous chapter, the SEZ brought out various changes in the social and physical characteristics of the town. The industrialization of the town that came with the establishment of the SEZ resulted in the scarcity of laborers in the farms, which, in turn, led to changes in traditional labor institutions and farming practices in the two villages. This chapter will discuss how such changes in rice farming practices and how the change and retention of traditional labor institutions resulted in changes on how farm laborers are organized and remunerated in the two villages, as well as how people accessed farming for their livelihood.

5.1. The SEZ and Scarcity of Laborers in the Farm

The proliferation of factories in the SEZ has resulted in the diversification of employment opportunities for village households. As discussed in the previous chapter, the town of Mariveles today has the highest employment rate in the manufacturing sector in the province and one of the highest in the country. Fewer households are engaged in farming today than in the 1970s and 1980s. As a result, the competition for laborers between the farm and industry sectors has greatly contributed to an increasing scarcity of laborers in the farm.

Due to the difficulty of finding skilled laborers for farming, farmers explain in the interviews that they have to change their practices in planting. Table 13 below provides a summary of these changes. The way by which laborers were organized and remunerated in

planting and harvesting had to be adjusted. In turn, the number of laborers employed in harvesting and planting has also changed.

Table 13. Farming practices before and after the establishment of the SEZ

Farming Practices	Mariveles (Town Site and Biaa) Before the SEZ	After the Establishment of the SEZ	
		Town Site	Biaan
Method of Planting	Transplanting	Broadcasting	Broadcasting
Labor Recruitment in Planting	<i>Cabecilla</i>	Family Labor/Hired	Family Labor/Hired
Number of Laborers in Planting	15 to 20 (mostly women)	1 to 2	1 to 2
Method of Weeding	Manual & Chemical	Chemical	Chemical
Number of Laborers in Weeding	5 to 7 (mostly women)	none	none
Method of Payment for Harvest Laborers	<i>Hunusan</i> 10% In-kind share	<i>Hunusan</i> 10% In-kind share	Daily wage
Labor Recruitment in Harvesting	Open to All	Harvest Groups (fixed membership)	Through Labor Leaders (non-fixed membership)
Number of Laborers in Harvesting	20 to 25	13	8
Role of Women in Farming	Transplanting and Weeding	None	None

Source: Author's survey and interviews (2015)

5.2. Changes in Traditional Labor Institutions and Practices in Planting and Harvesting

5.2.1. Shift to broadcasting and disappearance of the institution of *cabecilla*

The shift to broadcasting as a planting method swept the two villages in the mid-1970s just when employment in the factories was taking off. With the opening of the zone, most planters found work in the factories. Skilled women planters found work as sewers in the garment factories and as assembly line workers. The *cabecillas* also found work in the factories. At that time, there were no age or educational requirements in order to be employed in the factories in

the zone. Even though laborers were available who could plant in the two villages during that time, they were composed mostly of young girls with no experience and skills.

According to the interviews with older farmers, during that time when laborers were flocking to the SEZ, the prevailing daily wage in the farm was PhP4. However, laborers could earn PhP17 in the factories. This prompted planters and laborers to negotiate for higher wages because jobs were abundant inside the SEZ. Because transplanting remained labor-intensive, it is one of the most expensive practices in rice cultivation. The scarcity of skilled planting laborers, which subsequently resulted in high wages for transplanting, pushed the farmers to enact innovations to lessen their farming costs.

Aside from the cost, it is widely believed among the farmers that another factor that strongly affected the shift is the difficulty in finding skilled planters, who, at that time, found employment in the factories inside the SEZ. The difficulty of organizing and mobilizing planters was due to the disappearance of the *cabecillas* in the farms. The opening of factories attracted farm laborers, skilled planters and *cabecillas* to work as sewers, assembly line workers, construction workers, factory helpers and maintenance workers. Once *cabecillas* gained employment in the factories, the crucial link between the farmers and planters was severed.

As discussed earlier, the *cabecilla* is also an institution for the transfer of skills in transplanting. With the *cabecillas* being gone, the system that transfers the skills from one generation of planters to another also vanished. As a result, farmers expressed fear that the quality of transplanting work in the village today is very far from how it was in the past. Farmers, on rare occasions, try to practice transplanting. They do this when they have expensive seeds and they want to make most of them. Some farmers also perform transplanting when they expect bad weather and when there is a high probability of flooding. When farmers

hire planters, they spend more of their time, energy and patience on supervising them just to ensure the work is done properly. Before, this task fell on the *cabecillas*' shoulders as they discipline their crew members because their reputations were at stake if work becomes dissatisfactory. With the *cabecillas* being gone, the added tasks of supervision and recruiting laborers become more taxing for the farmers, especially for the older ones. The combination of higher wages, the scarcity of skilled planters and increasing difficulty to organize them due to the disappearance of the institution of *cabecilla* made transplanting very difficult for farmers. However, farmers have an alternative method to save on labor costs in planting. This alternative was to shift to broadcasting. The shift to broadcasting was slow at the start, and then sweeping as it gained momentum.

Transplanting is widely regarded as an important technological evolution in planting. Transplanting, with its proper spacing, yields better than broadcasting as it allows spaces in between the seedlings for better nutrient absorption and a room for the plant to grow. The spaces allow for better weed management without too much use of pesticides. Despite all these benefits, farmers in the two villages choose to perform broadcasting. Broadcasting, for its part, has its own advantages.

The most beneficial advantage is that it requires fewer laborers to do it, as one or two persons can sow a one-hectare field in half a day or less, compared to transplanting, in which a one hectare of land typically needs 15-25 persons to plant and at least three or four persons to pull the seedlings from the seedbed. Transplanting, together with harvesting, represents the access of the landless to earn money or acquire benefits from the land. Mainly because of rising wages and the disappearance of the institution of *cabecilla*, the shift to broadcasting has reduced the opportunities for employment that can be generated in the farm.

The shift from transplanting by the institution of *cabecilla* to broadcasting marked the start of the absence of women in farm work in the two villages since transplanting is composed largely of women. Furthermore, as the institution of *cabecilla* was not practiced by the farmers, they were presented with fewer incentives to use new varieties of seeds of rice that are suited for transplanting. The disappearance of the institution of *cabecilla*, in effect, resulted in the eventual de-feminization of rice farming in the two villages.¹ It also contributed to the low use of new varieties of seeds and lower farm production.

5.2.1.1. De-feminization of rice farming

With the proliferation of textile, garment and electronic factories in the zone, women were presented with alternative livelihoods in the two villages. From the result of the household survey, it would seem that the SEZ is more favorable for women than men as more of them gain employment in the factories.² Respondents of the interviews cite that the skills of women in sewing, their dexterity and steady hands suit the goods that are produced in the factories such as garments and semi-conductors.³

However, a closer look shows that women in the two villages are in a more disadvantageous position than men with the establishment of the SEZ, especially in the long term. It resulted to changes in traditional labor institutions, which, in turn, resulted in the way people participated in farming for livelihood. Women typically resign or stop working when they are starting a family, when their family is growing or when they are taking care of young children (Datoon 2016, 26). In addition, to save themselves from paying for health and maternal benefits, companies tend to not hire pregnant applicants.⁴ Furthermore, due to

minimum wages, working women with children in the zone usually cannot afford to pay someone to take care of their children while they work on their shifts.

Among the 72 SEZ women workers from the two villages, 50 are married. Thirty-five of these 50 women were further interviewed regarding their future careers in the zone and 28 (or 80 percent) of the women indicated that they don't expect to stay long in working in the factories. Because there is no security or assurance that women will get another contract when their current 5-month contract ends, most married women choose to stay as housewives. The situation of the women in the two villages is illustrated by the following quotes from two women interviewees in the study of Datoon (2016). One interviewee, a daughter of a farmer, worked in the zone after she graduated from high school as most of the women in the two villages would do at their age. She expressed that:

I worked in the zone for almost ten years after graduating from high school. I worked as a sewer, making dresses for Barbie dolls. I had to stop working when I got married at 25 years of age. I had to do it because no one will take care of my child, especially during night shifts and overtime.

(Datoon 2016, 27)

Another interviewee, a daughter of a former farm laborer and a fisherman, worked in the SEZ until she got married. Her situation was better than other women SEZ workers as she was able to find work in the zone even after temporarily stopping each time after giving birth to two children. However, she eventually had to stop working for good with the birth of her third child. She lamented that:

I worked in the zone sewing bags for a long time. I had worked for at least six companies during those days. Every time I got pregnant I had to stop working. When my child was old enough, I immediately applied again. During that time, every time you apply at a new company, you need to undergo trials again. When I got pregnant with my third child, I had to stop permanently from factory work because three kids is a lot of work at home.

(Datoon 2016, 27)

These two women wanted to continue working and wanted to have a career out of factory work but due to contractualization, low wages and their child bearing and rearing responsibilities in the household, they had little option but to leave the factories. The second case above can be seen as a positive impact of the zone as it provides employment to married women with children. However, it illustrates the constraints women experience in working in the zone while their families are growing at the same time. It illustrates that it is difficult to have a long career in the factories even for women determined to work.

Although there are instances in which women could continue to work in the factories while raising their families, these cases are rare and they are usually those who can afford to pay for household help or those women who have relatives that can take care of their children while they work. According to interviews with former SEZ workers, ordinary women in the village who do not have these advantages are forced to choose their families over their work in the factories. As seen in Table 14, the average age of women working in the SEZ is 34.4 and 28.8 years old in the villages of Town Site and Biaan, respectively. The combination of job security, contractualization and the minimum wages were cited by the interviewees as the main reasons why most women, after childbirth, are forced to stay home as housewives.

Table 14. Average age of SEZ workers

Village	Town Site		Biaan	
Sex	Male	Female	Male	Female
Average Age	38.0	34.4	27.4	28.8
	36.2		28.1	

Source: Author's Survey (2015)

The average age for both sexes can be considered as young, indicating the lack of long-term career in the zone. Furthermore, women tend to be more disadvantaged because men can alternatively work in construction in the zone and also participate in the farm as laborers and harvesters while they wait for five months to try applying again in the factories. These options are not available for women in the village and they don't have the option to earn from farming since their traditional roles have disappeared.

Women are an untapped labor force for agriculture. Before the SEZ was established and broadcasting was adopted, farming work was available for women in the two villages. Although women find jobs in the zone more than men, more women are unemployed in the two villages. Furthermore, even though laborers in the two villages are difficult to find, there is a high rate of unemployment in the two villages. Women respondents have expressed the lack of interest in farming. However, according to interviews among 20 out of 24 housewife-respondents in Town Site and 23 out of 63 housewife-respondents in Biaan, the lack of access to the farming labor market is also one of the reasons why they cannot get employment in farming.

As older women are pushed away from the SEZ due to contractualization in the zone and family responsibilities, they find their traditional roles as planters and weeders to have disappeared due to the disappearance of the institution of *cabecilla* and the shift to broadcasting in the village as a reaction to the early industrialization in the village. Farmers

expressed that they have gotten used to broadcasting that they already find it hard to go back to transplanting. Farmers explained that they have gotten used to the less capital needed for broadcasting compared to transplanting, and have structured their household budget to it (Datoon 2016, 28). With wages of laborers in the two villages, the return to transplanting will require farmers to have more capital, which may force them to borrow from the informal credit market. This is not easy, especially for resource-poor and risk-averse farmers. Furthermore, farmers choose to perform broadcasting as current planters, especially women in the two villages, do not anymore possess the transplanting skills that they had in the past, since the traditional labor institution that facilitates the training of novice transplanting laborers disappeared in favor of broadcasting.

As a result, older women leaving the factories cannot earn a living from farming as the early industrialization of the town of Mariveles resulted in changes in planting practices, which, in turn, led to the disappearance of their traditional roles in rice farming. Women in the two villages know that planting is a missed opportunity for them to earn. The sentiments of women in the two villages are summarized by the two quotes from two housewife-interviewees in the study of Datoon (2016). The first quote is from a wife of a construction worker and the second quote is from a wife of a fisherman and daughter of a former *cabecilla* back in the 1960s.

I would like to earn a living from farming but there is no chance. All of the tasks now are for men. Planting opportunities are very rare nowadays. If only there is still transplanting, I could earn extra for my family and help my husband in our household expenses.

(Datoon 2016, 28)

My mother was a *cabecilla* but I never learned how to plant. I feel a little ashamed because I am a daughter of a *cabecilla* who doesn't know how to plant. I worked in the zone as a sewer when I graduated from high school and I did not have the time to learn to do transplanting back then. Now, if only I knew how and if only there are transplanting opportunities, I could earn from farming.

(Datoon 2016, 28)

5.2.1.2. Low use of new varieties of seeds and lower production

With the institution of *cabecilla* being gone, farmers had to choose between paying higher transplanting wages, finding and organizing low-skilled and inexperienced transplanting laborers and supervising them during the transplanting, or they can choose to switch to broadcasting. By practicing broadcasting, however, they sacrificed a higher production for a lower planting cost.

Jonathan Rigg (1997) describes the shift to broadcasting as a step back in rice farming technology in Southeast Asia, where transplanting has been regarded as one of the advancements in planting. Furthermore, studies by Thakur (1993), Mahajin et al. (1995) and Ali et al. (2013) cited that broadcasting yields far less than those of transplanting, whereas a study by Patel and Charugamba (1981) cited that transplanting can yield as much as 30 percent more than broadcasting.

Farmers in the two villages expressed that, unlike before when they were doing transplanting, they currently yield 15 to 20 sacks less per hectare on average. Although there are various factors affecting yield, interviews with the officers from the provincial government

agricultural office expressed that broadcasting is one of the factors that makes production in the two villages lower than the provincial and regional averages in 2014 as shown in Table 15. As can be seen in the Table, the village of Town Site’s yield on average was about 0.7 metric tons less, compared to that from the rest of the province, whereas the village of Biaan yielded almost less than half of the provincial average.

Table 15. Average rice production in Bataan per cropping season, 2014 (in metric tons per hectare)

Region, Province and Village	Rice Production
Central Luzon Region	5.35
Province of Bataan	4.80
Village of Town Site	4.11
Village of Biaan	2.47

Source: Philippine Statistics Authority (2015a); Author’s survey (2015)

Note: Central Luzon Region and Bataan Province data are from the Philippine Statistics Authority (2015a); Village data are from the Author’s survey (2015).

Compared to transplanting, farmers have fewer incentives to use newer varieties of seeds when performing broadcasting. This, in turn, contributes to lower production in the two villages. Broadcasting needs more seeds than transplanting. Because, compared to transplanting, in which the seeds are first planted in a nursery and then transferred to the main plot after the seeds have matured to seedlings and which enhances the survival of the plant, broadcasting pre-germinated seeds involves a high risk of the seeds being eaten by birds and snails. Thus, the farmers compensate potential losses by using more seeds.

Because of this, farmers need at least two sacks of seeds to plant a one-hectare land compared to just one sack if they plant using the transplanting method. This discourages farmers to buy government certified seed varieties, which cost about PhP1,500 for 40 kilograms at the cheapest. Instead, they use seeds that are taken from their own previous harvests. Sometimes, they also exchange seeds with other farmers in the village or nearby villages. According to farmers, if they perform broadcasting with 2 sacks of certified seeds, it

will be too costly for them. As seen in Table 16, 84 percent of farmers in the village of Town Site and 93 percent of farmers in the village of Biaan use their own seeds for planting. Furthermore, 20 percent and 43 percent of farmers in the two villages of Town Site and Biaan, respectively, do not even know what variety they plant.

Table 16. Source of seeds and variety of rice planted by farmers

Source of Seeds	Town Site		Biaan	
	Number	Percentage	Number	Percentage
Own Seeds	37	84%	26	93%
Bought from a Seed Grower	7	16%	2	7%
Total	44	100%	28	100%
Rice Variety Planted	Number	Percentage	Number	Percentage
Do not know	9	20%	12	43%
RC 18	22	50%	6	21%
RC 216	5	11%	2	7%
RC 128	3	7%	3	11%
Others	5	11%	5	18%
Total	44	100%	28	100%

Source: Author's survey (2015)

Note: Others include varieties such as: Angelica, Destiny, Diamond, Jasmine, Peneranda.

Half of the farmers in the village of Town Site and 21 percent of the farmers in the village of Biaan reported that the variety of rice they are planting is RC18.⁵ However, according to interviews with older farmers and municipal agricultural technicians, because RC18 was the popular variety in the village, most farmers thought they planted RC18. According to them, there is a high probability that most of the farmers are not entirely sure of the variety they currently plant.

The disappearance of the institution of *cabecilla* made recruitment, organizing and the supervision of laborers in transplanting harder and more costly. Risk-averse and resource-poor farmers had little choice but to shift to broadcasting to save costs. In doing so, they sacrificed higher production, as they could no longer benefit from the natural advantage of transplanting.

Furthermore, it presented farmers with little incentive to buy new rice varieties that could boost their production.

5.2.2. Retention of the institution of *hunusan* and the creation of harvest groups in the village of Town Site

Unlike before when harvesting is open to all and laborers just go to the farmers on the day of the harvest, the scarcity of laborers made it increasingly difficult for farmers to find enough laborers for harvesting. As laborers became more scarce in the town, the two villages diverged in the way they organize and remunerate laborers in harvesting.

The institution of *hunusan* was retained in the village of Town Site but harvest groups were established to organize laborers for harvesting in the village. The aim of the harvest groups in the village of Town Site at first was to organize the scarce laborers left in the village in order to make it easier to mobilize laborers for the farmers. However, later, it became a mechanism for the members of the groups to limit the access of other villagers to participate in harvesting. Because in-kind shares are divided among harvesters, a smaller number of laborers translate to larger shares for each member. This helps the individual laborers get a share equal or even more than the current wages in the other sectors when they convert the fresh paddies into cash. Members of the harvest groups are the landless laborers. They are long-time farm laborers or sons of laborers. These laborers have banded together around a leader and usually, members of the groups are those who have personal ties with the leader. These ties can be kinship or friendship. In order for new members to join the group, a person needs to know someone in the group and that member will recommend the person to the leader. Nobody can be a member without the approval of the leader.

This leader is usually the most respected and most seasoned laborer in the group, who have gained respect among the farmers and their fellow laborers over time. The leaders' job includes: 1) keeping records of pooled harvest shares, 2) keeping records of loans among the members and 3) scheduling of laborers and ensuring that there will be enough laborers on the day of the harvest. In instances when members of the harvest group work in construction or other jobs outside the farm, it is the harvest leader's responsibility to look for a replacement. Leaders usually aim for 10-13 members per 1-hectare plot for harvest. Having fewer laborers than this would mean harder work for the group, whereas having laborers of more than 13 members means fewer shares and lesser income.

The leadership position can be transferred to another laborer. Most of the time, it is transferred to the laborer who is most seasoned. This decision rests solely on the leader. Harvest leaders in Town Site are paid extra. The usual payment is about 1/3 sack of fresh paddy per harvest.⁶

There are three harvest groups in the village. Two of the three have been established long ago, whereas the third group is relatively new. The two longest running and established harvest groups are the preferred choice for the farmers. Farmers regularly hire the same harvest group. They only hire another harvest group if their usual group is occupied and they only hire a new group if they have no other choice. The relationship between the farmer and the harvest leader has a great influence on this. The relationship among the leaders of the harvest groups is cordial. They know each other as they belong to the same village and have worked together in the past as laborers. They even borrow from each other some laborers in rare instances when their harvest group is short of manpower.

5.2.3. Shift to hiring waged laborers in harvesting in the village of Biaan

In the village of Biaan, the institution of *hunusan* disappeared as the farmers and laborers shifted to wage labor. With this, the process of organizing labor changed for the village. As more and more villagers gained employment in the SEZ and the auxiliary sectors, specifically in construction, it became increasingly difficult to find harvesters and laborers. For those who are willing to do farming, preference to be paid through fresh paddies waned in favor of daily wages.

This presented an opportunity for enterprising laborers in the village to recruit and organize other laborers on behalf of the farmers. Laborers who cannot find work outside the farm approach farmers and offer their services to search the village for harvesters on their behalf. These labor leaders search the village for available laborers who do not have current contracts in the zone or in construction jobs. These leaders are paid twice the daily wage, one for searching for laborers and the other for the actual harvesting work. It is the leaders' responsibility that the hired laborers will show up on harvest day. It is the responsibility of the leader to recruit good and trustworthy laborers. However, unlike the harvest groups in the village of Town Site, memberships in these groups are not fixed. The composition of the harvest group highly depends on the availability of laborers on the harvesting day. The usual harvest laborers are those who have no current contracts in construction or those who are waiting to apply in the factories. The leaders, however, prioritize family members, relatives and their personal networks in recruiting or hiring laborers restricting the opportunity of others in the process.

5.3. Rise of New Actors and Barriers in Farming

Like the shift to broadcasting, the changes in the way harvest laborers was organized and remunerated also affected the capacity of these farming practices to absorb laborers. Because harvest laborers are paid in wages in the village of Biaan, farmers in the village tend to employ fewer harvesters, eight persons on average. This is much less than before when farmers in the village were paying in-kind shares and employing 15-20 harvesters per hectare. Furthermore, labor leaders in the village of Biaan tend to prioritize their relatives and laborers in their personal networks in recruiting harvesters.

This trend is also true with the creation of harvest groups in the village of Town Site, in which unlike before, access has been restricted to 10-13 persons per hectare on average. The creation of harvest groups and the rise of harvest group leaders made it difficult for new laborers and those farm laborers who are not part of the personal networks of the leaders to access farming work. On one hand, harvest groups were organized and leaders gained prominence to help farmers find laborers more easily. On the other hand, it presented barriers that tend to exclude other villagers from opportunities in the farm. Membership in such groups rests solely on the approval of the leader, and laborers without connections to the leaders of these three groups cannot participate in harvesting. The irony here is that the scarcity of laborers in the two villages has led to more restriction and barriers to participation in harvesting. As a result, fewer people benefit in farming as a livelihood. There are laborers in the village that lament these kinds of systems of organizing labor. Their sentiments can be summarized by a statement from one laborer in the village of Town Site:

Even if I wanted to join the harvest to make extra money for myself, I cannot do it because I don't know the harvest group leader. Unlike before, a person cannot easily join a harvest if the leader won't let you join. Members of harvest groups are only the ones who benefit from the harvest nowadays.⁷

As farming practices change and adjust as a result of scarcity of laborers, barriers are created that tend to segment the opportunities for farming to fewer persons. In the case of the harvest, access was restricted mostly to those who are within the personal networks of harvest group leaders and members of the harvest groups. In the case of planting, the disappearance of the institution of *cabecilla* and the shift to broadcasting resulted in the total disappearance of the traditional roles of women in rice farming. This can be dangerous in the long-term as agriculture is seen as a safety net of the economy or a place where people can find employment in times of crisis in manufacturing and services sectors.

5.4. Rise of Bargaining Power of Laborers

Laborers and their leaders have taken advantage of their small number to gain advantage in the negotiation of wages and working conditions in harvesting. A few days' delay in harvesting means less yield and delayed opportunities for farmers to make a profit. Laborers leverage the difficulty of finding laborers for harvesting to acquire perks, which include better meals and a more flexible working time. A farmer in the village of Town Site lamented that, "Before, laborers are not particular about the food farmers prepare, but now laborers demand meals with soup." Another farmer in the village of Town Site village expressed that, "Before, ordinary

bread and water is enough, but now they will not eat bread without sandwich spread and they want ice in their water.”

Additional perks for laborers incur additional costs for farmers. However, having the ire of laborers in an environment where they are scarce is disastrous for the farmers. Laborers are united in boycotting a farmer when they feel that a farmer is not a good patron or is not providing snacks or cold water, and even for being strict about working time. Moreover, laborers hate farmers who complain a lot about tardiness of workers. When laborers boycott farmers, the farmers will have no choice but to hire laborers from other villages. Searching for laborers in other villages may prove to be more expensive for farmers since they have to spend on transportation and additional time in searching.

One laborer in the village of Biaan narrated that they have boycotted a farmer for three planting seasons because of too much complaining about them having frequent breaks and starting the activities late. That farmer ended up recruiting harvesters from other villages and incurring expensive costs in transportation and higher wages. The mindset and the confidence of the laborers in negotiating with farmers can be summed up by a quote from a laborer in the village of Biaan:

They have no choice but to give in to our request, because if they do not agree with our requests, who will harvest it for them? We tell the farmers: “Harvest it yourself.” Farmers cannot harvest it by themselves and the rain will ruin it or the birds will have a feast day eating the crops.⁸

Aside from boycotts, laborers also reported that they use gossip as a weapon to discourage farmers from implementing stricter provisions and dissuade them from cutting

perks offered to laborers. The worst gossip for a farmer is to brand him or her as a bad patron or bad host. This carries negative connotations not only among potential laborers that will work for the farmers but also to the larger community and the village. Using their advantage, laborers in the village of Biaan also demand raises in wages usually during peak times when laborers are especially hard to come by. This power possessed by the laborers will not be possible without the scarcity of laborers in the village and the opportunities for employment generated by the SEZ.

The same perks and benefits have been reported to be negotiated by laborers in the village of Town Site. The main difference, however, is that, in Town Site, the harvesters are still paid through in-kind shares from the harvest. Thus, they cannot negotiate for higher wages but they can negotiate in other terms, such as better meals, additional snacks and a later starting time. These can be additional costs but farmers do not have much of a choice, especially in the rainy season.

5.5. Summary

Experiences from the two villages illustrated that the scarcity of laborers brought about by rural industrialization catalyzed changes in farming practices and the traditional labor institutions in which laborers are organized and remunerated in planting and harvesting in the two villages. Furthermore, the scarcity of laborers has empowered them to have a stronger bargaining position over the farmers. This is advantageous for the laborers. However, additional expenses in food and wages add to farming costs that might eat up the farmers' budget that could otherwise be used for seeds, fertilizers and household expenses.

In planting, the combination of rising wages, scarcity of skilled planters and the disappearance of the institution of *cabecilla* that organizes and trains planters contributed to the shift from transplanting to broadcasting. The shift to broadcasting forced farmers to sacrifice higher yield for lower costs. It lowered the capacity of farming to absorb laborers. Moreover, the shift to broadcasting made the traditional roles of women in transplanting and weeding disappear, which limited the participation of women in farming. The view that industrialization through SEZs can provide rural women more opportunities is proven true as factories hire women as a significant percentage of their labor force. However, the combination of the implementation of contractualization, minimum wages and the life cycle of women discouraged them to have long-term careers in the zone. As a result, women, especially those in the mid-30s and older, find themselves unable to work in the SEZ, and worse, they also find themselves unable to earn a living in the farm as they see that their traditional roles in farming have disappeared. This study provides a different view on the effects of SEZs and rural industrialization on women employment in rural areas. It cautions us on the sweeping claim that SEZs and employment in the non-farm sector empowers women. As illustrated in this study, such benefits can be true in the early stages of the lives of the women but may have a different effect in their later life.

In harvesting, the shift to hiring waged laborers in the village of Biaan and the adjustment made to retain the institution of *hunusan* in the village of Town Site created barriers for the larger community to access harvest opportunities. Due to the difficulty in finding laborers, mechanisms were established to make farmers find laborers more easily, such as the formation of harvest groups in the village of Town Site and the recruitment of laborers through labor leaders in the village of Biaan. However, these became barriers that limited opportunities in farming work to only a small segment of the rural community. High wages was also cited as

a major reason for the smaller number of waged laborers in harvesting in Biaan. Although these changes are brought about by and are a reaction to the scarcity of laborers in the village, it is possible that changes brought about by the zone in farming practices are irreversible and dangerous when external shocks cause layoffs in manufacturing, and agriculture is called upon to absorb the surplus unemployed laborers.

Experiences in this study speak volumes on the effect of SEZs and industrialization on farming in rural areas. Contrary to studies that believe in a symbiotic relationship between industrialization and agriculture, experience in this study illustrates that industrialization may have negative effects on productivity and the ability of agriculture to provide livelihood for rural people. This study also underscores that rural industrialization may provide benefits among the disadvantaged groups in rural society, but may have latent and indirect negative effects in the long run for rural people, especially among the landless and women. This presents a paradox since the aim of rural industrialization is to generate employment, while most policy makers in the Philippines believe that rural development can be achieved through rural industrialization.

Notes

- 1 The cheapest high-yielding varieties cost about PhP1,500 per sack and is only available in the center of town or in the nearby city of Balanga.
- 2 This result is consistent with other studies, such as those of Price (1983), Warr (1984), Chant and McIlwaine (1995) and Rigg (1997) that suggest that rural industrialization is more advantageous to women.
- 3 This finding is consistent with Pearson's (1998) study of women factory workers in developing countries.
- 4 This is also common in other SEZs in the country as cited by Chant and McIlwaine (1995), ILO (2003) and Perman (2004).
- 5 According to Launio et al. (2008), this variety was released in 1994 and has become one of the most popular rice varieties in the Philippines and in Asia.
- 6 It is also customary for laborers to give their leaders free liquor as gifts or incentives at the end of every harvest season.

- 7 Interview with a laborer in the village of Town Site, March 10, 2015; translated from Tagalog. See Interview Transcript 5 in the Appendix for the full transcript of the interview.
- 8 Interview with a laborer in the village of Biaan, July 4, 2015; translated from Tagalog. See Interview Transcript 3 in the Appendix for the full transcript of the interview.

Chapter 6

Resiliency of Traditional Labor Institutions

As discussed in the previous Chapter, the establishment of SEZs creates a demand for laborers that directly competes with farming. The resulting scarcity of skilled farm laborers in the two villages brought about changes in farming practices and, consequentially, in the traditional labor institutions (*cabecilla* for transplanting and *hunusan* for harvesting) that govern the access of people to resources for livelihoods. As stated in the previous Chapter, some institutions were replaced while other institutions continued to be practiced by the people in the community. This chapter aims to discuss why these institutions were changed, replaced or remained amidst the establishment of the SEZ in the town of Mariveles and the resulting scarcity of laborers in the farm.

6.1. Community Norms and Farmers' Decision Making

According to Hayami (1999), farming labor in the Philippines traditionally tends to operate under the social norms of the community, which aims for employment of its members. Hayami traced this to the social norms of income sharing and work sharing that prevails in many Southeast Asian countries. These norms dictate that well-to-do members of the community should provide income and work opportunities for the poorer members, who are mostly the landless, to guarantee the minimum subsistence for the poor (Hayami, 1999). In return, farmers receive lesser transaction costs, minimum supervision costs and enhancement of their status as a patron. These norms are also common in areas where production is low and risks to farming

are high such as outbreaks of pests and diseases and calamities such as typhoons and drought. According to Hayami and Kikuchi (1981), letting others share income and work opportunities in their farms so that they can also work in others' farms is a way for farmers to diversify their incomes, have insurance mechanisms and reduce risks.

The penetration of capitalist markets in the agrarian community, introduction of alternative technologies and diversification of employment opportunities through industrialization espouse changes in the traditional labor institutions that govern the use of labor in farming. On one hand, the replacement of traditional labor institutions by capitalist modes of exchanges based on wage labor can enable farmers to enhance their profits or reduce costs. On the other hand, the traditional labor institutions of *cabecilla* and *hunusan* also provide benefits for farmers and laborers in rice farming. As will be discussed in the following sections, these benefits give farmers and laborers incentives for them to find ways to preserve these institutions.

This study argues that farmers and laborers choose between the benefits they can gain by changing or preserving traditional labor institutions. Thus, the preservation and resiliency of traditional labor institutions greatly depends on their advantage over the alternative. Furthermore, the resiliency of traditional labor institutions also depends on their ability to withstand adjustments in order to keep their underlying norms and defining features, which enable their advantages.

6.2. Demise of the Institution of *Cabecilla*

According to the interviews among farmers, former *cabecillas* and former planters in the two villages, *cabecillas* and planters during the early 1970s chose to work in the factories because

the income was more reliable and not seasonal. Once *cabecillas* gained employment in the factories, finding skilled planters in the two villages became more difficult. Farmers have to look for the planters by themselves in the village and sometimes in other nearby villages. This became too taxing, especially for older farmers. The farmers expressed that this made their planting schedule complicated and dependent on the availability of scarce skilled planters. As a result, the combination of rising wages and the difficulty to organize scarce skilled planters spelled the end of transplanting in the farming villages in the town.¹ Being paid through wages, planters were prone to the rise and fall of the wages. Unfortunately for the farmers, the sudden high demand for laborers created by the factories in the zone drove labor wages beyond their reach.

According to interviews and surveys with farmers, the main reason behind the shift to broadcasting point to reduction in farming costs. As farm laborers became more scarce and difficult to find while farm labor wages increased, transplanting became more expensive and more difficult to organize for the farmers. Although broadcasting yields are smaller, it became an attractive option for farmers until almost all of them shifted to broadcasting in the mid-1970s, just when the operations and employment in the SEZ were taking off.

Experience in the two villages shows that higher production is not the only thing that farmers consider in rice production. As shown earlier, farmers are greatly concerned with the cost associated with production. As shown in Table 17, broadcasting only incurs a small cost compared to transplanting. As discussed earlier, there are farmers who occasionally do transplanting. When they do, these farmers usually pay four laborers for pulling and ten laborers for transplanting. Compared to farmers who hire 1 laborer to perform broadcasting, farmers can save as much as PhP6,000 which they can use for other farming expenses, such as additional fertilizers and pesticides. They can use the saved money for household expenses.

Table 17. Average cost of transplanting and broadcasting in the two villages (in PhP)

Costs in Transplanting and Broadcasting	Transplanting		Broadcasting
	Pulling	Transplanting	
Average Number of Laborers per ha	4.7	10.8	1
Average Daily Wage per Laborer	251.6	253.0	251.6
Average Daily Food Cost per Laborer	50	50	50
Average Number of Days	1	1.5	1
Total Labor Cost of One Laborer per Day	301.6	303.0	301.6
Total Labor Cost per ha in a Day	1,422.0	3,263.1	301.6
Total Cost (total labor x average days)	1,726.7	4,769.11	301.6
Total Average Planting Cost		6,495.9	301.6

Source: Author's survey (2015)

The expensive wages are made worse by their lack of capital and the lack of access to formal credit institutions among the farmers. This problem is exacerbated by the risks associated with farming such as outbreak of pests, sudden drought and occurrence of typhoons. The mindset of the farmers in the two villages is accurately represented by a statement from a long-time farmer in the village of Town Site:

If you're going to do transplanting, you have to have a yield of 20-30 sacks more than if you're going to plant using broadcasting. If not, the advantage in yield of transplanting will be eaten up by the cost of labor. But what if a storm comes or flooding, pests, or drought? You cannot get back what you spent in labor.²

Older farmers expressed that if the institution of *cabecilla* is still being practiced, it might have been able to offset some of the cost of labor through the reduction of cost in recruitment and supervision, whereas the natural advantage of transplanting in yield can also offset the cost of labor. Also, key informant interviews with farmers in the two villages

revealed that farmers are willing to pay for transplanting as long as the work is of good quality. However, farmers agree that the combination of high wages and the difficulty of finding skilled planters due to the disappearance of the institution of *cabecilla* is a strong factor that pushed the farmers to shift to broadcasting. Results from the interviews indicate that farmers did not try to retain the institution of *cabecilla* or tried to revive it when it disappeared. In the village of Biaan, some farmers are forced to do transplanting during wet seasons or during rainy months due to the quality of their soil. In rare instances when farmers in the two villages choose to perform transplanting, the institution of *cabecilla* was not revived in the community.

The demise of the institution of *cabecilla* can be attributed to the weak exercise of community norms in the institution that, in turn, did not provide farmers with long-term benefits. For the farmers, although the institution of *cabecilla* enables them to save time and resources in recruitment and supervision, the money they will be saving in broadcasting is not worth the cost of reviving the institution as it provides them little or no long-term benefits since relationships between farmers and planters were weak. This weak relationship was made worse as seasoned and trusted *cabecillas* left farming in favor of the factories.

As discussed in Chapter 4, three features of the institution of *cabecilla* are the organization of laborers, relationship between the farmers and *cabecilla* and skills transfer. The organization of laborers in the institution of *cabecilla* can be seen as a mechanism of the community to achieve income sharing. Transplanting and the institution of *cabecilla* can provide a mechanism for household members, such as daughters and wives of farmers, to work in other farms to ensure alternative sources of income. However, the diversification of employment opportunities outside the farm with the establishment of the SEZ presented better opportunities for the households.

Recruitment and the organization of laborers in the institution of *cabecilla* are different from modern capitalist markets as it is based on personal relationships and networks lowering the transaction cost of recruitment, organization and supervision of laborers for their farmer-clients. The institution of *cabecilla* is the key to the transfer of skills from seasoned planters to novice planters. Patron-client relationships are also displayed between farmers and the *cabecilla* and between the *cabecilla* and the planters. Farmers and the *cabecilla* develop a relationship based on mutual-dependence as farmers provide *cabecillas* access to land for livelihood, whereas the *cabecilla* provides farmers with timely, organized, skilled and supervised laborers. Planters owe their livelihoods to the graces of the *cabecilla*, thus naturally acting as their patrons. However, direct patron-client ties are weak between farmers and planters. Although planters and farmers know each other as they belong to the same community, the relationship between them tends to be weaker than the farmer-harvester relationship. This is because the contact between them is minimal as recruitment, training and supervision are tasked to the *cabecilla*. Furthermore, planters collect their payments from the *cabecillas* as the farmers pay to him or her.

As discussed in the earlier chapters, planters do not want to be paid in-kind shares because they have to wait at least four months for the harvest. However, wages are dictated by the labor market in both farm and non-farm sectors. Because it is the form of payment in the institution, it tends to weaken the norm of reciprocity between farmers and planters because the planters earn a specific amount of cash independent of the yield of the farmers regardless if the farmers have high or low yields. Thus, it does not provide incentives for planters to care about the welfare of the farmers' farm.

As employment opportunities in the two villages diversified, it weakened the dependence of planters on the farmers for livelihoods. And as wages in the two villages rose,

the benefits from saving planting costs outweighed the benefits that the institution of *cabecilla* provided the farmers. As a result, farmers did not make an effort to adjust or enact ways to preserve the institution and they opted to shift to an alternative technology prioritizing saving costs and minimal risks over higher production with higher expenses.

6.3. Adoption of Wage Labor and Resiliency of the Institution of *Hunusan*

In the village of Biaan, the institution of *hunusan* was replaced by wage labor. Meanwhile, in the village of Town Site, despite the scarcity of farm laborers resulting from them finding employment in factories and construction projects, harvesters are still being paid in in-kind shares as the farmers and laborers continued to practice the institution of *hunusan*.

Table 18 shows the average fresh paddy production of the two villages, whereas Table 19 offers the computed monetary values of in-kind shares from the institution of *hunusan*. As discussed in the previous Chapters, laborers are paid ten percent from the total farm production. Based on the survey, because the average per hectare production of farmers in the village of Town Site was 62.6 sacks during the wet season and 82.5 sacks during the dry season, the farmers paid 6.26 sacks and 8.25 sacks of fresh paddies to the harvesters in the wet and dry seasons, respectively.

Because the average number of harvesters per hectare is 13, each harvester got, 0.48 kg and 0.63 kg in the wet and dry seasons, respectively. These in-kind shares, when sold in the paddy market, will amount to PhP264 in the wet season and PhP349 in the dry season. These amounts are larger than the PhP250 daily farm wage. In total, farmers in the village of Town Site pay PhP3,444 in the wet season and PhP4,539 in the dry season. This is higher than if they pay laborers in daily wages that will only cost them PhP3,250 for both the wet and dry seasons.

Table 19 shows that, if converted to monetary values, farmers pay more through the institution of *hunusan* than they would if they pay laborers PhP250 in daily wages, especially in the dry season when farming conditions are favorable and the yield is higher. Laborers earn more if they sell their *hunos* and convert it to cash. In contrast, farmers can earn more if they pay through wages and retain more paddies that can be sold and converted into more cash.³

Table 18. Average fresh paddy production per hectare (in 46kg sacks)

Village	Season	
	Wet	Dry
Town Site	62.6	82.5
Biaan	45.1	60.0

Source: Author's survey (2015)

Table 19. Monetary equivalent of *hunos* by cropping season (in PhP)

Town Site	Cropping season	
	Wet	Dry
In-kind share (10% from the harvest, 46 kg/sack)	6.26	8.25
Money Equivalent (in-kind share x price of fresh paddy @ PhP550/sack)	3,444	4,539
Average Number of Laborers	13	13
Average in-kind share per Laborer (46 kg/sack)	0.48	0.63
Money Equivalent at (PhP12/kg)	264	349
Total payment if paid in wage (PhP250 x number of laborers)	3,250	3,250
Biaan	Cropping season	
	Wet	Dry
In-kind share (10% from the harvest, 46 kg/sack)	4.51	6
Money Equivalent (<i>In-kind share</i> x price of fresh paddy @ PhP550/sack)	2,481	3,300
Average Number of Laborers	8	8
Average in-kind share per Laborer (46kg/sack)	0.56	0.75
Money Equivalent at (PhP12/kg)	275	367
Total payment (PhP250 x number of laborers)	2,000	2,000

Source: Author's survey (2015)

Note: Harvest laborers in the village of Biaan are paid in wages. The computations in the village of Biaan are hypothetical if farmers pay harvest laborers through in-kind shares. Fresh Paddies are sold at PhP12 per kg.

The amount of money that farmers can save through paying waged laborers can be seen in the experience of farmers in the village of Biaan during harvesting. Farmers in the village,

on average, spend PhP2,000 for both the wet and dry seasons for eight harvesters, paying PhP250 per harvester. As shown in Table 19, if farmers in the village of Biaan followed the institution of *hunusan* and pay through in-kind shares, they will be spending, on average, PhP2,481 for the wet season and PhP3,300 for the dry season. Farmers, on average, will be paying each harvester PhP275 and PhP376 for the wet and dry seasons, respectively. These are higher than the PhP250 daily wage per harvester.

From these results, the following questions can be asked. Why don't the farmers in the village of Town Site just hire waged laborers so that they can earn more? Why do they have to keep practicing the institution of *hunusan*? How does the institution stay resilient against wage labor? Why are laborers not demanding to be paid in in-kind shares in the village of Biaan since they can earn more?

6.4. Reasons for the Resiliency of the Institution of *Hunusan* in the Village of Town Site

6.4.1. Advantages of the institution of *hunusan* over hiring waged laborers

As seen in Table 19, farmers in the village of Town Site pay more when the payment is converted to money. However, paying through in-kind shares provides farmers other benefits, which will be difficult to gain if they pay through wages. This tends to provide incentives for farmers to preserve the institution. Based on the interviews and on the survey of the farmers' farming practices, the institution of *hunusan* provides various advantages for the farmers such as the following:

- (i) *Lessened supervision cost.* The institution of *hunusan* lessens shirking as the amount of payment to the laborers is calculated from their share in the harvest.⁴ On the other hand, farmers expressed that wages give incentives to prolonging the harvest another day to secure another day's wage. This, in turn, will make farmers spend more time and effort in supervising the laborers. The institution of *hunusan*, in contrast, provides incentives for the laborers to finish harvesting as soon as possible in order for the harvest group to accept another harvest contract from another farmer.

- (ii) *Avoidance of loaning and paying high interest rates.* Because harvesting is performed at the end of the cropping season, most farmers have no money left from the earnings of their previous harvest. Poor farmers would be forced to borrow money from the informal credit market to pay harvesters and they are forced to pay high interest rates. Thus, by paying in-kind shares, loaning is avoided.

- (iii) *The institution of hunusan is a way to protect farmers from the wage labor market.* Because of high demands for labor from the industrial sector, farm wages tend to be influenced by the labor market and the rise in the price of commodities. Unlike in the village of Town Site, farmers and laborers in the village of Biaan are in constant negotiation for wages. This provides farmers with an unpredictable environment for budgeting and capital allocation, as farmers may not know when the next wage increase will be. Constant negotiation may provide strain and conflict in the relationship between farmers and laborers. With the fixed in-kind sharing rate in the institution of *hunusan*, farmers expressed that the rise in living costs and the rise in

prices is absorbed by the increase in the price of fresh paddy or rice. They also expressed that it gives them predictability. With a predictable sharing rate, farmers can budget their expenses better and allocate scarce capital for farming inputs and household expenses.

- (iv) Preserving the institution of *hunusan* means *preserving a sense of shared risk, shared subsistence and reciprocity in the community*. Farmers believe that when a calamity comes or even when the occasional bad or low harvest comes, it is the laborers who make sacrifices, as they are the ones that lose out in the institution because lower yields and crop losses translate to lower shares for the laborers. Thus, when converted to money, they can earn lower than the prevailing wage rates.

In addition, having the harvest open to participation from residents of the village reinforces the norms of reciprocity and income sharing among farmers and laborers. It gives the landless laborers access to land where they can earn subsistence for their families. Thus, it is a way for farmers to share the benefits of the land. By paying through in-kind shares, the farmers and laborers work together in ensuring a good harvest. This does not only translate to working hard during harvesting, but also to the daily care of the standing crops, which could be as simple as looking out for pests and diseases, looking out for birds and stray animals and checking if there is enough water in the field.

Furthermore, the institution of *hunusan* reinforces patron-client ties. By providing livelihood for laborers, farmers try to preserve their status as patrons or providers in the village. They supplement this by providing snacks and meals during harvesting and by providing bonus shares during good harvests. In turn, laborers develop a sense of *utang na loob* or a feeling of a

“debt of gratitude” that accumulates every harvest season. Although this can be achieved by farmers through paying wages, paying through the institution of *hunusan* and in-kind sharing makes the transaction more personal and builds a sense of favor among laborers.

These advantages of the institution of *hunusan* over hiring waged laborers made the institution an important part of farming in the community, thus, for the farmers, it is only logical to preserve it. In an environment where the preference for wage labor among farmers is high and as scarcity of farm laborers is increasing due to the diversification of livelihood opportunities brought about by the industrialization of the town of Mariveles, the advantages of the institution of *hunusan* present the incentives for farmers to make the institution resilient and competitive against wage labor.

On the part of laborers, recruitment and organization of the harvest laborers had to be changed, resulting in the formation of harvest groups. On the part of the farmers, from harvesting being open to everyone in the community, they agreed to have it exclusively to the members of the harvest groups. Farmers and harvesters also agreed to reduce the tasks included in harvesting. Furthermore, crucial to the institution of *hunusan's* resilience and its preservation in the village of Town Site is the presence of the fresh paddy market, which is not available in the village of Biaan.

6.4.2. Role of the fresh paddy market

The fresh paddy market enables harvesters to have an option to convert their in-kind shares into money that they can use to purchase daily goods and services. Furthermore, farmers and laborers explain that this market is vital in keeping the time-honored sharing rate at ten percent through the years. Their reasoning is that the increase in the price of milled rice, which

determines the price of the fresh paddy, enables them to cope with the rise in labor wages and the rise in the overall living costs for the laborers. Thus, the farming community can maintain the ten percent sharing rate because the monetary value of this ten percent sharing rate increases as time goes on. Table 20 shows that the farm gate price of dried paddy in the Province of Bataan increased with an average rate of seven percent in the last ten years, compared to the five percent average increase in rice farming wages. According to the farmers, the steady increase in the prices of milled rice and paddy tend to offset the increase in wages and living costs among laborers.

Table 20. Average growth rate of rice farming wages and farm-gate price of dried paddy (in PhP)

Year	Rice Farming Wages	Growth rate (%)	Farm gate Price of Dried Paddy, Bataan	Growth rate (%)
2002	143.53	3%	9.29	5%
2003	148.30	3%	9.12	-2%
2004	155.23	5%	9.52	4%
2005	162.51	5%	11.19	18%
2006	171.89	6%	11.57	3%
2007	184.07	7%	11.49	-1%
2008	205.19	11%	15.31	33%
2009	213.63	4%	15.53	1%
2010	223.52	5%	15.87	2%
2011	236.14	6%	16.12	2%
2012	247.66	5%	17.77	10%
Average	190.15	5%	12.98	7%

Source: Philippine Statistics Authority (2015c); National Food Authority (2015)

Note: Rice farming wages data are from the Philippine Statistics Authority (2015c); Farm-gate price of dried paddy in Bataan data are from the National Food Authority (2015).

In the village of Town Site, laborers can almost use fresh paddies as currencies as it can be easily converted into cash. It can also be used as payment and collateral for loans among farmers and laborers alike. This will not be possible without the people in the village who buy fresh paddy from laborers, either for their home consumption or to be sold as dry or milled rice

later on. These people accumulate large quantities of fresh paddy and dry it themselves or pay laborers to dry it for them on the paved roads around the village.

6.4.3. Institutional adjustments

The presence of the paddy market is, however, not enough for the institution of *hunusan* to remain resilient. There were adjustments made to the traditional labor institution. One adjustment is the reduction of tasks that harvesters should perform. Before, the task of hauling the threshed and sacked paddies was included in the tasks that harvesters should perform, but this has been removed. In recent years, the task of hauling reaped stalks and piling it in preparation for threshing was also removed. The harvesters' work was relegated to strictly reaping the crops. To haul the reaped stalks and the threshed sacks of paddy, farmers hire other laborers or pay the harvesters additional money. During the time of the study, farmers would usually pay PhP20 for every sack to be hauled from his farm to the side of the road. This fee would vary depending on the distance of the farmer's farm to the road. Hauling became another source of income for harvesters apart from the in-kind share they will receive for their work in harvesting. According to a harvest leader in the village of Town Site:

They have to pay us PhP20 to haul each sack. The farther they are from the road, the more farmers have to pay for a sack. Before, hauling was included in the agreement. But as life gets harder, we wanted to be paid for hauling because it is hard work. But now as I get older, I don't anymore haul the sacks. I just let the younger ones do it. We like this because we have in-kind shares and we can also earn money if we haul the sacks. It also makes harvesting a little easier. It is one way to entice people to work in harvesting.⁵

This phenomenon is consistent with Hayami and Kikuchi's (1981) findings and analysis of labor institutions that adjust to approximate the prevailing wage rate. In a rice farming village in the province of Laguna in the Philippines, Hayami and Kikuchi (1981) found that the monetary value of the in-kind share was higher than the prevailing wages. Because of population increase in that village, labor supply increased against the demand, lowering the farm wages. Thus, to retain their traditional and time-honored sharing rate, the institution of *hunusan* in that village was adjusted to approximate the prevailing wage by adding more tasks in the contract. In Hayami and Kikuchi's (1981) study, weeding was added to the harvest contract, modifying the institution of *hunusan*.

In the village of Town Site, the opposite happened. Because the demand for laborers from the SEZ and its auxiliary industries drove up wages, the institution of *hunusan* was adjusted to reduce the tasks of the harvesters. Removing the task of hauling from the responsibilities of the harvesters presented additional incentives for laborers to work in harvesting. In addition, hauling presented harvesters another source of income apart from the in-kind shares they will get from harvesting. This enabled the institution of *hunusan* to compete with the prevailing wage not only in the farm but also in the zone. Thus, reduction in the tasks included in the institution of *hunusan* is a key reason for its continued practice in the village of Town Site.⁶

Another adjustment is the establishment of harvest groups among the laborers. Unlike in the old days when anyone can participate in harvesting and acquire a share, to participate in harvesting nowadays, one must be a member of a harvest group in the village of Town Site. As discussed in the previous Chapter, these groups were formed to better organize the scarce harvest laborers in the village. However, the harvest groups have become a way to control the number of laborers who can participate in harvesting. Because all harvesters would be sharing

the ten percent from the total yield, too many harvesters in the group would mean too little share for individual harvesters, whereas too few harvesters would mean harder work and longer working hours. By controlling the number of harvesters, the monetary value of the in-kind shares can be comparable to daily wages in other sectors. This provides additional incentives for harvesters to work in the farms.

6.5. Preserving the Key Features of the Institution of *Hunusan*

With the reduction of task of the harvesters and the creation of the harvest groups, the institution of *hunusan* was preserved in the village of Town Site. By preserving the key features of the institution, the participation of the community and paying through in-kind shares was also preserved. In doing so, farmers and laborers also retained the norm of income sharing as both farmers and laborers continue to have a stake in the good performance of the farm. This also preserved the norms of reciprocity and patron-client relationships between farmers and laborers. As seen in Table 19 earlier, farmers pay in-kind shares, which are higher than the prevailing wage rate if converted into cash. Farmers cite that one of the reasons for this is that this builds a sense of favor among the laborers. This is a short-term loss for the farmers but they view that they will gain this back in times of typhoons and disasters when laborers are hard to come by. When asked why they are still paying through in-kind shares even when they know that they are paying above the value of a daily wage, a farmer in the village of Town Site replied that:

Sometimes, when the weather is bad or there are typhoons and my crops are lodged, they help me harvest it even though we will only get a low yield. It is

hard to harvest the field when flooded. It is very hard. Its muddy, the crops are wet and it is difficult to move. You can say that during those kind of times, it is their time to make sacrifices for the farmers.⁷

This view is shared by the harvesters. According to an interview with a harvest group leader, their group has to harvest even though the conditions are not favorable for them. They cannot refuse their patron-farmers during their times of need. He expressed that:

Even if it is raining, it is our obligation to the farmers to harvest. We can't refuse. It is our reputation and obligation to the farmers. Even if we lose income we have to work on it. The farmers may not hire us again. Even if it is hard because the mud is deep and the crops are lodged, we cannot refuse them as long as it is scheduled. It will look like that we don't know how to return the favors they gave us.⁸

The creation of harvest groups restricts other members of the farming community from participating in harvesting and can be viewed as a contrast to the norms of income sharing, reciprocity and patron-client relationships. However, it is important to note that the creation of harvest groups is done under an environment where laborers are scarce. According to the interviews among farmers, harvest groups are necessary to organize the scarce laborers in the village. Farmers believe that they still follow the norms of income sharing as they continue to provide livelihood opportunities and subsistence for the laborers and the landless in the village. By earning higher than the prevailing farming wage, laborers have incentives to stay in farming. Although the larger community was excluded in harvesting, the norms of income

sharing, reciprocity and patron-client relationship were maintained between farmers and laborers.

6.6. The Fresh Paddy Market and the Disappearance of the Institution of *Hunusan* in the Village of Biaan

As seen in Table 10 in Chapter 4, the two villages experienced diversification of employment since the opening of the SEZ in the 1970s. As wages outside the farm became higher, villagers in the villages of Town Site and Biaan prioritized working outside the farm. The difference between the two villages in the retention of institution of *hunusan*, however, is the presence of the fresh paddy market in the village of Town Site, whereas it disappeared in the village of Biaan.

According to farmers in the village of Biaan, the institution has not been followed in the village for almost four decades. Farmers recall that the institution of *hunusan* disappeared around the middle of the 1970s and around the same time when laborers in the village found employment in construction and factories in the zone. Before, when there were not many non-farm opportunities for the villagers, laborers bought fresh paddies from each other. Non-farm households in the village also bought fresh paddies from laborers for their home consumption. Farm laborers and non-farm households invested in drying fresh paddies and sold it as milled rice. During those times, like in the village of Town Site at the present, fresh paddies can be easily converted to cash as many individuals in the village bought them.

Compared to the village of Town Site where farmers use the side of the provincial highway, drying is more cumbersome in the village of Biaan as the village lacks wide concrete roads where they can spread the fresh paddies to dry. Farmers use foldable canvasses or lay

fresh paddies on reaped fields and unpaved roads. This lack of appropriate drying facilities tends to discourage farm laborers and non-farmers in the village to invest in buying fresh paddies from farmers and laborers. Due to the limited drying spaces in the village, ten to 20 sacks of paddy usually take 2 to 3 days to dry.⁹ Villagers in the village of Biaan expressed that they would rather use this time to work in construction or in some other opportunity in the SEZ.

Because of the absence of the fresh paddy market in the village where laborers can convert their harvest shares into cash at the end of each working day to buy their daily needs, the two institutional adjustments in the institution of *hunusan*, which was done in the village of Town Site, was not possible in the village of Biaan. This market facilitated the institutional adjustments done in the village of Town Site. Without the ability to pay through in-kind shares, there was no incentive for farm laborers in the village of Biaan to organize themselves to form harvest groups in order to maximize the harvest opportunities in the village. Without the ability to pay through in-kind shares, there was no opportunity for farmers and laborers to adjust and lessen the tasks included in the harvesting contract. As seen in the village of Town Site, these adjustments were necessary for the value of in-kind share per laborer to be at par with the wages outside the farm.

6.7. Summary

This Chapter has attempted to analyze why traditional labor institutions change and why traditional labor institutions remain resilient amidst the penetration of capitalism and industrialization in the rural areas such as the creation of Special Economic Zones. Experiences from the two villages show that under an environment where the labor supply is tight and the

preference for waged laborers is high, the decision to preserve or change traditional labor institutions depends on maximizing its benefits and making it competitive against wage labor.

As seen in the two villages, both wages and the institution of *hunusan* present farmers and laborers with advantages. Traditional labor institutions remain resilient when the benefits they provide the farmers are deemed more valuable compared to the benefits of wage labor. Short-term benefits include reduction of transaction costs, reduction of supervision costs and to avoid loaning, whereas long-term benefits include income sharing, reciprocity of favors and livelihood opportunities, and the preservation of the patron-client relationship. With these benefits, farmers in Town Site did not mind paying laborers more than the farming wage since they get the benefits of the institution.

Failure to strongly preserve community norms may result in the disappearance of the institution as seen in the demise of the institution of *cabecilla* in the two villages. Since its features displayed weak adherence to community norms, farmers only got short-term benefits while long-term benefits from the norms of reciprocity, shared risk and patron-client relationships are not as much. As a result, farmers did not exert much effort to make adjustments to revive or preserve the institution and they easily turned to the alternative, which is broadcasting.

As can be seen in the two villages, preserving the traditional labor institutions and taking advantage of their benefits, which are provided by the community norms, depend on the presence of markets and adjustments on the institutions themselves. In the village of Town Site, the institution of *hunusan* could not be preserved without the presence of a fresh paddy market, which provided a way for laborers to monetize the harvest share in order for them to avail of other goods and services for their daily needs. This factor proved to be the missing

element in the village of Biaan as farmers and laborers there were forced to shift from the institution of *hunusan* to hiring waged laborers for harvesting.

Furthermore, adjustments in the institution of *hunusan* were necessary in order for the institution to compete with wage labor. Modification of the tasks involved in the harvest contract was necessary in order for the value of in-kind shares to be competitive with the prevailing wages in the other industries. Also, modifying the organization of laborers with the establishment of harvest groups was a necessary adjustment as a way to maximize employment opportunities for its members.

The findings in this Chapter suggest that the effects of the scarcity of laborers created by the SEZ is dynamic as institutions can be resilient or persist and adapt to changes without losing its key features that make them valuable to the community. Furthermore, it suggests that traditional labor institutions could be integrated to a capitalist market, such as the fresh paddy market in the village of Town Site. In addition, the findings illustrate that penetration of capitalism in the agrarian sector, at least in the Philippines, does not automatically result in the transition from traditional labor institutions to the adoption of capitalist modes of production, nor does it alternatively lead to resistance or protests as many studies suggest. Experience from this study illustrates that it is not only possible for traditional labor institutions to be integrated with capitalist markets, but this integration can also be a way for traditional labor institutions to remain resilient amidst agrarian change and penetration of capitalism.

The findings in this chapter offer a critic to the “bounce back” or equilibrium approach on institutional resilience and institutional change. As illustrated in the experiences in the two villages in this study, institutions can be resilient even with changes and adjustments in its practices. More importantly, this study strongly agrees to the argument that the key for the resiliency of institutions is their ability to make adjustments while preserving their key

features. The findings of this study, more specifically the retention of the institution of *hunusan* in the village of Town Site, illustrate the adaptive capacity of traditional labor institutions.

Notes

- 1 The disappearance of the institution of *cabecilla* can be seen as a direct effect of the triumph of the capitalist market in non-farm sectors, such as the manufacturing industry, as predicted by the dual-economy model. In another perspective, the disappearance of the institution of *cabecilla* and the shift from transplanting to broadcasting can also be seen as a reaction of farmers to limit the penetration of capitalism, especially the proliferation of wage labor. Using Chayanov's (1966) arguments, the shift from transplanting to broadcasting can be seen as a manifestation of the capacity of farmers to maximize drudgery instead of taking on additional production cost. By adopting broadcasting, farmers avoided hiring waged laborers and instead used their own and family labor. Thus, it can be said that the competition for laborers between the SEZ and farming can also restrict capitalist penetration in farming, with farmers shifting to non-wage labor and family labor.
- 2 Interview with a farmer in the village of Town Site, June 5, 2015; translated from Tagalog. See Interview Transcript 2 in the Appendix for the full transcript of the interview.
- 3 This method was adopted from Hayami and Kikuchi's (1981) study.
- 4 This shirking behavior was reported by farmers in the village of Biaan. Because laborers are paid in wages, they deliberately work slowly so that they can prolong the harvest activity. This will prompt the farmers to hire them for an additional day to finish the harvest.
- 5 Interview with a harvest leader in the village of Town Site, July 8, 2015; translated from Tagalog. See Interview Transcript 6 in the Appendix for the full transcript of the interview.
- 6 This is consistent with Hayami and Kikuchi's (2000, 182) findings that, as a response to technological advancements or changes in market wages, farmers are capable of efficient resource allocation through adjustments in their local contract agreements.
- 7 Interview with a farmer in the village of Town Site, June 4, 2015; translated from Tagalog. See Interview Transcript 7 in the Appendix for the full transcript of the interview.
- 8 Interview with a harvest leader in the village of Town Site, July 8, 2015; translated from Tagalog. See Interview Transcript 6 in the Appendix for the full transcript of the interview.
- 9 In the village of Town Site, 20 sacks can only be dried within one day. Farmers usually lay the fresh paddies on paved roads and on the side of the highways. There were no mechanical driers in the two villages.

Chapter 7

Conclusion

7.1. Divergence from Hayami and Kikuchi's Findings on Institutional Change

The study of Hayami and Kikuchi (1981) was one of the very first studies in the Philippines that analyzed the role of traditional labor institutions on how labor was utilized in farming. Although this study borrowed analytical approaches and tools from Hayami and Kikuchi's (1981) study, the findings of this study diverge from the findings of the said authors with regards to declaring the changes in the institution of *hunusan* as institutional change. Hayami and Kikuchi's main basis for concluding that a new institution is created is the change in tasks involved in the harvest contract. Hayami and Kikuchi's (1981) study and this study have some similarities and also some differences in terms of the context of the respective study sites. These are summarized in Table 21.

Table 21. Comparison of the findings of this study to that of the study by Hayami and Kikuchi (1981)

Contextual Conditions/Factors	Hayami and Kikuchi 1981 Study	This Study
Cause of change in the community	Population increase	Creation of the SEZ
Availability of farm laborers	Abundant	Scarce
Adjustments in the harvest contract	Weeding was added	Hauling was removed
Sharing rate	Retained the 1/6 sharing rate	Retained the ten percent sharing rate
Access of the members of the community to the harvest	Restricted to those who can do weeding	Restricted to members of the harvest groups
Interpretation of adjustment	A "new" institution is created	The same institution with adjustments

Source: Modified from Hayami and Kikuchi (1981); Author's survey and interviews (2015)

The institution of *hunusan* in Hayami and Kikuchi's (1981) village site has the same characteristics with the institution of *hunusan* in this study, such as it is open to all members of the community and in-kind sharing as the method of payment. The sharing rate in their village is 1/6 of the share from the harvest, or 16.66 percent, compared to ten percent in the two villages in this study.

The cause for change in their village came in the form of population increase, which, in turn, increased the supply of laborers in farming. As more laborers became available in the community, farm wages dropped. In turn, the monetary value of the 1/6 share from the harvest became higher than the existing farm wages. This presents a reverse situation in this study as the creation of the SEZ led to scarcity of laborers and higher farm wages because the jobs available in the SEZ have higher wages than farming. In addition, farming was seen as a harder livelihood compared to manufacturing and construction work by the residents. In both studies, adjustments were made in the institution of *hunusan* to try to preserve it.

According to Hayami and Kikuchi (1981), in the aim to preserve in-kind sharing as a method of remuneration and the time-honored sharing rate of the community, the farmers and laborers instituted changes in the institution of *hunusan*. Thus, the task of weeding was added to the harvest contract. By adding the task, the value of the 1/6 in-kind share approximated the value of prevailing farm wages.

This, in turn, changed the access of the community to the harvest as those people who participated in weeding were the only ones who were allowed by the farmers to participate in harvesting. A new name, *gama*, was given and a "new" institution was created replacing the institution of *hunusan*. According to the authors:

...the wage rate will be down if labor supply exceeds demand and resource

allocation will be adjusted accordingly. The personalized market in the villages bound by community obligations could be less efficient in this regard. In these villages a new institutional arrangement such as the *gama* needs to be invented before wage rate can be reduced.

(Hayami and Kikuchi 1981, 223)

Hayami and Kikuchi (1981) put the importance of community norms in the center of their analysis of institutional change. However, by approaching institutional change from a single-equilibrium perspective, they argue that adjustments in the institution of *hunusan* are considered as “disequilibria” and thus, any product of the adjustment is considered a new institutional arrangement. According to the authors:

...market processes are usually not flexible enough to adjust to rapid changes in relative resource scarcities corresponding to changes in factor endowments and technology. As a result, disequilibria between factor process and marginal flow factor productivities will be created, which we will call institutional adjustments. One possible direction of adjustments would be a shift away from personalized transactions to market transactions... Rather, it is often advantageous for reducing risk and transactions costs to strengthen personalized relationship of the patron-client type, as exemplified by a shift from *hunasan* to *gama*.

(Hayami and Kikuchi 1981, 219)

Taking the evolutionary perspective in institutional resiliency, the findings of this study argue that the adjustment of tasks in the institution of *hunusan* and the creation of harvest groups does not necessarily constitute a “new” institution and thus does not necessarily count as an institutional change. It is thus very possible that, even though a new name is coined in Hayami and Kikuchi’s study, the *gama*, it is still the same institution as the institution of *hunusan* as it kept its underlying norms.¹

This same argument was raised in the study of Higuchi (1990) in the province of Bulacan.² His findings among various villages in the province suggested that the transition from the institution of *hunusan* to the institution of *gama* is not a foregone conclusion and that changes in the institution of *hunusan* varies from village to village. Higuchi cites that some villages were able to keep practicing the institution by adjusting the sharing rate rather than the tasks. The same observation is shared by Boyce (1993, 133) as he documented different *hunusan*-type arrangements in other parts of the Philippines, in which the harvest is tied-up with other farming practices such as transplanting, among others.³ The studies of Higuchi (1990) and Boyce (1993), as well as the findings of this study, open the possibility that the institution of *hunusan* in the Philippines can adapt or can be adjusted depending on various local situations without transforming into a new institution.

7.2. Summary of Findings and Conclusion

Farming communities have developed traditional institutions that govern the access of people to scarce resources such as labor and land for livelihoods. Traditional labor institutions are based on the community norms of income sharing, reciprocity, and patron-client relationships that are designed for communities to ensure subsistence and mitigate the risks associated with

rice farming, such as drought, typhoons, outbreak of pests, flooding and others. The lack of development in the agriculture sector of the country in terms of rural infrastructure, mechanization, adoption of modern varieties, irrigation, drainage and the lack of access to formal credit institutions have all contributed to maintaining the high-risk nature of rice farming in the country. Thus, this provides incentives for farming communities like the two villages in the study to preserve their traditional labor institutions.

The poor performance of the agriculture sector combined with the country's lack of success in the manufacturing sector in the past decades have resulted in widespread unemployment, poverty and uneven development of regions throughout the decades. As a response, the national government adopted a policy of SEZ promotion outside the capital, Metro Manila, to boost the manufacturing sector, generate employment opportunities in rural areas and espouse regional development in the country. However, as SEZs are being developed in the countryside, they bring with them changes. As manufacturing factories go to the zones and create a high demand for laborers, these compete with farming, bringing about changes in farming practices and the traditional labor institutions that govern how labor is organized, utilized and remunerated in farming communities.

As seen in the experience of the town of Mariveles, the opening of the SEZ in the rural town, at first, brought many benefits to its residents in terms of employment. The opening of the zone attracted labor-intensive garments and textile companies, which created opportunities for villagers to be employed. For the first time in their lives, residents of the two villages had opportunities to work outside of farming and fishing and in the formal sector where they were able to earn regular income.

Results from the survey indicated that there was a shift of employment among the residents as most households shifted from farming and fishing to working in the zone and other

service-oriented occupations. Furthermore, results from the survey indicate that the SEZ generated jobs for women as more of them found employment in the zone than men. The early experience of industrialization in the town of Mariveles proved to be consistent to the belief that rural industrialization through the establishment of the SEZs is an effective mechanism to generate employment and foster rural development.

On the other hand, one of the major criticisms regarding the SEZs can also be seen in the town of Mariveles. The FAB had no linkages to the domestic economy or the local economy of the town of Mariveles and the two villages. The only linkage it had was through the labor market. This linkage, however, can be regarded as both a blessing and a curse. It can be a blessing because it generated employment for low-skilled laborers but it can also be a curse, especially for the farm sector, as it competed with farming for laborers.

This competition resulted in the scarcity of laborers in farming, which, in turn, resulted in changes in traditional labor institutions. Some institutions were replaced by wage labor while some stayed resilient. However, both the disappearance and retention of the traditional labor institutions resulted in changes in farming practices, the amount of labor the farm was able to absorb and access of people to livelihoods, especially among women.

As seen in the case of the institution of *cabecilla*, its demise was instrumental in the shift to broadcasting. The shift to broadcasting in turn reduced the amount of average employable laborers from 15-25 persons to one person per hectare. Furthermore, the shift to broadcasting resulted in the disappearance of the traditional roles of women in farming such as transplanting and weeding. This has contributed to the de-feminization of farming in the two villages. This, in turn, created barriers for older women, who can no longer work in the zone due to their age and family responsibilities, in accessing farming as a livelihood.

As seen in the case of the shift to hiring waged laborers in harvesting in the village of Biaan, the high wages prompted farmers to reduce the number of laborers that they can hire. Furthermore, the disappearance of the institution of *hunusan* and open access in harvesting in the village of Biaan also gave rise to a new system of organizing labor through labor leaders. As a result, access of the greater community to harvesting was diminished as only those people with close relationships and personal ties with the labor leaders have been prioritized.

In the case of the village of Town Site where the institution of *hunusan* was retained, the creation of harvest groups restricted the access of the larger community to participate in harvesting, as access became limited to the members of the group. Although at first the harvest groups were organized as a mechanism to mitigate the scarcity of laborers in the village as the groups made it easier for farmers to call on laborers for harvesting, it became restrictive because to be a member of the three harvest groups operating in the village of Town Site, one has to seek the approval of the harvest leaders. To become a member, like in the village of Biaan, the approval of the labor leader is needed and it tends to be limited to the leader's personal friends and family members.

The results of the study illustrate that traditional labor institutions are crucial for people in rural communities to access livelihoods. Such institutions are important for the disadvantaged, specifically the landless and the women. Thus, in the changes brought about by the SEZ, rural industrialization and scarcity of laborers, it is vital to understand why some institutions cease to exist while some remain resilient.

This dissertation illustrated that people choose to preserve or discontinue the practice of traditional labor institutions based on both the short-term and long-term gains that the traditional labor institutions provide against the alternative. In the case of the institution of *cabecilla*, the alternative is the shift to broadcasting, whereas in the case of the institution of

hunusan, the alternative is to hire waged laborers in harvesting. People take into consideration the monetary costs and profits as well as the non-monetary benefits of the community norms of reciprocity, shared income and patron-client relationships when deciding to change or preserve traditional labor institutions.

The case of the institution of *cabecilla* illustrated in the two villages that people tend to choose the alternative if the profit that they will gain and the costs that they will save from it outweigh the benefits presented by the traditional labor institution. The weak exercise of community norms in the institution of *cabecilla* did not provide incentives for the people to preserve the institution amidst the scarcity of laborers and rising wages. As a result, even if farmers wanted to retain transplanting, as this method enabled them to have higher rice production, the organization, recruitment, and supervision of laborers became too cumbersome for the farmers without the institution of *cabecilla*.

The *cabecillas* themselves and the skilled planters chose to work in the SEZ for higher wages. Retaining transplanting means that farmers have to pay higher wages. Farmers made no effort to revive the institution since the cost, mainly from wages, outweighs the benefits it provides. In the end, the farmers chose to shift to broadcasting, which enabled them to save on labor costs in transplanting.

In the case of the institution of *hunusan* in the village of Town Site, it was shown that the institution presents advantages in both the short-term and the long-term compared to paying wages to laborers. Thus, it presents incentives for farmers to preserve the institution and initiate adjustments to make it resilient from the effects of the SEZ. Farmers are even willing to make sacrifices in the short-term by paying more than the prevailing farm wages in return for the long-term benefits that the institution provides.

By preserving payments through in-kind shares, farmers and laborers in the village of Town Site preserved the practice of reciprocity, income sharing and patron-client relationships. This, in turn, gave farmers long-term non-monetary benefits, such as insurance in times of calamities and bad harvests, and preserved their status as patrons in the farming community. It also protected farmers from sudden increases in wages, which gave them a sense of predictability. Furthermore, by preserving the institution of *hunusan*, farmers avoided loans from the informal market, which can potentially reduce their profit, and were assured against shirking among laborers.

The resiliency of the institution of *hunusan* was possible due to the adjustments made to it. These adjustments came in two forms. One is that the tasks included in the harvest agreement were reduced. The other adjustment is that the laborers organized and formed harvest groups. The first adjustment was done to reduce the amount of work included in the *hunusan*. Furthermore, with the removal of hauling from the tasks included in the institution, farmers can hire the harvesters to haul the sacks of paddies, which can be an additional source of income for the harvesters. This was done to make harvesting more attractive to the laborers and in order for the institution of *hunusan* to become competitive with wages in the non-farm sector and wages that laborers can earn from the SEZ. Although the second adjustment limited the participation of the other community members in harvesting, this was done to organize the scarce laborers in the village. It was also done for the members to gain access to as many harvesting opportunities as possible. This gave laborers the incentive to keep working in the farms. Furthermore, reciprocity, income sharing and patron-client relationships are still practiced between farmers and laborers.

However, these adjustments will not be possible without the presence of the fresh paddy market in the village. The case of the village of Town Site illustrated that the integration

of traditional labor institutions with a capitalist market, such as the fresh paddy market, enables the resiliency of traditional labor institutions. This market enabled laborers to convert paddies to money to purchase other goods and services. Through this market, the time-honored ten percent sharing rate was also maintained as the increase in the cost of living and prices of commodities was offset by the rising value of rice in the market.

The fresh paddy market disappeared in the village of Biaan. As a result, although there was a preference for it among farmers in the village, the institution of *hunusan* cannot be sustained. By paying through wages, the underlying norms that define the institution such as reciprocity and income sharing were not preserved. In turn, the benefits that the institution provided farmers and laborers in the village of Town Site were absent in the village of Biaan as farmers and laborers shifted to wage labor. By paying wages, the relationship between farmers and laborers tended to become less personal. Furthermore, farmers were prone to loaning from informal credit markets.

In an environment where farm laborers become scarce due to the diversification of livelihoods caused by industrialization through the establishment of the SEZs, the resiliency of traditional labor institutions does not solely depend on the advantage they have over the alternative. The key for traditional labor institutions to be resilient is to enact institutional adjustments while staying true to the underlying norms that define the institution and provide the advantages in the first place.

This sets this study apart from other studies of agrarian change and institutional change, especially in the Philippines, as most studies adopt the equilibrium approach in studying institutional change. This study contributes to the literature of the evolutionary resiliency approach as it provides evidence of an institution adapting to a changing environment without changing its underlying norms.

As seen in the case of in the village of Town Site, the institution of *hunusan* has the ability to adapt to changing environments through adjustments or by modifying the tasks included in the institution and creating harvest groups or modifying access to harvesting. By doing so, the underlying norms of the institutions, such as income sharing, reciprocity and patron-client relationships that enable the institution to give people benefits, were preserved. As a result, the institution of *hunusan* provided continuity among the people while being adaptive at the same time.

Overall, the significance of this study is fourfold. First, the experiences of the town of Mariveles and the villages of Town Site and Biaan illustrate that rural industrialization, through the creation of SEZs, has negative impacts on the availability of farm laborers, cost of production, farming practices and the access of the landless and women to farming. The results of this study have illustrated that rural industrialization leads to agrarian transformations through the distortion of rural labor markets. These results provide caution or an alternative perspective to the sweeping claims of the advantages of non-farm employment and rural industrialization on agricultural and rural development.

Second, the experiences of the two villages illustrated that traditional labor institutions are major driving forces that influence the production process in agriculture. How these change and mediate exogenous factors of development are crucial in understanding agrarian changes and rural livelihoods. Thus, the lessons from this study add to the literature of the role of institutions and institutional change, more specifically, the role of traditional labor institutions in development.

Third, the experience of the institution of *hunusan* in the village of Town Site provides evidence against the equilibrium approach in studying institutional resiliency or the view that institutional resiliency is the ability of institutions to return to its original state after the

introduction of stresses. This provides caution to scholars studying institutional resiliency using this perspective. The institution of *hunusan* in the village of Town Site shows that resiliency can be achieved while making adjustments and modifications in the institution.

Fourth, the findings in this study illustrate that the penetration of capitalist markets in the agrarian sector, at least in the Philippines, does not automatically result in the transition from traditional institutions to the adoption of capitalist modes of production or that it will alternatively lead to resistance or protest, as many studies suggest. The findings in this study illustrate that it is not only possible for capitalist markets and traditional labor institutions to co-exist, but that traditional labor institutions can be resilient and can be integrated with markets to continue to function so that people can take advantage of its benefits.

Notes

- 1 The name *gama* was taken from the Tagalog word *gamas*. The English translation is “to cut” or “to cut weeds” if used in the context of rice farming. The institution of *gama* is still being practiced in other regions in the country, such as Central Luzon and Southern Luzon. It is interesting to note that people refer to the in-kind sharing in institution of *gama* as *hunusan* and to the in-kind share as *hunos*.
- 2 The Province of Bulacan is located in Central Luzon, the same region of the research site of this study and one of the research sites of Hayami and Kikuchi (1981).
- 3 Boyce (1993) cited these practices in the provinces of Laguna, Iloilo, Leyte and provinces that are part of the Bicol Region. Such institutions are given local names but are closely related to the institution of *hunusan* in the way they remunerate and organize labor.

Bibliography

- Abrenica, M.J. and Llanto, G. 2003. "Services." In *The Philippine Economy Development, Policies, and Challenges*, edited by A. Balisacan and H. Hill, 254-282. New York: Oxford University.
- Agarwal, B. 2011. *Food Crises and Gender Inequality*. United Nations Department of Economic and Social Affairs Working Paper no. 107. New York: United Nations.
- Alburo, F. 1987. "Manufactured Exports and Industrialization: Trade Patterns and Trends of the Philippines." In *Trade and Structural Change in the Philippines*, edited by C.I. Bradford, Jr. and W.I. Branson, 485-514. Chicago: University of Chicago Press.
- Aldger, N. 2000. "Social and ecological resilience: are they related?" *Progress in Human Geography* 24: 374-365.
- Ali, Q. M., Ahmad, A., Ahmed, M., Arain, M.A., and Abbas, M. 2013. "Evaluation of Planting Methods for Growth and Yield of Paddy (*Oryza sativa* L.) Under Agro-Ecological Conditions of District Shikarpur." *American-Eurasian Journal of Agricultural & Environmental Science* 13(11): 1503-1508.
- Aoki, M. and Hayami, Y. 2001. "Introduction: Communities and Markets in Economic Development." In *Communities and Markets in Economic Development*, edited by M. Aoki and Y. Hayami, xv-xxiv. New York: Oxford University Press.
- Austen, S. 2010. "Culture and the Labour Market." *Review of Social Economy* 58(4): 505-521.
- Authority of the Freeport Area of Bataan. 2015a. "Companies inside the FAB according to products produced 1980, 2010, 2013." Unpublished data file, Mariveles, the Philippines.
- 2015b. "Number of workers and companies in the FAB, 1970-2013." Unpublished data file. Mariveles, the Philippines.

- Basu, K. 1984. *The Less Developed Economy: A Critique of Contemporary Theory*. Oxford: Basil Blackwell.
- Bautista, M.C.R. 1983. "Capitalism and the Social Differentiation of the Philippine Peasantry." Unpublished Ph.D. Dissertation, University of Wisconsin-Madison.
- Bautista, R. and Tecson, G. 2003. "International Dimensions." In *The Philippine Economy Development, Policies, and Challenges*, edited by A. Balisacan, and H. Hill, 136-174. New York: Oxford University.
- Bautista-Vistro, A. 2003. "Decision Making and Flows of Income and Expenses among Households with Factory-Employed Members." In *Gender and labor in the economic Life: Gender at Work in Economic Life*, edited by G. Clark, 85-203. Maryland: Altamira Press.
- Becker, G.S. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82: 1064-1093.
- Bernstein, H. 1992. "Poverty and the Poor." In *Rural Livelihoods Crises and Responses*, edited by H. H. Bernstein, B. Crow and H. Johnson, 13-26. Oxford. London: Oxford University Press.
- Bernstein, H. 2009. "V.I. Lenin and A.V. Chayanov: Looking Back, Looking Forward." *Journal of Peasant Studies* 36(1): 55-81.
- Bernstein, H. and Byres, T. 2001. "From Peasant Studies to Agrarian Change." *Journal of Agrarian Change* 1(1): 1-56.
- Bernstein, H. 2010. "Agrarian Questions from Transition to Globalization." In *Peasants and Globalization*, edited by A.H. Akram-Lodhi and C. Kay, 239-261. New York: Routledge.

- Block, F. and Somers, M. R. 2014. *The Power of Market Fundamentalism: Karl Polanyi's Critique*. Massachusetts: Harvard University Press.
- Booth, W.J. 1994. "On the Idea of the Moral Economy." *American Political Science Review* 88: 653-667.
- Borras, S.M. Jr. 2009. "Agrarian Change and Peasant Studies: Changes, Continuities and Challenges - An Introduction." *Journal of Peasant Studies* 36(1): 5-31.
- Boyce, J.K. 1993. *The Philippines and the Political Economy of Growth and Impoverishment in the Marcos Era*. Hampshire and London: The Macmillan Press LTD.
- Briones, R. M. 2013. *Agriculture, Rural Employment, and Inclusive Growth*. PIDS Discussion Paper no 2013-39. Makati City, the Philippines: Philippine Institute for Development Studies.
- Castillo, H. 1983. "Has Bayanihan Gone Out of Style?" *Philippine Agriculturist* 65: 307-33.
- Castro, J. 1982. *The Bataan Export Processing Zone*. ILO-Asian Employment Program Working Paper. Bangkok: International Labour Organization.
- Camerer, C.F. and Fehr, E. 2009. "Measuring Social Norms and Preferences Using Experimental Games: A Guide for Social Scientists." In *Foundations of Human Sociality Economic Experiments and Ethnographic Evidence from Fifteen Small-Scale Societies*, edited by J. Henrich, R. Boyd, S. Bowles, C.F. Camerer, E. Fehr and H. Gintis, 55-95. Oxford and New York: Oxford University Press.
- Canlas, M.E.L. and Pardalis, M.C.R. 2009. *Youth Employment in the Philippines*. International Labour Organization-Asia-Pacific Working Paper. Geneva: International Labour Organization.

- Chakravarty, D. 2007. "Docile Oriental Women and Organised Labour: A Case Study of the Indian Garment Manufacturing Industry." *Indian Journal of Gender Studies* December 14: 439-460.
- Chant, S. and McIlwaine, C. 1995. "Gender and Export Manufacturing in the Philippines: Continuity or Change in Female Employment? The Case of the Mactan Export Processing Zone." *Gender Place and Culture* 2(2): 147-176.
- Chantana B. 1993. *Community Integration into Regional Industrial Development: A Case Study of Klong Ban Pho Chachoengsao*. Bangkok: Thai Development Research Institute.
- Chayanov, A.V. 1996. "On the Theory of Non-capitalist Economic System." In *The Theory of Peasant Economy*, edited by D. Thorner, B. Kerblay, and R.E.F. Smith, 1-28. Homewood, Illinois: Richard Irwin for the American Economic Association.
- Chuma, H., Otsuka, K., & Hayami, Y. 1990. "On the Determinants of Land Tenancy over Permanent Labour Contract in Agrarian Economies." *Journal of Japanese and International Economies* 4: 101-120.
- Datoon, R. 2016. "Rural Industrialization and The De-feminization of Rice Farming; The Case of a Village Outside the Freeport Area of Bataan." *Journal of Management and Development Studies* 5: 16-32.
- De Koninck, R. 2004. "The Challenges of Agrarian Transition in Southeast Asia." *Labour, Capital and Society* 37: 285-288.
- Del Rosario, C. 1980. "Changing Rural Institutions in a Rice Growing Barrio." *Philippine Sociological Review* 29(1): 111-131.

- Diokno, M. 1989. The Failure of EPZs in the Philippines. In *Transnationals and Special Economic Zones: The Experience of China and Selected ASEAN Countries*, edited by T. Carino, 132-133. Manila: De La Salle University Press.
- Duhaylungsod, L. 1989. "Confrontation with Commodification in a Philippine Upland Village." Unpublished Ph.D. Dissertation, University of Queensland.
- Eder, J. "Family Farming and Household Enterprise in a Philippine Community, 1971-1988." *The Journal of Asian Studies* 52(3): 647-671.
- Ellis, F. 2000. *Rural Livelihoods and Diversity in Developing Countries*. New York: Oxford University Press.
- Estudillo, J.P. and Otsuka, K. 1999. "Green Revolution, Human Capital, and Off-Farm Employment: Changing Source of Income among Farm Households in Central Luzon, 1966-1994." *Economic Development and Cultural Change* 47(3): 197-523.
- Estudillo, J.P., Sonobe, T. and Otsuka, K. 2007. "Development of the Rural Non-farm Sector in the Philippines and Lessons from the East Asian Experience." In *The Dynamics of Regional Development*, edited by A.M. Balisacan and H. Hill, 345-369. Massachusetts, USA: Edward Elgar Publishing, Inc.
- Farole, T. 2011. *Special Economic Zones in Africa: Comparing Performance and Learning from Global Experiences*. Washington, DC: World Bank.
- Farole, T. and Akinci, G. 2001. "Introduction." In *Special Economic Zones: Progress, Emerging Concerns and Future Directions*, edited by T. Farole and G. Akinci, 1-22. Washington D.C.: The World Bank.
- Feeny, D. 1983. "The Moral or Rational Peasant? Competing Hypothesis for Collective Action." *Journal of Asian Studies* 42(4): 769-789.

- Folke, C. 2006. "Resilience: The Emergence of a Perspective for Social-ecological Systems Analysis." *Global Environmental Change* 16: 253-267.
- Food and Agriculture Organization of the United Nations (FAO). 2005. *Philippines Agriculture, Environment and Rural Population*. Bangkok: Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific.
- Fegan, B. 1989. "Accumulation on the Basis of an Unprofitable Crop." In *Agrarian Transformations Local Processes and the State in South East Asia*, edited by G. Hart, A. Turton, and B. White, 159-178. Berkely: University of California Press.
- Fegan, B. 1989. "Folk-Capitalism: Economic Strategies of Peasants in a Philippines Wet-Rice Village." Unpublished Ph.D. Dissertation, Yale University.
- Folke, C., Pritchard, L., Berkes, F., Colding, J., and Svedin. U. 1998. *The Problem of Fit Between Ecosystems and Institutions*. IHDP Working Paper No. 2. Bonn, Germany: International Human Dimensions Program on Global Environmental Change.
- Friedmann, H. 1980. "Household Production and the National Economy: Concepts for the Analysis of Agrarian Transformations." *Journal of Peasant Studies* 7(2): 158-184.
- Fukui, S. 1999. "The Efficiency of the Permanent Labour Contract: A Case Study in the Philippine Rice Bowl." *The Developing Economies* 33(1): 82-99.
- Grabowski, R. 1995. "Commercialization, Non-agricultural Production, Agricultural Innovation, and Economic Development." *Journal of Developing Areas* 30: 41-62.
- Giddens, A. 2000. *Runaway World: How Globalization is Reshaping our Lives*. New York: Routledge.
- Granoveter, M. 1992. "Economic Institutions as Social Constructs: A Framework for Analysis." *Acta Sociologia* 35: 3-11.

- Grief, A. 2001. "Impersonal Exchange and the Origin of Markets: From the Community Responsibility System to Individual Legal Responsibility in Pre-modern Europe." In *Communities and Markets in Economic Development*, edited by M. Aoki and Y. Hayami, 4-41. New York: Oxford University Press.
- Guehenno, J.M. 1995. *The End of Nation-State*. Minneapolis: University of Minnesota Press.
- Gunderson, L.H., Carpenter, C., Folke, P., Olsson, P., and Peterson, G. 2006. "Water RATs (resilience, adaptability, and transformability) in Lake and Wetland Social-ecological Systems." *Ecology and Society* 11(1): 1-16.
- Hart, G. 1989. "Agrarian Change in the Context of State Patronage." In *Agrarian Transformations Local Processes and the State in Southeast Asia*, edited by G. Hart, A. Turton and B. White, with B. Fegan, and L. Teck Gee, 31-52. Berkeley and Los Angeles, California: University of California Press.
- Harris-White, B., Mishra, D. K., and Upadhyay, V. 2009. "Institutional Diversity and Capitalist Transition: The Political Economy of Agrarian Change in Arunchal Pradesh, India." *Journal of Agrarian Change* 9(4): 512-547.
- Hayami, Y. 1978. *Anatomy of a Peasant Economy*. Metro Manila, the Philippines: International Rice Research Institute.
- 1999. "Community Mechanism of Wage and Employment Determination: Classical or Neoclassical?" In *Development and Duality and the International Food Regime*, edited by G. Saxonhouse and T. Srinivasan, 85-106. Michigan: University of Michigan Press.
- 2007. "The Role of Social Structure and Norms in Reasserting the Rural Development: Agenda, Lessons Learned and Emerging Challenges." In *Asia Agricultural Development: African and East Asian Communities Compared*, edited by A. Baliscan and N. Fuwa, 63-80. Singapore: Institute of Southeast Asian Studies.

- Hayami, Y. and Kawagoe, T. 1993. *The Agrarian Origins of Commerce and Industry: A Study of Peasant Marketing in Indonesia*. New York: St. Martin's Press.
- Hayami, Y. and Kikuchi, M. 1981. *Asian Village Economy at the Crossroads: an Economic Approach to Institutional Change*. Tokyo: University of Tokyo Press.
- 2000. *Rice Village Saga Three Decades of Green Revolution in the Philippines*. London: McMillan Press Ltd.
- 2001. "The Two Paths of Agrarian Evolution in the Philippine Rice Bowl." In *Communities and Markets in Economic Development*, edited by M. Aoki and Y. Hayami, 70-96. New York: Oxford University Press.
- Haggblade, S. 2007. "Alternative Perceptions of the Rural Nonfarm Economy." In *Transforming the Rural Non-farm Economy*, edited by S. Haggblade, P.B.R. Hazell and T. Reardon, 25-54. Washington D.C: International Food Policy Institute.
- Helmke, G. and Levitsky, S. 2004. "Informal Institutions and Comparative Politics: A Research agenda." *Perspectives on Politics* 2: 275-740.
- Herrfahrdt-Pähle, E. and Pahl-Wostl, C. 2012. "Continuity and Change in Social-ecological Systems: The Role of Institutional Resilience." *Ecology and Society* 17(2): 1-8.
- Higuchi, T. 1990. "Institutional Innovation and Mechanization: An analysis of the Transformation of Labour Organizations Systems with Special Reference to Mechanization." In *Rice Farming and Rural Society in Malaysia, Southern Thailand and the Philippines*, edited by A. Fujimoto and T. Matsuda, 85-108. Tokyo: Tokyo University of Agriculture.
- Hill, H. 2003. "Industry." In *The Philippine Economy Development, Policies and Challenges*, edited by A. Balisacan, and H. Hill, 219-253. New York: Oxford University Press.

- Holling, C.S. 1973. "Resilience and Stability of Ecological System." *Annual Review of Ecology and Systematics* 4: 1-23.
- Hopcroft, R.L. 1998. "The Importance of the Local: Rural Institutions and Economic Change in Preindustrial England." In *The New Institutionalism in Sociology*, edited by M. Briton and V. Nee, 277-304. Stanford, California: Stanford University Press.
- Horton, S. 1996. "Women and Industrialization in Asia." In *Women and Industrialization*, edited by S. Horton, 1-42. London: Rutledge.
- Hubbard, M. 1997. "The Institutional Economics in Agricultural Development: Insights and Challenges." *Journal of Agricultural Economics* 48(2): 239-249.
- Intal, P.S. Jr., Boromeo, M.B.V., and Castillo, J. 2008. "Sustaining the Philippine Manufacturing Sector." *The Philippine Review of Economics* 45(1): 15-48.
- International Labor Organization (ILO). 2003. *Employment and Social Policy in Respect of Export Processing Zones*. Geneva: International Labour Organization.
- Kelly, P. 1997. "Constructing Globalization in the Philippines: Labour, Land, and Identity on Manila's Industrializing Periphery." Unpublished Ph.D. Dissertation, University of British Columbia.
- 1999. "Rethinking the Local in Labour Markets: The Consequences of Cultural Change Embeddedness in a Philippine Growth Zone." *Singapore Journal of Tropical Geography* 20(1): 56-75.
- 2000. *Landscapes of Globalization: Human Geographies of Economic Change in the Philippines*. Routledge: New York.
- 2001. "The Political Economy of Labour Control in the Philippines." *Economic Geography* 77(1): 1-22.

- . 2011. "Migration, Agrarian Transition and Rural Change in Southeast Asia." *Critical Asian Studies* 43(4): 479-506.
- Kerkvliet, B.J.T. 1990. *Everyday Politics in the Philippines: Class and Status Relations in a Central Luzon Village*. Berkely, California: University of California Press.
- Lanjouw, P. 2007. "Does the Rural Non-farm Economy Contribute to Poverty Reduction?" In *Transforming the Rural Non-farm Economy*, edited by S. Haggblade, P. Hazell and T. Reardon, 55-81. Washington D.C.: International Food Policy Institute.
- Launio, C., Guadalupe, R. and Beltran, J. 2008. "Recent Adoption and Spatial Diversity of Modern Rice Varieties in the Philippines." *American Society of Agronomy* 100(5): 1380-1389.
- Lenin, V. 1967. *The Development of Capitalism in Russia: The Process of the Formulation of a Home Market for Large-scale Industry, Collected Works, vol. 3*. Moscow: Progress Publishers.
- Lewis, A. 1979. "The Dual Economy Revisited." *The Manchester School* 47(3): 211–229.
- Long, N. 2011. *Development Sociology Actor Perspectives*. New York: Routledge.
- Lopez-Gonzaga, V. 1983. *Peasant in the Hills: A Study of the Dynamics of Social Change Among the Buhid Swidden Cultivators in the Philippines*. Quezon City, the Philippines: University of the Philippines Press.
- Mahajin, N.V., Pusdekar, M.V., Deshpande, K.V., Sathiwade, T.R., Sathiwade, P.R. and Hanwante, P.R. 1995. "Studies on Different Methods of Raising Paddy with Varying Levels of Nitrogen and Phosphorus in Nontraditional Paddy Area." *PKV Research Journal* 19(1): 65-66.

- Malate, R.P. 2015. "From Mountainous Terrains to Industrial Complex: The Bataan Export Processing Zone (BEPZ) and the Freeport Area of Bataan (FAB)." *Philippine Journal of Basic & Applied Sciences* 9(31): 268-274.
- Manalo, J. A. and van de Fliert, E. 2013. "Push and Pull Factors in Rural Filipino Youth's Outmigration from Agricultural Communities." *Asian Journal of Agriculture and Development* 10(2): 59-73.
- Manasan, R. 2012. *Export Processing Zones, Special Economic Zones: Do We Really Need to Have More of Them?*. PIDS Policy Notes 2013-15. Makati City, the Philippines: Philippine Institute for Development Studies.
- Mann, S.A. 1990. *Agrarian Capitalism in Theory and Practice*. Chapel Hill and London: University of North Carolina Press.
- Mariveles Municipal Planning and Development Office. 2015. "Map of the town of Mariveles and the SEZ area." Unpublished Map. Mariveles, the Philippines.
- McAndrew, J.P. 1994. *Urban Usurpation: Friar Lands to Industrial Estates in the Philippine Hinterland*. Quezon City, the Philippines: Ateneo De Manila University Press.
- McMichael, P. 1997. "Rethinking Globalization: The Agrarian Question Revisited." *Review of International Political Economy* 4: 630-662.
- 2010. "Food Sovereignty, Social Reproduction and the Agrarian Question." In *Peasants and Globalization*, edited by A.H. Akram-Lodhi and C. Kay, 288-212. New York: Routledge.
- Molm, L.D., Shafer, D.R. and Collet, J.L. 2007. "The Value of Reciprocity". *Social Psychology Quarterly* 70(2): 199-217.
- National Economic and Development Authority. 1980. *Philippine Statistical Year Book*. Manila, the Philippines: National Economic and Development Authority.

- National Food Authority. 2014. "Paddy Farm-gate Prices in Bataan Province." Unpublished data file. Balanga City, the Philippines.
- National Statistical Coordinating Board. 1991. *Philippine Statistical Year Book*. Quezon City, the Philippines: National Statistical Coordinating Board.
- . 2001. *Philippine Statistical Year Book*. Quezon City, the Philippines: National Statistical Coordinating Board.
- Nazarea-Sandoval, V.D. 1995. *Local Knowledge and Agricultural Decision Making in the Philippines: Class, Gender, and Resistance*. Ithaca: Cornell University Press.
- Nee, V. 1998. "Sources of New Institutionalism." In *The New Institutionalism in Sociology*, edited by M. Briton and V. Nee, 1-66. Palo Alto, California: Stanford University Press.
- Netting, R. 1993. *Smallholders, Householders: Farm Families and the Ecology of Intensive Sustainable Agriculture*. Palo Alto, California: Stanford University Press.
- North, D.C. 1998. "Economic Performance Through Time." In *The New Institutionalism in Sociology*, edited by M. Briton and V. Nee, 247-257. Palo Alto, California: Stanford University Press.
- Ofreneo, R. 1980. *Capitalism in Philippine Agriculture*. Quezon City, the Philippines: Foundation for Nationalist Studies.
- . 1995. "Philippine Industrialization and Industrial Relations." In *Employment Relations in the Growing Asian Economies*, edited by A. Verna, T. Kochan, and R.D. Lansbury, 194-247. New York: Routledge.
- Ortiz, S. 2002. "Labouring in the Factories and in the Fields." *Annual Review of Anthropology* 31: 395-417.

- Ong, A. 1990. "Japanese Factories, Malay Workers: Class and Sexual Metaphors in West Malaysia." In *Power and difference: Gender in Island Southeast Asia*, edited by J.M. Atkinson and S. Errington, 295-422. Palo Alto, California: Stanford University Press.
- Otsuka, K. and Hayami, Y. 1990. "On the Dominance of Tenancy over Permanent Labour Contract in Agrarian Economies." *Journal of the Japanese and International Economies* 4: 101-129.
- Patel, B.N. and Charugamba, B.S. 1981. *Potential for Improving Rice Production in Tabo Region, Tanzania and Its Implications for Village Planning*. Arusha, Tanzania: Overseas Development of Natural Resources Institute.
- Pahl-Wostl, C. 2009. "A Conceptual Framework for Analyzing Adaptive Capacity and Multi-Level Learning Process in Resource Governance Regimes." *Global Environmental Change* 19: 354-365.
- Parnwell, M.J.G. and Argihos, D. 1996. "Uneven Development in Thailand." In *Uneven Development in Thailand*, edited by M. Parnwell, 1-27. Aldershot: Avebury.
- Pearson, R. 1998. "Nimble Fingers Revisited: Reflection on Women and Third World Industrialization in the Late Twentieth Century." In *Feminist Vision of Development, Gender Analysis and Policy*, edited by C. Jackson and R. Pearson, 171-188. London: Routledge.
- Perman, S., Duvillier, L., David, N., Eden, J. and Grumin, S. 2004. *Behind the Brands Working Conditions and Labour Rights in Export Processing Zones*. Belgium: International Confederation of Trade Unions.
- Pejovich, S. 1999. "The Effects of the Interaction of Formal and Informal Institutions on Social Stability and Economic Development." *Journal of Markets and Morality* 2: 164-181.

- Philippine Economic Zone Authority. 2015. "Number of Operating and Being Developed Manufacturing SEZs in the Philippines as of April 2015." Unpublished data file. Makati City, the Philippines.
- Philippine Statistics Authority. 2015a "Average Rice Production in Central Luzon." Unpublished data file. Quezon City, the Philippines. Philippine Statistics Authority.
- 2015b. "Employment in Bataan Province by Sector in 2010." Unpublished data file. Quezon City, the Philippines.
- 2015c. "National Rice Farming Nominal Wages." Unpublished data file. Quezon City, the Philippines.
- 2015d. "Population in Bataan Province 1970-2010." Unpublished data file. Quezon City, the Philippines.
- 2015e. "Palay and Non-agricultural Nominal Wages in Region III 1991-2012." Unpublished data file. Quezon City, the Philippines.
- 2015f. *Philippine Statistical Year Book*. Quezon City, the Philippines: Philippine Statistics Authority.
- 2015g. "Residence of Bataan Households in the Last 5 Years." Unpublished data file. Quezon City, the Philippines.
- 2015h. "Share of Special Economic Zones from Total Foreign Direct Investments in the Philippines." Unpublished data file. Quezon City, the Philippines.
- Pike, A., Dawley, S. and Tomaney, J. 2010. "Resilience, Adaptation and Adaptability." *Cambridge Journal of Regions, Economy and Society* 3: 585-594.
- Polanyi, K. 1994. *The Great Transformation*. Boston: Beacon Press.
- Popkin, S. 1979. *The Rational Peasant*. Berkely, Los Angeles and London: University of California Press.

- Price, S. 1983. "Rich Woman, Poor Woman: Occupation Differences in a Textile Producing Village in Central Java." In *Women's Work and Women's Roles: Economics and Everyday Life in Indonesia, Malaysia and Singapore*, edited by L. Manderson, 97–110. Canberra: Australian National University.
- Quisumbing, A.R. 1994. "Intergenerational Transfers in Philippine Rice Villages: Gender Differences in Traditional Inheritance Customs." *Journal of Development Economics* 43(2): 167-195.
- Remedio, E.M. 1996. *Export Processing Zones in the Philippines: A Review of Employment, Working Conditions, and Labour Relations*. ILO Working Paper No. 77. Geneva: International Labour Organization.
- Reyes, C.M., Tabuga, A., Asis, R. and Datu, M. 2012. *Poverty and Agriculture in the Philippines: Trends in Income, Poverty and Distribution*. PIDS Discussion Paper Series no 2012-09. Makati City, the Philippines: Philippine Institute for Development Studies.
- Rigg, J. 1997. *Southeast Asia the Human Landscape of Modernization and Development*. London: Routledge.
- 2001. *More than the Soil: Rural Change in Southeast Asia*. Essex, United Kingdom: Pearson Education Limited.
- Rodgers, G., Foti, K., and Lauridsen, L. 2004. "Labour Institutions and Economic Development: Issue and Methods." In *The Institutional Approach to Labour and Development*, edited by G. Rodgers, K. Foti, and L. Lauridsen, 4-25. London: Frank Class.
- Rostow, W.W. 1960. *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge, U.K.: Cambridge University Press.
- Sahlins, M. 1972. *Stone Age Economics*. Chicago: Aldine-Atherton.

- Saith, A. 1991. "Asian Rural Industrialization: Context, Features, Strategies." In *Rural Transformation in Asia*, edited by J. Breman and S. Mundle, 358-489. New Delhi: Oxford University Press.
- Sajor, E. 2004. "Are they Incompatible? Modern Farming and Non-Market Labour in the Northern Philippine Uplands." In *Labour in Southeast Asia Local Processes in a Globalizing World*, edited by R. Elmhurst and R. Saptari, 157-186. New York: Routledge.
- Sayer, A. 2000. "Moral Economy and Political Economy." *Studies in Political Economy* 61: 79-104.
- Sassen, S. 1996. *Losing Control: Sovereignty in an Age of Globalization*. New York: Columbia University Press.
- Scott, J. C. 1972. "Patron-Client Politics and Political Change in Southeast Asia." *The American Political Science Review* 66(1): 91-113.
- 1976. *The Moral Economy of Peasants*. New Haven, CT: Yale University Press.
- 1985. *Weapons of the Weak Everyday Forms of Peasant Resistance*. New Haven: Yale University Press.
- Scott, M. 2013. "Resilience: A Conceptual Lens for Rural Studies?" *Geography Compass* 7(9): 587-610.
- Smelser, N. and Swedberg, R. 2005. "Introducing Economic Sociology." In *The Handbook of Economic Sociology*, edited by N. Smelser and R. Swedberg, 3-25. New York: Princeton University Press.
- Sjostedt, M. 2015. "Resilience Revisited: Taking Institutional Theory Seriously." *Ecology and Society* 20(4): 1-23.

- Takahashi, A. 1969. *Land and Peasants in Central Luzon: Socio-Economic structure of a Bulacan Village*. Tokyo: Institute of Developing Economies.
- Takashi, K. and Otsuka, K. 2009. "The Increasing Importance of Non-farm Income and the Changing use of Labour and Capital in Rice Farming: The Case of Central Luzon, 1979-2003." *Agricultural Economics* 40: 231-242.
- Thakur, R.B. 1993. "Effect of Sowing Methods and Seed Rate on the Performance of High Yielding Varieties of Rice (*Oryza sativa*)." *Indian Journal of Agronomy* 38(4): 547-550.
- The World Bank Group. 2008. *Special Economic Zones: Performance, Lessons Learned and Implications for Zone Development*. Washington D.C.: The World Bank Group.
- Thomas, F. and Gokhan, A. 2001. "Introduction." In *Special Economic Zones Progress, Emerging Concerns and Future Directions*, edited by T. Farole and G. Akinci, 1-22. Washington D.C.: International Bank for Reconstruction/the World Bank.
- Tomlinson, J. 1999. *Globalization and Culture*. Chicago: University of Chicago Press.
- Turner, S. and Caouette, D. 2009. "Agrarian Angst: Rural Resistance in Southeast Asia." *Geography Compass* 3(3): 950-975.
- Voss, J. 1983. "Capitalist Penetration and Local Resistance: Continuity and Transformations in the Social Relations of Production of Sagada Igorots of Northern Luzon." Unpublished Ph.D. Dissertation, University of Toronto.
- Wallerstein, I. 1974. *The Modern World System: Capitalist Agriculture and the Origins of the European-World Economy in the Sixteenth Century*. New York: Academic Press.
- Warr, P. 1984. *Export Promotion via Industrial Enclaves: The Philippines Bataan Export Processing Zone*. U.P. School of Economics Discussion Paper 8407. Quezon City, the Philippines: University of the Philippines.

- 1989. “Export Processing Zones: The Economics of Enclave Manufacturing.” *The World Bank Research Observer* 9(1): 65–88.
- Wolf, E.R. 1971. *Peasant Wars of the Twentieth Century*. London: Feber.
- Wolf, D.L. 1992. *Factory Daughters Gender, Household Dynamics and Rural Industrialization in Java*. Berkeley: University of California Press.
- Wong, K. and Chu, D. 1984. “EPZ and SEZ as Generators of Economic Development the Asian Experience.” *Human Geography* 66(1): 1-16.
- Wong, S.T. and Tiongson, A. 1980. “Economic Impacts of Growth Center on Surrounding Rural Areas: A Case Study of Mariveles, Philippines.” *Human Geography* 62(2): 109-117.
- Young, O.R. 2010. “Institutional Dynamics: Resilience, Vulnerability and Adaptation in Environmental and Resource Regimes.” *Global Environment Change* 20(3): 378-385.

Appendix

Interview Transcripts

Interview Transcript 1

Informant: Obet (Farmer in Town Site)

Date: June 15, 2015

Time: Around 10 a.m.

Venue: Under a tree on the side of the farmer's farm.

Interview Environment: I arrived at the farmer's farm while the farmer was preparing his land for plowing. The farmer took a break to accommodate the interview.

R = Researcher

O = Obet

[1] R: Do you always do broadcasting?

[2] O: Yes, it is too expensive to do transplanting here. The lowest per person is PhP250 and you have to feed them lunch and snacks. That's why it is too big of a burden transplanting is. In my field, I need 20 persons for transplanting.

[3] R: When did you last do transplanting?

[4] O: Long time ago. Seven years ago, I tried but it is too expensive. I went back to broadcasting. The cost was too large. In broadcasting I only need one person, myself. I broadcast three sacks of seeds in my field. I can hire someone to broadcast. I can pay him PhP350 but almost every time I do it my self.

[5] R: But in broadcasting it is hard to manage weeds. How do you do it?

[6] O: It is easy if you just apply herbicides. I just use herbicides.

[7] R: Before when you are transplanting, how do find planters?

[8] O: We have a *cabecilla*. We just go the *cabecilla* and schedule a planting day. The *cabecilla* just bring the planters to us on that day.

[9] R: If there is no *cabecilla*, how do you do transplanting?

[10] O: It is hard to do it without the *cabecilla*. We have to recruit many planters. We know some planters but it is hard to go to them one by one. It is also hard to supervise their work when the planting starts.

[11] R: Why do you say so?

[12] O: Without someone organizing them, we have to watch them one by one. Some planters don't care if they are slow. They just want to do their work and get paid. Some planters deliberately work slow so that the planting will extend another day.

[13] R: How does the *cabecilla* supervise them?

[14] O: The *cabecilla* watches over them and tells them what to do. If someone is slow or too fast the *cabecilla* will tell him to wait or hurry up.

[15] R: Do you know the *cabecilla*.

[16] O: Yes. We have regular *cabecilla* that we trust.

[17] R: How about the planters, do you know them?

[18] O: Some of them. The hiring of the planters is up to the *cabecilla*. We don't have to find planters for ourselves. We just let the *cabecilla* hire who ever the *cabecilla* wants.

[19] R: How do you pay them?

[20] O: We pay them in cash. We pay the *cabecilla* double the amount.

[21] R: Why do you have to pay them double?

[22] O: For example you have ten planters, you have to prepare payment for eleven persons. You pay the *cabecilla* for planting and for organizing the planters.

[23] R: What happened to the planters when the farmers shift to broadcasting?

- [24] O: The good planters became hard to find that's why we did broadcasting. The wages become expensive and it is very difficult to find good planters. Planters today are not very good compared in the past.
- [25] O: Like me, I sometimes can afford to pay for transplanting but it is hard for me to find good planters and I get disappointed with their work. They plant in a crooked direction. They cannot even plant in a straight line. It is like they don't care about us farmers when they do that.
- [26] R: Where do you think the planters went?
- [27] O: Many people got jobs in the zone.
- [28] R: Are there a lot people in the farm who worked in the zone?
- [29] O: Yes, many sons and daughters of farmers. Usually women. My daughter worked in the zone for 6 months. She resigned when she got pregnant. She is about to get married.
- [30] R: Who decides the raise in pay of the laborers?
- [31] O: It is caused by the rise of the price of commodities. The laborers themselves..... If they feel that the pay is not enough they raise their pay. Sometimes they compare it to the wages in the factories but not exactly the same maybe a bit lower than the factories.
- [32] R: What do the farmers do when laborers want a raise?
- [33] O: Nothing, we can't do anything about it. No one will work for you if you don't pay them what they want.
- [34] R: When you shifted to broadcasting, did the farmers talk to each other and decided that you all should shift to broadcasting at the same time?
- [35] O: No. No. It just happened. We just decided. It is up to the farmer if he wants to do transplanting or broadcasting. If someone wants transplanting then they have to pay laborers what they want.
- [36] R: Did someone tried to revive the cabecilla?
- [37] O: Even if we want, we don't have the good planters. We don't know where they are and we don't have the time to teach new planters.
- [38] R: Are you familiar with the Drum Seeder? Why don't you use it?
- [39] I know it. I have used it before. But I don't like it. It saves you on seeds but I think the crops are thin if you use it. The yield is low.
- [40] R: How many laborers do you hire for harvest?
- [41] O: In here, we have groups that harvest. Sometimes 20 laborers come to my farm. Sometimes it is less. It is not consistent. Sometimes they are twelve, sometimes fifteen. Sometimes it takes one day to three days to harvest my field.
- [42] R: How do you find the harvesters?
- [43] O: The groups have leaders. We just inform the leaders that we need harvesters on a specific day. It is like the *cabecilia* in planting. The difference is that you don't have to pay them in cash.
- [44] R: Why are there harvest groups here?
- [45] O: To make it easier to look for harvesters. Maybe to also control the number of harvesters. It is not like that before, before any one can join.
- [46] R: Why do they have to control the number?
- [47] O: Of course, the smaller the number the more shares each laborer can get from the ten percent.
- [48] R: How do you pay them?
- [49] O: For every 100 sacks they take ten sacks. It is sharing we don't pay money. That is why it is ok for me for the harvest to take one to three days. I also give them snacks.
- [50] R: Do you feed them lunch?
- [51] O: No just, snacks. If the harvest is good I prepare special snacks. The usual is bread and coffee in the morning and in the afternoon. Whatever I can afford. But before, ordinary bread and water is enough, but now they will not eat bread without sandwich spread and they want ice in their water.
- [52] R: Is that the way it is here, you don't pay money? In Biaan they pay harvesters money. Why do you think they do that?

- [53] O: Maybe they don't want to give away their paddies. Here, no matter how many laborers come, we only pay ten percent of our harvest. If 20 harvesters come, we can't pay money to all of them. Maybe in Biaan, they only hire a few laborers. Here we want as many laborers as possible.
- [54] R: Do you think you lose more money when you pay paddies?
- [55] O: No. It is also our way of helping the laborers. We also know them personally. They have been harvesting for me for a long time. If our harvest is good, their share also will be good. It is our way of attracting laborers to work for us.
- [56] R: But what if your harvest is low?
- [57] O: They will also get low shares. But sometimes I pay them extra if they get low shares. They also help us ensuring our crops are healthy so they can get bigger shares.
- [58] R: How do they do that?
- [59] O: They just sometimes tell me if they see pests in my field. Sometimes they tell me if my field looks dry or maybe it needs more water. They also recommend new fertilizers or pesticides when they learn about it from other farmers.
- [60] R: When did these groups start?
- [61] O: I can't remember. When finding harvesters here started to become hard.
- [62] R: After harvesting what do you do?
- [63] O: We take the paddies to the road. We dry on the hi-way.
- [64] R: How long does it take you to dry?
- [65] O: If the weather is good, 100 sacks can only take 1 day.
- [66] R: Do you do it by yourself?
- [67] O: We hire laborers to haul. Because my farm is far from the road I pay PhP30 per sack. For drying we pay them PhP20 per sack in one day. I only hire 1 person. During rainy days, sometimes it takes us two days.
- [68] R: How long have you been a farmer?
- [69] O: I started farming 1971 when I inherited the land from my father. But I have been helping my father in the farm before.
- [70] R: Do you plant other crops?
- [71] O: Like that mangoes and bananas. I am really a farmer.
- [72] R: Did you notice any effects of the factories in the labor here in the farm?
- [73] O: Like I said, if we want to do transplanting, we have to prepare money. Transplanting is better for weed management. Crops are also easier to manage. But I don't have the money to spend so I can't afford transplanting and pay the good planters.
- [74] R: How about your relationships with other farmers?
- [75] B: It is ok. Fun in farming started to disappear with the introduction of hand tractors or Kubota (a brand of tractor). It made farmers individualistic and disconnected (*Kanya-kanya*). In the old days everybody shared equipment, carabaos and labor. Farmers were more connected as everybody knew what everybody was doing and we knew the problems each of us have. Now, farmers are on their own.
- [76] B: It made farmers independent with each other unlike back in the day that they harvest and thresh at the same time and everybody is helping each other and they can share resources.

Interview Transcript 2

Informants: Bert (Farmer in Town Site), Nenita (Wife of Bert and former SEZ worker), Obet (Farmer) and Tony (Laborer)

Date: June 23, 2015

Time: Around 4 p.m.

Venue: Inside the Farmers hut

Interview Environment: The hut is in the middle of the farmer's farm in the village of Town Site. The farmer, his wife, another farmer and a laborer are talking after working for the day. I joined their conversation after another farmer introduced me to the group.

R = Researcher

F = Bert

W = Nenita

F2 = Obet

L2 = Tony

E = Everybody talking at the same time

[1] R: What is the size of this farm?

[2] W: 2 hectares. I inherited this land from my father.

[3] R: Why is the wages here increasing?

[4] E: The cost of living is increasing. The price of rice and commodities is increasing. You have to also raise the wages of the laborers.

[5] R: Why is *hunos* (10percent) not increasing?

[6] W: Ever since I was a child, the sharing rate here is 10 percent. But we prepare snacks for them in the morning and the afternoon.

[7] R: Why is it not increasing like the wages?

[8] F2: Because, unlike before, there are tasks that were reduced from the harvesting. Hauling was removed. The farmers have to pay for the hauling. That's why the ten percent sharing is not increasing. Before, if you're a harvester, you do everything.... Now farmers have to find laborers who will haul the reaped crops and threshed sacks.

[9] L2: harvesting is easier now compared to before.

[10] R: Do you find difficulty in finding laborers?

[11] W: No. Ever since the time of my father they are working in our farm (pointing to the laborer). I don't experience difficulty, I don't know about other farmers.

[12] F2: The harvesters, they are the ones leaving the farms.

[13] R: Why are they leaving? Where do they work?

[14] H: They find jobs in the zone. Whatever they know how to do. If they know how to weld, they become a welder, if they know masonry they become masons, if they know construction they work in constructions.

[15] W: But the work there in the zone is eight hours. Unlike here in the farm, if it is hot you can rest. There, they don't have rests, especially in construction.

[16] R: Is it difficult to look for harvesters?

[17] F2: Yes, it is difficult. Farmers tell the harvest leaders and the leaders have to look for laborers that they know.

[18] R: I am wondering why in Biaan laborers are paid in wages. Are farmers not losing money when they pay through *hunusan*?

[19] L2: Laborers benefit more from *hunusan* but if you're a farmer you will not have difficulty in finding harvesters. You just need to talk to one person, the harvest leader.

[20] F2: Also, if laborers accept wages, it is easily spent. If paddies, it can last longer whether you eat it or you sell it.

[21] R: Why is no one buying fresh paddies in Biaan?

[22] F2: In Biaan, it is hard to dry paddies. Maybe that is why many laborers don't want to accept. They are far from the roads there.

[23] R: How long does it take to harvest your farm?

[24] W: Sometimes it takes four to five days during wet season. When the crops are lodged it is really difficult to harvest. Good thing we are paying through *hunos*. Imagine, if we are paying through wages? We cannot afford it. I have experienced before that it took two weeks for my farm to be harvested.

[25] R: Why did it take two weeks?

[26] W: It's a combination of the rainy season and the difficulty to find laborers. But I didn't look for laborers, It's the leaders job to find them. Eventually the harvest group finished my farm.

[27] F: Harvesting here has groups. The members are the ones who harvest for the farmers.

[28] R: If I am not a member, can I join the harvesting?

- [29] F2: You have to ask permission from the leader. If I am an ordinary member and I bring another person that the leader does not know personally, the leader will not allow it. You have to know the leader personally to join.
- [30] R: Are you a member of a harvest group? (asking Tony)
- [31] T: I know the leaders. I can join them if I want too. Sometimes I join them.
- [32] R: What about other laborers? Do they get mad at the groups?
- [33] T: Some are mad because they cannot easily join. But I can't blame them for having the groups. Life is getting harder.
- [34] R: Are the groups advantageous for the laborers' income?
- [35] T: Unlike before when anyone can join the harvest, the more harvesters come, the smaller each laborer get from the farmer.
- [36] R: Do you practice transplanting? (asking the farmers)
- [37] F: Yes, before.
- [38] R: When did you start broadcasting.
- [39] W: Maybe during the 1970s. I remember when I was in elementary this field is transplanted but when I went to high school it is broadcasted.
- [40] R: Why did you shifted?
- [41] W: To minimize cost. Labor wages increased during that time.
- [42] R: The yield is better with transplanting. Do you think so?
- [43] F2: The same if you consider the cost.
- [44] W: Yes, but the cost of labor eats up the advantage. Sometimes it is just the same because of your costs. That's why farmers here practice broadcasting.
- [45] F: It is ok to do transplanting if you get lucky with pest and typhoons, but if you run out of luck, you get bankrupt!
- [46] F2: If you're going to do transplanting, you have to have a yield of 20-30 sacks more than if you're going to plant using broadcasting. If not, the advantage in yield of transplanting will be eaten up by the cost of labor. But what if a storm comes or flooding, pests, or drought? You cannot get back what you spent in labor.
- [47] E: I you do transplanting there many things you have to spent on like pulling seedling and preparing food.
- [48] W: Labor cost here increase because of the zone. I noticed it when in 1972 when I graduate elementary. Before, you wont have difficulty in finding planters. When the zone opened, planters disappeared in the village. They found jobs in the factories. Before, it is not difficult to work in the zone. Even though you did not graduate high school.
- [49] R: How long did you work in the zone?
- [50] W: I worked in the zone for almost ten years after graduating from high school. I worked as a sewer, making dresses for Barbie dolls. I had to stop working when I got married at 25 years of age. I had to do it because no one will take care of my child, especially during night shifts and overtime. I also worked in the company called Matel and Supreme Tags. We made bags and garments.
- [51] R: Most of the planters before are women or men?
- [52] F2: Women, and also the *cabecilla* are women.
- [53] W: They found work there and the planters in the village disappeared. The ones that are left in the village work slower that those skilled planters.
- [54] F2: Wages are rising and the quality of work is declining.
- [55] L2: That also happened with harvesters. There are times that you can't find any of them.
- [56] F: Last year, two big factories opened in the zone. It is really hard to find laborers here.
- [57] F2: The zone competed with labor in the farm. In the zone before, even if you don't have schooling as long as you are willing to work hard you can find a contractual job as long as you can write your name and sign a contract.
- [58] W: During the old days, when the zone was booming with employment opportunities, it was a very happy place to be in because there were a lot of companies operating. People in the villages, too, were very happy because almost everybody could get work if they really try to look for it and apply.
- [59] F2: With all the factories, if you can't find work in the zone before, it only means that you are lazy.
- [60] W: But now in the factories, you can't work if you are not a high school graduate. Now you have to train at TESDA. Before the companies train us in sewing. When I applied before, I don't know anything about sewing but I got a job. If that happens now I wont get a job.
- [61] F: Before, the zone is a really great place to work. It is fun to work there before. There are a lot of jobs.

Interview Transcript 3

Informant: Dolores (Farm laborer in the village of Biaan), Tina (Wife of a Farmer), Ariel (Laborer), and Jon (Nephew of a farmer)

Date: July 4, 2015

Time: Around 9:30 a.m.

Venue: Inside the Farmers hut

Interview Environment: The hut is in the middle of the farmer's farm in the village of Biaan. I saw a wife of a farmer her nephew and 2 laborers talking while having coffee. I joined the conversation. One laborer is waiting for harvesting to start; the other laborer is hauling sacks of fresh paddies from another farm. The nephew of a farmer is in a hammock watching over the laborers. The wife of the farmer left in the middle of the interview to go to the market.

R = Researcher

L1 = Dolores

W = Tina

L3 = Ariel

N = Jon

[1] R: How long have you been working as a laborer here in the farm?

[2] L1: I have been working as a farm laborer for a long time.

[3] R: How are you paid for harvesting?

[4] L1: We are hired and paid Php250 per day with snacks. Sometimes we are paid Php300 but with no snacks. We prefer Php250 as long as everything is free like water snacks and sometimes even lunch. We don't have to worry about the food. We can just do our work.

[5] R: Have you always been paying harvesters wages?

[6] L1: Yes, as long as I can remember.

[7] W: Since I was young we hire harvesters.

[8] R: But in the other villages they pay through *hunusan*?

[9] L1: Yes, that's the way it is. It is not the same in all the places.

[10] W: In some places they use machines for harvesting but we don't use it here.

[11] R: Why is there no *hunusan* here?

[12] L1: We don't have time to dry the paddies and sell them to the millers. We like to be paid with money.

[13] R: Why don't you just sell the fresh paddies?

[14] L: Nobody here buys fresh paddies. It is hard to find someone who will buy.

[15] R: Do you do transplanting before?

[16] W: Yes in the past, my husband used to do transplanting before. But he learned how to do broadcasting.

[17] L1: But in broadcasting, the yield is lower. In my province every one is transplanting.

[18] R: Where are you originally from?

[19] L1: From Sorsogon. I have a cousin who married someone from here. They invited me here to work. I came here in 1971. I was 15 years old.

[20] R: Why did broadcasting became popular?

[21] W: In broadcasting you don't have to pay any laborers. If you know how to do broadcasting, you can save costs.

[22] L1: When I participate in transplanting before, it was so long ago. The pay was so low back then. But the price of commodities was also low back then. Now if I do transplanting here we will ask for Php250. Prices of commodities are high.

[23] R: How does it compare in the salaries in the zone?

[24] W: In the zone, they are paid maybe Php330 plus overtime.

[25] L1: But they are not given food. You pay for your own food and water. All expenses are yours.

[26] W: If you add the food to the Php250, it is almost the same. Snacks in the morning and snacks in the afternoon plus lunch. It is maybe even more than Php300. For the food, maybe we are spending about Php50 per laborer.

[27] R: Why are you not starting yet?

- [28] L1: We are waiting for the farmer. He can't decide if we will harvest today because it might rain. Last night it rained hard. There is a typhoon, it is in the Visayas. If it were me, I want to start harvesting now. I'm waiting for other harvesters, I don't know where they are they are late.
- [29] R: Is there a harvest group here in Biaan?
- [30] L1: There is no fixed group. Anyone can join other harvesters.
- [31] R: How does a farmer find harvesters?
- [32] L1: Someone is paid by the farmer to look for harvesters. For example me, if the farmers hire me, they will pay me to look for harvesters. But he has to pay me double. He will give me money a day before the harvest then I will look for laborers. I have the money already while I am looking for them.
- [33] R: What if someone does not come to the harvest but is already paid.
- [34] L1: I will be answerable to the farmer. As a leader, I can also just find laborers and not work in the harvesting but I will just be paid only one-day worth of wage. But if someone I hired doesn't come, I am obligated to work in the harvesting. I have to replace them.
- [35] L3: We like it when the payment is advance. So we can buy already what we need in our homes.
- [36] R: On the average how many harvesters do you hire?
- [37] L1: Like now, we are eight harvesters.
- [38] R: So the farmer will pay eight laborers plus one.
- [39] L1: Yes, because if they don't pay us to look for harvesters they will have a hard time looking for them. They are scattered in the village. Farmers have to go house-to-house and ask for harvesters. It is hard to find laborers nowadays. Like in planting, almost all are in the factories already. Many laborers are also working in construction.
- [40] L3: In construction we earn PhP300 if you are skilled you can earn PhP450. Like me, I know masonry I can earn PhP450. Right now I have no construction job so I work here in the farm.
- [41] R: How about you Jon, do you work in the farm?
- [42] N: If you are asking me about what I know about farming, I cannot answer you because I do not know a thing about it.
- [43] N: But if you are going to ask me about factory work. I can tell you everything about it because I worked in the factory before and I have just finished my contract.
- [44] R: What did you do in the zone?
- [45] N: I work in production and finishing for two years.
- [46] R: What did you make?
- [47] N: Bags. Many kinds of bags.
- [48] R: Is that continuous?
- [49] N: Five-month contracts.
- [50] R: How many companies did you work for?
- [51] N: Three.
- [52] R: Can I come back here again to interview you about your work in the zone?
- [53] N: Just ask my uncle if I'm here. I am often here when I have no work.
- [54] R: (Dolores) Who decides when to rise wages?
- [55] L1: Us the laborers. We base the wages to other jobs like in the factories and also to the price of commodities. If workers in the factories have raise in wages we also ask for raise in wages. But a bit lower than them, not exactly their wages.
- [56] L1: Like one time I got mad with one laborer who asked for PhP300 per laborer but with no snacks and no lunch. He did not think that PhP250 per laborer with food is better. I said next time ask for PhP300 with food.
- [57] R: Do you think the farmers will agree to it?
- [58] L1: They have to. They have no choice. What if we don't work? If we don't work for the farmers we can earn from other sources like, construction. They have to agree with use. It is so hard to find laborers nowadays, it is really hard and it is hard to work in the farm.
- [59] L1: They have no choice but to give in to our requests, because if they do not agree with our requests, who will harvest it for them? We tell the farmers: "Harvest it yourself." Farmers cannot harvest it by themselves and the rain will ruin it or the birds will have a feast day eating the crops.
- [60] L3: If farmers don't agree, laborers will be united against them. If there are farmers who complain often, we walk out on him even though the tasks are not finished like harvesting.
- [61] L1: We leave the farm. We don't care if the farmers get mad. There is one time, we walk out of farmer because he complaints that we are always having breaks. It was hot that day that's why we are having breaks. We left the farm and we boycotted him, I think, for four seasons.

Interview Transcript 4

Informant: Christy (Health worker in the village of Town Site, a former SEZ worker and Daughter of a former *Cabecilla*).

Date: July 1, 2015

Time: Around 10 a.m.

Venue: Inside the village health office

Interview Environment: The interview was conducted while the informant is having a break during his workday. Her co-workers in the health office were listening to the interview.

R = Researcher

C = Christy

[1] R: How do workers apply to the factories? Is there an agency?

[2] C: No, you apply to the company directly. There is one agency called Abeline. They are the ones who inform the applicants about openings in the company. But the applicants still have to apply directly to the companies.

[3] R: What are the requirements to be accepted as sewers in the factories?

[4] C: High school graduate, you should have a diploma. You also have to be a skilled sewer. You should get a certificate from TESDA. The companies also conduct trials, if you pass, your hired.

[5] C: My daughter trained in TESDA, I paid PhP550 for 16 weeks of training. If you don't train under TESDA you will not get hired in the factories if you don't have connections in the management. If you're a new graduate, you have to train in TESDA so you will be hired. My daughter got hired when she was 18 years old.

[6] R: How about you?

[7] C: Me, I only learned in TESDA. When I was in school I learned to sew in old sewing machines but the machine in the factories are more advance, high-speed and motorized.

[8] R: Can you apply if you did not graduate from high school?

[9] C: If you did not graduate from high school you can study in the Alternative Learning System (ALS) program by the municipal government. All barangay offices have ALS, they can give an equivalent to a high school diploma.

[10] R: Are there more women workers than men?

[11] C: There are more women workers but the number of men is slowly catching up. There are also a lot of men working as sewers nowadays.

[12] R: What are their shifts?

[13] C: The shifts are 6 a.m. to 6 p.m. then 6 p.m. to 6 a.m. There also shift from 6 a.m.-2 p.m then 2 p.m. to 10 p.m. then 10 p.m. to 5a.m.

[14] R: When you started how much did you get per day?

[15] C: I first settled for PhP5 per hour for a four-hour shift in a company called Mitsumi. I started working after graduating from high school in 1989. After a week, I got a contract for five months.

[16] C: Then I got hired in a companies called Lotus, they make shoes. They offered free trainings in sewing for shoes. At that time I was a very good sewer already.

[17] C: After five months, I left Lotus and I got news that a company called Pasig Textile is hiring, they made gloves. I did sewing trials then I got hired. After five months, they wanted to make me a regular employee but I have to go to Cavite (another province). I refused because I don't want to leave home.

[18] C: I just applied to a company called Lawrence. They also make shoes. I became a line leader in 1991. I can get a good salary but I have to work over time. My shifts were always 6 a.m. to 10 p.m. six days a week. I become a line leader I got extra allowance.

[19] C: I worked for almost all sewing companies back then. K1 they made golf bags, then Miko. I stopped working in 2006. My work is not continuous. I got married in 1993. When I got pregnant I resign from work, when my child turns one year old, I apply again. I have three children.

- [20] C: I worked in a company called Mutsumi for 5 months. The contracts then were only up to 5 months. If you stay in the company for six months you become a regular employee already. Now there are two-year contracts but not regular. But the usual employee gets 5 months contracts.
- [21] R: Can a worker be a regular employee?
- [22] C: Some workers get regularized. They are only a few and only the best ones. If you don't get regularized after 5 months, then they will replace you with another worker. That's the policy in the companies.
- [23] C: That's what I don't like in working in the factories. It is not continuous. After five months you have to stop working. When I stop working, it is hard to start again. After five months of break, your line leader will call you and invite you again for another trial and then you have to accomplish the requirements again. Some of the contracts today are up to two years but are still contractual.
- [24] R: What does your children do in the zone?
- [25] C: I have a daughter in Mitsumi and a son in Essilor. I told my son that you have to learn how to sew so that you can follow on my footsteps.
- [26] R: How much do they earn?
- [27] C: They are paid minimum wage but they earn a lot from overtime. They earn PhP41 per hour in overtime. Sometimes they do double shifts, eight hours of overtime. Even when tired, they do overtime to earn.
- [28] R: If companies have a lot of overtime, does it mean that the factories in the zone have high production demands?
- [29] C: Yes. Production is high. There are also more companies being established.
- [30] R: How about construction workers. How much do they earn per day in the village?
- [31] C: It depends. If you know masonry you can earn up to PhP500. If you are just a helper, you are paid PhP300-PhP350.
- [32] R: How about if you work in the shops?
- [33] C: They are paid the minimum wage.
- [34] R: How about those who do laundry and ironing?
- [35] C: PhP400. It is hard work. One week's worth of laundry you will wash in one day. It is hard. Ironing is only PhP400.
- [36] R: Did you work in planting before when you were young?
- [37] C: No. I did not learn how to do planting even though my mother was a *cabecilla*. I immediately worked in the zone. Other people told me "Why did you not learn to plant? Your mother is a *cabecilla*."
- [38] C: My mother was a *cabecilla* but I never learned how to plant. I feel a little ashamed because I am a daughter of a *cabecilla* who doesn't know how to plant.
- [39] C: I worked in the zone as a sewer when I graduated from high school and I did not have the time to learn to do transplanting back then. Now, if only I knew how and if only there are transplanting opportunities, I could earn from farming.
- [40] R: But you already have a job here.
- [41] C: I could earn on the side. It can help to pay the bills. My salary here is not that big.
- [42] R: Are there still transplanting in the village?
- [43] C: In Limay (nearby town to Mariveles) there still is.
- [44] R: Is your mother still alive?
- [45] C: Yes of course.
- [46] R: How old is your mother? Can I still talk to her?
- [47] C: 72 years old. She is still strong.
- [48] R: Can you introduce me? I want to interview her.
- [49] C: She is in her house. We can schedule an interview. I will bring you to the house. She was a popular *cabecilla* before.
- [50] C: I told my mother "I wish I learned, whenever I see planters in the field it looks like it's a fun work." My mother said "You're a fool, you don't know that it is very hard to plant in the field."

- [51] C: I told my mother that I should have learned your livelihood. Because there is the zone and we are 10 siblings, I wanted to help my mother. I really wanted to have a reliable job. That's why I applied there.
- [52] R: What does your mother do nowadays?
- [53] C: She is retired. She plays cards and mahjong with the neighbors. She raises pigs for extra income. Tomorrow I will bring you to her.
-
-

Interview Transcript 5

Informant: Jet (Laborer in the village of Town Site)

Date: March 10, 2015

Time: Around 12 p.m.

Venue: Under a Tree in a Farmers' Farm

Interview Environment: Jet is resting after eating lunch. He is hired by a farmer to plow the farmer's plot.

R = Researcher

J = Jet

- [1] R: How long have you been a laborer?
- [2] J: I am 24 years old. I have been a laborer since 15 years old but not continuous.
- [3] R: Do you have other sources of income.
- [4] J: I made a living in doing different varieties of farm work like threshing, hauling and land preparation. I am from Neuva Ecija. I came here to work because the farm wages in our village is PhP175. Here you can earn PhP250 to PhP300.
- [5] R: Do you work as a harvester?
- [6] J: I cannot work as a harvester because I don't know the harvest leaders or members of their associations personally.
- [7] J: Even if I wanted to join the harvest to make extra money for myself, I cannot do it because I don't know the harvest group leader. Unlike before, a person cannot easily join a harvest if the leader won't let you join. Members of harvest groups are only the ones who benefit from the harvest nowadays.
- [8] J: I just buy fresh paddies from the harvesters.
- [9] R: What do you do with the paddies you buy? How do make money out of it?
- [10] J: I collect paddies until it is large enough to dry and sell. Usually I collect about 7-10 sacks worth of fresh paddies. I dry it my self to save cost.
- [11] R: How do you dry it?
- [12] J: We dry it on the side of the road, usually on the highway. Sometimes I hire someone to help me dry it if I can't do it alone.
- [13] R: How about planting? Do you work as in transplanting?
- [14] C: No. Farmers here are not transplanting.
- [15] R: In Nueva Ecija, do you work in planting?
- [16] C: Yes. Oftentimes.
- [17] R: Why do think farmers here are broadcasting?
- [18] J: They say broadcasting became popular here because of the lack of people who poses the skills in transplanting.
- [19] R: Why did you think that happened?
- [20] J: The mothers and fathers that were transplanting before were not replaced by their children. Their children found jobs in the zone. Or maybe their mothers and fathers did not want them to plant and work in the zone instead.
- [21] R: Have you tried working in the zone?
- [22] J: I have not tried applying yet.
-
-

Interview Transcript 6

Informant: Cesar (Harvest Leader in the village of Town Site)

Date: July 8, 2015

Time: Around 1 p.m.

Venue: Just outside of the Laborer's House

Interview Environment: The house is located along the highway. Vehicles like trucks and buses pass along while the interview was going on.

R = Researcher

C = Cesar

[1] R: When did you start working as a laborer?

[2] C: When I was 15 years old. I was born in 1955.

[3] R: How old are you now?

[4] C: 60 years old.

[5] R: How can farmers get you and your laborers for harvest?

[6] C: I talk to farmers. I take care of the people. Farmers say when and I bring my people. The schedule is on a first-come-first-serve basis. I have a calendar and I schedule the farmer's harvest day.

[7] R: Do you earn extra for being the leader?

[8] C: Sometimes the farmers pay me additional 2 buckets (1/4 sack) of fresh paddies. I also plant vegetables as additional source of income.

[9] R: How did you become a leader?

[10] C: They elected me leader. I was a laborer before, our leader retired from working in the farm and they wanted me to take over sometime in 1996. Before, I also work as a planter when there are transplanting but it is rare nowadays.

[11] R: Why did you start a harvest group?

C: We want to group together so that it is easier to look for people. If farmers schedule with us, we can easily manage the schedule of people who will be there in the harvesting.

[12] R: Can anyone join the harvest?

[13] C: Groups have their own men. But because I know the other leaders, I can also join the other groups. Harvesters have other sideline jobs. But we have plenty of harvest opportunities due to un-synchronous planting here.

[14] R: Why do groups have their own men?

[15] C: To make it easier to organize. I can easily inform the people when the harvest is. Sometimes if I can't find my own people, I ask the leader from other groups if I can borrow his people.

[16] R: Did other laborers get mad of you?

[17] C: No. It is hard to find people to work in the harvest that's why we have groups. It is easier to manage if you know each other. The work is also faster.

[18] R: Why do you still want to be paid in *Hunos* (in-kind share)?

[19] C: We want paddies. We don't like cash. Compare PhP250 per day to the 10 percent share. If we accumulate paddies, I can earn more. If I earn daily wage, when the evening comes it is gone, it is spent.

[20] R: Where do you sell your fresh paddies?

[21] C: I buy fresh paddy from my laborers. I dry them and mill them and I earn from it. Buy and sell. There are a lot of buyers in the village, those who have money buy and sell paddies like me. They accumulate, dry and mill or they can sell to the millers. We can profit as much as PhP300 per sack.

[22] R: Are there any combined harvester in the village?

[23] C: No 3-in-1 harvesters (combined harvesters) here. There is someone who wants to invest but the capital for that is large. And I think it will just be stuck in the village.

[24] R: What will happen if you don't show up on a scheduled harvest?

[25] C: I have never experienced that. Even if it is raining, it is our obligation to the farmers to harvest. We can't refuse. It is our reputation and obligation to the farmers. Even if we lose income we have to work on it. The farmers may not hire us again. Even if it is hard because the mud is deep and the crops are lodged, we cannot refuse them as long as it is scheduled. It will look like that we don't know how to return the favors they gave us.

[26] R: What kind of favors?

[27] C: Because of them we have livelihoods. It is their decision if they will hire our group or not. They also give us extra, especially when they have good harvests. Sometimes, when I need help with money or rice, I can go to them to borrow.

- [28] R: How many harvesters do you need for a hectare of land?
[29] C: Usually 12-15 people. Sometimes other laborers have something to do, like me, my pig has to give birth soon. I cannot come to the next harvest. As a leader I have to find another person to replace that laborer.
- [30] R: Which do you prefer, many harvesters or few harvesters?
[31] C: We like it if there are more harvesters so that we can finish early compared to few harvesters. We like to finish in one day so we can accept another harvest the next day or we can go the scheduled harvest. But sometimes I have to control the number of people, too many is also not good, we wont earn as much.
- [32] R: In Biaan, harvesters are paid in wages. Why is it different here in the village?
[33] C: In Biaan, that's the tradition. Maybe they have computed it already. For 15 people, they computed that they should earn 250 a day for one hectare. But the earning in *hunusan* is different. We don't sell it immediately. We store the paddy and accumulate. If we dry it and mill it, we can sell it in a much higher price and we can earn more. If the harvest is also good, we can earn more.
- [34] C: Our harvesters can also barrow paddies from our stored paddies. They use it for home consumption or when they need the money for household expenses. They just have to pay it back or deduct it from their share. I keep the record on who borrows or get from the stored paddies.
- [35] R: You are 60 years old, can you still work the whole day?
[36] C: Yes. 1 hectare, we can finish it in one day. I am thinking of retiring as a leader. Because it is hard, sometimes I can't find harvesters especially in the rainy season. It is hard because I give my word to the farmers but sometimes I can't bring enough people to harvest. But during the dry season it is easier to find most of my people.
- [37] R: Why is it harder during the rainy season?
[38] C: Because it is hard to harvest during rainy season. In the rainy season the crops are lodged. You also sink in the mud in the filed.
- [39] R: What else do you get from the farmers?
[40] C: Sometimes the farmers give us lunch. Sometimes just snacks. Lunch is not included in the agreement with the farmers but snacks are expected. Sometimes we request more delicious snacks like rice cakes and soft drinks.
- [41] R: What you noticed that is different from harvesting before?
[42] C: Not much.
- [43] R: Is hauling included in the harvesting agreement?
[44] C: They have to pay us PhP20 to haul each sack. The farther you are from the road, the more farmers have to pay for a sack. Before, hauling was included in the agreement. But as life gets harder we wanted to be paid for the hauling because it is hard work. But now as I get older, I don't anymore haul the sacks. I just let the younger ones do it. We like this because we have in-kind shares and we can also earn money if we haul the sacks. It also makes harvesting a little easier. It is one way to entice people to work in harvesting.
- [45] R: How did the farmers react? Did they protest?
[46] C: I think they understand. They know harvesters are poor and they know prices of commodities are also rising. And, it is hard to find harvesters nowadays.
- [47] C: Our obligation ends when we cut the crops and sometimes pile it. If the farmers wants us to haul the crops to the highway, they have to pay PhP20 per sack depending how farm his farm is from the road. If they want other laborers to haul it, it is ok with us.
- [48] R: Did you work in the zone before?
[49] C: Yes when I was younger. I worked in construction. We build the dam that you see in the zone. We built some of the water thanks.
- [50] R: Did you work for a long time?
[51] C: Not continuously. I worked for almost one year. After that, I went back working here in the farm.
- [52] R: Where do you like working better, in the zone or in the farm?
[53] C: When I was younger I liked working in the zone, the work in construction is sometimes easier. I also earn better. But now it's the same. I like working the farm better now.

Interview Transcript 7

Informant: Boy (Farmer in the village of Town Site)

Date: June 4, 2015

Time: Around 12 p.m.

Venue: Inside the farmer's hut.

Interview Environment: The farmer, with his wife, is resting in his hut in the middle of his farm. Part of the interview was done while eating lunch.

R = Researcher

B = Boy

[1] R: How long have you been a farmer?

[2] B: I can't remember anymore. More than 50 years. I was a former fisherman and a farm laborer mostly planter and harvester. I also worked as a pipe-fitter in the zone. My work in the zone was short. I have a small farmland as a laborer and did other farm work in the morning and went out in the sea as a fisherman at night.

[3] B: I gave up fishing and have been a fulltime farmer for decades now. I acquired the "rights" to my farm through good performance as a laborer. When the current owner of the land bought the land from the former owner, I was asked to operate the land because the owner has no knowledge in rice farming.

[4] R: Why is broadcasting the popular method in the village?

[5] B: When the zone companies increased in number, planters found work in the zone and planters became scarce. In my opinion, today, even if some farmers can still pay daily wages for transplanting, it is hard to find skilled planters. If ever we find skilled planters, the planting schedule will depend on the schedule of the planters' available time, which may lead to delays on the farmers cropping schedule.

[6] R: But did you practice transplanting before?

[7] B: Yes. Back then, most farmers were practicing transplanting. They get laborers and scheduled transplanting through the *cabecilla*. This *cabecilla* will coordinate and recruit the planters. Back then, planting was done almost at a synchronous manner.

[8] R: What is the reason to the shift to broadcasting?

[9] B: The scarcity of skilled planters may have influenced the farmers to shift to broadcasting method. In my opinion, because of the broadcasting method, planting in the village is not synchronous anymore.

[10] B: Even if we ever find planters today but the problem is the quality of their planting. Farmer will be disappointed and frustrated with the quality and they are expensive.

[11] R: In harvesting, how do you get the laborers you need?

[12] B: There are 3 groups of harvesters in the village. We just schedule the harvest with their leader. The leader brings his laborers to my farm on the day agreed upon.

[13] R: How do you get their services?

[14] B: I have a regular group that harvest for me. The leader and I have come a long way. He and his people have always harvested my farm. We have build a long standing relationship.

[15] R: What do you do if they are not available?

[16] B: I call the other group. I very seldom do that. Every harvest, it is automatic I hire my regular group. I don't need to ask the leader, it is expected. We only talk about the date of the harvesting.

[17] R: Are other farmers like you? They have their regular harvest group?

[18] B: Yes. I think so. Farmers have regular long-standing relationships with their preferred harvest groups. They have build ties with the leaders.

[19] R: How do you pay them?

[20] B: I pay ten percent share to harvesters. If we pay through sharing we can save on supervision. It is also faster to harvest if the laborers are paid with sharing. They want to finish as soon as possible to move on to the next harvest.

[21] B: The Harvesting activity should be fast. Farmers harvest their crop as fast as they can because of the uncertainty of the weather, flooding and the schedule of the thresher. They harvest immediately because of threats from some pest like birds and the wind.

[22] R: Do they always have jobs in the farm?

- [23] B: Un-synchronous planting in the village makes the demand for farm harvesters stable in village throughout the year. Farmers can afford to plant un-synchronous because of the abundant and uninterrupted water supply.
- [24] R: Can everybody join the harvest?
- [25] B: There is no specialization among the laborer as threshers can be haulers, dryers but they cannot always be harvester because there are groups of harvesters.
- [26] B: The quality of work among the current generation of laborers is poor. They are late to show up at work, slow in working, and they have poor skills.
- [27] R: Do you always have harvest groups?
- [28] B: Harvesting is open before. Anyone can harvest your farm as many people as possible. When I was a younger farmer, they just go to the farm at the time of the harvest bring their sickles and join the harvest.
- [29] R: How do you pay them?
- [30] B: The same as now. Ten percent.
- [31] R: Back then, do you tell and invite harvesters?
- [32] B: Some of them we invite, but most just come to us. Harvesters tell each other when the harvest was.
- [33] R: When did the harvest group started?
- [34] B: Same as planters, harvesters are really hard to find during those times, maybe in the late 1970s. Groups started to form to make it easy to find harvesters. They also compete with each other so they have more harvest agreements with farmers.
- [35] R: Do you like having the groups?
- [36] B: It makes finding harvesters easier. And I think because they are fewer in the group, they can earn better than before when anyone can join.
- [37] R: In Biaan, harvesters are paid in wages, why in your village you still follow *hunakan*?
- [38] B: We can also pay the harvesters wages. But we like paying *hunos* (in-kind share) more. It a different feeling if you pay with paddies. Sometime I even add a little more for them.
- [39] R: Why do you do that? Why do you add?
- [40] B: I wanted to help them. I also know them personally. Sometimes, when the weather is bad or there are typhoons and my crops are lodged, they help me harvest it even though we will only get a low yield. It is hard to harvest the field when flooded. It is very hard. It is muddy, the crops are wet and it is difficult to move.
- [41] B: You can say that during those kind of times, it is their time to make sacrifices for the farmers. So if we can, we help them (the laborers) to gain income or food.
- [42] R: What if typhoons are seldom or they never come?
- [43] B: It is ok. As long as they help me when I need it. They help us in some other way. Some harvesters help in plowing. Some help me when I need help fixing my hut. Most them I know personally for a very long time already.
- [44] B: I can relate to the laborers. I was a laborer before. During my early days as a farmer, I was not obligated to sell paddy. I was just contented in planting rice for our own consumption. This changed when my children entered school. I was also obligated to borrow from *takalanan* to increase my capital and earnings and use the money to support his children's expenses.
- [45] R: Why is the 10 percent sharing rate in *hunakan* is not changing?
- [46] B: Maybe because the price of fresh paddies is also increasing. They sell it fresh or they can dry it. The price of milled rice is also increasing though the years. May be that the reason why there is no need to change the 10 percent. It is just my opinion.
- [47] R: Is the *hunakan* now the same with the *hunakan* before? Or there are changes?
- [48] B: Not much changes. I think it's the same. But the laborers in the past, like us, are more hard working and stronger. Back then; I can work the whole day without rest. I just eat lunch then go back to work. Now laborers have plenty of breaks. They also come to work very late. Before, in our time, when there is a harvest, we start harvesting before sun rise. Now, sometimes, laborers come during lunchtime already.

- [49] B: Also before, after reaping, gathering and hauling of reaped crops and hauling threshed paddies is included in the harvest agreement. After reaping, we gather the crops in preparation for threshing. After threshing, we have to haul the sacks to the farmers' house for storage.
- [50] R: Do you complain to them?
- [51] B: We also understand them. Life is getting harder and prices of food are getting higher. It is also getting harder to find good laborers in the farm. Maybe we can give them extra motivation to work for us. As long as they finish the job it is ok because we just pay ten percent to them not unlike daily laborers.
-
-

Interview Transcript 8

Informant: Carmelita (Former *cabecilla* in the village of Town Site)

Date: July 2, 2015

Time: Around 4 p.m.

Venue: Inside the informant's house

Interview Environment: The informant is playing cards when we arrived in her home. Her daughter who works in the village office accompanied me and introduced me to her. During the interview her daughter is listening together with the others guest in the house while playing cards.

R = Researcher

C = Carmelita

- [1] R: How old are you?
- [2] C: I was born on June 24, 1943 here in Town Site.
- [3] R: I noticed that farmers in the village are doing broadcasting.
- [4] C: Before, they are transplanting.
- [5] R: When did broadcasting started?
- [6] C: During the 1970s, farmers seldom do transplanting.
- [7] R: What do you think is the reason?
- [8] C: Because wages are getting higher and higher. Commodities are getting more expensive.
- [9] R: When the farmers shifted to broadcasting what did you do?
- [10] C: I just took care of my family. I accepted laundry services. Sometimes cleaning services.
- [11] R: How about the other *cabecillas*, what did they do?
- [12] C: They found work in the zone.
- [13] R: Why did you not try applying in the zone?
- [14] C: I was old already. My hips hurt from planting for many years and I have to take care of my children.
- [15] R: Back then, how many planters you get each planting? For one hectare?
- [16] C: It depends, sometimes 12 sometimes more than 20. If I get 12 planters, they pay for 13 persons because the *cabecilla* gets twice the payment.
- [17] C: When I was *cabecilla*, our group is the most famous among the farmers because we are good planters. We also work faster than other groups. Almost all planters wanted to hire me. Instead of the work extending to another day, no matter how large the farm, we can finish in one day. Farmers save money from us. That's why they like my group.
- [18] C: During the late 1960s, I had many children. I did not give up being *cabecilla* but I did not participate in planting because I was always pregnant and giving birth. During the 1970s wages went up rapidly. I think from PhP 4 to PhP8 and PhP35 by 1980s.
- [19] R: Who decides when to raise wages and how much?
- [20] C: We just follow the wages of laborers. Like when it rapidly increased, some *cabecilla* told me that wages increased. They ask me if will follow or not.
- [21] R: How did you start to be planter?

- [22] C: When I was young, I wanted to learn because some of my friends earn money from planting. I told my self that I also want to learn like them.
- [23] R: Who thought you how to do transplanting?
- [24] C: We were taught in school simple planting. But I joined a planting crew and the older planters thought me. I asked permission from the *cabecilla* if I can join and she accepted me. I joined after graduating from elementary.
- [25] R: How did you become a *cabecilla*?
- [26] C: When our old *cabecilla* retired, she gave me the position. We have many planters in the group. I asked her “Why me?”. She told me because I am good in managing people.
- [27] R: Who feeds the planters? You or the farmers?
- [28] C: The farmers. When we did a good job, our lunch and dinner will be special. Sometimes we bring our own food. But if the farmers are happy with our work they will cook for us.
- [29] R: Which do you have more in your group, women or men?
- [30] C: Most planters are women. Men pull the seedling then the women plant the seedlings. Most of women in my group start at 13 years old until 20 years old.
- [31] R: Why are there more women?
- [32] C: Planting is a chance for women to earn and help their husbands or their parents. When I was the *cabecilla*, all of those who want to learn how to plant, I teach them. I wanted to give them jobs especially the women because they don't have sources of income here in the village.
- [33] R: Aside from planting do you have other sources of income?
- [34] C: I accept laundry services when it is not planting season. When my first husband died I also participated in the harvesting.
- [35] R: When was this?
- [36] C: He died in 1971.
- [37] R: How much do you earn from harvesting?
- [38] C: Depends on the yield. We get ten percent from the farmers yield.
- [39] R: Do women like you join harvesting?
- [40] C: Mostly men. Women rarely join. I just needed a source of income.
- [41] R: Where do you find planters?
- [42] C: There are a lot of planters here before. Many of my relatives are planters. There are many women here who knew how to plant before. I just teach them how to do it. I feel pity for some of them because they have no jobs. When I have a planting agreement, I ask them to join me.
- [43] How do they re-pay you?
- [44] I just expect them to be good during our planting. Just being obedient and being respected is enough for me. If they are good in planting we can get more contracts.
- [45] R: How about now? Are there still a lot of women who know how to transplant?
- [46] C: Not anymore. They can also find other jobs. It looks like they are not interested to plant anymore. Before we can finish planting a farm in one day. Maybe today they will take them two days.
- [47] R: What is the job of your husband?
- [48] C: He is a diver.
- [49] R: What does he dive for?
- [50] C: He dives for ship wreckage and sells the metals.
- [51] R: How about your children, did they learn how to plant?
- [52] C: None of them worked in planting. I enrolled my daughters to a sewing school for one month so that they learn how to sew and find jobs in the zone. My sons helped their father and also became divers.
- [53] R: Do you think you earned well being a *cabecilla*?
- [54] C: Yes because my pay is double. During planting seasons I have money. I can support my family. When I was young I helped my parents. Because I was popular among the farmers, I get so tired during planting seasons. I can't refuse my regular farmers.
- [55] R: What happens if you refuse?

- [56] C: They might feel bad and they might not get me again. As much as possible I don't refuse. I have built a long relationship with them. We know each other from the many years in planting.
- [57] R: How do the farmers find you?
- [58] C: The farmers will go to me, they know where I live, and say the date and how many planters they need. Sometimes I haggle with the farmers if I can bring more planters so that many of my planters can have income for that day.
- [59] C: If I ask these favors to the farmers, In return we have to finish on schedule or before the agreed upon time. I never extend the planting to another day like what other groups do.
- [60] C: What I do is we start before dawn If some planters who can go earlier, I ask them to go earlier so that farmers will be happy.
- [61] R: How do you find planters?
- [62] C: When I tell planters to be present on that day, that's it. They have to go.
- [63] R: Can a planter work by asking permission to the farmers and not you?
- [64] C: I don't know if farmers will allow it. The tradition is that farmers ask the *cabecilla*.
- [65] C: Farmers seldom contact planters. Some farmers don't even know my planters. They only know me.
- [66] R: What if a farmer wants someone to work that is not part of your group?
- [67] C: They don't do that. Maybe they respect the *cabecilla*. I may not allow that because I don't know if that person is a good planter or what.
- [68] R: What are the other responsibilities of the *cabecilla*?
- [69] C: I have to manage my planters. I have to know who are the stronger and the weaker planters. I have to position the weak planters and the strong planters in the field so that no one will be left behind.
- [70] C: I put the strong planters in between the weak ones so they have to keep up. I also have to always check if we are planting in a straight direction. Another good thing in our group is that farmers don't have to pay for someone to put a line on the field because we can plant in a straight line.
- [71] C: I also schedule the planters so that everyone can earn. Sometimes I cannot bring all my planters.
- [72] R: Can your planters plant under another *cabecilla*?
- [73] C: I don't allow them because they have to be available when I need them. If I can't bring enough people to a planting job, I might look bad in front of farmers. During the old times we also have a lot of planting jobs so my planters don't have to look for other *cabecillas*.
- [74] R: Are there any old *cabecilla* still left in the village?
- [75] C: Most of the old *cabecilla* here are dead already. Some of them went to Bulacan (another province).

Interview Transcript 9

Informant: Leo (Farmer in Town Site)

Date: February 11, 2015

Time: Around 2 p.m.

Venue: Inside the village office

Interview Environment: The office is an enclosed room. Office staffers are going inside and outside of the office. During the interview, the farmer also answers calls on his cellular phone.

R = Researcher

L = Leo

- [1] R: I noticed farmers did not know the variety they are planting.
- [2] L: Some of them know. Some of the farmers exchange seeds. They don't buy certified seeds.
- [3] R: I am interested to know about the farm labor in your village.
- [4] L: Wages here is a little expensive. We pay PhP250 a day plus snacks.
- [5] R: Most of the farmers are doing broadcasting. Is that related?

- [6] L: Because laborers are, like what I said, PhP250 a day. And you know us Filipinos, we are obligated to feed the people who work for us. So farmers have to prepare at least snacks for the laborers. And you know sometimes the job they do is not worth with that you pay them for.
- [8] R: Why do you think it is not worth it today?
- [9] L: They are a little lazy because they are paid daily, sometimes they prolong the work or not give 100 percent effort.
- [10] R: When I heard of it, I was a bit surprised that farmers here are doing broadcasting because you don't have problems in water supply.
- [11] L: Yes, the yield is so much better in transplanting.
- [12] R: When do you think the high wages started?
- [13] L: It is gradually increasing. Our situation here, the companies are competing with us farmers.
- [14] R: What do you mean companies?
- [15] L: The factories. The factories setting up in the zone. It is more convenient to work in the factories because in the farm you spent the whole day under the sun. That is the competition... That's why the farm workers, they ask for higher wages.
- [16] R: That's what I would like to study here. Do you think the SEZ is affecting farming labor in your village?
- [17] L: In terms of production, I you take care of your farm, you can get almost the same yield. The main problem really is the farm worker because they are disappearing. The yield maybe is the same but the cost is higher. It goes to paying the farm workers. That's why we are doing broadcasting, to save a lot of money.
- [18] L: In transplanting we have to pay 20-25 planters in one hectare. You also have to pay ten laborers to do the pulling of seedling. The total is 30 persons and you compute that to PhP250 per day or PhP300 per day when you include the food for the morning and the evening. In broadcasting you only need one or two persons. That's how much you save on broadcasting.
- [19] R: Do you practice synchronous planting?
- [20] L: No, we don't. We don't have problems in water. Sometimes we have problems in pest but not always.
- [21] R: When you did transplanting before do you have a *cabecilla*?
- [22] L: Yes, we did before.
- [23] R: Where are the planters now?
- [24] L: I don't know what happened to them.
- [25] R: How do you pay transplanting before?
- [26] L: Ever since we pay them money. I don't remember paying them anything but money.
- [27] R: When did you start planting?
- [28] L: I inherited our farm in 2000, originally my father was the farmer. When he died, I continued as the farmer. Before, I just help my father in the farm.
- [29] R: In the harvest, do you pay them money?
- [30] L: No, we pay them ten percent. But, you have to prepare snacks for them sometimes it is expensive to prepare food. Before, laborers are not particular about the food farmers prepare. But now, laborers demand meals with soup.
- [31] R: In the harvest, do they have a *cabecilla*?
- [32] L: It is not a *cabecilla* but they have a leader. You don't have to pay him double because we pay paddies. You just say "harvest my farm" then he will bring his men over. I don't know their process of hiring in their group.
- [33] R: Do you know a harvester? Can you recommend me? I just want to interview him.
- [34] L: I can recommend you to my harvester. He has been harvesting for me for a long time.
- [35] R: Do most farmers sell fresh paddies or they sell dried paddies?
- [36] L: Some of them sell dried paddies some of them sell fresh paddies. It depends.
- [37] R: Where do you dry?
- [38] L: Most farmers dry on the side of the hi-way.

- [39] R: Where are the landlords?
- [40] L: They are just there. They don't care much of about farming. Most of landlords are professionals. We just pay them sacks of rice per year of cropping. In my case I pay my landlord 14 sacks of rice per cropping.
- [41] R: You mention earlier that farm laborers have found work in the zone?
- [42] L: They have, laborers maximize their time there while they are strong and young. That's why companies are competing with us here n the farm.
- [43] R: How about laborers who are jeepney divers or tricycle drivers?
- [44] L: They also do that but only a few of them.
- [45] R: Where do the farmers get financing?
- [46] L: That's the biggest problem for the farmers. Most of them loan from *takalanan*?
- [47] R: How does that work?
- [48] L: I you get PhP1,000 you have to pay two or 3 sacks. I am not sure. You have to ask another farmer. When the farmers need money for fertilizers, pesticides they loan but whenever you loan, it is the same interest. For example if your about to harvest and you loan PhP1,000 you still have to pay 2 sacks.
- [49] R: Does the zone have other effects on the laborers?
- [50] L: Like what I said, they are become harder and harder to find. You really need to plead to them. The labor cost is increasing because they can demand higher pay because they are few. For example in the rainy season you are in a hurry for land preparation, planting or harvesting, that's when they can demand for higher pay or favors.
- [51] L: For harvesters, you have to plead to them you have to say: "Please, I will prepare good snacks or I will feed you lunch and dinner". Image you have to feed 20 people.
- [52] R: How do the laborers decide how much they will ask for? Who decides that they should be paid PhP250 a day?
- [53] L: They decide among themselves. Then sometimes we haggle with them. We tell then "we can't afford that". But you don't have a choice. You just have to agree with them.
- [54] R: That's what I will study here in your village, the effect of the SEZ on farm labor. Can you refer me to an old farmer and a harvester?
- [55] L: I can refer you to my brother in law and my harvester. My brother-in-law has been farming before the zone.

Interview Transcript 10

Informant: Miring (Farmer in the village of Biaan)

Date: March 10, 2015

Time: Around 9 a.m.

Venue: Under a tree just outside the farmer's hut.

Interview Environment: The Farmer is supervising a laborer harrowing his plot. It is the second time we met after a municipal extension officer introduced me the day before. The conversation is often interrupted because the farmer needs to instruct the laborer what to do.

R = Researcher

M = Miring

- [1] R: When did you start farming?
- [2] M: I started farming in 1953. I inherited the land from my parents who migrated into the village from Cavite (Cavite is the province across Manila Bay).
- [3] M: Most of villagers here, like me, are migrants from Cavite and its neighboring province Batangas.
- [4] R: Is it difficult to find laborers here in your village?
- [5] M: Most laborers have other side-jobs such as construction.
- [6] R: How do you find laborers in the harvest?

- [7] M: We hire someone to find the harvesters. We pay harvesters one day in advance because that is the tradition in the village.
- [8] R: How do you pay harvesters?
- [9] M: I have been paying laborers and harvesters wages for so long. Laborers prefer wages. It is what they want.
- [10] R: Was there *hunusan* in the your village before?
- [11] M: There was before.
- [12] R: What happened to it?
- [13] M: Laborers got jobs in the factories. Many of them worked in construction. They started not accepting in-kind shares anymore.
- [14] R: Why do you think laborers don't want to be paid in-kind shares?
- [15] M: Laborers will have to dry their paddy and pay for milling. It is a long process. This is additional work for them. With wages, they have money right away. They may not be accustomed in handling and drying paddies, unlike before.
- [16] R: How do you dry paddies?
- [17] M: We use canvasses. We lay it over our fields.
- [18] R: Why not use the road?
- [19] M: It is unpaved. It is hard to use when it rains. And it is small. No one can pass through if we lay our paddies there.
- [20] M: Laborers here prefer money so they can buy groceries and liquor for the evening.
- [21] R: Is there no one buying fresh paddies in the village?
- [22] C: None. Before there are, but now no one is buying.
- [23] R: What happened to the buyers?
- [24] M: The same reason for laborers. It a long process especially if you only have few paddies.
- [25] R: What do you think is the advantage of *hunusan*?
- [26] M: Before, people care more about the farmers' plants as it grows. Laborers offer free weeding services, they constantly monitor the water level to make sure that the plants have enough. They also on the look out on the presence of pests.
- [27] M: One instance happened a few days before. The bunds of my plot broke and the water inside the paddy run out resulting to the stunting my plant. It resulted to a low harvest that season. That would never happen if other people in the farm care about each other's paddies.
- [28] M: If there is *hunusan*, maybe everybody will help the farmers to attain more harvest through simple acts such as monitoring for pest, looking out for water levels in the paddy field. I hope *hunusan* will return here, but the laborers wont cooperate. *Hunusan* should start here for us to save money.
- [29] R: Why don't you farmers start the *hunusan* again?
- [30] M: Laborers prefer wages. It is what they want, so we have no choice. Most laborers cannot wait for the harvest season or until the farmers can sell the dried paddies or milled rice. They earn to live a day at a time, so they prefer to be paid through wages.
- [31] R: What do you think is the advantage of paying daily wages?
- [32] M: If a farmer wants to have more rice to sell or to eat, it is good to pay harvesters instead of *hunusan*.