Ph.D. Thesis

Rural Socio-Economic Development: Sustainable Agriculture Dependent on Utilizing Regional Resources Comparing Japan and Thailand.

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Chapter 1

General Introduction

1.1 Rationale

Economists, policy makers, and rural development practitioners have been aware of the rural development problem over the past fifty years. Population mobility is evident in rural areas. People are still moving to urban areas, which have emerged in all nations. Rural areas are aging and educational attainment is lower, as are levels of public service. Not only are the profiles of rural areas changing, but the perception of the role of rural areas held by the masses has also shifted, especially modes of land use (Ruth McAreavey, 2009). Because rural areas are mainly used for the stability of food and agriculture, problems that occurred in rural areas are important to take into consideration.

Rural resources are in need for both the private and the public sectors. The costs of agricultural production are rising while consumers are increasingly demanding cheaper and higher quality food. Food security arguments have re-emerged in recent years within international trade negotiations as a means of justifying subsidies. This phenomenon has spread in Europe and Asia. Rural areas in the 21st century have shifted to reform rural and agricultural policies. As a result, integrated rural development, multi-functionality, and bottom-up approaches have became the much-discussed concepts. Similarly, in Thailand, the government has been trying to reform rural and agricultural policies.

Since the Bowring Treaty in 1855, Thai farming has been involved in commercial agriculture and the international trading business. As a result, Thai gross economics has been brought to capitalism. However, the majority of Thai agriculture still aims for self-sufficiency. Meanwhile, government policy is aimed at commercial agriculture and its effect has been on the farmers in terms of debts, land lost, and socio-cultural destruction of agricultural communities.

During the past 40 years, since the first National Economic and Social Development

Plan in 1961 began attempts at socio-economic development, the problems have been related to the development of the agricultural sector. In this case, the sector is not focused on the rice fields, but on Thai farmers and rural communities in order to generate agricultural trade and commerce, not merely subsistence living. Free trade has emerged in Thailand and there is a high demand for rice and sugar. The demand for rice has increased the amount of cultivated farmland. The export of rice has increased and became the major export from the country's central region. The pattern of natural resources in the Northern provinces of Thailand means concessions of timber, especially teak, is the main trade export. Timber and rice have been exported for nearly a century.

For the past 40 years, the Thai farming society has gone through rapid changes due to the National Socio-Economic Development Program. The research project on the "Social Impact Assessment project," by Mingsarn Kaosa-ard (2000:27) studied ten villages around Thailand. Results found that during the years 1987-1997, the Thai economy changed from primarily subsistence production to commodity production rapidly, especially in villages that were influenced by globalization. These villages were in contact with the market through the marketing system, export, service, education, communication, labor exports, among other things. Moreover, fact finding of this study shows that agricultural production can be categorized into three types: (1) Subsistence Production, (2) Domestic Commodity Production, and (3) Export Commodity Production.

For example, the study on "Changes in Thai Rural Production," in the case of Ban Sak Luang, Amphur Li, Lamphun province, found that in 1985, farmers began using technology in the production process. In 1988, capitalists took advantage of access to the village to secure corn, soybean, and chili, while in 1996, corn was provided as the village commercial crop and become an industrial crop. There were two types of capitalists: those who bought land for crop cultivation only, and those who carried in crops to the village and agreed to buy products.

In Ban Traignam, Amphur Viangkosai, Chiang Rai province in 1980, people brought

industrial crops such as corn and cassava into the village. From 1980-1990, corn became an important industrial crop in terms of market demand and provided higher incomes to farming families. The impact of the mono-crop, however, was forest invasion and deforestation.

Small business farming has been trying to survive by applying other related choices: (1) “One household, two ways of production” is a particular farming style aimed in part at self-sufficiency and also at commercial gains, such as growing beans and rubber trees or corn and cabbage. (2) Joint plantation has been introduced to replace mono-crop agriculture, adding more than one plant into farming practices, as well as the raising of animals. (3) Friendly environment agriculture has been applied to avoid chemical use. (4) Related groups are established in order to benefit farmers through financial support, labor, and natural resources preservation. These related groups are considered to be social capital. For example, financial savings community groups have engaged group members in social welfare, including loans, medical care, and financial support for community projects in natural resource conservation. The objectives are to reduce risk within families and to maintain a farming lifestyle amid capitalism.

According to a survey in 2013, most agriculture farmers cultivate rice, especially in the northeastern part of the country. Information from the database system of the Department of Agriculture Extension, at the Ministry of Agriculture and Cooperatives, provides table (1.1), which shows the number of households by category of crops, while table 1.2 shows the number of rai farmed by category of crops.

Table 1.1 Number of households by category.

Region	Rice	Fruit	Crop	Vegetable	Flower and garden tree
Central	144,504	10,618	33,057	4,643	2,527
Western	127,851	17,098	36,661	14,246	2,263
Eastern	88,476	25,730	43,141	4,864	1,290
Northeastern	2,262,838	8,532	444,925	11,544	472
Southern	96,366	85,886	4,924	20,051	568
Northern	799,799	92,156	350,838	24,047	2,831
Total	3,519,834	240,020	913,546	79,395	9,951

Resource: Department of Agriculture Extension, search on 4/11/2013

Table 1.2 Number of rai by category

Region	Rice	Fruit	Crop	Vegetable	Flower and garden tree
Central	7.517,374.51	40,914.14	1,147,229.86	15,493.33	12,403.20
Western	4,375,919.69	173,534.62	1,140,365.82	69,941.94	16,891.87
Eastern	3,277,557.71	383,170.17	1,112,850.49	13,612.70	7,225.44
Northeastern	40,655,754.62	60,949.29	7,695,712.07	39,498.33	1,795.53
Southern	835,660.66	489,013.03	13,869.68	48,004.86	1,184.29
Northern	21,043,231.82	661,316.03	7,793,946.25	116,707.65	7,090.94
Total	77,705,499.01	1,808,897.28	18,903,974.16	303,258.81	46,591.27

Resource: Department of Agriculture Extension, search on 4/11/2013

Now the Thai agriculture sector has two main sectors, which are the Thai farming society and the agribusiness farmer. Thai farming society, a self-sufficient farming group, is focused on growing enough food to feed the farmers themselves and their families, and business is not the main point. Therefore, in these cases, family income is gained from other channels, not agriculture. On the other hand, agribusiness farming is focused on agriculture as the main source of income in order to respond to the demands of the market.

The study of the economic impact on Thai rural communities by Mingsarn Kaosa-ard (2000:27) concluded that the transformation of self-sufficient agriculture to agribusiness farming drives economic growth, but it also destroys rural community structure and social capital, such as joint plantations and labor exchange, called “Ao Raeng,” a labor exchange system of helping farmers in harvesting rice, corn, and/or sugarcane. In this labor exchange

system, each member must wait and take turns in order to harvest the crop. The system may cause a delayed harvest until the last turn of a particular farmer. Therefore, farmers are forced to employ labor or use harvesting machines. These are examples of the decline of socio-cultural capital. Moreover, Mingsarn also stated that the decline of socio-cultural capital happens when its benefit is dysfunctional for agricultural communities. This incident is likely to happen to communities near urban areas. For example, farmers cannot maintain their community's private irrigation.

The same result of the study on Social Impact Assessment: Synthesis Report by Prinyarat Leangcharoen and Ukrit Uparasit (2000:153), showed the impact of the economic crisis on the Thai rural community in Ban Pornsawan, Tambon Nonsa-ard, Amphor Nongruae, Khonkhaen province. The association and collaboration of farmers declined because of labor mobilization to urban areas within Thailand and abroad. In 1998, many association groups and collaborations were terminated. The terminated groups were joint plantations, financial savings groups for women, buffalo funds, rice banks, original breed chicken funds, disaster management funds, original breed pig funds, and others. The following question was raised: What would the future of Thai agriculture community be?

The above evidence reflects the social problems of poverty, which is one of the main problems for the Thai government. Policies and urgent support are needed for socio-economic development in rural areas to increase per capita income. Land abandonment is also rising because there is no younger generation who want to inherit the land and farm it themselves. Senior citizens are the majority population in agriculture. Younger generations aim for higher pay, looking for opportunities in urban communities. Additionally, employment rates in rural areas are low. As a consequence, the number of senior citizens in rural areas is increasing. The number has reached 20% of the population in some provinces.

The current situation requires humans to live in coexistence with information technology without the need for mass production. Nostalgia tends to increase, as well as the demand for local identity consumption. Some people aim to live in rural communities for

both leisure and settlement.

The turning point occurred once there was a realization in the local resources of nature, humans, society, and culture. Local resources are different in each areas, which creates local identities and later turns into “capital” in rural development, as related to concepts of economists in economic community, economic creativity, and creative tourism. Despite the above-mentioned, socio-economic development relies on many aspects.

Consequently, a discussion on socio-economic development in rural areas must include the agricultural sector in policies and practical dimensions as most of the income in rural areas derives from agriculture. It is the basis of socialization for the population of rural areas.

The study of rural development policy and practice is significant. Among the big problems in the rural communities of Asian countries are both that the Japanese and Thai governments have implemented various policies to revitalize socio-economic development in rural areas. Thus, the study of utilizing local resources to revitalize rural areas from Japanese and Thai experiences is necessary.

2. Objectivity

The study focuses on the future of Thai agricultural farmers as they can reflect an endless battle of socio-economic development in rural areas. Because the Thai government has struggled to put in place adequate policies, problems seem to be duplicated. From the study of Japan’s success in restoring the economy and rural society, this researcher has considered related key factors to the context. Therefore, objectives of this study are as follows:

- To examine the utilization of local resources to revitalize rural areas in Japan and Thailand in terms of key factors and rural area revitalization.

3. Methodology

This study has been carried out using qualitative research methodology including employing documentary analysis, in-depth interviews, and participatory observation in the field of OVOP and OTOP, using the agricultural farm park as a community enterprise and organic farming.

Field study in Japan is conducted by using case studies to run in-depth interviews at:

- Moku Moku Farm, Iga city, Mie Prefecture
- Inuunig Village Organic Farm, Nagoya Prefecture
- Bell Farm, Matsusaka City, Mie Prefecture
- Tuduki Harvest Farm, Yokohama Prefecture

Interviewees are farm managers of Bell Farm, Moku Moku Farm, and Inuunig Farm, the Toduki Havest Farm owner and staff, and academics.

The **Period of study** for the research paper to study in Japan is from June 2014 until June 2016.

4. The scope of Study

This thesis contains six chapters, as follows:

Chapter 1 General Introduction

Chapter 2 Rural Development in Thailand: Status, Concept, and Policy

Chapter 3 Challenges for Thai OTOP community enterprises: experiences from Thailand and Japan, a comparative study

Chapter 4 The development of community enterprise: a case study of Moku Moku Farm in Mie prefecture

Chapter 5 Rural socio-economic development: sustainable agriculture dependent on utilizing regional resources comparing Japan and Thailand

Chapter 6 Conclusion and discussion

5. Terms of Reference

(1) Community enterprise

Community enterprise is an operation to manage “capital” of rural areas creatively and with self-reliance. It is an operation in which community members own production inputs, such as manufacturing, trading, and finance. These factors are the causes of economic benefits as they can create general income and occupation. In terms of social benefits, they can create a strong bond within families and communities to contemplate, respond, and share their opinions together. The aim of community enterprise is not only to generate income in terms of financial benefit, but also to gain a strong sense of a peaceful community.

(2) Sustainable agriculture

Sustainable agriculture refers to farming in which farmers are self-reliant in terms of production inputs, manufacturing, marketing, and product distribution, as well as the ability to process food, without relying on external funding sources, which later causes a lack of power in negotiation. Farmers can earn fair revenue under a well-organized group with modern technology that helps them create social balance and stability.

(3) Utilizing regional resources

Utilizing regional resources means the use of natural resources, human resources, and local capital in rural socio-economic development.

(4) Rural socio-economic development

Rural socio-economic development means the development of revenue as a community in terms of rural society. They can view and manage issues such as the elderly population, land abandonment, poverty, etc.

Chapter 2

Rural Development in Thailand: Status, Concept, and Policy

2.1 Overview

The development theory that emerged in the late 1970s was based on the neoclassical theory. This phase of development theory viewed the problems of underdevelopment as resulting from overly active government or state-led development. Therefore, sustaining growth and stability required government intervention. From the late 1970s to the late 1990s, government failure was blamed for impediments to development. This period was called neoliberalism, which emphasized liberalizing domestic and international markets for both goods and factors of production, which would help a country achieve sustained economic growth. This market-oriented development strategy dominated the world, especially during the 1980s. The Washington Consensus, a set of reforms aimed at stabilizing the economy via liberalization and openness, is evidence of developmental thought during this stage. However, neoliberalism eventually lost some of its credibility because of unrealistic assumptions of efficient markets and resource allocation that a country would achieve through market liberalization. During this era, there were several economic collapses, such as the Mexican peso crisis in 1994, the Asian financial crisis in 1997, and the Russian ruble crisis in 1998. Most of the countries under the Washington Consensus performed poorly in terms of growth and poverty reduction. The institutional problem was thought to be an obstacle to economic growth and development. In order to drive long-term economic growth, technology, human capital, and good governance were needed as the agenda of development.

Other challenges to development concerned environmental and food security issues. Therefore, contract farming, a sufficiency economy, and organic farming were expected to be development goals after the new millennium. The theoretical framework and the practices of these are discussed in next chapter.

In this chapter, the researcher will explain the status, concept, and policy that is involved in rural development in Thailand and the concepts of contract farming, the sufficiency economy, and organic farming.

2.2 Rural Development in Thailand: Status, Concept, and Policy

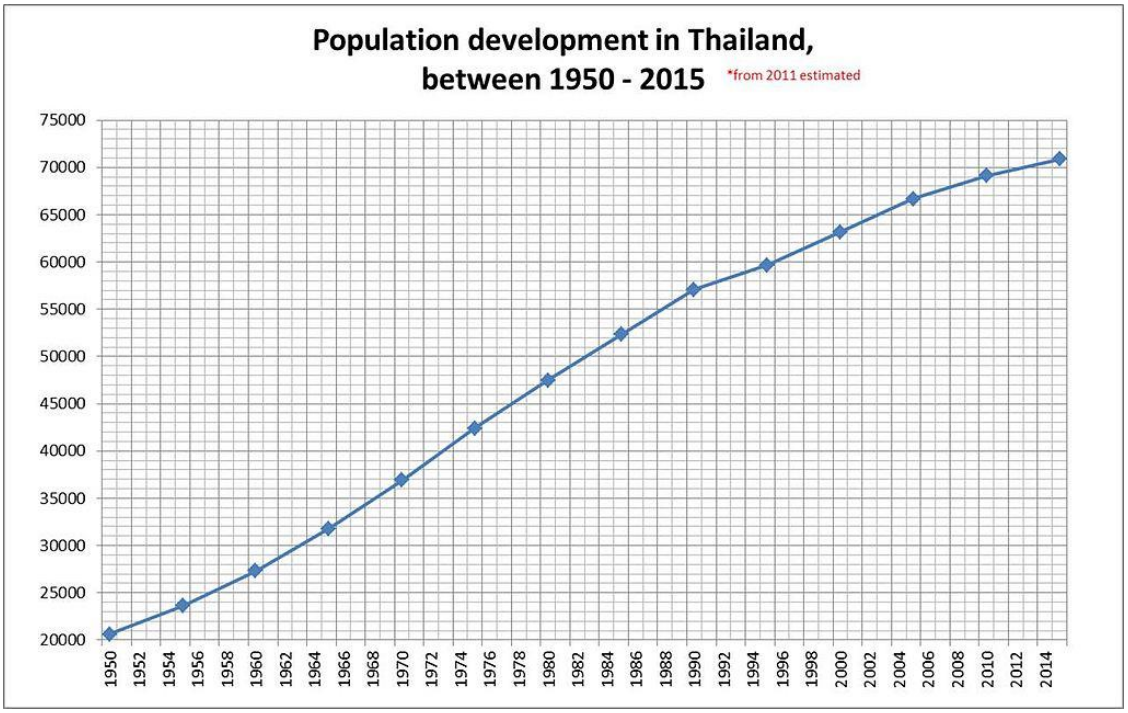
2.2.1 Population

Population is one of the most significant factors that must be taken into account in formulating economic, political, and social programs. Early in 1970, the Thai government announced its policy towards a reduction of the population growth rate. In the 1990s, the population problem remained one of the country's basic problems. The failure of rural development was a factor pushing people out of their village communities, further intensifying urban congestion, unemployment, and crime (Suchart Prasith-rathsint, 1981: 5-7). The last official national census was carried out in Thailand back in 2010, and the country's official population was declared at 65,479,453. Current estimates show a 2016 population in Thailand of 68.1 million, an increase from 2014's estimate of 67.7 million. Th increase is concentrated in the rice growing areas of the central, northeastern, and northern regions. Accurate statistics are difficult to arrive at, as millions of Thais migrate from rural areas to cities, then return to their place of origin to help with seasonal field work. Officially, they have rural residency, but spend most of the year in urban areas. Thailand's successful government-sponsored family planning program has resulted in a decline in population growth from 3.1 percent in 1960 to around 0.4 percent in 2015 (World population review, 2015).

The survey on population composition of the Statistics Bureau in 2005-2006 found that 23.1 percent of the population was under 15 years of age, 66.0 percent was of working age (15-59 years old), and 10.9 percent was in the old age group of 60 years and over. The proportion of the population decreased among the youth, while the proportion increased slightly at the ages of 15-59 and 60 years and over. Thailand has an aging population structure.

Thailand has been faced with rapid aging. The rapidity of population aging in Thailand means that the country has a shorter time to deal with the new challenges related to an aging society, especially in the rural areas. In 2014, the aging population was 15.4 percent. It is estimated to reach 19.8 percent in 2025 and 29.8 percent of the total population by 2050. The rural areas have only an aging and youth population structure. People in the working ages (15-59 years old) are moving to urban areas.

Fig. 2.1 Population development in Thailand 1950-2015



Source: The National Statistical Office

2.2.2 Average Income

The National Statistical Office (NSO) carried out the 2015 household socio-economic survey from January to December 2015. The results showed that household income in 2015 earned an average of 26,915 baht per month. About half of households in the whole country (49.1%) were in debt. The average amount of debt was 156,770 baht per household. The main purposes of borrowing were for household spending (75.0%), which included household

consumption (41.3%), the purchase of house and/or land (32.4%), and loans for education (only 1.3%). Loans for investment and others purpose (25%) were divided primarily among farming businesses (14.3%), followed by non-farming businesses (10.2 percent). Formal loans (36.7%) were used for household consumption, which decreased from the year 2013 (41.3%), followed by borrowing for the purchase of house/land (32.9%), and loans for agricultural business (14.3%) (The National Statistic Office, 2015). By household socio-economic class (i.e. occupation), professional, technical, and managerial workers earned the highest average income, at approximately 56,633 baht average. Households that earned lower average incomes were those in the fishing, forestry, and hunting professions 13,410 baht.

2.2.3 Status of Agricultural Areas

The agricultural census in 2013 found that most of the agricultural holdings (5.9 million members, 96.3%) were cultivating crops. Of this number, about 21.3 percent also operated other types of agricultural activities, such as livestock farming, freshwater culture fisheries, or sea salt farms. Agricultural holders cultivating single agricultural crops (up to 78.5%) were rearing livestock, had freshwater cultures, or farmed sea salt. Each activity might operate with a variety of crops or a variety of livestock. The agricultural holders that cultivated single crops rose to 80%. Two-type activities of agricultural holdings were found to be 18.7%, while holdings of three-type activities and above were found to be only 1.3 percent. (The National Statistic Office, 2013)

As of the census day (1 May 2013), Thailand had a total of 5.9 million agricultural holdings, which accounted for 25.2 percent of the total households of the country. The total area of the holdings was 116.6 million rai, or an average of 19.7 rai per holding. The majority of agricultural holdings (2.7 million, 46.4%) were located in the northeastern region, which also had the biggest area of agricultural holdings at 54.6 million rai (46.8%). The northern region was second in the number of holdings and the area of the holdings, at 1.3 million members and 27.5 million rai (22.0% and 23.6%, respectively). The southern region had 1.0 million members

and 14.9 million rai (17.3% and 12.8%, respectively). The central region had the least number of holdings, 0.9 million members (14.3%), with the area of the holdings being 19.6 million rai (16.8%). (The National Statistic Office, 2013)

The majority of agricultural holdings (92.6%) used fertilizer. Of those, 86.9% used inorganic (i.e. chemical) fertilizer. Of that number, approximately 51.9 percent used only inorganic fertilizer. The use of organic fertilizer only and the use of bio-fertilizer only were found to be 2.2% and 1.7%, respectively. Considering the fertilizer use from 2003 to 2013, it was discovered that holdings used an increasing amount of fertilizer, from 90.2 percent in 2003 to 92.6 percent in 2013. The use of inorganic fertilizer only decreased from 56.8 percent in 2003 to 51.9 percent in 2013. In regards to the average amount of inorganic fertilizer used per rai, it was found that it increased from 41.8 kg/rai in 2003 to 57.3 kg/rai in 2013. (The National Statistic Office, 2013)

From the total area of holdings of 116.6 million rai, about half of the total area (51.3%) was farmed for rice, followed by field crops (22.4%), rubber trees (14.5%), and permanent crops and forest (8.5%). The result of this Agricultural Census revealed that over the past 10 years, the area of rubber tree plantations and field crops grew significantly. In contrast, the area under rice and permanent crops and forest decreases. By region, the major use of agricultural land in the northeastern, northern, and central regions was for rice (67.5%), followed by field crops (34.8%). The area of land holdings in the southern region was mainly used for rubber trees and for permanent crops and forest (66.6% and 24.4%, respectively). The land use for permanent crops and forest in the central and northern regions was found to be 14.6 percent and 9.2 percent, respectively, while the land use for rubber trees in these two regions was 8.5 percent and 3.2 percent, respectively. (National Statistic Office, 2013)

2.2.4 Economic and Social Development Concept and Policy

After Thailand's National Development Plans launched in 1961, and up to the 1980s, rural development was of the highest priority. The strategy was to increase productivity and thus

the income of the farmers through a more intensive and more appropriate use of land. The goal of the government was to promote economic progress.

From the first of Thailand's National Development plans to the seventh, Thailand has faced various problems, such as population growth, regional fertility differentials, migration and redistribution, unemployment, and social concerns (crime, education, welfare for the rural elderly). Since the Eighth Plan (1997-2001), the development paradigm has shifted from a growth-oriented approach to a new model of holistic "people-centered development." In order to ensure more balanced development, priority was given to broad-based participation that would actively engage civil society, the private sector, and academia in formulating the national development plan. However, economic mismanagement, which led to the 1997 Asian Crisis, prompted the adoption of the Philosophy of a Sufficiency Economy as the guiding principle in the Ninth Plan (2002-2006), while its practical applications became evident during the Tenth Plan (2006-2011). In order to achieve sustainable development with a people-centered approach, it is necessary to enhance the country's self-resilience by strengthening its economic and social capital and improving risk management in order to effectively handle internal and external uncertainties (The Eleventh National Economic and Social Development Plan, 2012).

Academics, especially Chatthip Nartsupha and Prawet Wasri, and NGOs pushed forward the theory of Wattanatham Chumchan as a community culture approach to develop socio-economic stability in rural communities. This approach has controlled various socio-economic development programs up to the present day. The essence of the "community culture" theory is as follows: first, it emphasizes the value of anti-modernism, based upon a small-scale economy, small government, social cooperation, and spiritual satisfaction; second, it advocates a populist style of political dominance based on independent autonomous communities; third, it aims at the recovery of the individual's identity and the national identity (Atsushi Kitahara, 1996:84-98). Additionally, there are various emergent concepts of community development, such as participation, self-reliance, and the potentiality of the people themselves.

In the Eighth Plan period, Thailand encountered the economic crisis of 1997. The impact of the economic crisis spread in ASEAN countries and in South Korea. Its impact on the community was profound, including increasing unemployment, decreasing income and increasing debt, increasing household expenditures, increasing the cost of agricultural production, increasing the cost of education and the student drop out rate, and hampering people's physical and mental health. Although the government adopted several programs to help people who were affected by the crisis, these programs, such as the Social Investment Fund (SIF), were not implemented effectively. Moreover, the Ministry of the Interior, which is in charge of extensive community development programs and projects, was responsible for the community self-reliance project.

Many people tried to turn the crisis into an opportunity. Some people returned to their hometowns and took up farming again. They had different ideas about changing the ways of production, using technology, adding marketing channels, and exploring value-added products. These were ideas they had gathered from the knowledge and experience that they had accumulated while working in urban areas.

For the community, the government viewed the rural area as a rice bowl to support unemployed workers returning home. The villagers reconsidered their rural lifestyles, finding much to be appreciated, even with limited material possessions. "One household with two modes of production" or "self-reliance" here means they would first produce enough food for themselves, and only then selling any surplus production for profit. After the crisis, the villagers learned to survive by self-reliance. Some started to network horizontally within their community, as well as with other communities, for mutual support. There were two alternatives for the communities. First, the villagers had to help themselves. In addition, they should: (1) promote horizontal and vertical solidarity, for example, through savings groups and the networking of savings groups; (2) promote community wealth through community business, including local currency; (3) build social safety nets through informal local social security arrangements, such as Khru Chup's group in Songkhla province or Phra Supin Pani To's group in Trat province.

Second, the villagers had fight for the government to provide price guaranties for crop products such as rice, sugar cane, and cassava. In addition, they had to fight for help from the government for debt relief from the Bank of Agriculture and the Agricultural Cooperatives. (Pranee Khattiyos, 2003:147-154)

During the Tenth Plan, the Philosophy of the Sufficiency Economy was applied extensively in Thailand's development, and this resulted in greater resilience in various aspects of Thai society while enabling the nation to cope effectively with the impacts of the 2008 global economic crisis.

The basic concepts of the Eleventh Plan were derived from the guiding principles of the Eighth through Tenth Plans. The Eleventh Plan adhered to the Philosophy of the Sufficiency Economy, focused on progress that is people-centered, and balanced the various dimensions of development. However, the application of the plan's main concepts needed to address significant changes. It had to direct the country's evolution towards achieving well-being and sustainable development over the long term. Vision 2027, drafted by Thai people from all walks of life, stated that "Thai people are proud of their national identity, in particular their hospitality." They also followed the path of the Sufficiency Economy, using democratic values and good governance. Public services of high quality are provided throughout the country. Thai people live in a caring and sharing society and enjoy a safe and sound environment. Processes of production are environmentally sound, and food and energy are secure. The economy is based on self-reliance and is to stay competitive in the global marketplace. Thailand has actively contributed to the regional and global communities with dignity." (The Eleventh National Economic and Social Development Plan, 2012)

2.3 Rural Socio-Economic Development in Thailand: Practice

Contract farming, the sufficiency economy, and organic farming are the alternatives for communities in Thailand among the rural socio-economic development policy.

2.3.1 Contract farming

Contract farming, as defined by the Cabinet Resolution as the government sector in 2005, means an arrangement made between a private company – the buyer of product – and farmers, referred to as producers or sellers of the product. The two parties are required to sign a contract prior to the commencement of the production process. In addition, the agreement on the cost and the quantity of the purchased outputs is required to be included in the Contract.

Contract farming means the contract made between farmers and a company in which the business concerns agriculture. Farmers may make an agreement with seed or livestock companies to plant crops or raise animals as agreed in the requirements and conditions mentioned in the contract signed by both parties. The company, for its part, is responsible for providing the farmer with the seeds or animals, fertilizers, any supplementary food, medicine, or other materials, and is required to buy all production from the farmer at a price agreed in advance by both parties. (HomeNet Thailand, 2012)

The Bureau of Agricultural Development Policy and Planning (2009) has research on contract farming systems showing that contract farming comprises three important dimensions, as follows (HomeNet Thailand, 2012):

1. Market needs — determining the quality, quantity, and cost of produce that farmers are required to produce and the company is required to buy.

2. Production materials — determining the roles of each contracting party in supplying required production inputs.

3. Production — determining the role of the company in providing technical assistance to farmers and the farmer's use of his/her skills and experience in making production decisions.

Contract farming is playing an increasingly important role in many developing countries (Matthew Warning and Nigel Key, 2002). It has become more popular in many countries, including China, South Africa, and Southeast Asian countries. Contract farming carries both a positive and negative image.

Many economists believe market risks are the primary reason for contract farming for farmers and for food processing firms. Market prices of agricultural commodities are very risky, especially for perishable and high value products. Another important motivation for farmers using contracts is to reduce transaction costs, because the costs of planning, implementation, and supervision of market transactions are very high for farmers to market their products directly. Farmers choose large firms as their processors and marketers in order to reduce such transaction costs. The results of confirmed by empirical analysis from other countries, both developed and developing. The same reason of high transaction costs also applies to agribusiness firms (H. Holly Wang et al., 2011). The growth in contract farming has sparked controversy over its social and economic impact in agrarian communities. Contract farming has the potential to significantly raise the income of growers and may enhance rural development by serving as a source of information about new crop technologies. In addition, contracts frequently provide the credit, input, information, and services smallholders need to cultivate and market lucrative nontraditional crops. Contract farming may also create positive multiplier effects for employment, infrastructure, and market development in the local economy. As economic reforms reduce public expenditures for credit programs, staple crop price supports, input subsidies, and government research and extension programs, agro-industrial firms may not only provide these services to farmers without government resources, they may also take advantage of local information unavailable to traditional governmental institutions. (Matthew Warning and Nigel Key, 2002) For some crops which grow in special climates or geography, another advantage of contract farming is the bargaining power of farmers to raise the cost of products.

However, in many environments, the impact of contract farming on rural development depends importantly on the types of growers with whom the agro-processing firms contract. If firms choose to contract primarily with wealthier growers, then poorer members of the rural population will fail to benefit directly from those arrangements. Hence, contract farming has the potential to affect the way income is distributed within a rural community and can exacerbate

existing patterns of economic stratification. (Matthew Warning and Nigel Key, 2002) Moreover, contract farming has destroyed the potential in the agricultural production process and self-sufficiency of farmers. Farmers were always exploited by company contracts, with the size or quality lower than that of the conditions of company.

The Thai government launched contract farming as a government policy before the 6th National Economic and Social Development Plan (1987-1991) (Songsak Sriboonchitta and Aree Wiboonpoongse, 2008). When the Thai government promoted exports in the 4thNational Economic and Social Development Plan (1977-1981), the resulting expansion of cash crops included cassava, sugar cane, kenaf, maize, etc., for dry lands and soybeans, peanuts, and mungbeans for both dry and irrigated land. Agro-industries grew rapidly, especially in canned fish, pineapple, and tomato products. By the middle of the 7th Plan, the export value of agro-industries growth rate rose to 14 percent per year. Compared to other Asian countries, by early 1990, Thailand likely had the most experience with contract farming.

In 1987, the Cabinet came up with the solution of the "Four-Sector Cooperation Plan to develop agriculture and agroindustry." The plan aimed at improving the production system to reduce price risk and market uncertainty while improving farmers' technical knowledge and raising production efficiency. Under this plan, agro-industrial firms, farmers, financial institutions (Bank for Agriculture and Agricultural Cooperatives: BAAC) and government agencies were to work together (Songsak Sriboonchitta and Aree Wiboonpoongse, 2008). The Ministry of Agriculture and Cooperatives had various responsibilities, such as coordinating with BAAC and private companies to provide support and input factors to farmers, to establish coordination centers within the private sector, and to provide training in contract farming for farmers and local officials in various aspects. Agriculture products that were support under the government contract farming policy included onions, garlic, potatoes, vegetables, fruits, and certain tree varieties (eucalyptus). There was high export potential for high quality rice, fruits, flowers, and fresh-water and coastal-swamp fish.

Sriboonchitta and Wiboonpoongse (2008) provided and overview on the development of contract farming in Thailand at the end of the Sixth plan, in 1991. The NESDB recommended that contract agreements be more effective and beneficial to all parties concerned. The Subcommittee of the 4-sector Plan came up with several measures in response to issues regarding fairness and risk reduction to assure cooperation between the government agencies and firms. Measures focused on coordination and risk sharing, such as a "project fund" to provide compensation for production and marketing risks, or "group farming" and "cost sharing" among farmers and firms. The last alternative was considered a novel measure and was not implemented. With the 7th plan, to raise the probability of success, the subcommittee consented to support agro-industrial projects (under the 4-sector Plan) that could reduce production and marketing risks and identify potential target areas and farmers. The proposals were approved based on the highest benefit terms provided to participating farmers by the firms. To assure fairness, in 1999 the government took charge of regulating contract compliance using a standard agreement for companies and farmers, issued by the Department of Internal Trade, which is in effect today. In the 9th National Plan (2002–2006), though there is no explicit mention of contract farming, government agencies continued to implement it. In 2004, to alleviate a trade issue between the People's Republic of China (PRC) and Thailand, the government compensated farmers if they reduced garlic crops and switched to other crops under contract farming. In addition, the private sector has been encouraged to extend contract schemes to neighboring countries under a sub-regional economic cooperation agreement called "Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy" (ACMECS). The scheme enables firms to reduce the seasonality of raw material procurement.

Thai agricultural marketing systems generally are competitive. In contract farming, a quasi-monopoly has been necessary for success. Japanese cucumber contract farming in the early 1990s appeared to be a monopoly when it had a small and specific market. There was only one company making contracts with farmers. Presently, the crop has become more common despite the strict specifications, and quality is maintained by the few companies exporting to Japan. In

high demand crops like potatoes and other vegetables, contracted markets are highly competitive. In 1990, there were only two potato processing companies contracting farmers in Northern Thailand, but five years later, there were seven potato processing firms and the competition for contract farmers became intense. Contract farming has expanded from Chiang Mai to other provinces in the North. Commodities include poultry and hogs, Japanese rice, basmati rice, organic rice, vegetable seed, corn seed, and various fresh vegetables for frozen and pickled products. The commodities are contracted by large and medium firms owned by multinational companies and joint ventures or by domestic companies. After the 1997 economic crisis, smaller firms left the industry, but competition continued among fewer but larger firms. Now there are at least 3–4 companies competing for the same crops. As disclosed by one company, firms need to exercise different tactics to retain their farmers. (Sriboonchitta and Wiboonpoongse, 2008) There are two big companies involved in contract farming - the Charoen Pokphand Group (CP) and Betagro Co.Ltd., which are the main contractors of farmers in Thailand.

Farmers are aware of many issues if they contract with companies, such as financial issues, health issues, environment issues, and legal issues. These issues may bring various problems. For example, farmers are normally required to maintain production equipment and the environment in accord with agreed conditions determined by the company. When the chicken and pig farmers want to raise product, they are required by the companies to change the original "open air system" to a "closed air system," which requires 200,000-500,000 BTH for the enclosures. Furthermore, risk in contract farming depends on many environmental factors, such as the ability to manage the farms, mistakes that occur from the technological operation of the systems during the production process, potential claims from natural disasters that are not covered by insurance. Farmers are responsible for all the damages. In the production process cycle, the company requires the use of various kinds of fertilizers, drugs, and chemicals to protect the product from any possible damages. Many farmers are not well-informed on how to use these products and the correct ways to protect themselves. Thus, in some cases, the farmers' health is

jeopardized. The use of fertilizers, drugs, and chemicals to protect the product from any possible damages results in pollution, degradation of the environment, and loss of the community's natural assets and the life of the community itself in the vicinity. Buchorn Keawsong (2006) divided the legal relationships typically found between famers and company into four types: (1) the relationship between employer and worker or contractor, (2) the relationship between a buyer and a seller, (3) the relationship through an agent, and (4) the relationship between the seller of production inputs and farmers. The details of these relationships must be clearly stated in the contracts.

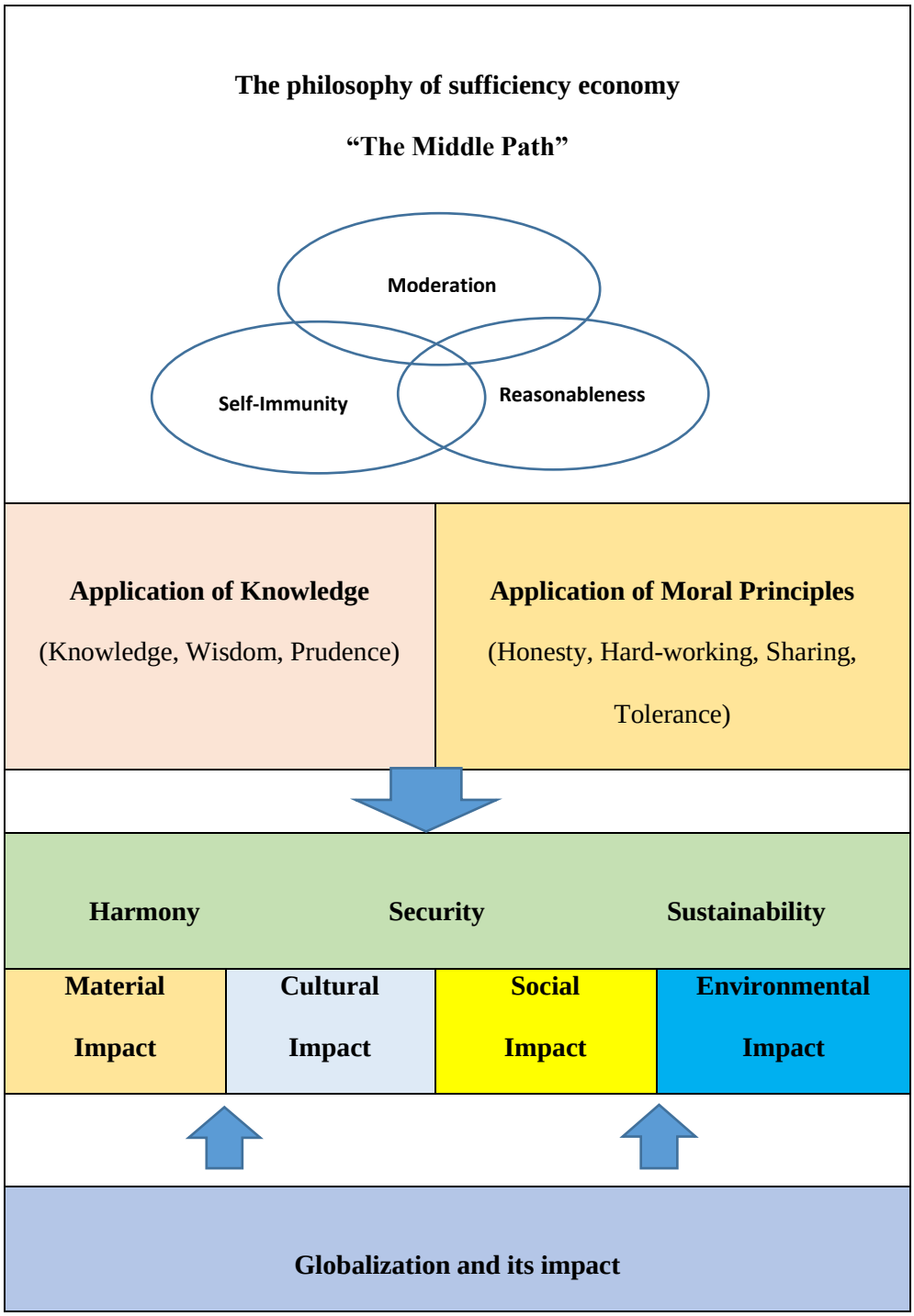
At the present, Even if some contract farmers can adapt to technology and new habits of agricultural management, and some firms can be competitive in the global market, it can be said that the government has failed in finding a balance of power between farmers and companies. Farmers are treated unfairly by companies and have a lack of negotiating power.

Over the past three decades, Thailand has experienced tremendous progress in contract farming. However, it is only one alternative for Thai farmers and is still a failure at the early stage of contract farming systems despite the fact that the government supports the policies.

2.3.2 Sufficiency Agriculture

After the Asian financial crisis in 1997, His Majesty King Bhumibol Adulyadej proposed the philosophy of sufficiency economy (PSE) to the people of Thailand on 4 December 1997. The philosophy guides people in living their lives according to the middle path. The concept of PSE can be applied to the individual level, the community level, and the national level. The PSE framework has three interlocking elements representing the three principles of moderation, reasonableness, and self-immunity, as shown in figure 2.2 (Mongsawad, 2010).

Fig. 2.2 The philosophy of sufficiency economy framework



Source: Mongsawad, 2010 reference from Thongpakde (2005)

Figure 2.2 shows the three interlocking elements representing the three principles of the PSE as moderation, reasonableness, and self-immunity. These three principles are interconnected and interdependent. Moderation conveys the idea of people living their lives on

the middle path, not the extremes. People should rely on themselves without overindulgence. This way of living occurs when people have reasonableness - accumulated knowledge and experience, along with analytical capability, self-awareness, foresight, compassion, and empathy. They must be aware of the consequences of their actions, not only for themselves but also for others. The third principle, self-immunity, refers to the ability of people to protect themselves against any external turbulence and to cope with events that are unpredictable or uncontrollable. It implies a foundation of self-reliance, as well as self-discipline. Apart from these three components, two other conditions are needed to make the principles of sufficiency economy work: knowledge and morality. Knowledge encompasses accumulating information with insight to understand its meaning and the prudence needed to put it to use. Morality refers to integrity, trustworthiness, ethical behavior, honesty, perseverance, and a readiness to work hard. By practicing these three principles with the two underlying conditions, people would be able to live securely in harmony in a sustainable society and environment. Such a way of living does not signify self-sufficiency; rather, it reflects self-reliance - the ability to tolerate and cope with all kinds of malignant impacts of globalization. (Mongsawad, 2010)

PSE was applied to government policy, especially in the 8th National Economic and Social Development Plan (1997-2001), and influences government agencies for implementation. In the private sector, companies such as The Siam Cement Group, the PTT Public Company, Toshiba Thailand, the Pranda Jewelry Company, and Chumporn Cabana Resort, have all applied PSE to encourage corporate pursuance of sustainable profits via ethical approaches, including good corporate governance, social responsibility, mindfulness of all stakeholders, and business prudence with risk management.

The Philosophy of Sufficiency Economy calls for balanced and sustainable development at all levels**:** the individual level, the community level, and the national level. As a practical example of applying the philosophy of Sufficiency Economy, His Majesty the King has developed systematic guidelines for proper management of land and water resources, based on His experiments with integrated agriculture over the years. This system of agriculture is

commonly known in Thailand as *New Theory Agriculture*, which is also regarded as a new form of sustainable agriculture towards self-reliance for the rural household. The main purpose of the New Theory Agriculture is to make farmers more self-reliant through a holistic management of their land, while living harmoniously with nature and within society. The complete New Theory Agriculture has three stages: (1) sufficiency at the household level, (2) sufficiency at the community level, and (3) sufficiency at the national level.

The National Economic and Social Development Board (2000) explained in the statement of 10th UNCTAD 2000 on the New Theory Agriculture that there are three stages to practice, as follows:

The first stage of the New Theory aims to create self-reliance and self-sufficiency at the household level; the so-called *self-sustaining agricultural landscapes*. For a household with 4-5 members - an average household size in Thailand - it requires an average of 1.5 rai (2.4 hectares) of land. The land shall be divided into four parts, in the proportions of 30/30/30/10. The first 30% segment of the land - approximately 0.48 hectares, is for rice cultivation, while the next 30% is for field and garden crops. The third 30% is to dig a pond of 4 meters deep, which will have a storage capacity of 19,000 cubic meters. The remaining 10% is for housing and other activities.

Fig. 2.3 Land division for New Theory Agriculture

Land divided into four parts			
30 %	30 %	30 %	10 %
rice cultivation	field and garden crops	pond of 4 meters deep	housing and other activities

Furthermore, increasing the sustainability of farming systems involves utilizing a holistic method of management practices that have multiple benefits. Among these practices is

making use of interrelationships, such as insect and weed control, water and soil management, integrating livestock, and crop production operations. The guidelines have wide applicability over a large proportion of rural areas of Thailand, especially in the northeast, where water supply is relatively scarce compared to land area. In areas where land is relatively scarce or water supply is not a problem, the same concept minus the turning of land into water reservoirs can also be implemented.

The first stage of New Theory Agriculture allows farmers to be at least self-sufficient in terms of food, and can create proportionate income from selling extra crops and products beyond the necessary consumption of the household. This way, it provides basic self-immunity for farmers against a variety of adversities.

The second stages aims to create sufficiency at the community or organization level. It is based on cooperative activities with neighbors within the community through the sharing of the excess resources of each household. The activities can be different for each community depending on their conditions; there is no blueprint for activities. They include community enterprises or co-op based production, community saving groups, and establishing community healthcare centers, as examples. These activities should lead to greater self-reliance within each community, while enhancing the capacity of community members in reducing costs of living, or increasing income, or creating a community social safety net. It can be compared to a cluster development of businesses in the same locality with similar activities, to achieve economies of scale as well as economies of scope.

In the *third* and most advanced stage, the community is encouraged to expand their activities through reaching out to cooperative firms, banks, and other outside sources. The expansion across different levels of organizations or activities can be compared to developing a value-chain in production. The expanded activities include raising funds, creating direct sales channels, or seeking funds for establishing community rice mills or cooperative stores, for example. At this stage, various institutions will join hands in a collaborative way to create

sufficiency at the national level. Firms have to initiate corporate social responsibility to reach out to communities, while the public sector promotes different types of associations as well as facilitating trust among actors through institutional arrangements.

The second and the third stages of the New Theory Agriculture encourages the strengthening of people's participation, and builds capacity for a community's management. Members in the community can raise the learning process of their own community development by sharing understanding of the community development plan and exploring information and data related to situations of the community: income and expenditures, natural resources, public utilities, and services available, etc., to forming a shared vision to develop one's own community, with a working plan to make that vision comes true and to learn from the experiences of external sources. These community development processes aim to construct government policy from the root as a decentralized policy. NESDB has viewed it as an important conceptual framework in the 8th National Plan.

To conclude, the sufficiency economy concept and New Theory Agriculture have caused a paradigm shift on rural development in Thailand from a market-oriented development strategy to a social-oriented development strategy by using people as the center of development.

2.3.3 Organic Farming

(1) Meaning of organic farming

The term organic farming has different meanings between the Codex Alimentarius Commission (CAC) and the International Federation of Organic Agriculture Movement (IFOAM).

Organic farming, as defined by the CAC, states that organic agriculture is "based on a holistic production management system, which promotes and enhances agro-ecosystem health, including bio-diversity, biological cycles, a soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that

regional conditions require locally adapted systems. This is accomplished by using, wherever possible, cultural, biological and mechanical methods, as opposed to synthetic materials, to fulfill any specific function within the system." (Labmann, 2007)

According to IFOAM (2005), organic agriculture is put into a wider context, adding social aspects by defining four principles. The first, the principle of health, says that organic agriculture should "sustain and enhance the health of soil, plant, animal, human, and planet as one and indivisible." Second, the principle of ecology, means that the production system should be based on living ecological systems and cycles, imitate them, and help to sustain them. The third, the principle of fairness, says that organic farming should "build on relationships that ensure fairness with regard to the common environment and life opportunities." The fourth and last is the principle of care, which appeals to precaution and responsibility to protect "the health and well-being of current and future generations and the environment." (Labmann, 2007)

(2) Organic farming in Thailand

The Thai private organic certification body, "Thai Organic Agriculture Certification," sets the following basic rules and aims for organic production (Labmann, 2007):

- To develop the production system of integrated farming, which deals with a diversity of plants and animals.

- To develop a self-reliant production system in terms of organic matters and nutrients on the farm.

- To improve and maintain natural resources by seeking to use renewable resources on the farm.

- To maintain the ecological system on the farm and with respect to ecological sustainability.

- To protect and avoid practices that will cause pollution to the environment.

- To promote the production system and management respecting humanity.

- To adhere to principles of handling and processing by applying natural methods, conserving energy, and reducing negative effects on the environment.

In Thailand, organic farming has been gaining in importance. NGOs recognized the potential of organic agriculture to alleviate poverty among the rural population, so in the early 1980s, farmers chose organic farming as a possible alternative to mainstream agriculture. The first time the government mentioned organic farming - together with other alternative farming methods, was in the 8th Economic and Social Development Plan 1997-2001. It set the goal to convert 20 percent of the arable land to sustainable agriculture, including organic farming. However, so far this goal has not yet been reached. In 1999, the Department of Export Promotion initiated a "Pilot Project on the Export of Organic Farm Products". In 2001, the official "Standards for Organic Crop Production in Thailand" (SOCPT) came into effect. A certification system and a logo for organically grown products were developed as well. In 2002, the National Office of Agricultural Product and Food Standards developed a national organic agriculture criterion. The standards include freedom from chemicals for at least three years before the first organic harvest. (Labmann, 2007)

Planning to become a major organic crop producer, export has been a main aim in Thailand's organic farming policy, and thus the Department of Export Promotion is active in the support of export production and encourages private companies with organic product lines to put up organic food exhibitions in Thailand and abroad. The Department of Export Promotion also facilitated trade promotion projects, including the "Pilot Project of the Export of Organic Farm Products," which was initiated in 1999 and aimed to promote the production and export of organic rice, bananas, asparagus, and baby corn. (Labmann, 2007)

Organic agriculture in Thailand is often confused with sustainable agriculture or alternative agriculture. There are more activities of the government in the field of "organic farming" through local government agencies, but these products have not gained organic certification yet. No subsidies for organic agriculture have been provided so far. (Labmann, 2007)

Chapter 3

Challenges for Thai OTOP Community Enterprises:

Experiences from Thailand and Japan, A Comparative Study

3.1 Introduction

Agricultural countries all over the world try to engage with farmers through a variety of policies,such as production, structural adaptation, the establishment of funds to aid farmers, the development of quality products, goods distribution, the products' value-added, and creating new and alternative businessessuch as social enterprises. All of these policies promote the sustainable development of agriculture. Even if these efforts do not work in all agriculture societies, this paper posits that the social process of these policies will lead to the development of human resources and sustainable development in agricultural countries.

Since UNESCO launched the sustainable development concept nearly three decades ago, many developing countries in Asia, Africa and Latin America have adopted it successfully as a means to develop their agricultural communities. Japan's "One Village One Product: OVOP" is an example of this concept, though it is seen in different forms throughout the world. Thailand's version, "One Tambon One Product:OTOP," was initiated in 2001 by Thaksin Shinawatra, the prime minister at that time.

Studies by Okara (2009), Shakya(2011), Kurokawa (2011) and Murayama (2014) reveal four major differences between the original OVOP policy in Japan and OTOP practices in Thailand: (1) OVOP is a locally led, bottom-up movement, while OTOP is a centrally led, top-down policy; (2) OVOP does not have a designated budget, while OTOP is allocated an annual budget; (3) OVOP focuses on community development through promoting one local product, while OTOP focuses on advancing entrepreneurship by promoting a "No. 1" through an OPC (OTOP Product Champion) program that follows specified criteria; and (4) OVOP focuses on self-sufficiency, while OTOP involves continuous government assistance.

This paper examines the ways in which Thai OTOP community enterprises follow Japanese OVOP community enterprises, with the understanding that Thailand adopted and modified the OVOP concept for use in its own community economic development.

3.2 History of the OVOP Concept

The earliest form of Japan's OVOP was developed in 1961 in Oyama Machi, the poorest village in Oita prefecture. Calling it the New Plum Chestnuts strategy, Hirumi Yahata, the president of the Oyama agricultural cooperative, devised a plan to transform agricultural production from rice to more lucrative plums and chestnuts in an attempt to raise local living standards. This attempt, whose motto was "Let's plant plums and chestnuts to go to Hawaii," proved to be successful by 1967 (Shakya, 2011). What we now know as OVOP began as a community enterprise in 1979, when it was introduced and promoted as "Isson Ippin" by then-governor of Oita prefecture, Dr. Morihiko Hiramatsu.

3.2.1 The OVOP Concept of the Movement

In the 1960s, Oita faced many problems, including population decline, as the local labor force of young people migrated to the large cities, where industrial mass production of inexpensive standardized goods offered employment (Moriyama, 2012). When Dr. Hiramatsu became prefectural governor in 1979, he discovered that the income of the remaining residents was low, and he wanted to devise a plan to alleviate their financial hardship. He recognized that an OVOP movement could achieve three goals for prefecture's impoverished residents (Moriyama, 2012).

The movement's initial and ultimate goal was to increase residents' per capita income and revitalize a rural society whereby everyone could feel proud and satisfied with life in their respective communities.

Secondarily, an OVOP plan could invigorate regions using two approaches: exogenous and endogenous development. While exogenous development attracting outside investment could not stimulate all areas, endogenous development in rural areas can make full use of their potential resources and capital, preserve the environment and develop localities by promoting semi-secondary industries. This is the spirit of the OVOP movement.

The movement's third goal aimed to build a society oriented around gross national satisfaction (GNS) that improved the quality of life, fostered the pursuit of a worthwhile life, and allowed for the coexistence of nature and humans. A GNS-oriented society is based on the philosophy of the sufficiency economy.

The OVOP movement was based on three principles: (1) local yet global, (2) self-reliance and creativity, and (3) human resource development. The first principle promotes the concept of "Think globally, act locally." Citizens create specialty products as a source of local pride, such as agricultural products, tourist sites and folksongs. The community can use the local capital, i.e., the natural resources, culture and items unique to the area, to make and develop high value-added, globally marketable products that provide self-reliance and sustainability to the area. This principal belief in local knowledge and instinct is a buried treasure in each village. Residents choose their specialty product for the OVOP movement, not government officials, though all are aware of their potential. Local government provides technical guidance and support for promotion and sales.

Finally, human resource development is the movement's most important component. Oita prefecture established the Land of Abundance Training School to cultivate human innovation. The school has no assigned textbooks or teachers for the regional revitalization programs. Instead, local people who have succeeded in the movement are invited to be lecturers. Students, whose course of study is two years, include farmers' wives, agricultural cooperative staff, teachers and office workers.

From the 1960s to the present, Oita prefecture has accumulated various social capital, including OVOP groups, social organizations, prefectural farmer networks, urban and agricultural cooperatives, OVOP corporations, expansion of product associations, and tourism development organizations.

3.2.2 OVOP Movement in Other Countries

Many Asian, African and Latin American countries have successfully adopted OVOP concepts, with **China** the first nation outside Japan to adopt it. In 1980, Shanghai initiated the "One Hamlet One Product" (OHOP) plan.

Cambodia established a project on January 27, 2006. Close to a decade later, Cambodia still lacks experience in implementing this movement (Sopheaktra, 2008) and is constrained by a lack of market strategy, inadequate technology for processing and packaging, a lack of financial support, inadequate management skills and an absence of defined product standards.

Indonesia has been implementing its "Saka Sakti" or "One Regency One Product" plan, since 2000. Aquaculture production in a variety of economically important species is being promoted with smallscale operations by community groups, while on a large scale by cooperatives. The aquaculture cluster, however, is constrained by a lack of quality seeds (Ruchiwit, 2014).

Malaysia has been carrying out its movement since 2003 as a policy for integrating rural development to emphasize each district's role in spearheading rural development for international markets. In 2004, under the banner One-District-One-Industry, Malaysia set up four product categories: industries, crafts, food and rural industry products. It is improving the wellbeing of Malaysia's rural population Radiah (Kader, Mohamad, Azid, & Ibrahim, 2009).

A similar movement has been carried out in **Myanmar**, producing fishery products such as fresh snakehead and "belar" (Trichogaster pectoralis) fish. Local communities have also produced other fish products, such as sour fish, fish sauce, fish paste, dried and salted fish, and

shrimp. Still, they lack technology and adequate marketing capability, though now products are being marketed by entrepreneurs (ASEAN Foundation, 2008).

The **Philippines** started its "One Barangay One Product" movement in 1993. Later, the name was changed to "One Town One Product," aimed at promoting entrepreneurship and creating job opportunities for rural communities involved mainly with MSMEs (micro, small and medium enterprises). SULONG, or SME Unified Lending Opportunities for National Growth, provides capital for MSMEs under this movement ("Sulong" literally means advance or forward) (ASEAN Foundation, 2008).

Vietnam still has no legal framework regarding an OVOP-like plan, though local enterprises produce specific products such as fish sauce and other items through rural community efforts. The Ministry of Fisheries and Rural Development of Vietnam has negotiated with the World Bank for possible funding of the country's FOVOP activities (ASEAN Foundation, 2008).

3.3 Adopting the OVOP Concept and Thai OTOP Community Enterprise Experiences

3.3.1 The Initiation and Social Context of the OTOP Project

Thai Prime Minister Thaksin Shinawatra went to Oita prefecture to study the OVOP movement of Dr. Hiramatsu, which he then adopted under the name "One Tambon One Product" (OTOP). The OTOP project, launched in 2001 as public policy, was significant in the election campaign of the government's Thai Rak Thai party. It was intended as a policy to improve the economic situation at the grass roots level; however, the government did not adopt the whole principal, modifying it to meet the context of Thailand's social capital in the 2000s. OTOP is said to be a successful project.

At the same time, the Eighth National Economic & Social Development Plan (1997-2001) had the revised aim of promoting sustainable development by using strategies to improve

the quality of life, develop human resources and focus on people's participation in strengthening community organizations.After the 1997 economic crisis, His Majesty King Bhumipol announced the Theory of Economic Self-Sufficiency to focus on greater resiliency and sustainability, and the government announced self-sufficient community economic projects in all provinces (Prayukvong, 2007).

The Ninth National Economic & Social Development Plan (2002-2006) adopted the "Sufficiency Economy" philosophy of His Majesty King Bhumipol as a policy guideline. The plan was to develop good governance, strengthen grass roots organizations and promote sustainable development in rural and urban communities. The plan was attempting to eradicate poverty and unequal income distribution through the development of social capital.

The Office of the Prime Minister issued regulations for the OTOP National Board 2001 according to five objectives: (1) to create jobs and income for communities, (2) to strengthen communities to become self-dependent, (3) to promote Thai wisdom, (4) to promote human resource development, and (5) to promote communities' creativity in developing products in harmony with the local culture and way of life.

Fig. 3.1-3.2 Thai OTOP

3.3.2 The Development of OTOP in Thailand

The OTOP project was announced as an urgent policy in 2001 and is still in use today. The government is concerned with promoting activities to develop products and support sales promotion. Various activities have run continuously, such as annual product fairs and exhibitions, and the yearly search for an OTOP Village Champion (OVC). Thailand's development of OTOP has been as follows:

Table 3.1 Development of OTOP in Thailand

Year	**The development of OTOP and Activities**
2001	-Government announced as an urgent policy
	-Established OTOP administration board
	-Placed under Community Development Department, Ministry of Interior
	-Village Development Fund was established (July) for not only OTOP groups, but also utilized by many community groups
2002	-Rating system for OTOP products were given one to five stars
	-Integrated: Ministry of Interior, Ministry of Industry, Ministry of Agriculture and Cooperatives and Ministry of Commerce
2003	-Quality Chosen for OTOP Product Champion (OPC): Local Link Global Reach
	-Community Development Department, support to link OTOP network to product development on Tambon level, District level, Provincial level, and Central government level

Table 3.1 Development of OTOP in Thailand (continued)

Year	**The development of OTOP and Activities**
2004	-Enacted "Village Fund and Urban Community Act"
	-OTOP groups registered with Department of Agricultural Extension, Ministry of Agriculture and Cooperatives for fund engagement.
	-29,385 OTOP products were registered for grading (one to five stars) and 7,967 products were selected.
2005	-Established Small Medium Large Government Budget (SML Fund)
	-Enacted "Small and Micro Community Enterprise Promotion Act"
	-OTOP groups obtained support from the Tambon Administration Organization, the Community Development Department, and other government agencies.
	-Ministry of Commerce announced that the export value of OTOP goods reached 1 billion dollars (around 40 Billion Thai Bath).
2006	-Search for excellent OTOP Village Champion (OVC)
	-Highlighted OVC as one of the mechanisms to promote and support the development of Thai OTOP products
	-Five stars: 812 products were selected
2007	-Knowledge-based OTOP activity
2008	-Entrepreneur Promotion activity
2009	OTOP Tourism Village activity
2010	-Sustainability of OTOP activity
	-OTOP producers registered under OTOP in 2010: 33,228 producers =Community-based enterprise = 66.8 % =Single owner enterprise = 31.1 % =Small and Medium-sized enterprise = 2.2 %

Table 3.1 Development of OTOP in Thailand (continued)

Year	The development of OTOP and Activities
2011- 2014	-Market Movement both domestic and international market -Business Matching Project

The government has supported activities, maintained funds, chosen quality products, promoted and supported the development of OTOP products for global markets, and worked to develop SMEs.

3.3.3 OTOP Sales Output, 2009-2013

Table 2 shows that earnings from OTOP increased from 7,180 million baht in 2009 to 72,243 million baht in 2013. Food products comprise the majority of OTOP products. The government has subsidized products continuously. The OTOP budget allocated 800 million baht in 2003, 1,500 million baht in 2004, 1,000 million baht in 2005 and 2006, 500 million baht in 2007, and 400 million baht in 2008 (Natsuda et al., 2011).

Table 3.2 OTOP Sales Output from 2009-2013

Fiscal Year	OTOP Products					Total (Baht)
	Food	Beverage	Fabric & Apparel	Apparatus, Decoration and Souvenir	Herbal (Non-food)	
2009	4,853,491,710.00	163,486,954.00	550,713,070.01	1,485,263,736.00	127,204,868.00	7,180,160,338.01
2010	29,509,066,445.00	3,133,326,603.00	9,173,871,567.00	15,322,660,946.00	2,296,381,909.00	59,435,307,470.00
2011	33,480,483,803.00	3,953,094,299.00	10,995,645,544.00	15,615,323,813.00	2,772,725,537.00	66,817,272,996.00
2012	33,622,500,013.45	4,280,207,123.00	10,741,448,111.00	15,416,838,431.39	2,743,698,791.25	66,804,692,470.09
2013	35,552,676,674.00	3,328,985,833.00	14,084,198,739.00	15,514,533,368.00	3,762,762,352.00	72,243,156,966.00

Source: Community Development Department, Ministry of Interior, Accessed on May 12,2014

3.3.4 OTOP to be SMEs

In 2014, the Ministry of Industry collaborated with the Ministry of Commerce to develop OTOP businesses into SMEs by enhancing development of the production process, packaging, quality of products, management and five-star rating system. This operation would choose five-star rated products throughout the development: 152 products from 76 provinces (two from each province).

The Community Development Department reported that OTOP can increase SMEs by 1.55% of all products in 2012. OTOP entrepreneurs choose not to become SMEs for many reasons, including unfavorable tax measures and lack of government subsidies. An academician at the Ministry of Commerce has said, “The main reason OTOP entrepreneurs don’t want to become SMEs is the government subsidy. If an OTOP becomes an SME, the government won’t subsidize it. This is a problem for the Ministry of Commerce and Ministry of Industry.”

Fig. 3.3-3.5 Thai OTOP Label

3.4 Challenges for Thai OTOP Community Enterprises

A comparative study of community enterprise experiences from Thailand and Japan has found that Japan devised a collaborative policy to enhance community enterprises. Its government is trying to revitalize rural areas via collaboration among enterprises in the agricultural, commercial and industrial sectors. Within these three sectors, the government promotes collaboration among six industries categorized in three groupings: (1) agriculture, forestry, and fisheries as the primary industry; (2) manufacturing as the secondary industry; and (3) retail as the tertiary industry. The goal is to create new value-added products using regional resources such as crops, food and food processing, and sales on products from agriculture production, the processing production and service activities (Hiroshi Ehara, interviewed on May 16, 2014).

The promotion of product development and market cultivation is a key to revitalizing rural areas through close collaboration between large industries and SMEs, including food processing and lodging service industries, as supported by the Act on Promotion of Business Activities by Collaboration between SME Operators and Operators of Agriculture, Forestry and Fisheries, which came into effect in July 2008. The act was affected to realize the revitalization of local areas through employment creation and income improvement by not only using rural human resources and knowhow, but also by the broadening of multiple initiatives of collaboration among the agricultural, commercial and industrial sectors, which bring out originality and ingenuity. Regarding collaboration between agriculture and related industries, the agricultural sector must link with various industries including, but not limited to, the food and restaurant industries and the tourism sector. Initiatives to promote the consumption of local produce through collaboration with local, distressed retail areas have made progress by using heretofore vacant shops.

Noshiro city provides a good case study of collaboration among agricultural, commercial, and industrial sectors through revitalization in local areas. This city in Akita

prefecture established a Yu-ichi (evening market) by bringing agricultural products and processed food to previously unused shop in the local shopping area. Farmers bring and sell agricultural products and processed food by themselves. It has gained popularity among people on their way home from work and with housewives nearby. The shop has a long line of customers. Sales have increased two-fold compared with when the farmers sold in front of the post office (Ministry of Agriculture, Forestry and Fisheries, 2008). This collaboration among agricultural,commercial and industrial sectors is a new concept in Japan.

Actions such as the agricultural employment program that create jobs in rural areas in a Japan whose economy is in a severe state and declining rapidly following the worldwide financial crisis. Employment conditions are worsening on a decline in the number of job openings to the applicants. Due to an expectation of rising labor demand in the primary industry, the government is strongly promoting this field to advance employment numbers at a rapid pace. In December 2008, the Ministry of Agriculture, Forestry, and Fisheries (MAFF) established rural employment counseling counters. These consultation services receive many inquiries. The number of consultations and inquiries at this service (and similar services in prefectural governments) had reached 22,656 people between December 24, 2008, and April 15, 2009. The number of new workers recruited for the agricultural, forestry, and fishery sectors through the consultation services between December 2008 and April 15, 2009 was 1,370. In the agricultural sector, the government launched an employment program that provides support for agricultural corporations to undertake on-the-job training for individuals motivated to work. There are 1,226 participants in training courses at 1,057 agricultural corporations under this project. To foster individuals as leaders contributing to the revitalization of rural areas, the government launched "Inaka-de Hataraki-Tai." This project provides practical training regarding the revitalization of rural areas to urban dwellers interested in activities and settlements. Local governments subsidize this project. Agricultural corporations employ job applicants and implement practical

training, with training costs of approximately 97,000 yen/month and a training period of 12 months or fewer.

A comparative study of community enterprise experiences between Thailand and Japan on development, policy, government subsidization and business development of small communities finds a variety of factors as follows:

3.4.1 A Culture of Entrepreneurship

The Thai community entrepreneur does not embrace a culture of entrepreneurship that honors commercial agreements, as farmers grow OTOP products in their spare time outside the main growing season. During the season, farmers abandon their OTOP production without respecting their promises to the market trade network; they merely break their contracts to continue growing and harvesting their crops. In Japan, community entrepreneurs honor their production contracts.

3.4.2 The Problem of Products

In making high value-added products, Thai OTOP entrepreneurs neither make products and goods that use local capital or natural resources, culture and items unique to the area, nor develop them into globally marketable products that could provide self-reliance and sustainability. Instead, they copy products made elsewhere by other entrepreneurs. In Japan, the focus is on community development through the promotion of uniquely local products.

Fig. 3.6-3.7 OTOP Packaging

3.4.3 The Distribution of Products

Thai community entrepreneurs don't distribute products directly to the end-consumer, but instead sell to middlemen or brokers. In Japan, OVOP entrepreneurs promote their products directly to restaurants or launch their products directly to consumers.

3.4.4 Financial Discipline

OTOP product promotion has so far operated as a centrally government-led, top-down policy. When a community entrepreneur initiates an enterprise, he or she borrows money from the national government-maintained OTOP fund. Unfortunately, most of this money is then spent on activities or objectives other than establishing a productive OTOP business, resulting in a non-productive loan. Moreover, these so-called entrepreneurs seem to have little interest in the products they say they intend to create and market.

In Japan, the community entrepreneur movement is locally led. Local knowledge and instinct are thought to be a buried treasure in each village. Residents choose their specialty

product for the OVOP movement, not government officials, though all are aware of their potential. Local government provides technical guidance and support for promotion and sales.

3.4.5 The Subsidization of Government

In Japan, local governments provide subsidies to community enterprises with money from the central government. If a business meets application criteria, it can receive subsidies for certain projects. In Thailand, local governments lack an OTOP budget and resources, all of which are held by central authorities.

In the case of Moku Moku farm, the Japanese Ministry of Agriculture has provided subsidies to build facilities for food processing. The farm has employed former Ministry of Agriculture staff and therefore has good connections and a good relationship with the ministry. Total costs for company activities at the farm are six billion yen, of which two billion yen came from central and local government subsidies. The subsidies can only be used for buildings and processing of food products and may not be used for accommodation facilities.

In Thailand, monetary subsidization has been held by central government agencies, such as the Department of Agricultural Extension, Ministry of Agriculture and Cooperatives, Community Development Department, Ministry of Interior, and Ministry of Commerce. Local governments lack an OTOP budget and resources to develop each area.

Fig. 3.8-3.9 OTOP Packaging

3.5. Conclusion

These days, local products in various countries generate income for their communities and cities, especially in tourist areas. However, local product development in rural or agricultural areas in many developing countries is likely to face problems related to various factors, mainly from trying to apply OVOP principles without fully understanding the concepts, and from applying those principles in a different context than its prototype, such as in societies, cultures, economies and political situations that are different from those in which OVOP was conceived. Therefore, cross-cultural implementation is necessary to make successful modifications.

Factors that have made OVOP a success in Japan are (1) being based on a culture of selfsufficiency, (2) making products that have unique characteristics in each area, and (3) developing networking between farmers and their prefectures, cities, agricultural cooperatives, NGOs, resident associations, chambers of commerce and tourism associations.

It is unclear whether Thailand's OTOP movement can solve rural and urban poverty and unequal income distribution, but it seems likely to increase local social capital. OTOP entrepreneurs whose businesses progress sustainably will inevitably develop social capital. They

can develop human resources and knowledge management, which are the most important factors in enabling communities to become selfreliant and sustainable.

How can the OTOP movement solve poverty and unequal income distribution in rural communities? To find alternative ways, Thailand must 1) reconsider the principle of the OVOP concept; 2) rethink the ways in which funds are distributed; 3) go forward in efforts to collaborate with other economic sectors; and 4) help entrepreneurs distribute products directly to end-consumers.

Chapter 4

The Development of Community Enterprise:

A Case Study of Moku Moku Farm in Mie Prefecture

4.1 Introduction

Among the big problems in the rural communities of Japan is that the population is both declining and aging. The majority population in the countryside is over 65. Apart from agricultural production, rural communities play various roles aside from agricultural production in local areas. Due to the emergence of various movements, such as OVOP, SMEs policies, and other community enterprises has led to the revitalization of rural communities and its sustainable economic growth.

In the 1960s, Oita Prefecture located in the south of Japan faced many problems, including population decline as the labor force of young people in the local communities and rural areas was pulled towards the larger cities where industrial mass production of inexpensive standardized goods offered employment (Hiromichi Moriyama, 2012). Morihiko Hiramatsu who was the former Governor of Oita Prefecture promoted “Isson Ippin” or One Village One Product (OVOP) in Japan and OVOP was advocated in Oita Prefecture in 1979. He discovered that the income of the citizens was low. He came up with three reasons to initiate the OVOP movement. The first and ultimate goal of the movement was to increase the per capita income of citizens and to revitalize the society in the rural community where all citizens could be proud and feel satisfied with their lifestyles in each of their respective communities. The second goal was to invigorate regions using two approaches: exogenous development and endogenous development. The exogenous development attracting outer investments cannot promote all areas, but endogenous development as a type of revitalization approach in the rural areas can make full use of their potential resources and capital, preserve

the environment, and develop the areas by promoting semi-secondary industries. This is the spirit of the OVOP movement. The third goal aimed at a gross national satisfaction (GNS) oriented society for the improvement of the quality of life, the pursuit of a worthwhile life, and the coexistence of nature and humans. The GNS-oriented society was based on the philosophy of the sufficiency economy.

From the 1960s to the present, there are many world-renowed companies such as Canon Inc., Canon Meterial, Daihatsu Motor Corporation Limited, Toshiba Corporation, and Nippon Steel Corporation in Oita Prefecture. The output of Oita Prefecture amounts 3,029,900 million yen (up 6.2%) and ranks second in the Kyushu region. Many small to medium-sized enterprises have entered Oita Prefecture for supplying parts and assisting the manufacturing process.(Yujiro Okara, 2009) Oita Prefecture has accumulated various social capital, including: OVOP groups, social organizations, farmer networks of the prefecture, cities and agricultural cooperatives, OVOP corporations, expansion of the product associations, and tourism development organizations.

In 1963, Japan enacted the SME Basic Act. The ultimate goal of the small and medium enterprise (SMEs) and the micro and small community enterprise (SMCEs) was to revitalize a society in the rural community and create sustainable economic growth. These concepts are ones that have been adopted in the circle of community development to promote self-reliant economics as well as the principles of community enterprise, community economics, community industry, and self-sufficient economics. The basic principles of policy on SMEs have been revised according to the needs throughout the period, and supporting measures have been implemented and enhanced, e.g. policies on finance, promotion, guidance, and unionization.

At present, the small and Medium Enterprise Agency, Ministry of Economy, Trade and Industry reported on September, 2013 accounting for 99.7 % of all companies, 70 % of

all employees, and more than 50% of all added value. SMEs form the very basis of the Japanese economy. Even such large corporations as Toyota, Honda, and Sony started out as small backstreet factories, and the revitalization of SMEs can promote competition in the marketplace, creating new industries and becoming the motivating force behind economic restructure. The majority of the products of large corporations consist of components from SME subcontractors; thus, it is the hidden strength of SMEs that underpins trust in Japanese products. The economies of Japan's provincial areas are supported by the activities of SMEs - mainly in the industry, retail trade, and the construction industry – and SMEs play a part in revitalizing local economies and boosting employment opportunities. Supporting SMEs means the creation of jobs for new business development in such areas as agriculture, commerce, and manufacturing. The support, provided to new SMEs and Micro enterprise, aimed at developing and cultivating markets for advanced new products and services.

There are many OVOP projects that have been developed into SMEs or community enterprise. A community enterprise is a social enterprise that serves a geographical community or a community of interest and has representatives from the community on its board of directors. It provides goods and services and has a long-term commitment to create jobs or provide a service for members of the community. It may also contain a significant sub-sector within the wider social enterprise sector, sharing the same definition of social enterprise: an organization trading for social purposes with profits reinvested rather than going to shareholders.

At present, Japan's efforts are towards increasing farm income by promoting the **"sixth industry."** Farmers' income comprises agricultural income, income from agriculture production-related businesses, such as the processing of farm products and restaurant operation, non-agricultural income and other components. Japan's net agricultural production (amounting to Japan's total agricultural income) totaled 3 trillion yen in FY2008, halving from

FY1990. Individual farmers' income has slackened. In order to expand farmers' overall income, the government should support promoting the "sixth industry" to increase their income from agriculture production-related businesses in addition to their agricultural income. Efforts to expand agricultural and agricultural production-related incomes include those made mainly by individual farms, producing areas, and other groups. It is important for them to find future challenges and development directions based on past cases for these efforts. Farmers should cooperate with commercial and industrial sector players in making these efforts by integration of production, processing and marketing or combination of agriculture with tourism, expansion of added value, development of regional brands, responses to demand for processing and commercial uses of farm products, expansion of exports, and reduce of shipment and distribution costs. Processing of farm products, direct sales and tourist farm management are frequently cited by farmers as actions that they want to undertake for promoting the "sixth Industry". (MAFF, 2011, p.30-31)

Promoting the "Sixth Industry" means that agriculture, forestry and fisheries as the primary industry, manufacturers as the secondary industry, and retailers as the tertiary industry are promoted comprehensively and integrally to create new added values using regional resources.

Community-based farm cooperatives: these farm cooperatives consist of farming households in certain regions that have developed a relationship through the local community or other geographical bases. In these cooperatives, farming households conduct agricultural production as a collaborative enterprise. Adopting the three basic tenets of (1) aggregation of diverted paddy fields, (2) communal use of communally purchased equipment and (3) communalization of the entire farming process from production to marketing with farming leaders playing a central role. These cooperatives take different forms and approaches depending on their geographical location.

However, the important movement that has influenced community enterprise or community products was creative tourism. Iga no Sato Moku Moku Tezukuri Farm is one such enterprise, developing a business by adopting the OVOP concept movement. They approached financial support through the Government, and using the creative tourism concept. All of these concepts call **"Cultural Economy"** paradigm.

Iga no Sato Moku Moku Tezukuri Farm developed from individual farmers who were trying to survive within the big market. They have since grown into a medium sized community enterprise. There are approximately 1,000 employees with 140 permanent staff, 160 part-time staff with long-term contracts, and 700 part time employees with short-term contracts. Annual profits in 2012 were 5.1 billion yen. Iga no Sato Moku Moku Tezukuri Farm is the best practice of rural community development in Japan.

This study explores the development of a medium sized community enterprise and tries to find factors contributing to its success. In general, it is not common to develop the community products into the sixth industries. In this manner, the researcher aims to find out how Moku Moku farm can operate to be one of the sixth industry in Japan. The lesson lerned from Moku Moku farm is important for the developing countries, especially Thailand. This study has been carried out using qualitative research methodology; employing documentary analysis, in-depth interviews, and participatory observation in the field.

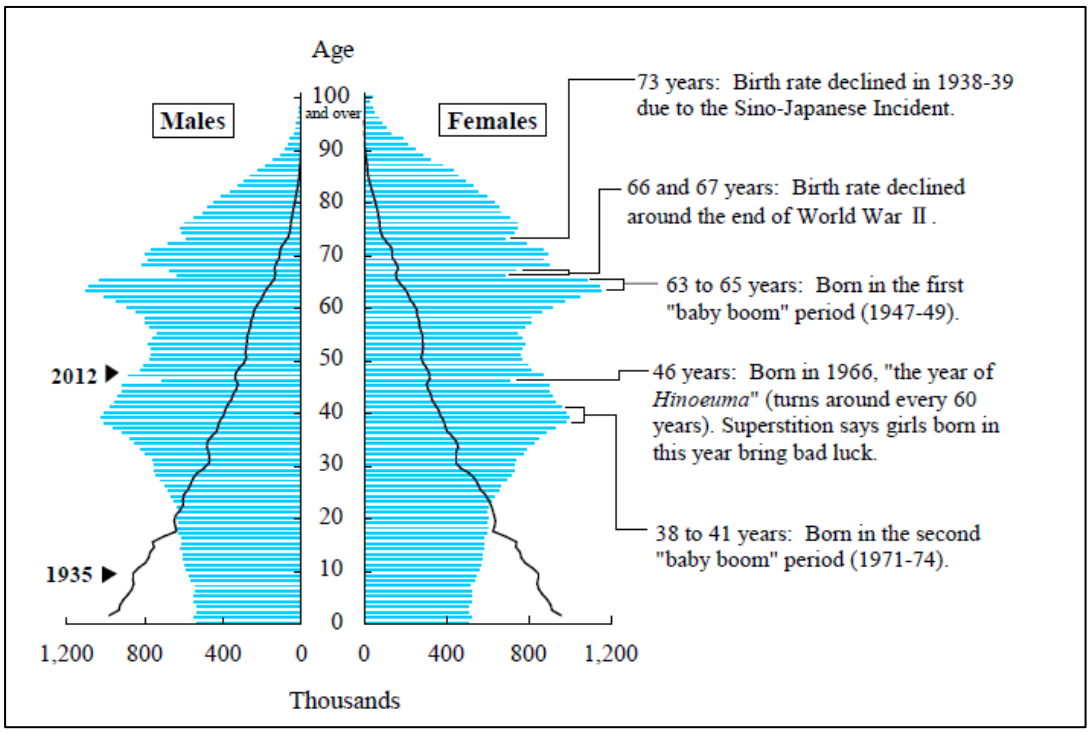
4.2 Rural Community Development in Japan

4.2.1 The present state of rural areas

The local or rural communities in Japan have a big problem (Hideharu Uemura, interviews on May 7, 2014). Rural is defined as eighty percent farming. The population of Japan is anticipated to decline for a long time hereafter (MAFF, 2008). Japan's total population in 2012 was 127.52 million. This ranked tenth in the world and made up 1.8 percent of the world total

(Statistic Bureau, 2013, p. 10). Trends of an aging population (age 65 and over) will increase to 29.1 percent in 2020, 31.6 percent in 2030, 36.1 percent in 2040, and reach 38.8 percent in 2050. It is important to note, however, that the elderly population was 30.79 million in 2012, or 24.1 percent of the total population, the highest percentage of the population in the world. The Population Census shows that Japan has 56.3 percent were nuclear-family households and 32.4 percent were one-person households (Statistic Bureau, 2013, p. 13).

Fig. 4.1 Population Pyramid



Source: Statistical Handbook of Japan 2013

By classifying agricultural areas as a mountainous, urban, hilly, or flatland areas, it is estimated that the population in mountain farming areas in the year 2020 will be approximately 70 percent of the current population. Rural communities play various roles aside from agricultural production in local areas. At present, there are 139,000 rural communities

nationwide in Japan as of 2005, of which 110,900 thousand communities have maintained their community functions excluding rural communities in urbanization of promoted areas. In the depopulated areas, the function of community is weakening or is difficult to maintain in communities where fifty percent consist of nine or fewer households or in forty percent of communities in which the rate of aging population is more than fifty percent. When the average household membership is two people or fewer, the above-mentioned percentage becomes higher (MAFF, 2008, p. 38).

4.2.2 Rural Areas Revitalization

A current problem in the rural areas, prefecture-by-prefecture population changes from 2005 to 2010, indicate population growth in nine urban prefectures, such as Tokyo, Kanagawa, Chiba, Okinawa, Shiga, Aichi, Saitama, Osaka and Fukuoka. All have seen accelerated drops in rural prefectures. Population drops are particularly large in Akita, Aomori, and Kochi. Population in rural regions is estimated to decline to 81 percent of the 2005 level, with the aged population rate rising from 22 percent to 35 percent. As rural population declines and ages, farmers cite such life-related problems as abandoned cultivated land, farmland care, wildlife damage, employment, and emergency medical services, Under this situation, a decline in community functions and depopulation are seen for some rural communities (MAFF, 2008, p. 39-40). The population decrease is causing many shops to close.

Presently, the Japanese government is trying to revitalize rural areas via collaboration among the agricultural, commercial, and industrial sectors.

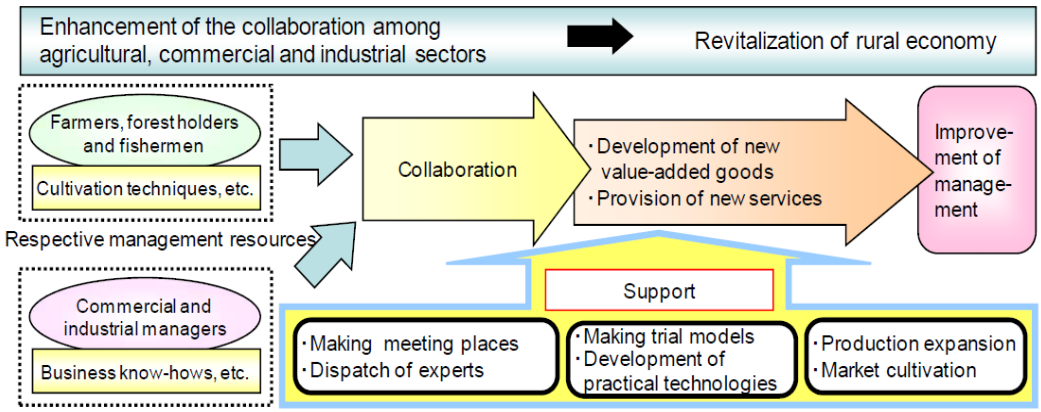
Many Japanese private sectors would like to combine three sectors of industry; (1) Primary industry including agriculture, forestry, and fisheries, (2) Secondary industry, such as the processing industries, like processing food, processing of tea, mining and quarrying of

stone and gravel, construction and manufacturing and (3) Tertiary industries, such as activity merchants and services such as wholesale and retail trade, transport, and postal activities, information and communications, finance and insurance, accommodations, eating and dining services. In one decade, many Japanese private sectors would like to promote the "sixth industries" agriculture, forestry and fisheries as the primary industry, manufacturers as the secondary industry, and retailers as the tertiary industry are promoted comprehensively and integrally to create new added values using regional resources such as crops, food and food processing, and sales on products from agriculture production, the processing production and service activity. (Hiroshi Ehara, interviews on 16 May, 2014)

The promotion of product development and market cultivation is a key to revitalize rural areas through the close collaboration between the primary industry and Small and Medium sized Enterprise (SME), including food processing industries and lodging service industries, supported by the Act on Promotion of Business Activities by Collaboration between SME Operators and Operators of Agriculture, Forestry and Fisheries, which came into effect in July 2008. It is expected to realize the revitalization of local areas by employment creation and income improvement by not only utilizing human resources completely and know-how in rural areas, but also through the broadening of multiple initiatives of collaboration among agricultural, commercial, and industrial sectors, which bring out originality and ingenuity. Regarding collaboration between agriculture and related industries, it is indispensable for the agricultural sector to link with various industries including, but not only, the food and restaurant industries and the tourism industry. The initiatives to promote the local consumption of local produce through collaboration with local shopping areas where an increase and continuing state of empty shops are nationwide issues have made progress. For example, a good case study of collaboration among agricultural, commercial, and industrial sectors through revitalization in local areas is Noshiro city, Akita Prefecture, which established the Holding Yu-ichi (evening market) by bringing agricultural products and

processed food to an unused shop. A group of farmers holds Yu-ichi at this otherwise vacant shop in the local shopping area. Farmers bring and sell agricultural products and processed food by themselves. It has gained popularity among people on their way home from work and with housewives living nearby. The shop has a long line of customers. Sales have increased two-fold as compared with when they sold directly in front of the post office (MAFF, 2008,p.42). The collaboration among agricultural, commercial, and industrial sectors is a new concept in Japan.

Fig. 4.2 Significance of the collaboration among agricultural, commercial, and industrial sectors



Source: *Ministry of Agriculture, Forestry, and Fisheries. Annual Report on Food, Agriculture, and Rural Areas in Japan, FY 2008, Summary (Provisional Translation). Ministry of Agriculture, Forestry, and Fisheries.*

Creating employment in rural areas through agricultural employment programs is a way to initiate rural revitalization. Owing to the worldwide financial crisis, Japan's economy is adversely affected and continuing to decline rapidly and is in a severe condition. Employment conditions are worsening rapidly; there is a decline in the number of job openings as compared to the applicant ratio. Due to the expectation of the labor demand in primary

industry, the government is strongly promoting the support of job creation and other employment measures in order to advance employment numbers at a rapid pace.

In December 2008, MAFF established rural employment counseling counters. These consultation services are getting a lot of inquiries. The total number of consultations and inquiries gathered at this consultation service (and other similar consultation services in prefectural governments) rose by 22,656 from December 24, 2008 to April 15, 2009. The total number of newcomers recruited in agriculture, forestry, and fisheries through the consultation services from December 2008 to April 15, 2009 is 1,370. In the agricultural sector, the government launched the agricultural employment program, which provides support for agricultural corporations to undertake on-the-job training for motivated individuals who have incentive to work. There are 1,226 participants in training courses at 1,057 agricultural corporations under this project. In order to foster individuals who can be leaders contributing to the revitalization of rural areas, the government launched the project of "Inaka-de Hataraki-Tai." This project provides practical training regarding the revitalization of rural areas to the people living in urban areas interested in resettlements. Local government is subsidizing this project. Agricultural corporations employ job applicants and implement practical training, with training costs approximately 97,000 yen / month, with a training period of 12 months or less.

4.2.3 The case of Mie Prefecture

Mie Prefecture is part of the Kansai region on the main island of Honshu. There are 7 districts and 29 municipalities. The capital is Tsu. Mie has a coastline that stretches 1,094.9 km (680.3 mi) and a 5,777.22 $km^{2.}$ (2,230.30 sq mi) landmass, of which 64.8% is forested, 11.5% agriculture, 6% residential area, 3.8% roads, and 3.6% rivers. The remaining 10.3% remains unclassified. The total population of Mie is 1,820,324 persons (April 1, 2014)

The economy of Mie depends on the manufacturing industries, the seafood industries, and on traditional handicrafts, such as Iga Braid, Yokkaichi Banko Pottery, Suzuka Ink, Iga Pottery, and Ise Katagami. Northern Mie is home to a number of manufacturing industries, mainly transportation machinery manufacturing, such as Mitsubishi, Honda, and Isuzu, and heavy chemical industries and oil refineries. Due to the amount of industry, the GNP in northern Mie is higher than in other areas. In southern Mie (Nansei Area), seafood is the biggest industry, supplying dry fish, tuna, and pike. Southern Mie prefecture is economically poorer than northern Mie. Along with these industries, Mie also produces tea, beef, cultured pearls, and fruit, mainly mandarin oranges. Food production companies include Azuma foods.

The researcher selected Mie Prefecture due to many kinds of agricultural farm emerged in the rural areas and the idea has led to the revitalization of rural communities and its sustainable economic growth.

4.3 Iga no Sato Moku Moku Tezukuri Farm

Iga no Sato Moku Moku Tezukuri Farm is an agricultural theme park nicknamed **"Moku-Moku."** Moku means wood in Japanese. Moku-Moku farm is situated in a rural area in Iga city, Mie Prefecture. Moku-Moku farm produces many varieties of food, but it is most well-known for its pork and beer. It is one of the largest farms in Mie and draws a decent number of tourists to its main farm in northern Iga. It also runs a number of buffet-style restaurants and shops.

The location of Iga city is in the mountains of western Mie, close to Kyoto and Shiga prefectures. As of September 2012, the city had an estimated population of 95,137 and a population density of 170 persons per km². The total area is 558.15 km². Iga developed in the Edo period under the Tokugawa Shogunate as the castle town of Iga Ueno Castle. Iga is known as the birthplace of the haiku poet Matsuo Basho and the home of the ninja Hattori Hanzo.

Fig. 4.3 Iga no Sato Moku Moku Tezukuri Farm

4.3.1 Development

Moku Moku Farm was established in 1983 by five pig farmers who raised “Iga–buta” (Iga pig). The company was not well known at the time. However, the farm change from just five pig farmers to what is now an agricultural producers’ cooperative. At first the thought was that having resources and good tasting food would make their business profitable, but they were wrong. Other factors also needed to be considered in establishing the business (Go Ma. Karen Quilloy, 2012). The company therefore initiated the one of five policies, stating that “additional farmers can raise pigs and other animals for sale. Their profit margin is not large so that we can sell the animals at a low price.” As time passed, they looked for a consortium to provide the meat and the processing for the business.

In 1987, the company established "the Moku Moku Ham Factory," run by pig farmers in the Iga city community. In 1989, they started teaching the process of making hand-made sausages. In 1995, they opened "Moku Moku Tesukuri Farm" and start making local beer. In 2002,they saw the opening of their first restaurant branch in Yotsukaichi City, Mie Prefecture. In 2011, they opened Hahatoko restaurant and by 2013 they had opened their 7th branch restaurant, in Abeno, Osaka Prefecture. They now have seven restaurants (two branches in Nagoya, two branches in Osaka, and three branches in Mie), four gift shop branches in Mie, and one branch in Tokyo.

The total area of the farm is 30 hectares (185 rai). On the site there are four restaurants, cottages for overnight accommodation, a hot springs spa, educational classes to learn about farming, cooking, baking, and brewing beer, a petting zoo and pony rides, and gift shops selling products from the farm. One of the restaurants, the Tomato Café, has a tomato theme, with most if not all of the products being tomato based. They serve pasta, cake, ice cream, and other dishes, all using tomatoes.

Nowadays, the number of members (fan club members) of Moku Moku Farm is about 45,000 members, primarily Japanese who have made purchases from the farm and who give the farm information. Advertising is for website sales, the farm, the restaurants, and the park, all under the concept "food and farming," "natural food," "agriculture," and "handmade."

30% of the farm's income comes from the park, with another 30% coming from website sales, and 40% from the restaurants. Income in 2012 was 5.1 billion yen.


Fig. 4.4-4.5 Products of Moku Moku Farm

4.3.2 Management

Business management of the farm consists of seven areas: (1) Management of the farm (rice, vegetables, fruit, and Shiitake mushrooms), (2) Management of the agricultural and livestock processing plants (ham, sausages, local beer, bread, sweets, and bean curd), (3) Operation of the Shokuno learning center (*shokuno = food & agriculture), (4) Mail order & gift shop, (5) Direct sales shops, (6) Restaurants, and (7) Rent farms, which operate under five organizations, as follows;

1) Moku Moku Tezukuri Farm. Managing the farm in a self-sufficient manner, providing agricultural guidance to local farmers, overseeing the production of processing foods, beer, bread, sweets, and bean curd, leading professional workshops, and running the agricultural park (farming and Shokuno learning).
2) Agricultural Cooperation. “Moku Moku” manages mail orders, the online shop, and gift shops (four branches in Mie and one branch in Tokyo).
3) Iga no Sato Company Limited manages the restaurants (two branches in Nagoya, two Branches in Osaka, three branches in Mie).
4) Local Industrial Laboratory is the local industry consultant.
5) Hahatoko Company Limited administrates the restaurants’ funding and investments by its staff.

Fig. 4.6-4.7 Products of Farm

These products are separated into three types, (1) Agricultural products, (2) Preserve or processing products, and (3) Primary production sections. The company wants to distribute these products to branches of the company or sales shops such as restaurants in Mie, Nagoya, Osaka, Shiga, and Tokyo, and through their web service.

Sales and processing production includes sausage, ham, beer, Japanese rice, Shitake mushrooms, strawberries, dairy cows, sweet for the production of mochi, bread, and Tofu. All of these products are produced primarily from the agriculture of this area.

In the early days, when the business began, there was not much money available for advertising and promotion, so the way they let people know about their business was primarily through word of mouth. The director said "*When the business started, we didn't have money for advertising, so we just used story telling from customers to their friends. Usually middle age women, they like to relate some interesting experiences to their friends, you know, "word of mouth."*

4.3.3 Agriculture Farm and Creative Tourism

UNESCO explained the definition of 'Creative Tourism' as one that emphasizes and includes greater access to culture or history ("fewer museums, more squares"), and involves doing something experientially, an authentic engagement in the real cultural life of the city.

"Creative Tourism" is considered to be a new generation of tourism. One participant described his perspective that the first generation was "beach tourism," in which people come to a place for relaxation and leisure; the second was "cultural tourism," oriented toward museums and cultural tours. "Creative Tourism" involves more interaction, in which the visitor has an educational, emotional, social, and participative interaction with the place, its living culture, and the people who live there. They feel like a citizen. This third generation requires that managers also evolve, recognizing the creativity within their city as a resource, and providing new opportunities to meet the evolving interests of tourists.

While creative tourism must be linked to culture, the particular cultural expressions will be unique to each place. For example, the group discussed low-rider cars as being a cultural expression of northern New Mexico, and tango dancing as being particular to Buenos Aires.

After significant conversation, the group adopted Santa Fe's working definition of creative tourism: ***"Creative tourism is travel directed toward an engaged and authentic experience, with participative learning in the arts, heritage, or special character of a place, and it provides a connection with those who reside in this place and create this living culture."*** (UNESCO, 2006)

From this meaning, Moku Moku Farm created various activities toward engagement in authentic experiences, with participative learning in art and culture, involvement in the processing and production of food, beer, bread, sweets, and bean curd, as instructed in professional workshops. In the Agricultural Park, customer can enjoy a variety of activities such as farming, Shokuno learning, a brewery tour for watching the process of making their

local beer, strawberry picking (January - April), mushroom picking, a mini pig show, as well as the workshops for making sausages, bread, and pasta. There is also a hot spring facility at the farm. Additionally, there are approximately 100 special events in a year. Examples include: (1) Thong Thong Festival (Golden Week Festival) (2) Pig Festival: Attendance is around 10,000 customers (3).Piglet activities (4).Bonsai Festival: A private party for students and alumni of Waseda University (5) Christmas Festival (6) Summer Camp: A weeklong festival for Moku Moku Farm fan club members.

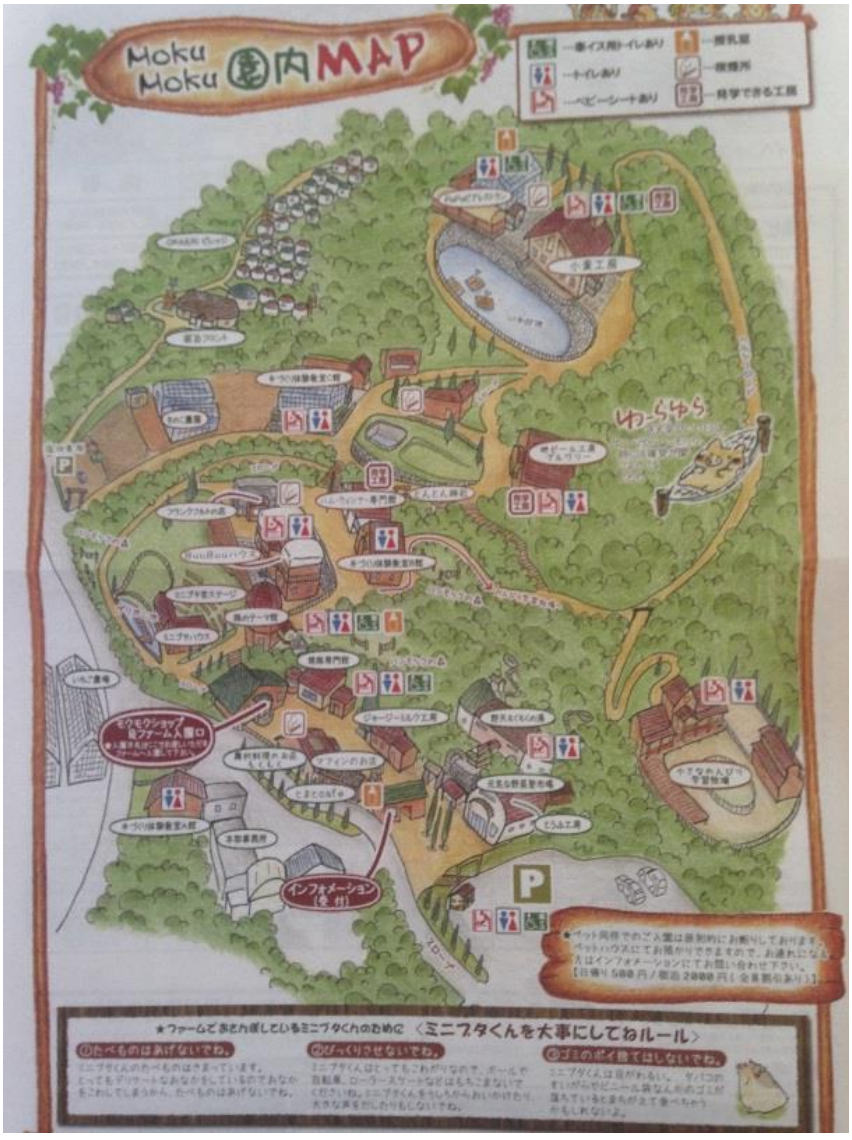


Fig. 4.8 Map of Moku Moku farm

Customers pay 500 yen to participate in activities and educational workshops. Activities can include early morning farm work (milking cows, feeding animals), harvesting fruits and vegetables, and classes on making different foods (bread, sausage, beer, seasonal items). All of these activities involve educational instruction related to life on the farm and the production of the food there, along with the enjoyment of the experience. The director said …

> *"The ordinary way is to have customers can harvest strawberries in 1:30 hours by themselves and that's it, but here, we do it a different way. Our customers are educated in how to grow strawberries and the different kinds of strawberries. Our customers get a lot of knowledge, and then the customers can harvest by themselves. They learn how to use the machinery for beer production. Another example of the experience, it is an interesting story. When children see a brown cow, they ask, "If the cow is brown, why isn't the milk brown? Why is the milk white?" This kind of education is important. This farm has idea to educate people, especially children. This is important. Another example of the importance of education: When we ask senior engineers, "Do you know how many udders a cow has? Some of them answer 6, some answer 4. Senior engineers don't know how many udders a cow has. This should be basic knowledge."*

The farm tries to practice the keys to creative tourism. However, there are many activities for managing the farm because at the beginning, the business was an association. There were five farmers that made up the group, with each member proposing a different activity for the farm. In this way, as customers visited the farm, there were different activities for them to take part in, allowing customers to return multiple times without doing the same

thing over and over and thus getting bored (and therefore no longer coming to visit). With a variety of activities, customers can return and try new things each time, if they so choose.

Fig 4.9-4.10 Learning Activities for their Customers

4.4 Success Factors

4.4.1 Farm products value-added

Moku Moku Farm was considering what could be added or what the value of their product was and would they be able to sell it. They agreed to put the emphasis on their "knowledge," "reasoning," and "making" as the theme of their farm. Their concept of putting new values on farming and agriculture was the key factor in their success. One item they chose was a novelty item produced for the birth of a grandchild. Rice is sealed into a small pillow as a keepsake for grandparents. On the front of the pillowcase is a photo of the newborn grandson or granddaughter for the grandparents as a gift.

Story telling is another way value can be added. The farm explains that when we look at an ordinary pig, it is a bit funny, but there is an explanation behind the status of a pig. It is believed that when you rub a pig, it brings good luck in work and love. Of course, there are also souvenir shops and stores where products are sold directly.


こんなかわいい
「抱っこ米」も誕生しました。
「生まれたときの重さで
おじいちゃんおばあちゃんにも
抱っこしてもらいたくて」
ネイチャークラブ会員
井寺さん（愛知県）

Fig. 4.11 Pillowcase seal newborn

Fig. 4.12 Pig in Souvenir Shop

4.4.2 Community-based use

Moku Moku Farm makes good use of its community charm and characteristics in order to flourish as a community. Harmony between the producers and consumers coexist since both sides understand that learning and becoming aware of the importance of agriculture as a way of life and through giving and receiving new values of agriculture makes everyone happy and satisfied. The whole community works side by side. The employers themselves are also the owners of the farm, while the consumers get the experiences of the farming community through food and agriculture education (classes).

Moku Moku Farm has had two strategies since it opened. (1) The strategy in the big cities - Tokyo, Nagoya, and Osaka - is to inform the activities in the cities. The restaurants not only serve delicious food to their customers, they also act as advertising for the farm and the shops, where customers can go to purchase the farm's products and, (2) The strategy in the rural areas, such as Iga city, is to address the situation of an aging population. Senior citizens prefer to eat fresh foods and traditional Japanese dishes, but supermarkets sell their products in big packages that are too much in quantity for the elderly, who often live alone. At Moku Moku Farm's restaurants and shops, fresh food can be purchased in small amounts that are better suited to those people with smaller appetites or who live alone.

4.4.3 Green business

Moku Moku Farm does not just do business but also greatly contributes to protecting the environment, and at the same time makes good use of their resources for the growth of the whole community (cooperative). The farm makes efforts to be a green, environmentally sound business as follows:

1) Their shops sell their drinks in paper cups.
2) Customers also have the option of buying reusable cups to keep throughout the day and take home with them.
3) Their products are packaged very simply, in packaging that is useful.
4) The farm makes it's own chopsticks to use with its products.
5) "Kuru Kuru Juice" is a juice they sell that customers make themselves at the shop, with the electricity needed to make juice coming from a human powered wheel.
6) Guest bungalows for accommodation include electricity meters for guests to keep track of how much electricity they are using, the idea being that if people can easily see how much electricity they use, they are likely to reduce their consumption.
7) Customers are encouraged to bring their own shopping bags. With each bag a customer brings, the farm gives the customer a token, good for 10 yen, which the customer may put into a donation box. At the end of the year, the company collects the tokens and donates 10 yen to charity for each token. The average year-end total is 1.5 million yen, which the farm donates to environmental organizations. Customers can also contribute money, which the farm will add to its donations. Customers are surveyed as to which organizations they would like the money donated to.

Fig 4.13-4.14
Ninja Show

Source:http://www.centrair.jp/en/tourist-info/ninja.html

4.4.4 Cultural and Social Capital

Iga developed in the Edo period and is culturally significant as the birthplace of the haiku poet Matsuo Basho and the home of the ninja Hattori Hanzo. Local products from this area include Iga ceramics, or *Igaware*, wheat cookies, and the Ninja Castle – a museum housing Samurai, Tofu, and Higu artifacts. The farm uses this culture capital as an activity in order for customers to learn about the region.

They have a traditional shop in front of Ueno Castle in the Japanese housing style, which they use to sell Bento boxes. The farm's director has said, *"The company asks to buy traditional housing from the farmer to sell in traditional Bento boxes. In this shop, the customer can eat the product in this housing, this very traditional housing. The customer may ask, "How can I buy smaller amounts of salad?" If you go to the supermarket, there is only the standard packaging that the supermarket provides, but in our shop, customers can purchase products in amounts that suit their needs.*

Moku Moku Farm has developed networking between farmers and the prefecture, the city, agricultural cooperatives, NGOs, resident associations, the Chamber of Commerce and Tourism Association, the Japan Agriculture association, and Mie University as social capital for supporting their business.

4.4.5 Local Government subsidies

The Japanese Ministry of Agriculture gives subsidies to build facilities for food processing. If the business meets the application criteria, they can receive subsidies for certain projects. Moku Moku Farm has employed former Ministry of Agriculture government staff and therefore has good connections and a good relationship with the Ministry of Agriculture. Total costs for company activities at the farm are six billion yen, of which two billion yen came from central and local government subsidies. The central government puts subsidies into the budget of the local government, which can then be given to local businesses that apply for the money. The subsidies can only be used for buildings and processing of food products and may not be used for accommodation facilities.

4.4.6 Unique Location

The farm is located close to Shiga prefecture, not far from Mie prefecture and easily accessible to the bigger cities of Osaka and Nagoya. These products are separated into three types, (1) Agricultural products, (2) Preserve or processing products, and (3) Primary production sections. The company wants to distribute these products to branches of the company or sales shops, and through their web service. There are seven shops and restaurants. Three shops are in the cities - Tokyo, Nagoya, and Osaka - and there are four shops in Mie prefecture (Front of a Castle, Matsusaka city, Iga city and a department store along the motorway), where the farm is located. The farm's idea is to build the relationships between the farm and its customers, so they have opened shops and restaurants in areas close enough to the farm that customers can visit the farm if they like. For this reason, they have not opened shops and restaurants in locations considered too far from the farm for their customers to be able to visit. Expanding to more distant areas is not currently in the plans for the future.

4.4.7 Farm Fan club membership

The number of members (fan club members) of Moku Moku Farm is about 45,000 members, primarily Japanese who have made purchases from the farm and who give the farm information. Advertising is for website sales, the farm, the restaurants, and the park. Fan club members help for advertising, so the way they let people know about their business was primarily by word of mouth.



Fig 4.15-4.17 activities in farm

4.4.8 Uniqueness of their products

Moku Moku Farm wants to differentiate their products from other, larger brands. Realizing that they could not compete with the large brands on existing products, Moku Moku Farm decided to find their own niche in the food and beverage market. Beer was one area where they could set themselves apart from the large corporations by brewing craft beers unique to their business that would not try to compete with the large breweries. They still brew beer in similar varieties as the large corporations, but with a different taste and signature style. The director: *"We set up a point of the variation from the major brands. We will have weaknesses. Therefore, we don't set up the same goals with the major products. We have to think about how to compete in beer. We know Asahi is a famous brand in Japan. We produce*

beer, so our taste goals must be different from Asahi. We try to produce a light beer, and of course the taste will be, of course, different from Asahi. We cannot win against Asahi. So, we produce a completely different beer. We try to find our own niche. The targets are also different from Asahi. For us, word of mouth is most important. We will not fight against Asahi."

Fig 4.18-4.19

Beer Products

4.5 Conclusion

As a whole, Moku Moku Farm is far more than a farm; it's an experience and a very good place for learning, both for the younger and older generations. They do not just do business; they greatly contribute to the protection of the environment and at the same time make good use of their resources for the growth of the whole community (cooperative). The business itself is noteworthy in its efforts to revitalize the community through their new values in farming and agricultural practices while producing delicious and safe food. They see the importance of "knowledge" and "thinking" together with their customers. They understand the importance of employees and farmers engaging together for business and they give high priority to the "spirit of cooperation," which makes this farm both unique and sustainable. (Go Ma.Karen Quilloy: 2012) The motto of Iga no Sato Moku Moku Tezukuri Farm is as follows:

- Agriculture to promote local economy

- Leading to maintain the agricultural culture
- Efforts to protect the natural environment
- Production of good and safe foods
- Business to share the knowledge and experiences with the customers
- Work environment to cherish the richness of human minds
- Top priority of the cooperative spirit and business based on laws and democratic rules

The development of Moku Moku farm has become the new trend for community development to increase the per capita income and to revitalize a society in the rural community. All citizens can be proud and feel satisfied with their lifestyles in each of their respective communities. This case study confirms the hypothesis that globalization and local community can co-exist.

In my personal opinion, I feel the success of Moku Moku farm lies in its creative and innovative idea. The mixing of the innovation and methodology is one of a kind small business that can do well in a big market are not something toy see very often. Thus, in order to increase rural development goals which are revitalization and per capita income, we must both promote local products and invite manufacturing companies to set up in rural areas as the case of Mie Prefecture in Japan, which is relevant to Thailand in cultural-based form. In consequence, the system can be simultaneously implemented to serve Thailand or iesthe other developing country in ASEAN.

Chapter 5

Rural Socio-Economic Development:

A Comparative study of Thai and Japanese Experiences on Organic Farming

5.1 Introduction

In general, rural socio-ecomonic development is determinded in national plan. In the first phase, it focused on only economic development, but later it viewed the importance of society development. However, development policies almost emerged in urban areas before rural areas so the economic growth has been started in urban areas. While, in rural areas faced on various problem such as migration, abandoned field, natural resources management, aging, per capita income and agricultural production. This crisis emerged in both developing countries and developed coountries.

Moreover, many countries all over the world are aware of food security and efforted to establish various the action plan into government policy and rural areas became the first priority which is determined being a base of production especially agriculture. The world food situation and trends in agriculture, there are many concerns over global food supply and demand in order to grain stocks have dropped almost to the lower limit of safety stock. On the demand side, an increase in demand for foodstuffs and agricultural products due to population increases, particularly in developing countries, economic growth in China and India, and an increase in biofuels; On the supply side, a small increase in harvested areas and unit crop yields, and the impact of global climate change on production.

The world food situation and agricultural trends in Japan, MAFF reported is the largest net import country of agricultural products in the world. Its import of agricultural products, mainly processed foodstuffs, is constantly increasing, reflecting the appreciation of the yen and trade deregulation throughout the world, as well as the more diversified diet of the Japanese. Imports from the United States, EU, China, Australia and Canada, the top five countries, account for 70% of the total import volume, showing that Japan's imports largely

depend on imports from these specific countries(MAFF,2010). Besides, Japanese government need to be pursued from the farm to the dining table to improve the safety of food products. Recently Japanese people especially parents with children are very sensitive with food safety. However, those food are expensive so that low income family can not afford to get them. Moreover, problem in the rural communities of Japan is that the population is both declining and aging. Particularly, municipalities in hilly and mountainous regions will see a sharp population drop.

In Thailand, After government announed the 1st National Economic & Social Development Plan(1961-1966), monoculture expand. Government had been promoted agriculture industries. There are to using the chemical fertilizer and agricultural chemical to herbicides intensively, to reclaiming the forestry and to using natural resources for electricity power supply. Until the 7th National Economic & Social Development Plan(1992-1996) founded various social and environment impact such as migration into the urban, natural resources management, pollution, healthy problem and inequality between the urban areas and the rural areas. From the 2013 Agricultural Census, agricultural holdings in Thailand were totally 5.9 million and the households of agricultural holdings were accounted for 25.9 percent of total households in the country. The majority of agricultural activity was crops (96.4%). Most of agricultural holdings, of about 77.2 percent, were found in non-municipal area. In addition, Northeast was the region having nearly half of all agricultural holdings (46.5%), followed by North (22.0%), South (17.2%) and Central (14.3%). Area of agricultural holding throughout the country was totally 114.6 million rais which was accounted for 35.7 percent of total area of the country 1/. The most of the agricultural holding area located in non-municipal area about 79.5 percent. During the past 10 years, from 2003 to 2013, agricultural holdings increased from 5.8 to 5.9 million (1.7%) and area of agricultural holding increased from 112.7 to 114.6 million rais (1.7%). However, an average area of holding remained the same at 19.4

rais per holding. From the agricultural holdings of 5.9 million in Thailand, it was found that they engaged in various kind of agricultural activity, i.e. the single activity and the multiple activities, such as involving in both crops and livestock or involving in both crops and freshwater aquaculture or involving in both sea salt farm and livestock. For the single activity, which was accounted for 80.0 percent of the total holdings, it was discovered that agricultural holdings engaged mainly in crops was the highest in number of around 4.5 million (76.5%) among others.

Among the biggest problems on above in the rural areas of Japan and Thailand, its now play various roles aside from agricultural production in these areas due to the emergence of various movements.

In Japan, For the sustainable development of agriculture, Japan is facing the urgent need for a recovery of sustainable agriculture. In response, Japanese government focuses on "domestic production," "farm management, human resources and farmland to support production," "efforts to increase agricultural income," "activities of women and elderly people," "efforts in agriculture that are in harmony with environmental conservation and biodiversity" and "efforts in research and technology development." In order to spur rural area revitalization, the Ministry Agriculture, Forestry and Fisheries has instituted projects to support community-based organic farming cooperatives such as supporting agribusiness and encouraging the younger generations to entry farming. Farming grants are provided to people aged between 18 and 40 years as a new farmer. Japan government support promoting the "sixth industry" increases farmers' income from agriculture production-related businesses along with adding to their existing agricultural income. Farmers can cooperate with commercial and industrial sector players in making efforts such as the processing of farm products and restaurant operations. These will represent important challenges in the future of organic agricultural farming in Japan's rural areas. Agricultural cooperatives' efforts to

increase farming income through sixth industry promotion are represented by such farms as the Matsusaka Agricultural Park Bell Farm in Mie prefecture, Moku Moku Farm and Inuunig Organic Farm, as successful agricultural farm. These farm are the current model which represents a best-case scenario to utilize local resources in an effort to revitalize rural areas.

In Thailand, during the past decades, the Government of Thailand has successfully been implementing several socioeconomic policies through its regular National Economic and Social Development Plans (NESDP) to boost the agricultural sector. With the improved sustainable growth in the past decade, more employment was generated and the food production considerably increased. Food production has outpaced domestic consumption resulting to an increase in its food exports. Thailand has become one of the world's largest and most advanced producers and exporters of processed food products and is one of the top five net food exporters in the world. Export food industries and agriculture industry sectors currently employ 870,000 workers. Such as, the Thai government announced self-sufficient community economic projects in all Thailand's provinces. Later, the 9th National Economic & Social Development Plan (2002-2006) adopted the "Sufficiency Economy" philosophy of His Majesty King Bhumipol as a policy guideline. The plan was to develop good governance, strengthen the grass roots organization of society, and promote sustainable development in rural and urban communities. The plan was attempting to eradicate poverty and unequal income distribution through the development of social capital.

Furthermore, Thailand follows Japanese OVOP community enterprises, with the understanding that adopted the OVOP concept for use in its own community economic development, the OTOP project has been launched in Thailand in 2001 as a government policy. These days, many local products in various countries can successfully generate income for their communities and cities, especially in tourist areas. It is not clear whether the OTOP movement in Thailand can solve the rural and urban community poverty and unequal income

distribution, but it seems likely to be able to increase local social capital. Successful OTOP entrepreneurs whose businesses progress sustainably will inevitably develop social capital. They can develop human resources and knowledge management, which are the most important factors in strengthening communities to be self-reliant and sustainable. In addition, the government's interest in organic agriculture started later than that of NGOs and its role in organic agriculture is still although increasing. They have tried to campaign on organic food consumption, but still has interested just a little from consumer. Organic products still are considered a product for the upper classes and for foreigners. Even if, the Ministry of Commerce reported, Thailand government gives precedence to export market more than domestic consumption in organic agriculture, still organic farming is the destination of a development community in rural areas at the present.

In generally, economic development policy has an impact on another development especially encouragement and revitalizing community.

5.2 Objectivities and Methodology

This paper focuses on rural socio-economic development policy in Japan and Thailand in the past five decade, defined organic farming as sustainable agriculture and examines utilizing local resources regarding how to revitalize rural areas and what factors to be important.

This study has been carried out using qualitative research methodology; employing documentary analysis, in-depth interviews with the owner of organic farm and the experts, and participatory observation in the field in Thailand such as Lampang and Chiang Mai Province and Japan such as Mie Prefecture, Nagoya Prefecture. The case study of this research in Japan is the Inuunig Village organic farm establised in Nagoya Prefecture and in Thailand are the Kanlayanamithra Group established in Mea Tha sub-district, Mea-Orn district, Chiang Mai province and the organic farmer in Ban Wor Keaw, WorKeaw sub-district, Hangchat

District, Lampang. The period of this study time was on January to October, 2015.

5.3 Organic Farming in Japan

Organic farming is crucial for food security and environment sustainability movement. The developed countries are aware to consume clean food after consumers fearing for the pesticides' harmful effects. In developed countries, it has been found that the average yield of organic farming is 92.2 % of conventional farming (Keiko Yoshino,2010). Especially, the middle class or the high-income group in urban area is the groups that increased their awareness of healthy problem effect from food consumption. Various research results have shown some food with chemicals that contain carcinogenicity. The environment can also be affected from using chemical fertilizers and pesticides. Later on, these have led to organic farming movement and safety agriculture farming.

When Japanese were affected from radioactivity after the Second World War and modern technology, the citizens moved for food safety. According to the Agricultural Basic Act which was enacted in 1961, the policy on selective cultivate of crop based on consumers' needs started. Organic farming was re-evaluated when health problems caused by chemicals became known in the 1970's (Keiko Yoshino,2010). For the last 30 years, organic farming has been influenced in its development by three major factors: environmental concerns with the pollution and unsustainability of modern high input farming; human health concerns over agro-chemicals; and social concerns over the destruction of rural farming communities (http://www.solutions-site.org/node/47 accessed on June 8, 2015)

Organic farming is a kind of alternative agriculture which has been moved around Japan. However, before organic farming movement in Japan, there are various alternative agricultures such as Fukuoka nature farming (started 1938 by Masanobu Fukuoka), Mokichi Okada nature farming (started 1936) and Kyusei nature farming (Kyusei Kyo'organization

was established by Okada in the 1930s). These nature farmings can't response to the demand of the increasing population, but they has been used to drive self-sufficient economic. Thus, nature farming is not success in market economic. However, all of these were adopted into agricultural sector in Thailand.

Conclusively, both Internal and External factors, which drive organic farming movement continuously in Japan such as emerging pollution of 1960s, has caused an emerge of a new paradigm of a green revolution, the impact from nuclear weapon post the world war II, development policies in rural areas, JAS Law, and so on.

Nowadays, agricultural sector in Japan is focusing on organic farming that related to human health, the environment, a community support start-up that can lead to a stronger community atmosphere (income for senior citizen and low rate on labor migration), and an increased income for farmers. This research on movement and adaptation of organic farming sector, especially the market, can lead us to apply learning knowledge and experience to organic farming sector in Thailand which is still at the stage of a beginner.

5.3.1 Community Supported Agriculture and Business Model for Organic Farming Movement

In 1971, the Japan Organic Agriculture Association (JOAA) was founded in search of sustainable agriculture and desirable relationship between farmers and consumers. As the model of "community supported agriculture" spread in America, the concept was re-introduced to Japan through an environmental White Paper publised in 1990, from which the local government in Japan began to consider this idea for the first time (Takeshi Hatano,2008).

Later, "Teikei" system was emerged and became the direct sharing of harvest and risk between organic farmers and contracted consumers (Keiko Yoshino,2010). Teikei is the community supporting agriculture which farmers relate closely with consumers, as the organic

certification is based on system trust. Consumer can order a number of products needs per day, per week and per month while farmers can recommend any products for consumers. Teikei group, as an idea to create an alternative distribution system, is not depending on the conventional market.

Since 1990s, Teikei System has been declined in Japan due to the social problem and the way of life that has been changed. Japanese housewives who were the main supporters in Teikei system has declined, mainly due to the increasing number of working woman. With the decreasing number of housewives, who used to stay at home and exclusively do every household and community shores, time consuming Teikei activities has lost the needed to support and more convenient channels were chosen by the majority (Keiko Yoshino,2010). When the rate of home cooking is declined and that of dining-out and taking-out is increasing, it seems likely that consumers would welcome the participation of the distribution industry and food service industry into the organic market. This phenomenon occur in many countries around the world, including Thailand. Hatano (2008) indicated that a number of participants in each Teikei group has declined between 1996 to 2007. In contrast, when Teikei group registered as NPO in 2001, a number of Teikei group increased. The remain of all organic famer was only 10 percent.

Furthermore, the primary reasons for the decline in Teikei participation entail various internal and external factors, such as changes in Teikei's participants, changes of the larger organic market, and changes in the society as a whole. These factors have led to a reduction in the number of Teikei participants – even as channels for distribution of organics have increased[4]. Notwithstanding, the number of organic food consumers has not declined in Japan. Nowadays, the food-service industry need can create successful organic business.

5.3.2 The Certification and Labeling Systems of Organic Agricultural Products

How stringent are domestic organic products in order to get certified and labeled under standard in Japan? At the present, some farmers have not received certification on safety food or organic farming standard from Japan Agriculture Standards (JAS) or International Federation of Organic Agriculture Movement (IFOAM). Because there are many conditions to change such as high technology that having a high cost for farmers. In cases of small farms or farmers who are under the Teikei system, consumers are dealing directly with farmers to control any standard.

The certification system for organic products was made compulsory from 2001, as a result of the revised JAS Law. Fujimoto mentioned the number of certified organic business entities, including producers, distributors, and importers, has gradually increased from 3,639 (2002) to 5,842(2010). However, certified organic producers accounted for only 3,815 persons in 2010, and the extent of their certified fields remained small in area at 8,506 ha, accounting for a mere 0.18% of total arable land in the country (Akimi Fujimoto,2012).

Koichi Ikegami (2015) from Kinki University said that in the beginning period, JOAA, the major organization of organic agriculture in Japan, insisted that certification and labeling systems did not fit organic agriculture and denied any kind of involvement with such system. Later, MAFF had introduced the guideline on organic agriculture products in 1992, being followed by the revision of Japan Agriculture Standards (JAS) in 1999 for the purpose of harmonization to the so-called CODEX standards for organically produced foods.

5.3.3 Organic JAS Certification

Japan Organic and Natural Foods Association (JONA) has been conducting third-party, organic certifications since 1993. Its certification currently covers mainly, for the domestic market, organic JAS certification and JONA Original certification and, as international organic certifications, overseas regulatory certifications including those for the U.S.A., EU, and Canada, and JONA IFOAM certification (JONA, retrieved on 2015).

Organic JAS certification is mandatory for an operator, including producer and processor, to obtain organic JAS certification from a registered certification body by having their operation inspected in order for their product to claim “Yuuki” or “Organic” on crops or processed foods in Japan (organic JAS certification is voluntary if JAS marks are not intended to be attached on organic livestock, organic feed, and organic food processed mainly from non-crop ingredients). It is not allowed to put organic JAS marks on the products and/or claim organic if the operator is not certified to JAS. An operator that illegally labels products is subjected to penalties in line with JAS law. National organic standards are set as “Japanese Agricultural Standards (JAS) of Organic plants”, “JAS of Organic Processed Foods”, “JAS of Organic Feeds”, and “JAS of Organic Livestock” (hereafter called JAS standards). JAS standards lay down production/processing methods of organic food. A producer, a manufacturer (processor), a re-packer and an importer have to have an inspection from a registered certification body to evaluate their competence, system, and equipment to produce/process organic food (JONA,retrieved on 2015).

However, JONA has JONA Original Certification program for operators producing, processing, and handling products not covered by organic JAS standards, such as aquaculture products, alcohol beverage, and honey. JONA has certification programs to certify products claiming “made with organic (ingredients)” (higher than 70% of organic ingredients) as well as organic crop, organic processed food, organic livestock, organic feed,

organic bee products, and organic aquaculture products. Organic aquaculture products are certified to JONA private standards that take international standards into account. In case of alcohol beverages, JONA certifies operators to organic labeling guidelines of National Tax Agency.

Table 5.1. The operators subject to organic JAS certification

Operation category		**Products as example**
PPMD (Crop producer)	A single farmer, a farmer association, and so forth (including overseas operators) to produce organic crop and organic feed.	Organic rice, organic potato, organic cabbage, organic apple, organic shiitake mushroom, organic rice straw, etc.
PPMD (Processor)	A plant (including overseas operators) to process organic processed food and organic processed feed.	Organic soy sauce, organic dry noodle, organic konnyaku, organic green tea, organic azuki bean jelly, organic milk, etc.
PPMD (Livestock producer)	A producer (including overseas operators) to raise livestock at a certified house as organic feed is fed.	Organic egg, organic chicken, organic pork, organic beef
Repacker (Subdivider, repacker)	A plant and a retail store (including overseas operators) to repack organic crop and organic processed food.	Organic food in general with organic JAS mark attached
Importer Note: Only in Japan)	An importer that imports organic products from the countries, such as EU, Australia, and the U.S., that are recognized as having organic regulations equivalent to JAS.	Organic pasta, organic olive oil, organic soy beans, etc.

Sourse: JONA, retrieved on June 15, 2015

5.3.4 Distribution of Organic Products

In the beginning there were “Teikei” system supported organic products. Teikei is an idea to create an alternative distribution system, not depending on the conventional market. In the second half of the 1970s organically-grown products began to be dealt by some wholesalers and greengrocers and some time later at natural food stores, department stores and supermarkets. After the Cherynoby crisis, people concerned about the safety food as a result there was a flood of flags. Labels such as “organic”, “no chemical”, “less chemical”, “natural farming”, “micro organic farming”, were found at many grocery stores (JONA, retrieved on June 15, 2015).

The distribution channels for food in Japan have been opened for organic food. The most important one is the conventional retail trade with a market share of more than 60% which shows a difference to other countries (e.g. US or UK) with a significant higher percentage and much lower market fragment. Usually Japanese retailers are categorized as follows: General Merchandise Stores (one-stop shopping for food and non-food products), Supermarkets (special food and household products), convenience stores (more than 10,000 shops all over Japan offering lunch boxes), department stores (high price food and non food products), and local or specialty stores (important sales channel in the past) (Organic Services GmbH,2012). In this conclusion, Organic food distributes both wholesale and retail/service in the Japanese market.

A quantity of domestic organic production in Japan is less than import organic production. As presented in Table 1, domestic organic products from 33,734 tons in 2001 increased to 56,415 tons in 2010. And the imported organic product has continued to grow, from 94,186 tons in 2001 to 859,943 tons in 2010. For the period from 2005 to 2008, more than one million tons were imported, due to the heavy purchase of organic sugarcane. Thus,

the relatively small number of certified organic producers and quantity of domestic organic production does not necessarily mean a small demand for organic products in Japan.

Table 5.2 Changes in the number of JAS certified organic entities, domestic organic products and imported organic products in Japan, 2001-2010

Year	Certified business entities	Domestic production (tons)	Import (tons)
2001		33,734	94,186
2002	3,639	43,789	89,019
2003	4,273	46,192	297,923
2004	4,453	47,428	449,649
2005	4,884	48,172	1,440,178
2006	4,611	48,596	1,296,256
2007	5,104	53,446	1,902,279
2008	5,651	56,164	1,981,262
2009	5,514	57,342	704,204
2010	5,842	56,415	859,943

Sources: Fujimoto,2012

From "Organic Market Research Project (OMRP)" survey conducted by a team led by IFOAM Japan, the Japanese organic food market is estimated at around $ 1.3 to $1.4 billion as of 2010. According to MAFF, the organic share in domestically grown agricultural food products in Japan was only 0.24% in 2011, still 0.14 percentage points up from a decade ago. The Japanese organic market is still in its nascent state. This is partly due to limited domestic organic food supplies, undeveloped distribution channels and continuing strict import regulations, hindering the availability of organic products in Japanese market. Considering that Japan imports about 60% of its food supply on a calorie basis from other countries, the stringent regulation on organic food imports is also a major impediment to the expansion of the organic market in Japan.

5.3.5 The Case study in Japan

MAFF has established the basic principles for promoting organic farming on the fundamental issues for central and local government to implement policy measures for promoting organic farming from the viewpoint of production, distribution, and consumption by setting up promoted target groups (the target groups would be national and local governments, farmers, and consumers), supporting the distribution and sales of organic farm products, promoting technological development, promoting consumer's understanding and interest in organic farming, promoting understanding between organic farmers and consumers, supporting the research sector, supporting organic farming activities in private sectors, supporting local governments via the central government (encouraging prefectural governments to engage with organic promotion programs, providing guidance, giving advice and training to local government, which create and implement policy measures on farming), and making a cooperation system in the national and prefectural governments (MAFF,2007).

One of the best practices as a business model for revitalization of hill farming through organic agriculture in Japan is the collaboration between universities and the private sector. In 2005, Tokyo University of Agriculture signed a cooperation agreement with the city of Joetsu in Niigata Prefecture. From the second year of the activity, TUA decided to set up a public company. A corporation named the Joetsu Tokyo Nodai, Inc. was officially founded on the 1st of April, 2008 by TUA graduates, together with concerned parties who wished to support this challenge of the university, to initially clear abandoned fields. Its business objectives included not only farm and ranch management but also training and research businesses in bio-production, processing, and marketing.

The case study of this research is the Inuunig Village organic farm in Nagoya prefecture. The owner is studying for a doctoral degree at Mie University. He is 40 years old. He is interested in organic farming because his parents are organic farmers and they have a

large-sized organic farm and organic shop in Nagoya. He established his own organic farm in 2012. He operates the farm as using organic farming methods. There are plot areas that customers can rent and grow vegetables by themselves for their own use or for sale. The farm rents each plot of land for only 30,000 yen for one year, a very affordable price in Japan, considering the average Japanese spends 5,000 yen per month for vegetables bought in the supermarket.

Fig. 5.1-5.2 Inuunig Village farm

The owner of the Inuunig Village farm explained that his organic farming method ensures not only safety, good taste, and low cost, but also a sustainable way of farming. Organic means safety and good taste for individuals and sustainability and security for farmers and the environment. He said, “When I teach customers how to farm organically, I will tell them not to try to grow too much. We should grow only 10-15% on our own for cooking, while 80-85% of vegetables should come from farmers in order to keep organic farms in business. In one year I will teach how to grow about 30 kinds of vegetables. If they are grown

on an organic farm, they will be safer and taste better than if they are grown non-organically. These farmers have the practice and experience. They can do it by themselves." The owner of the Inuunig Village farm called this case Community Supported Agriculture(CSA).

Nowadays, the young generation has entered the organic farming movement in significant numbers. The researcher interviewed individuals of the younger generation who are learning at the Inuunig Village organic farm in Nagoya. They said, "*organic farming is the new alternative business for the younger generation, especially small organic farms in a community. We use land of an area of only 1 Rai for operation. This organic farm not only cultivates some vegetables for consumers, but also we can provide various activities for members, such as learning cultivation, the processing of food, and selling the products on the weekend. We can develop relationships among family members and between families. Finally, we can own the business by ourselves and we can be in our hometown.*"

5.4 Organic Farming in Thailand

5.4.1 Background

In Thailand, awareness for health food has increased during the recent years due to health problems and causes. In other word, NGOs are important players to develop organic agriculture. They have tried to promote the campaigns on organic food consumption, but still receive small interest from consumers. Organic products are still considered as a product for the upper class and foreigners.

Although the government's interest in organic agriculture started later than that of NGOs, its role in organic agriculture is still increasing. Since Thailand economic in 1997, the King of Thailand has been supporting the idea of Sufficiency Economy. The composition of the 8th National Economic & Social Development Plan for the five-year-period (1997-2001) was mentioned in sustainable agriculture, which included organic farming. In the 9th National

Plan, the King's principle of "Sufficiency Economy" has been adopted to develop economic and society. After that, government organizations are involved in organic farming through policy, certificate, accreditation, support, extension, research and development the responsibility as the policy.

Organic agriculture in Thailand is often confused with sustainable agriculture or alternative agriculture. Various thoughts and practices on alternative agriculture have emerged in Thailand such as Mokichi Okada Association style, Santi Asoke farming, the Integrated Agriculture and Aquaculture, Permaculture, the new theory agriculture and organic agriculture. Among all these, organic agriculture farmers in Thailand.

Mokichi Okada Association (Sununtar Setboonsarng and Jonathan Gilman,2011) adopted nature farming techniques from Japan to Thailand in 1989. Farmers in Chantaburi, Chonburi and Lopburi provinces have fully adopted MOA nature farming.

Santi Asoke Nature Farming was developed under a combination of farming systems based around organic farming and Fukuoka nature farming. The main motivation in the adaptation of this system is based on a spiritual belief. Farmers who practice Santi Asoke farming do so in order to fulfill their Buddhist beliefs. Products from each center allow Santi Asoke to be completely self-sufficient in vegetables and rice; the surplus product is sold in Santi Asoke's own natural food shops and vegetarian restaurants. The profits from the latter enterprises are used to fund Santi Asoke's activities around Thailand. Nowadays, the Buddhist thought and practice of Santi Asoke has been spread around Thailand. As Santi Asoke is successful in helping farmers to reduce their debts by following a certain Buddhist lifestyle and by implementing natural farming, the Bank of Agriculture and Agricultural Co-operatives (BAAC) co-operates with Santi Asoke on "Toxic" free agriculture.

The Integrated Agriculture and Aquaculture is an alternative agriculture that plays various roles in Thailand. The Integrated Agriculture and Aquaculture brings the

awareness and exploit of this symbiosis and is designed for small-scale farms. It takes the advantage of the mutually reinforcing linkages between crops, fish and livestock. This system has a high degree of market orientation. The objective is to achieve an on-farm ecological balance where a sufficient variety of crops, livestock and fish are produced to meet the farm family's food and cash income needs. The majority of farmers have adopted this system because of the increased productivity, reduced input costs, increased profits and long run sustainability that can be gained. It is especially attractive because this system is providing more profit than conventional farming, and certainly more sustainable.

Permaculture is not a farm production system but rather a land use planning philosophy. However, farms run according to permaculture philosophy are encouraged to practice a number of common activities; organic farming techniques, agro forestry, aquaponics, the adoption of appropriate technologies compatible with the local environment and cultural traditions.. Permaculture has had very little impact in Thailand as it has only been partly explained by agro-forestry.

The "New Theory" Agriculture, an approach to rural development, was adopted from the role of the King of Thailand. The "New Theory" divides land into four parts: to preserve the water, to dedicate to the rice production, to cultivate garden crops and trees, and to occupy as residence. The farmers who interest in this approach will concentrate on producing enough to became self-sufficient. The approach also encourages them to join groups, co-operatives, and cooperate with financial and energy sources. These thoughts should improve the quality of life of population in the rural. After the 1997 economic crisis, His Majesty King Bhumipol announced the Theory of Economic Self-Sufficiency to focus on greater resiliency and sustainability, and the Thai Government announced self-sufficient community economic projects in all Thailand's provinces. Later, the 9th National Economic & Social Development Plan (2002-2006) adopted the "Sufficiency Economy" philosophy of

His Majesty King Bhumipol as a policy guideline. The plan was to develop good governance, strengthen the grass roots organization of society, and promote sustainable development in rural and urban communities. The plan was attempting to eradicate poverty and unequal income distribution through the development of social capital.

Organic agriculture, still at its beginning, has received attention from Thai farmers and is growing in Thailand. The attention has been stimulated by a pioneer organic rice project, which began in 1990 in Kadcham district, Surin province. Here a cooperative of 600 farmers, together with outside financing from Bangkok business people, bought a rice mill to process pesticide free rice and to provide an alternative from the local rice millers who frequently cheated the farmers. One third of the rice produced free rice and chemically produced rice to be processed in the same mill. In 1997 a similar scheme started in Roi Et province in Northeast Thailand.

The first time the government mentioned organic farming-together with other alternative farming methods, was in the 8th Economic & Social Development Plan (1997-2001). It set the goal to convert 20% of the arable land to sustainable agriculture, including organic farming. However, this goal has not yet been reached. In 1990, the Department of Export Promotion initiated a "Pilot Project on the Export of Organic Farm Products". In 2001, the official "Standards for Organic Crop Production in Thailand" (SOCPT) came into effect. A certification system and logo for organically grown products were also developed. In 2002, the National Office of Agricultural Product and Food Standards developed a national organic agriculture criterion. The standards therefore are chemicals free for at least three years before the first organic harvest (Marina Stracke-labmann,2007. The promoting activities of government in the field of organic farming were announced in 1990 but there are fewer subsidies from government and lack of steady supports.

According to a study by Green Net(2015), the organic farming land which are

certified by ACT (Organic Agriculture Certification Thailand) has increased to the highest of 219,521.16 rai in 2011. However, the largest production category is organic rice, especially in 2010-2011. (Table 5.3) In 2005-2006, there was Insurance price of rice paddy policy by Taksin Government, a number of certified organic farming increased the same as in 2009-2012, depended on Yingluck's rice pledge policy. As farmers extended to grow out-of-season rice 2 times per year, this resulted in a shrinkage of organic farmland and organic rice fields. The certified organic farmland was reduced 7,499 farmlands in 2011 to 7,189 farmlands in 2012 and the highest has been increased to 9,281 farmlands in 2012.

Green Net information founded that farmers and organic farmlands in the Northeast of Thailand has the most farmland proportion while in the South has the least proportion. The average of farmlands hold in the Central is 88.1 rai per farmer, followed by 64.3 rai per farmer in the South. Even if Thai organic agriculture market was slightly reduced in 2012 due to the impact of internal economic and politic problems, organic agriculture market has been improved in 2013 regarding the extended market factors, especially EU, USA and China (Vitoon Panyakul, retrieved on June 3,2015).

Panyakul(Retrieved on June 3,2015) said that "organic agriculture promoting of Thai government, after the Strategy of Organic Agriculture Development National Plan 2008-2011 and the Organic Agriculture Development National Action Plan 2008-2011 finished, has transferred the responding organization from the Office of the National Economic and Social Development Board (NESDB) to the Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. According to the lack of political stability also makes the Office of Agricultural Economics can not to successfully pushed new strategy and to continually arranged National Organic Agriculture Committee Meeting". Moreover, one obstacle to the growth of organic farming in Thailand is the lack of a recognized national certification scheme.

Table 5.3 The organic farming land are certified by ACT (rai) in Thailand 1998-2013

Year	Rice	Field crops	Vegetables	Fruits	Tea/ Coffee	Vegetables /Fruits Mixed	Aqua culture	others	Total
1998	6,281.41		-					-	6,281.41
1999	5,510.13		-					-	5,510.13
2000	7,005.26		3,518.75					-	10,524.01
2001	9,900.50		3,518.75					-	13,419.25
2002	32,841.27		22,382.30					768.75	55,992.32
2003	46,179.33		22,260.64					768.75	69,208.72
2004	52.182.75	7,859.79	13,283.60	12,777.00				768.75	34,689.14
2005	108,302.02	6,731.20	14,844.76	4,995.35				761.00	135,634.33
2006	113,213.04	6,546.65	15,121.21	4,981.83				1,077.25	140,939.98
2007	77,005.03	10,103.64	16,503.19	15,907.20				203.75	119,722.81
2008	70,485.67	11,791.13	13,820.39	8,369.92				1,500.00	105,967.11
2009	112,152.27	45,920.63	18,066.51	7,342.20				8,738.43	192,220.04
2010	138,328.03	46,682.07	7,047.70	6,751.33	5,286.00	7,832.88		1,067.34	212,995.35
2011	140,711.61	46,682.07	7,132.83	9,485.50	5,605.00	7,935.13	1,838.52	130.50	219,521.16
2012	124,964.39	46,691.44	4,443.45	7,440.04	6,689.25	12,106.50	1,779.92	1,270.83	205,385.82
2013	125,730.71	42,865.57	4,433.33	7,951.09	7,372.41	9,145.09	1,685.92	13,999.56	213,183.67

Fig. 5.3 Organic Thailand Brand

Fig. 5.4 Organic Thailand Agriculture Standard Certification

Fig 5.5

This is the IFOAM organic logo, which can also be found on some produce in Thailand. The International Federation of Organic Agriculture Movements (IFOAM) is the worldwide umbrella organization of the organic agriculture movement, with about 750 member organizations and institutions in about 100 countries all over the world. It was founded in 1972.

5.4.2 Certification

Certification is necessary to make sure that organic criteria are being followed correctly, so that the customer can trust in the quality of the products and that organic brands can be created so that product is distinguishable from products from other sustainable or conventional farming systems. This is of special important in Thailand, where awareness of organic products is still weak (Panyakul,2003). Certified bodies in Thailand can be classified into 3 categories: Thai government bodies, Thai private entities, and foreign entities, with 50% of organic farmlands certified by foreign companies and 50% of organic farmlands were certified by Department of Agriculture under Thai government bodies (Sali Chinsathit,2011). Organic Agriculture Certification Thailand (ACT) is the only organic certified body which is accredited by ACFS and IFOAM. ACFS or The National Bureau of Agricultural Commodity and Food Standards was established within the Ministry of Agriculture and Cooperatives in October 2002.

Established in 1995, Organic Agriculture Certification Thailand (ACT) is an independent private certification body. It was the first Thai certification body offering internationally recognized organic products in 2000. In 2002, the Institute of Organic Crops was established as a national certification body and as a research and development center. Also in 2002, the "Organic Thailand" brand was established. The Ministry of Agriculture and Cooperatives attempted to adopt the DOA procedure for organic fisheries and organic livestock. Unlike the integrated certification of ACT, in these cases of crops, fish, livestock and fertilizers etc., they must be certified at four different departments of the Ministry, which is difficult as farmers with integrated farm systems then require up to four separate certifications. Foreign certification bodies acting in Thailand comprise certification bodies from Italy (Bioagricet), from Germany (BSC), from Australia (Australian Certified Organic), from Sweden (Krav-Economisk Foriegning) and from Britain (Soil Association)(IOAS 2006) (Marina Stracke-labmann ,2007).

At present, ACT established new organic standards in 2014, existing operator already certified by ACT may choose to implement and be complied with these new standards now or by 1st September 2014 at the latest. New operator applying for ACT certification or extending scope have to implement the new standards immediately. This standard which is an additional revision and approved by ACT Standard Committee on 10th March 2015.

5.4.3 The Organic Production

Organic farm in Thailand, according to the background and methods, can be divided into 2 types as (Chinsathit,2011) "self sufficiency oriented" and "organic standard oriented". Self-sufficiency oriented farms are mostly belonging to small farmers who grow crops for consumption in the family and the products is residues for local market. Organic standard oriented farms received more certification for domestic markets and international markets.

As Labmann classified organic farmers in Thailand into 3 types: (1) farmer groups and co-operatives (2) commercial family farms and (3) agribusinesses. Each type is different in market orientations, products, technologies and geographical locations.

Most of organic products in Thailand, for both domestic market and international market, are rice (Hom-mali), fruits and vegetables.

The Ministry of Commerce reported, since 2008, organic products has become one of Thailand agendas when the government appointed national-level committee comprising concerned agencies namely the National Economic and Social and Development Board (NESDB), the Ministry of Commerce (MOC), the Ministry of Agriculture and Cooperatives, and the Ministry of Sciences and Technology. This high-level committee set targets on developing organic knowledge and innovation as well as promoting commercially viable organic products. The Ministry of Commerce's role is to market organic Thai products in both domestic and international markets with the following strategic points; capacity building on

organic producers and entrepreneurs, organic value creation in accordance with the market demand, trade facilitation and market expansion for both international and domestic.

Later, in 2010, the Ministry of Commerce has supported 3 organic product types; food, non-food and organic services. In 2011-2012, the Ministry continues to support such product range with an emphasis on organic services. The plan includes the organic island initiative by transforming Pa-Ngan Island, in the South of Thailand, conventionally known as full moon party into an organic island with coconut-processed products as well as environmental friendly hotels and spa (www.google.com, retrived on June 16, 2015).

Also, for the medium-term plan (2012-2015), the Ministry of Commerce has a vision to drive Thailand to be the organic hub of ASEAN, thanks to the relatively advanced innovation, the existence of IFOAM accredited certified body, the close collaboration between the public and private sectors.

Organic Thai products status, approximately 34,780 ha (0.21% of total agricultural land) got certified agricultural land, consumption ratio is between 50% export and 50% domestic.

5.4.4 International Market

Organic agriculture market in Thailand was still being a market of producers. Organic agriculture products production can produce less than general agriculture products, followed by its expensive price of more than 20-50%.

The data of Thai organic agriculture market is still estimated data due to 2 decades of non-productive survey and study on organic agriculture market. During the middle to the end of 2014, the Ministry of Commerce tried to conduct a survey and an analysis on the agriculture products market, expected to start in 2015 (Vitoon Panyakul, retrieved on June 3,2015).

Refer to the report of The Ministry of Commerce, in 2012, the organic Thai products

exported to EU is 70% in organic rice and processed rice, 15% in organic vegetable (sweet corn, asparagus, lemon grass, Thai green okra, soy bean), 10% in fruit (mango, banana, pineapple, and mangosteen) and other products such as processed vegetables, herbal teas, food ingredients (coconut milk, sugar, tapioca flour), wild honey, processed foods, tiger prawn and coconut oil.

The facts and figures of the Ministry of Commerce reported that the key factors are Thai exporters, both private sector companies and cooperatives. Private sector companies are Top Organic and Supplies Products, Merit Food Products, River Kwai International Food Industry, Thai Organic Food, Rangsit Farm, Sampran Food, Southeast Asia Organic, Swift and Urmatt, ltd. Cooperatives are Earth Net Foundation, Green Net Cooperatives, Bak Ruea Farmer Group, Rak Thammachart Club, Surin Farmer Support and Lemon Farm. Export value of Organic Thai products export to Europe is accounted for 50% of total exports with the value of $60 mil. USD. In 2012, Organic rice exports equal to about $7.0 mil. USD (30% growth). However, based on TOTA members' 2011 revenue, the growth rates are between 9-100%. (Information as of February 12, 2013)

The Ministry of Commerce reported above, Organic agriculture in Thailand give precedence to export market more than domestic consumption. Export markets of Organic Thai products are EU, Japan, USA and Singapore. Rice is the most important export crop, especially Hom-mali jasmine rice which has been certified to export from Organic Agriculture Standard as Biogcert KRAV, BSC and Ecocert. The following priorities to export are vegetables, fruits, corns, herbs and spices (Reuthaichanok Jingjit,2555).

5.4.5 Domestic Market

Organic products in Thai focused to distribute into 4 channels: (1) membership system is similar to Teikei system in Japan or community support agriculture and Box in EU and USA (2) market fair, held in specific place and date, only determined by the community

(3) organic market that follows government policies or organic enterprises policies (4) conventional market such as modern trade, supermarket, and department stores (Reuthaichanok Jingjit,555). In most supermarkets, organic, health, and chemical-free produces are placed on the same shelf as the conventional products. occasionally, if there is a promotion program for health and organic produces, then, the products will be separately placed onto a special shelf (Sali Chinsathit,2011).

Table 5.4 Shows on organic movement in Thailand

Year	Development of organic agriculture in Thailand
1995	Agriculture Certification Thailand (ACT) was legally established as non-governmental organizations
1999	The Department of Export Promotion initiated a "Pilot Project on the Export of Organic Farm Products" aimed to promote the production and export of organic rice, banana, asparagus and baby corn.
2001	ACT established ACT control.
2002	The Department of Agriculture (DOA) established the Institute of Organic Crops as a national certification body.
	DOA established the "Organic Thailand" brand as a national logo and established 5 pilot projects producing 15 organic crops, managed in collaboration with farmer individual exports, the private sector, and consumer groups.
	The National Bureau of Agricultural Commodity and Food Standards (ACFS) was established within the Ministry of Agriculture and Cooperatives.
2008	The Organic Agriculture Development Committee made the Organic agriculture development national action plan 2008-2011.

Table 5.4 Shows on organic movement in Thailand(continued)

Year	Development of organic agriculture in Thailand
2009	Established the "Organic Agriculture Development Thailand center" (OAD) at Sukothai Thammatirat University.
2011	The Ministry of Commerce has supported 3 organic produce types: food, non-food and organic service.
2013	IFOAM and FAO organized the ASIA-Pacific seminar on "Entrepreneurship and Innovation in Organic Farming" in Thailand.
2014	ACT established new organic standards.
2015	ACT Standard Committee approved new organic standards.

The study on organic farming situation in Thailand founds that the numbers of organic farm be certified standard is only 353 cases all country. There are both personality, coorperative, enterprise and association owner. (Table 5.5)

Table 5.5 Shows the number of organic farming enterprise in Thailand.

Regional	**Number**
Northern	53
Central	55
Bangkok and Perimeter	154
Northest	86
Southern	5
Total	353

6.4.6 The Case Study in Thailand

This paper studied two cases in Thailand as Kalayanamithra Group in Mea Tha sub-district, Mea-Orn district, Chiang Mai province and the farmer in Ban Wor Keaw, Wor Keaw sub-district, Hangchat district, Lampang province.

The case study in Chiang Mai province, the Northern, they operated organic farming continued from thier parents. Thier parents cultivated in traditional agriculture as peasant but they change be in organic farming way. One of group members, his name is Yuthasak Yuennoi, 34 years old, who is new generation. He initiated CSA marketing in Mea Tha, as a kind of direct sale of organic products. He and friends established Kalayanamitra Group for developing direct organic market system. He told *"organic farming as sustainable agriculture, we don't exploit natural environment, the most of customers are foreigner, they ordered various our products, can increase income per family and have good quality of life."*

He has only the reason to do farm as he want to go up agriculture of his parent which he can used knowledge to operated difference from them for sustainability. He used internet to design the webpage and sell production by this channel. He design box for products set to follow customer order. The most of customer is in the urban of Chiang Mai province. He can got money more than 30,000 bath per month. He satified for this income and the best benefit from operated organic farming for him is that he can be in his hometown after he finished in bacherlor's degree in architecture.

For another one case in Lampang province, the farmers just change from chemical agriculture to be organic farming. His name is Sumrauy. He started to grow riceberry as organic rice.

Now, he can cultivate riceberry rice and sent to the big company for distributing in domestic market. His product can get the organic certificate as Organic Thailand.

He told that he can sell rice more that 30,000 bath per rai. He explained *"it is difficult to change behavior cultivate in Thailand to become organic farming in order to the most of all farmers are still familiar with chemical agriculture. But we can view in the future because trends of consume healthy food is increasing."*

Fig. 5.6-5.7 Organic Rice of Ban Wor Keaw

5.5 A Comparative Study of Thai and Japanese Experiences on Organic Farming

The researcher viewed this farm as suitable in semi-urban and rural areas and among middle-class individuals who are looking for a new way of life. Trends among these newer farmers will be increasingly higher education, because they can use their knowledge along with advances in information technology to lead their farming operations. Social media is the important factor to distribute products and share information. Thus, organic farming is likely to spread all over the country, leading the younger generation along the way. At present, organic farming in Japan is of interest to the younger generation as a means to start their business and with support from the central government and implementation by the local government. This phenomena will reduce migration into urban areas.

The important factors, which support organic farming succession, are the changing trends of consumption, increasing the number of citizens who prioritize food safety (healthy food and clean food), the progress of information technology, and logistic systems in Japan. Even though rural areas may lack a large labor force, farmers can develop products and spread them all over the country. If younger generation farmers can support themselves, they can be strong agriculture descendants. Thus, the development of organic farming has become the new trend for community development to increase the per capita income and to revitalize societies in the rural community. All citizens can be proud and satisfied with their lifestyles in each of their respective communities. It is an ongoing challenge in Japan and Thailand to find alternative ways to revitalize a society in the rural community.

A comparative study of Thai and Japanese experiences on the development, policy, government subsidization, and ability to encourage rural communities finds a variety of factors, found as follows:

5.5.1 The Organic farming Initiation

Thailand's organic sector is driven mainly by private companies, government projects, grower cooperatives, grassroots support groups and NGOs, but initiated by NGOs. Organic agriculture in Thailand give precedence to export market more than domestic consumption. While Japan government is the major host to movement on organic movement.

5.5.2 Government Policy and Subsidy

Japan government policy focused for domestic market but Thailand government policy is directly to international market. Japan has various organic policy for revitalizing socio-economic rural communities and supporting fund for young generation into new farmers while government Thailand has not clearly organic farming policy. Even though, Thailand goverment have any plan to movement organic farming, but have not clear for impliment strategy.

5.5.3 Customer

Japanese consume organic products more than Thai. Ingeneral people in Japan aware security food and healthy food increasing while Thai expand only people who live in urban and middle class. The important factor that customers in Thailand are a few is organic products are very expensive.

5.5.4 Ability to encourage rural community

In order to Japan government has various policies for organic farming movement, including concerns on socio-economic problem in rural areas. Thus, determinded policy which response this problem such as supporting the young generation to be new farmer. Nowadays, agricultural sector in Japan is focusing on organic farming that related to human health, the environment, a community support start-up that can lead to a stronger community atmosphere (income for senior citizen and low rate on labor migration), and an increased income for farmers. While, Thai government is not aware of problem that rural community is facing so that utilizing rural resources to revitalizing rural community is not mainly organic farming movement. However, both of Thai and Japanese farmers have goals to operate organic farm for them are that can be in Hometown.

5.6 Conclusion

Organic farming is the new alternative business for the younger generation, especially small organic farms in a community. This organic farm not only cultivates some vegetables for consumers, but also we can provide various activities for members, such as learning cultivation, the processing of food, and selling the products in various markets. The researcher call this farm “Indy farming”, the new style of organic farming which is suitable for gen me who love to consume signified products and service. Trends among these newer farmers will be increasingly higher education,

because they can use their knowledge along with advances in information technology to lead their farming operations. Social media is the important factor to distribute products and share information. Even though rural areas may lack a large labor force, farmers can develop products and spread them all over the country. If younger generation farmers can support themselves, they can be strong agriculture descendants.

These farms successfully applied community-based solutions to create business activities using local resources - human resources, natural resources, and socio-cultural resources in their efforts to establish community-based businesses.

Thus, the development of organic farming has become the new trend for community development to increase the per capita income and to revitalize societies in the rural community.

Organic farming way is not only one alternative for rural socio-economic development, but also can revitalize rural community especially able to bring young generation back to hometown, increase per capita farmers imcome, decrease field abandoned and so on. Moreover, organic farming way can develop relationships among family members and between families and can protect environment. Finally, all citizens can be proud and satisfied with their lifestyles in each of their respective communities. It is an ongoing challenge in Japan and Thailand to find alternative ways to revitalize a society in the rural areas.

Chapter 6

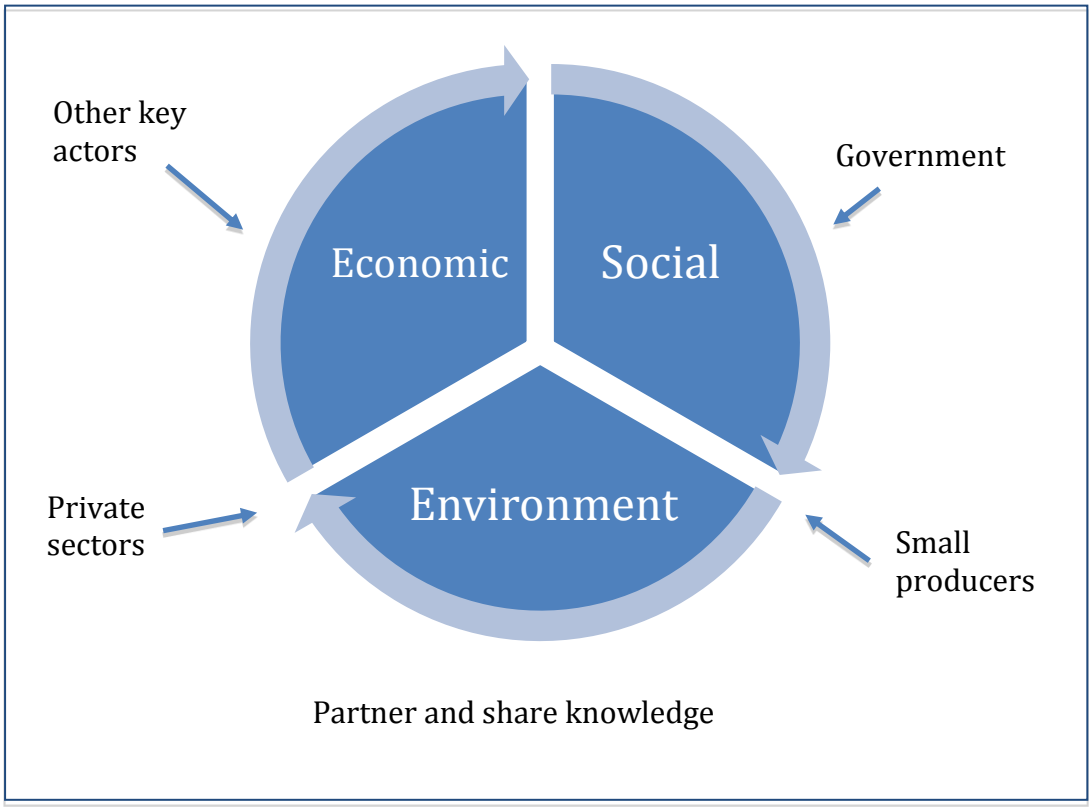
General Discussion

6.1 Conclusion

A study of the socio-economic development of rural society means the study of society and the economy as they relate to agricultural communities and the agriculture sector.

In 2015, the 193 members states of the United Nation adopted the Sustainable Devlopment Goals (SDGs). The purpose of these goals is to integrate the three dimensions of sustainable development – economic, social, and environmental - with closely interwoven targets. The SDGs are indivisible - no one goal is separate from the others and all take comprehensive and participatory approaches. SDGs focus on rural development and investment in agriculture – crops, livestock, forestry, fisheries, and aquaculture - as powerful tools towards a zero hunger generation and poverty reduction by 2030. The 17 SDGs focus on food and agriculture. Government, small producers, the private sector, and other key actors in food protection, security, and sustainable development must partner and share knowledge with the FAO (Fig. 6.1). A common vision for sustainable food and agriculture has five key principles, including (1) improving efficiency in the use of resources, (2) conserving, protecting, and enhancing natural ecosystems, (3) protecting and improving rural livelihoods and social well-being, (4) enhancing resilience among people, communities, and ecosysytems, and (5) promoting good governance of both natural and human systems. This approach is initiated by the FAO, which tries to develop the agricultural sector and rural community. The FAO, in collaboration with the United Nations Development Programme, is working with the Ministry of Agriculture, Environment, Finance, and Planning in Thailand to safeguard livelihoods, raise agricultural production, and boost food security. The FAO provides policy advice and technical expertise to ensure that climate change adaptation risks and priorities in the agriculture, forestry, aquaculture, and fisheries sectors are incorporated into national adaptation processes.

Fig. 6.1 Three dimensions of sustainable development



The development policy in Thai rural areas consists of three alternatives for the socio-economic development movement. The first is contract farming, which is widely debated among economists, policy makers, and rural development practitioners. Within this, there are advantages in avoiding raw materials and marketing risks, as farmers are provided with both fertilizers and pesticides by the companies involved. However, the Thai government knows that contract farming is an unsuccessful policy in the socio-economic development of Thai rural areas.

Another policy, announced by the Thai government in 1997, was the self-sufficiency economy. This policy has the qualities of a leading approach in integrated agriculture and aquaculture, following the teachings of King Bhumiphol Adulyadej. Jirayu Issarangkoon na Ayuttaya explained that the sufficiency economy means not only consumer sufficiency, but also sufficiency of living and leading a proper individual life, and can apply to both individual

and family living. This policy did not mesh with the ideology of the majority of Thai farmers who suffered through poverty for generations and now long for wealth.

The last policy, which is common among newer farmers, is organic farming, a system providing fewer crop products but of higher quality. Recently, organic farming has been operated individually and has relied on social media programs such as Line and Facebook to communicate directly between farmers and consumers. While many farmers feel that this may be the best method going forward, nonetheless they face obstruction in organic farming as they are surrounded by those who use chemical fertilizers and pesticides. Their land is often covered by factory emissions. This can lead an individual organic farmer to a crucial assumption on how to become a genuine organic farming system.

For the socio-economic development in rural Thailand, the mentioned policies are insufficient. Hence, a comparative study on socio-economic development between Thailand and Japan is necessary.

The study found that Japan and Thailand have had similar experiences in socio-economic development policy. An example is the use of local natural resources as capital to develop local entrepreneurs as policy-driven for OVOP. Japan has been successful in the development of OVOP entrepreneurs, as they can create the uniqueness of their local products, especially in Oita prefecture. The OVOP concept has been widespread throughout the nation and has generated sufficient income for local entrepreneurs. It also creates pride for the community. Factors related to the success are (1) being based on a culture of self-sufficiency, (2) making products that have unique characteristics in each area, and (3) developing networking between farmers and their prefectures, cities, agricultural cooperatives, NGOs, resident associations, chambers of commerce, and tourism associations. Thailand applied the concept of OVOP and the principles used by the Japanese during the period of Former Thai Prime Minister Thaksin Shinawatra. Unfortunately, Thailand's OTOP entrepreneurs have not been as successful. The concept has proved to be an ill-fitting choice for Thai agriculture, with limited opportunities for farms to become small and medium enterprises (SMEs). Some even deny SMEs as they fear a lack of support from the

government. OTOP entrepreneurs are likely to remain stagnant. Although OTOP seems to be an inefficient policy to drive economic growth, it can still generate social capital in rural areas. Another advantage is for those who gather to form a community enterprise. The problem is that Thailand has not applied all the principles it needs to proceed. Moreover, there is a failure in applying the OVOP concept to political, economic, social, cultural, and natural resource contexts. The achievement of the two countries on community enterprises is quite different.

The Sixth Industry in an important policy of socio-economic development in Japan. Unit analysis of The Sixth Industry in the study is the agricultural farm parks Moku Moku Farm and Bell Farm, located in Mie Prefecture. The Japanese government promotes **"The Sixth Industry"**[1] to farmers in agriculture, fisheries, and forestry. The concept of running a business has been divided into three levels: the primary industry, the secondary industry, and the tertiary industry, by relying on local resources as a base to create value and increase productivity.

From the study of Moku Moku farm, the farm is successful in running a business because its goal is not solely to make profit. It also aims to care for the environment and the farm by using local resources to increase its output value. It concentrates on the quality and safety of products while preserving the culture of agriculture as a business in community cooperation, housing, and sharing knowledge with customers, as well as promoting the community's economy. There are eight factors related the success of Moku Moku Farm: value-added farm products, community-based use, green business, cultural and social capital, local government subsidies, unique location, farm fan club membership, and uniqueness of their products. As mentioned, the farm's size and revenue have increased. This provides income of people in the community and demonstrates how a farm can revitalize a rural community.

[1] Promoting the "Sixth Industry" means that agriculture, forestry and fisheries as the primary industry, manufacturers as the secondary industry, and retailers as the tertiary industry are promoted comprehensively and integrally to create new added values using regional resources.

The last issue in the study of organic farming is one of the Japanese government's policies enhancing socio-economic development. It is also a chosen practice for rural areas in Japan. The government assists new organic farmers to become organic farming entrepreneurs. Therefore, there are a number of young generation farmers who participate in this campaign. These are young farmers who choose to have their own business and have no interest in working for the private sector. The study also found that, in relation to the principles of organic farming, the concept is toward marketing environmental and social aspects, enhancing socio-economic development in rural areas, and focusing on the income from its products. Organically farmed products are more expensive than non-organically grown products in general. It also helps create relationship among family members and between families. A study of organic farming in Nagoya found that there are various activities provided for family farm members during the weekend. The related activities are food processing and lessons on growing vegetables. This has drawn younger generations from cities to rural areas and slowed the progression of land abandonment. Organic farming has been transferred from generation to generation, as the study found that most farmers are senior citizens, not of prime working age.

Organic farming is a new trend for the Thai agricultural sector. Though there are a few registered farmers, those who run their farms without registration are in higher number. The main markets for organic farming are companies or large enterprises and supermarkets for export. An individual organic farmer tends to distribute products in the fresh market or delivers to consumers as ordered. This system is called CSA. According to the study, organic farming products are exported to other countries more than they are provided within the nation. The volume of Thai export products is larger than that consumed in the country. In contrast, products of Japanese farms are mainly consumed within the country. Additionally, in Japan, the volume of domestic products consumed within the country is less than the amount imported from abroad. This indicates a high demand for food safety in Japan as opposed to Thailand.

The important factors that support organic farming and the agriculture park farm business success are:

- Changing trends of consumption and increasing the number of citizens who prioritize food safety (healthy and clean food).
- The progress of information technology and logistic systems in Japan.
- The increase of the **"Generation Me"** population, who use social networks leading to consumption and lifestyle as a virtual reality society. After Generation X, Generation Me emerged using social networking to present themselves. They look throgh variuos experiences and love adventure. They will leading agricultural culture to mainstream economy. They present everyday life to society via social networking platforms Facebook, Instagram, and Line, in particular sharing their thoughts, feelings, beliefs, and actions. They have friends and social networks on the internet, thus they can use social networking as marketing channels and to communicate with consumers.

6.2 Discussion

A comparative study of socio-economic development in rural Japan and Thailand found that both have similar factors in operating organic farming, as follows:

1. Both governments announced various policies for socio-economic development movement. The Japanese government issued OVOP and The Sixth Industry policies, while contract farming, organic farming, and the self-sufficiency economy were launched by the Thai government. Both have objectives in socio-economic development in rural areas.
2. Natural resources and local capital are used accordingly. Both governments try to encourage farmers to rely on local resources to reduce production costs, create local identities, and add value to their products.
3. There are budgets provided by local and national governments.

4. There is community-based development. All cases in the socio-economic development study aim to consider community problems, such as land abandonment, migration of rural populations to cities, lives of senior citizens, inheritance of agricultural land and production, and equality of access to healthy food.
5. The main objective is to increase rural incomes, with poverty being a significant problem in rural areas. Therefore, the socio-economic development policies of both governments are to increase per capita income, which from the study, have proved to be a success.

However, the factors related to successful development in rural areas also include farmer aggregation and modern agricultural management. For Thailand, farmer aggregation has been a failure, and there has been no modern approach for agriculture management. The researcher found that farmer aggregation and modern agriculture management in Japan are different from those in Thailand.

6.2.1 Farmer aggregation

The Ministry of Agriculture and Cooperatives have a vision to provide agriculturists with a good quality of life, people with safe food for consumption, and the current generation with income from working the land. Their mission includes, (1) to promote agriculturist units and encourage them to be self-reliant, with a good quality of life and stable occupations, (2) to promote production of agricultural produce and food of increased value that meets market demands and consumer standards, (3) to research and develop an infrastructure for agricultural production, and (4) to develop and transfer agricultural technology focusing on effective, sustainable, and environmentally-friendly use of agricultural resources. The Ministry of Agriculture and Cooperatives have various missions to promote agriculturalist units in order to encourage rural socio-economy development, however farmers are still struggling to increase their income.

For the past 40 years, farmer aggregation has been invested in by the Thai government, which has tried to set up cooperatives for farmers to gather and get assistance in production, costs, processing of products, and marketing. Though Thai agricultural cooperatives are under development, farmers have gathered and registered as members. Most of the farmers expect benefits in production factors and loans, both of which play an important role for Thai agricultural cooperatives. Marketing is still behind, as products are sold at high prices to cooperatives and later distributed to the market during lower priced seasons. The country lacks farmer aggregation in order to improve marketing and food processing. As a solution, the government often purchases agricultural products from farmers. This has caused farmers to focus on selling their raw materials to the government only, thus lacking opportunity to develop skills in food processing and marketing for their own products.

After the "Tom Yum Kung" crisis in 1997, there were two incidents that happened to laid-off employees: (1) More laid-off employees returned to the agricultural sector, and (2) With the increase in knowledge of information technology, they realized they were unwilling to follow their parents in the farming society. In order to avoid city life and the competitiveness of employment among the younger generation, they created products in small amounts with high added value. Unique and gimmicky products were developed under the concepts of new trends and fashions in health care and environmental protection. Products such riceberries[2] and mulberry tea fell into the health care and environmental protection

[2] Riceberry is a newly registered rice variety from Thailand originated from a cross-breed between Jao Hom Nin (JHN), the local non-glutinous purple rice and Khoa Dawk Mali 105, the Thai Hom Mali Rice, by Rice Science Center, Kasetsart University, Thailand. From 4 years of strenuous selection for nutritional properties, anthocyanin stability, physical and cooking properties. The outcome is the deep purple whole grain rice with softness and palatable after taste. Riceberry has been the most popular brown rice known for health promoting properties. Attracting people to consume more brown rice is the most significant steps in solving food-related chronic diseases like diabetes, heart disease, high blood chloresterol, obesity and cancers. The areas of Riceberry rice production are in the Northern and North-East of Thailand. During the months of August to December (wet season) is suitable for Riceberry planting. Table Agronomic characteristics, grain quality and cooking quality of Riceberry. Riceberry is enriched with both water soluble, mainly anthocyanin and lipid soluble antioxidants, such as carotenoid, gamma oryzanol, and vitamin E. All nutritive properties of Riceberry are contained in its rice bran with only small fraction was accumulated in its endosperm. This is true for all cereals, therefore, it is best to consume whole than polished grains. Nutritional properties of Riceberry is concentrated in its rice bran. The potential anti-cancer activity

categories. These products are made on a small scale and sold to customers in the producers' own communities. If the products are successful and demand exceeds supply, sellers will buy products from other local farmers and provide them to their customers. Some have bought products from others as they have limited access to land in order to grow their own. Distribution channels are mainly Facebook and Line. The benefits are then collected individually, not as a whole, as in the social enterprise concept. However, the cycle has yet to become a completed community enterprise unit in Thailand as it has in Japan due to a lack of strong farmer aggregation. The role of the younger generation, in this case, is only as a vendor.

The social enterprise concept spread throughout Thailand within approximately ten years. The ways in which enterprise leads to success and develops communities is an advanced step of CSR, and there is an attempt to share this success to cover errors that have occurred or may occur in other communities, especially those that entail failing to respond to the environment. CSR always encourages a local approach to social agency in rural areas, such as giving scholarships to students, painting temples, organizing Buddhist Kratin ceremonies, and leaving offerings for monks. Nonetheless, social enterprise concerns the sharing of knowledge to take advantage of the specialties of each community member. For example, a private company employee may help with packaging design for local products. Bringing technology to communities in order to generate job opportunities and community development is also part of the social enterprise concept. Still, Thailand's social enterprise attempts have faced obstacles since the Ministry of the Interior got involved in budget allocation from large enterprises like Charoen Pokphan Group (CP) or the Electricity Generating Authority of Thailand (EGAT). Communication channels between large enterprises and local communities are interrupted by the Department of Community

of compounds extracted from riceberry bran was evaluated in human cancer cell lines (Caco-2, MCF-7 and HL-60) Source: http://dna.kps.ku.ac.th/v2016/index.php/news-articles-rice-rsc-rgdu-knowledge/rice-breeding-lab/riceberry-variety

Development, prefects, and the Ministry of the Interior. Therefore, social enterprise has generated more income for those in the government.

Thai farmers have never been pressured with the concept of aggregation in order to create food processing and expand the market for its products. In Japan, there is a competent Japan Agriculture (JA), which is an aggregate of farmers who long for their own businesses. JA's principles of operation are to gather famers as its members in order to accumulate shares without dividends being paid in cash. Membership benefits are that farmers are privileged to sell products to JA both as raw materials and after processing. The process of operations is similar to the Thai agricultural cooperative, only with characteristics in accordance with the business sector. JA provides farmers with technology to cope with farmers in two areas, which are: (1) to reduce purchase costs and share fertilizers or growing seeds at affordable prices, and (2) to sell products as a whole while still being able to negotiate sale prices, especially in large quantities. An example of this second aspect is being able to sell products both wholesale and export them to other countries in large quantities, which would be impractical for individual farmers.

In conclusion, JA is the result of the strength of Japanese society, not the strength of Japanese farmers. In other words, farmer aggregation is a result of rural socio-economic development, as shown below:

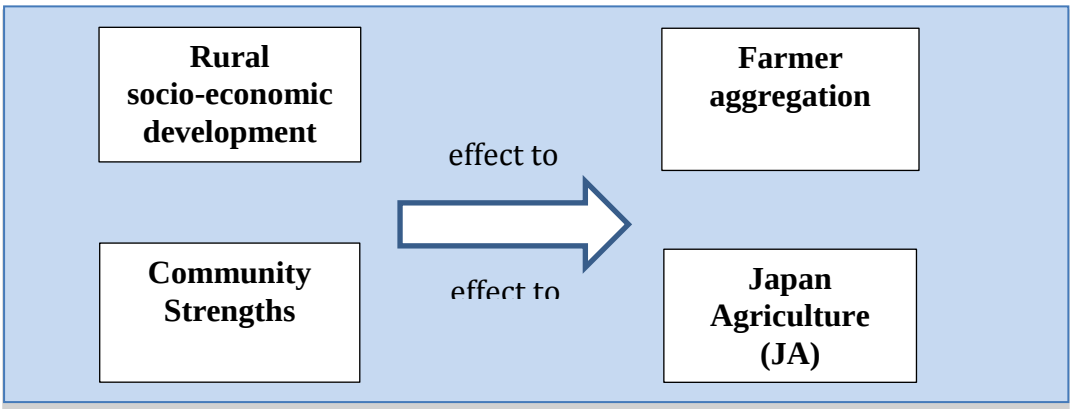


Fig. 6.2 shows the relationship between rural socio-economic development - farmer aggregation and community strengths – Japan Agriculture (JA)

6.2.2 Modern agricultural management

Modern agricultural management utilizes a different way of transportation management for farmers in logistics, technology, and packaging. We found that Thai farmers and entrepreneurs in the community do not realize the channels for transportation to a variety of distributors. In terms of modern management, farmers should recognize the costs that the end-customers can cope with. It might be possible to deliver products with higher prices by air, whereas lower priced products can rely on land transportation or post. With this, product distribution can be accomplished more efficiently.

One of the major problems faced by Thai farmers is the storage of products. Most agricultural products can only be stored for a short period of time, especially organic products that do not use chemicals for longevity. Farmers with modern agricultural management can quickly process their raw materials. For example, rice must be milled according to the demands of customers, while the rest of the rice remains unshelled and stored. Farmers also need to understand the nature of consumers in regards to the differences in seasons, beliefs, and cultures.

However, modern agricultural management needs principles for good governance. Good governance management refers to creating trust and stability among members (as is true in good governance management), one needs to be accepted as being fair and clear in each and every aspect, such as queuing for purchasing and selling products, the use of common resources, and the breakdown of all benefits. These can sustain farmer aggregation. Unfortunately, because Thai society is still using the patron-client system and kinship, and because these have become part of benefit management, members have no trust in aggregations. Members who are relatives of cooperative managers will receive more benefits and other advantages than those who are not related, so the patron-client system is still powerful in Thai agriculture society.

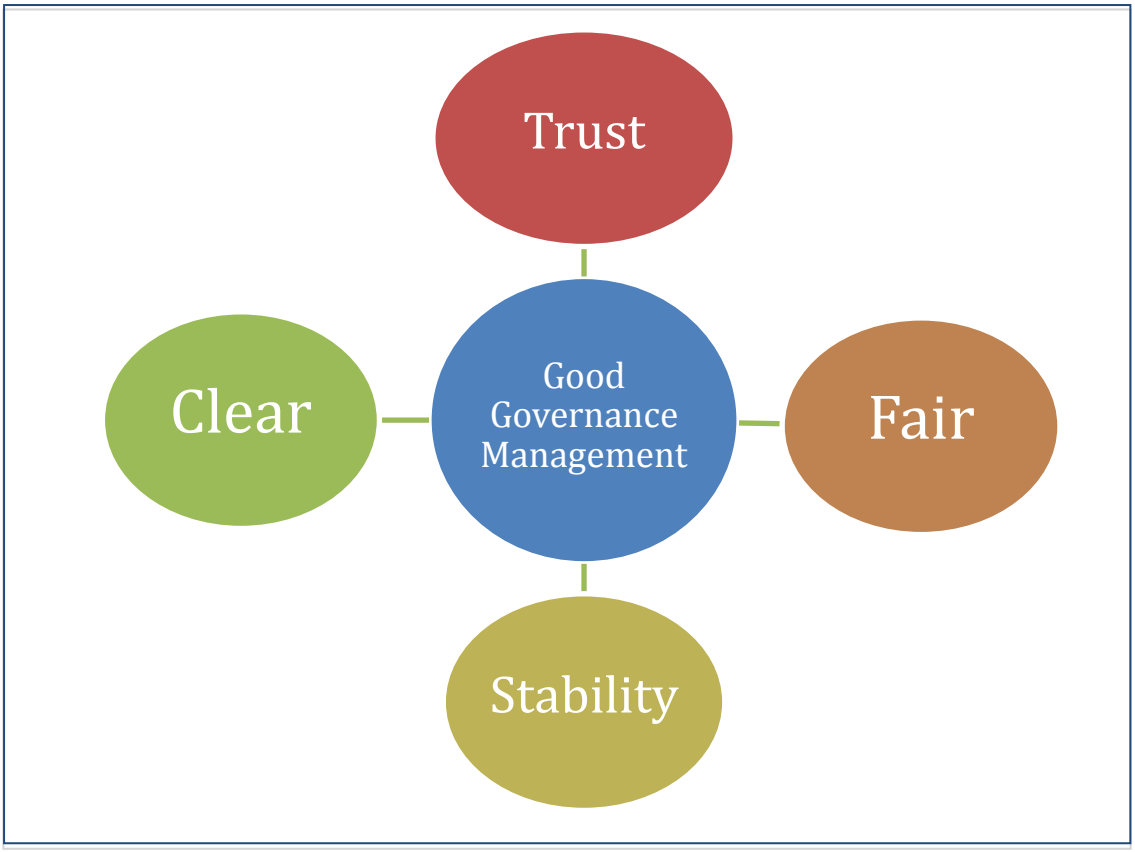


Fig. 6.3 Combination of good governance management

In terms of technology management, JA has a system of sharing technology and agricultural machinery among members. It has reduced the cost of production, while this system is not known to Thai farmers, who usually rent or buy their own equipment and technology individually, substantially increasing the costs they incur.

In terms of packaging, Japanese farmers have become familiar with packaging technology, and it has been made easy for Japanese. Packaging is not a problem for Japanese farmers or entrepreneurs in the community. On the other hand, Thai farmers are weak in this area. OTOP lacks well-designed packaging in terms of usage and branding. Technology related to packaging is crucial regarding the use of materials and the equipment necessary to create a well thought out packaging by designers.

In the Thai context, factors that are related to modern management have been relied on by large companies and those in the bigger cities and have been overlooked or unavailable to those in rural areas. Thai farmers have difficulty reaching and understanding facilities,

hence rural development in the field of food processing and product distribution is limited. Some examples are food quality testing in order to be certified by the Food and Drug Administration (FDA), the development of innovation and distribution channels, and logistics.

6.3 Suggestion

At present, Smart City and Thailand 4.0 are being introduced to Thai society as a way to empower them to connect with technology, which will be the main tool to achieve their marketing goals. Thailand 4.0 is the code system focusing on Thai economic development. The codes are:

- Thailand 1.0, focusing on selling raw materials in the agricultural sector.
- Thailand 2.0, focusing on light industry with low costs for labor and raw materials, such as textiles, food, and electronic devices.
- Thailand 3.0, focusing on the turning point of industry to heavy industry and exports.
- Thailand 4.0, focusing on the turning point of the economy to a value based economy or innovation economy movement.

Up to the present, Thailand 1.0 - 3.0 has brought no success or shifted the economy from a low income to a higher-middle income or higher income country. Therefore, Thailand 4.0 is introduced with the following concepts:

1. To develop from commodities to innovation products.
2. To shift from an industrial driven country to relying on technology and creativity.
3. To increase markets in customer service instead of production.

Thailand 4.0 is an attempt to transform the industrial and service sector throughout the country into four crucial elements:

1. To transform traditional farming into modern agricultural farming, focusing on technology management as smart farming to generate increased income and to transition farmers into entrepreneurs.

2. To transform traditional SMEs or SMEs needing subsidies from the government into smart enterprises and startups SMEs with high potential.

3. To transform traditional services with low value services into those with higher value services.

4. To transform lower skilled labor into higher knowledge professions.

However, researchers disagree with the Thai government on its policy regarding development needing to rely on the industry and service sectors without consideration for community-based development, which is a key factor of industrial growth, wealth, and sustainability within industry and the service sectors. In order to achieve the set policy, strength from within is a key, and in this case, researchers have introduced what they are calling the **"Smart Village."**

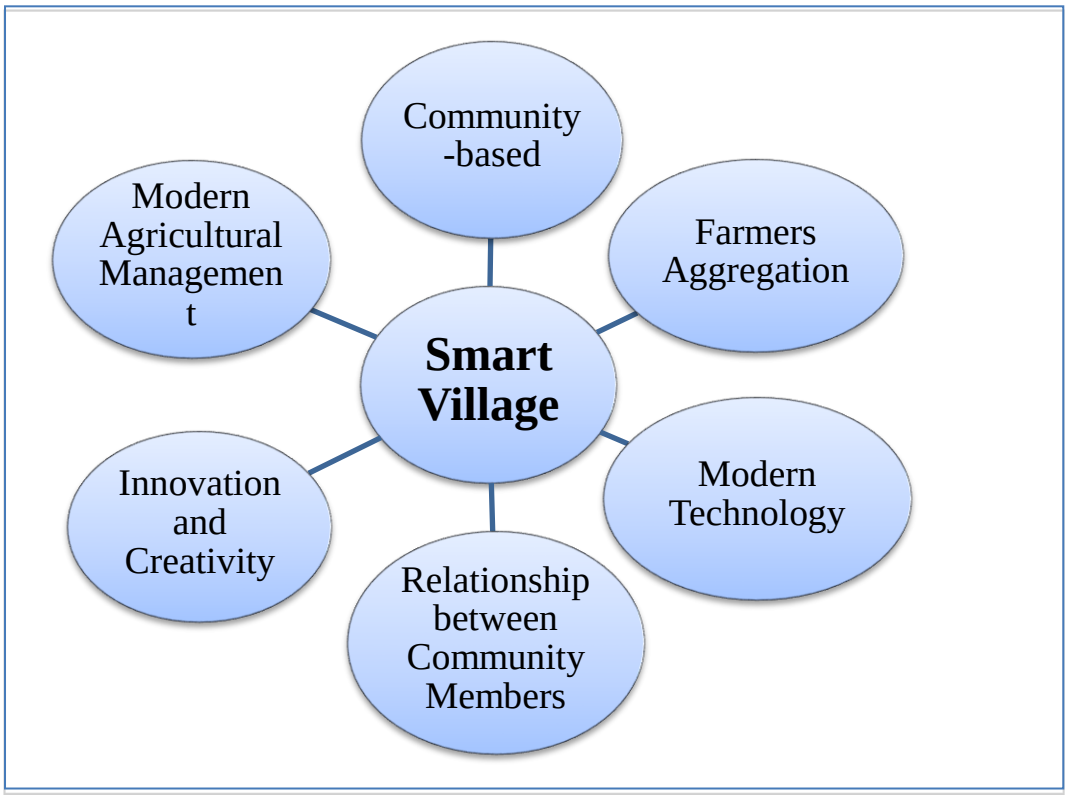


Fig. 6.4 Key factors of Smart village

The **Smart Village** concept is intended to create strong movement in communities and villages, primarily in the agricultural sector. The word "Smart" means innovation and creativity. Innovation, as culture and technology, can move traditional production towards productivity, design, quality, and environmental sustainability.

Although "Smart" is part of the government's "Thailand 4.0" policy, in the transformation of the four crucial elements, not enough is being done to develop the country yet. Aggregation and modern management should also be considered.

Suggestions for implementation in Thai agriculture have involved others, not only farmer aggregation, due to the weakness of Thai aggregation:

(1) To create strong farmers, aggregation is more difficult and longer than to have a **strong community**. In Thai communities, there is various socio-cultural capital, such as **lineage, history, and physicality, which connect among members**. This socio-economic capital represents important factors to create a strong community.

(2) To create a connection among members, the researcher found a firm relationship between female family members or female descendants who usually facilitate the production and process. In northern Thailand, a connection of female family members is a firm relationship (as seen from animistic ancestor beliefs). Hence, the matrilineal society has been derived from rural and agricultural communities.

(3) To creating strength in a small community, to have as strong an aggregate among farmers in Thailand as in Japan, it can be a difficult task and take a long time. Thailand still has an ambiguous definition for "community."[3] Likewise, the meaning of community in Thailand has an opposite meaning to the one defined by the government, as there it includes no involvement of family or relative lineage, physical or historical backgrounds. Under the

[3] We can divide characteristics of community in Thailand into types of relationships among community members as kinship and patronage. Kinship as family members or linage member relationships, this relationship can dominate local government, social groups, social organizations, and social networks in a community. This type is a closed relationship. Patronage is the relationship between patrons, individuals, villagers, or organizations in a community for support, encouragement, privilege, and financial aid. This type is open for other individuals into a community, such as business owners, strangers, and newcomers.

same format and process, the policy must focus on creating strength in a small community. In order to create strength in a community, the three elements (kinship, physical, historical) have to be combined and appropriately adjusted similar to the process of success in Japan, as mentioned in Chapters 3-5.

To conclude, suggestions by the researcher aim to create strength in rural communities by implementing the Smart Village concept and introducing official Smart Village zones. Socio-cultural capital and key factors are also part of the consideration, as mentioned in case study Chapters 3-5.

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2. Director of Moku Moku Farm, May 29, 2014.

3. Hideo SASAKI, President of Tuduki Harvest and Staffs, Incorporated non-profit organization aiming to enhance an inclusive community for mental disabilities, Yokohama, Japan, November 28, 2015

4.Director of Bell Farm, Matsusaka, Mie, June 23, 2015

5.Director of Agriculture Association in Han Village, Iga, Mie, June 24, 2015