

# Livelihoods Strategies of Peasant and Indigenous Variety Rice Situation in Globalization

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## Abstract

This article intended to investigate the livelihoods of peasant and the situation of indigenous variety rice in globalization: a case study of Ban Nam Yen, Kok Saton Sub-District, Dan Sai District, Loei Province, Thailand on the issue that the reduction of indigenous rice varieties reflected to the food security and community culture. The results found that the indigenous rice varieties are cultivated for consumption and distribution in Ban Nam Yen. However, due to the economic conditions that come with a globalized society, farmers were forced to reduce the indigenous rice cultivation area and change the ways in which they used the land and how they cultivated the modified rice in the rice market. This meant that the use of indigenous

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rice variations were reduced - though there was an establishment of an indigenous rice peasant group. This has led to the transition from rice cultivation for private consumption to modern peasants in globalization society. All in all, this has devalued the indigenous rice and has caused Thai peasants to no longer be the foundation of Thai national identity. Instead, the reformed Thai economy has made Thailand a slave of commercial agriculture.

**Keywords:** Livelihoods Strategies, Peasant, Indigenous Rice Varieties, Globalization

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### บทคัดย่อ

บทความวิจัยนี้มีวัตถุประสงค์หลักเพื่อศึกษาวิธีการดำรงชีวิตของชาวนาและสถานการณ์ข้าวพันธุ์พื้นเมืองในกระบวนการโลกาภิวัตน์ กรณีศึกษาพื้นที่บ้านน้ำเย็น ตำบลกกสะทอน อำเภอด่านซ้าย จังหวัดเลย ในประเด็นที่ว่า การลดลงของพันธุ์ข้าวพื้นเมืองสามารถสะท้อนถึงความมั่นคงทางอาหารและสะท้อนถึงวัฒนธรรมของชุมชน ผลการศึกษาที่ได้ คือ บ้านน้ำเย็นเป็นชุมชนชาวนาที่มีการปลูกข้าวพันธุ์พื้นเมืองไว้บริโภคและจำหน่าย แต่สถานะเศรษฐกิจในสังคมโลกาภิวัตน์บีบคั้นให้ชาวนาต้องลดพื้นที่เพาะปลูกข้าวพันธุ์พื้นเมืองเพื่อนำที่ดินทำกินไปใช้ประโยชน์รูปแบบอื่น และนำพื้นที่เพาะปลูกข้าวที่มีอยู่ใช้ในการเพาะปลูกข้าวพันธุ์ปรับปรุงซึ่งเป็นที่ยอมรับของตลาดข้าว จึงทำให้เกิดการลดลงของการใช้ข้าวพันธุ์พื้นเมืองที่ถึงแม้จะมีการจัดตั้งกลุ่มผู้ปลูกข้าวไร่ข้าวพันธุ์พื้นเมืองก็ตาม การปรับเปลี่ยนจากชาวนาชนบทที่เน้นการเพาะปลูกเพื่อยังชีพแบบผสมผสาน

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เป็นขบวนการสมัยใหม่ในสังคมโลกาภิวัตน์ที่เน้นการเพาะปลูกเพื่อเป็นผู้ประกอบการได้ส่งผลให้เกิดการลดทอนคุณค่าข้าวพันธุ์พื้นเมือง อีกทั้งยังทำให้เกษตรกรไทยไม่ได้ตั้งอยู่บนรากฐานของความเป็นไทยและการใช้ภูมิปัญญาของไทยอีกต่อไปโดยกลับกลายเป็นทาสของระบบเกษตรกรรมเพื่อการพาณิชย์

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## 1. Introduction

The beginning of the Thai rice industry was marked by the green revolution. This ultimately transitioned the rice industry from being based on indigenous rice to relying on modified rice. Lianjamroon (2011) explained that Thailand began changed from diversified subsistence farming to commercial farming. This developed the country under the first National Economic and Social Development Plan on 1961 along with the establishment of the International Rice Research Institute (IRRI) at Philippine by support of the United States. In addition to this, Chanta (2015) viewed that this change affected the communities and resources from promoting cash crop or monoculture of mainstream agriculture that began during the green revolution era. This lead to the development of various varieties that were aimed to meet the market needs with state and private sector mechanisms. They sought to determine the appropriate characteristics of the plant variety, promote the production which subsequently caused the reduction of genetic diversity including: engineering editing, genetic characteristics of seeds, and efforts to plant those in the farm. The exchange of plant genetic and knowledge of peasants have never been independent from control, but the mechanisms of state power and market system has lead to the monopoly in plant and rice varieties. This has caused the varieties of rice to be modified in order to make plants suitable for various locations. A as a result, the peasants have had to plant crops and rice under the market needs and reduce the planting of certain crops that are unwanted by market. Therefore, a diversity of rice varieties is reduced, which has lead to the risk of genetic and biodiversity loss.

The consequences of the green revolution included the production of agribusiness to operate within globalized society. Atthakor, W (2018) stated that the agribusiness is a “threat” to “community culture”. The “green revolution modern culture” had removed the community rights and destroyed the local wisdom of agriculture that builds cultural security and self-reliance of various communities in Thai society. This includes the development of quality indigenous rice-both of which are foods and herbs. The monoculture reduces a role of local wisdom by reducing the self-reliance of community and restricting them from developing their local knowledge. Vandergeest, P. (2014) therefore proposed the alternative agriculture as a solution for those peasant communities who suffer the problems of capitalism. He stated that the alternative agriculture has received more and more attention. The alternative agricultural concept

is a critique to the green revolution. The concept argues that the green revolution has been responsible for a food shortage, new varieties planting and the use of agricultural chemicals. This has ultimately led to peasants being in financial debt, as well as an array of environmental problems. The alternative agriculture has proposed the following solutions: integrated agriculture, agroforestry, natural agriculture, organic agriculture, the SRI (the system of rice intensification) and IPM (integrated pest management). This is a guideline for pest management and permits the use the chemicals in exceptional occasions. For example, when there are many outbreaks, in order to fight with the cash crops by promoting and expanding the “Prototype peasants” or “Prototype peasant groups” to be the leaders in alternative agriculture and share knowledge together.

In the provinces of Ban Nam Yen, Kok Sathon Sub-District, Dan Sai District and Loei indigenous rice would also be organically organically. The process started from selecting the seeds, preparing the lands, cultivating, harvesting and taking care of the rice. Natural and traditional methods were implemented in every step. Although in Ban Nam Yen, some agricultural techniques were applied in order to increase the quality of the yield. For instance, Effective Microorganisms were used to take care of the paddy. This can be seem as a method of transitioning the indigenous rice. In addition to this, the method may positively benefit the health of people as well as not causing harm to the environment. Organic indigenous rice cultivation in Ban Nam Yen relied on the ‘natural’ approach of cultivating rice. This meant that no toxic waste would contaminate the soil, water or air. This was to enhance the abundance of the soil and the ecological diversity in the ecology system. Moreover, this ‘natural’ approach can also restore the environment and the balance of the nature.

Therefore, as mentioned above, this article is interested in the social issues occurred during the green revolution in the global society. It has distributed a set of knowledge and innovation to the community. However, people in Ban Nam Yen can still live by cultivating the indigenous rice, which is considered an alternative agricultural method. This article also inetnds to investigat factors affecting Ban Nam Yen people to change their livelihood. Moreover, it also aims to examine the usage of monoculture and how the process of globalization has affected the peasant community, their livelihoods and the indigenous rice cultivation in the community.

## 2. Objectives and Approaches

This article aimed to study the livelihood of peasants and the situation of indigenous rice in globalization: a case study of Ban Nam Yen, Kok Sathon Sub-District, Dan Sai District, located in the western border of Loei Province and is a part of the northeastern region of Thailand.

The study has used the qualitative research as a guideline. The field survey and data collection focused on in-depth interviews, observations and group discussions. The data collection instruments consisted of an interviews, observations, group discussions and various activities obtained in the field. The sample was comprised of 35 households that cultivated the indigenous rice at Ban Nam Yen and 180 households that were the community leaders. The details are as follows:

### The Sample Group

1. The leaders and the committee of indigenous rice group
2. 35 households cultivating the indigenous rice at Ban Nam Yen who were selected by a purposive sampling method.

### Research Instrument

1. Structured interviews were implemented because the study focused on in-depth discussions with participants in order to get accurate answers. In addition to this, structured interviews were used so that the interviewer would have a clear guideline during the process and would not go off topic. The structure of the interview was planned in advance before collecting the data.

2. Observation, participation observation and direct observation were used. For example, if the sample group was at home, the agricultural tools around their house would be observed. If the sample groups were at the rice plot, they would be observed on what were doing.

### Data Collection

The researchers visited and surveyed the community in order to become familiar with the people in the community before collecting the data. During the data collecting

process, the researchers were guided by a local who they met at a local grocery shop. The researchers visited the community four times before collecting the data in order to become accustomed with the community. The language was not a problem during the data collection process. Moreover, the survey was conducted on the analysis of the area and the analysis of the possibility to study. The details of other procedures are as follows:

1. The interview form and the observation form were made and submitted to the experts. After that, they were amended accordingly.

2. The interview was conducted based on the objectives of the study. The interview form was examined by the experts and the researchers have amended the information accordingly. Moreover, participation observation and direct observation were conducted. The observation would be used to discuss, along with the results of this study. The data was distributed to the participants in order to amend, improve and complete the information.

3. Finally, the researchers summarized, analyzed and synthesized the data based on the objective of the study. The data were used to discuss together with related concepts, theories, and other pieces of research. This was done in order to identify the relationship of this study with others. The differences of this study would be identified as the new body of knowledge.

### **3. Review the Concept of Livelihoods Strategies of Peasant**

The popularity of livelihood concepts, both on concepts and policies level, arose under the academic atmosphere of the social science development in the 20<sup>th</sup> century. This reviewed the classical conceptual theory regarding alternative economies. Changes in peasant society has become a contemporary trend for seeking the answers to economic and livelihood deadlock under liberal capitalism. This includes Karl Polanyi's institutional economics concept in job analysis on development as well as applying the cultural economics concept for livelihood analysis or revival The Agrarian Question of Karl Kautsky. Laungaramsri (2011) further explained that the return of debate on the peasant society has an important issue, namely the complexity on the relationship between peasant society and postmodern society or space of peasants in globalization

era. (Laungaramsri, 2011) focused on decision making and strategy selection of peasants, especially the household as an actor. In addition to this, the study of the livelihoods strategies of peasant must be considered along with the rural livelihood conceptual framework on the issue of vulnerability context. This is the context of environmental condition that the poor lives and affects the status of household resources or facing the risks or pressures that may affect the food security consisted of the trends such as population trends, resource management trends in the event of Shocks such as natural disasters, illnesses and seasonality such as seasonal crops, etc. Kollmair, M. and Gamper, S. (2002) had also developed an approach of the livelihood concept study through various capitals in society. The Department of Foreign International Development (DFID) had developed and implemented in various research projects by suggesting that the heart of livelihood is at the people. The strength of people was referred to as “capital” or “resources”. Because the potential of people is an important foundation for development of both themselves and the community. Therefore, it is important for analyzing the way that people transform the resources. Positive outcomes for livelihood required many forms of resources which are unnecessary to be in the form of private ownership regime, Instead they may be suited to be in the form of collective ownership, such as the relationship between various resources and dynamics of resources.

For Thailand, Santasombat (2003) described the livelihood strategy as “the flexible peasant”. This essentially viewed that 19<sup>th</sup> century peasant society in the third world countries had to face more external pressure when the Western powerful countries. They paid attention to and needed foods and agricultural products from the third world countries more and more. The colonialism enabled these local economies to be integrated into the world economy quickly. Peasants in various areas of Thailand, Myanmar, Vietnam, Malaysia, Indonesia, Philippine including Latin America and certain parts of Africa began to enter into production for sale along with the subsistence production system as a result the peasants have to create a learning process about the properties of various varieties, modify and develop the plant varieties to suit for the physical diversity. In addition to the learning how to modify crops based on their physical characteristics, this community learns new beliefs, rituals, community culture.

Pintobtang, P. (2015) proposed the “Subsistence Crisis” of rural people in globalization era by analyzing the changes in current rural community. It was found that the villagers

adapted oneself by accepting the modern production technology and relying on the currency-based economy deeply. They were intensive and complex involved in commercial agricultural system. The rural people then became a new generation with multi-dimensional adaptations. They were not just semi-labor peasants, but they also had the culture of consumption, acknowledgement of political news. This made them not so different from the middle class in the urban area. However, because rural people possess small size of land, high production costs, low agricultural prices and high household expenses according to the modern consumption culture resulting they were pushed to “drown” or “choke” due to the problems of subsistence crisis. The “subsistence crisis” of rural people in this era was able to create the “subsistence security”. That was a way of life that bound with a market economy resulting in disintegration within a community with various groups or organizations. Leaders participated into political activities both in the community and national politics and related with external politics, acquisition of security or guarantee of the livelihood of rural people, they were therefore related to the political areas, elections, policies of political parties politicians, and etc. that formed as a new kind of social relationship and made people ends meet.

According to the research conducted worldwide, Gladwin, C. et al. (2001) studied the livelihoods strategies to solve food security problems in African households. This was done through the variety strategies of female peasants as food insecurity was one of the most critical problems among low-income households and food production policies in Africa was unstable. Even though African peasants aimed to supply sufficient crops, they seemed to have unsatisfied returns. For this reason, the government should have a method to improve more yields for rural agriculture. The method may also include the opportunities for non-farming and farming labors. However, the African female peasants - also known as the main food producers, attempted to do various jobs in order to reduce the stress for their families. The agricultural jobs that increased their income were developed through cash crops farming, bean cultivating and non-farming careers that were impossible for women. However, in the African society, the breadwinner was still the men’s role and income or money was still their main responsibility. During this time, rural women had used a variety of livelihoods strategies that suited the environment, resources and household factors. Nevertheless, some might be able to adapt but some were unadaptable. Therefore, the author would like to propose to the main policy makers

of the country, to launch the proactive developmental policy including inequality development in order to resolve the food insecurity issues and support the policy making to generate income and create livelihoods systems in both short-terms and long-terms economic changes in Africa.

You, H. and Zhang, X. (2017) paid attention to sustainable livelihoods and sustainability in rural China. China placed an importance on the ecological safety, economic efficiency and social equality. Sustainable production and consumption in rural China were still important issues that China tried to find solutions for, especially the sustainable livelihoods of rural peasants. This group of people had not yet found healthy environments. They lived in rural areas with high air pollutant emission and degraded ecological quality. It therefore affected the agricultural products in China and peasants who had low living standards and lacked the opportunities to access the resources. Hence, the Sustainable Livelihoods Index was a useful tool for determining the sustainable livelihood or the development in order to assess the security level of sustainable livelihoods of provincial peasants in China. Additionally, all three elements which were ecological abundance, economic efficiency and social equality in order to use the results to plan for improving the quality of life of rural peasants.

In summary, according to the review of the concepts related to livelihood strategies peasants in globalization, the framework for analyzing and understanding generated two approaches. The first one was the changing livelihood pattern of peasants to support the change in society and the second one was the social structural change pattern to support changes from the global society. Furthermore, the previous studies showed that it supported lifestyle and sustenance. The livelihood will be sustained when people can deal with problems or change to maintain or increase both current and future capabilities and resources. The results of the livelihood were the successes from a livelihood strategy such as more income, better mental and physical well-being, self-esteem, accessibility to various services, being integrated to be a part of the society, less fragility, more flexibility and more rights regarding resources management.

#### 4. The Livelihood Approaches on Strategies Among Ban Nam Yen Peasants in the Globalization Era

The social changes that were manifested through globalization resulted in various local communities movement. Even in the remote communities, the changes were varied. In the case of Ban Nam Yen peasants, they not only lived in a small village far from civilization but they also lived far from the center where they communication and coordination with government agencies took place. As a result, the changes in Ban Nam Yen have been done gradually. People in the community were not aware of the changes. Due to this unawareness, people in the community had a variety of livelihoods approaches that were consistent with the community ecology. One of the interesting changes in the peasant society was the transformation of the local economic system and how it adapted in order to survive in the current society.

**The Economic and Occupational Situations** In addition to gathering forest products from Phu Pha Phung, a part of Phu Hin Rong Kla National Park in Phitsanulok Province, people in Ban Nam Yen mainly practiced the agriculture. The uniqueness of the community was the cultivation of indigenous rice for consumption and selling the seeds. It is widely known that Ban Nam Yen had the highest variety of indigenous rice in Loei province. As Ban Nam Yen was a peasant community located far from urban society, the community still carried the culture of indigenous rice cultivation. The culture continued to be inherited by individuals and preserved in some families even though the indigenous rice varieties were disrupted by the improved rice varieties of the capitalist economy in the globalized society. In the production year 2018 (Table 1), indigenous rice varieties cultivation according to their beliefs and popularity were demonstrated as follows.

**Table 1:** Lists of Indigenous Rice Varieties Cultivated at Ban Nam Yen Field

| Current Indigenous Rice Varieties Cultivated |                   | Current Indigenous Rice Varieties Non-cultivated |                          |
|----------------------------------------------|-------------------|--------------------------------------------------|--------------------------|
| Upland Rice                                  | Lowland Rice      | Upland Rice                                      | Lowland Rice             |
| Sew Gliang<br>Glutinousrice                  | Lueng Boonma Rice | Mark Whai Rice                                   | Mhork Rice               |
| Leum Pua<br>Glutinousrice                    |                   | Mark Luem Rice                                   | Rom Muang Rice           |
| Black Glutinousrice                          |                   | Mark Ku Rice                                     | Leb Chang Rice           |
|                                              |                   | Mark Sew Noi Rice                                | Phaya Luem Gaeng<br>Rice |
|                                              |                   | Mark Sew Khao Rice                               |                          |
|                                              |                   | Mark Sew Dam Rice                                |                          |

In addition to the upland and lowland rice cultivation of both indigenous rice and improved rice for consumption and distribution, there were also other economic crops that were cultivated to generate incomes to spend in their families. People in the village cultivated both the economic crops to serve the market needs and the economic crops stated in the farming contracts with well-known Thai companies. For instance, they cultivated pineapple for the factory in Chonburi Province. They also cultivated pepper and passion fruit for central market in Khon Kaen Province. They sold the products to the agricultural products markets such as Talad Thai Market and Si Mum Mueang Market in Pathum Thani Province. They also conducted maize cultivation or cassava cultivation. They also grew the new economic crop which was Arabica coffee. The cultivation included macadamia nut, Hong Huay Lychee, and Mon Thong durian. Moreover, there was also another economic crops from the southern part of Thailand which was rubber tree. The cultivation of the rubber tree was initiated by external capitalists from the southern part. They bought the land and then cultivated the rubber trees because of the physical characteristics of Ban Nam Yen and other villages surrounded it. This area was surrounded by high mountain area and high land between gorge. The weather was cold all year round, even in summer. Furthermore, the land price was low because it was located far from the economic sources of Loei Province. For this reason, the villagers had divided their land to sell to the capitalists and some of them were used to cultivate the rubber trees.

Therefore, when the field surveys were conducted, it demonstrated the image of rubber plantations both in and outside of communities thoroughly. This can be illustrated in the agricultural calendar of Ban Nam Yen in 2018 as follows:

**Table 2:** The Ban Nam Yen Agricultural Calendar, Production Year 2018

| Lists         | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sep | Oct | Nov | Dec |
|---------------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|
| Rice          |     |     |     |     |     |     |      |     |     |     |     |     |
| Maize         |     |     |     |     |     |     |      |     |     |     |     |     |
| Cassava       |     |     |     |     |     |     |      |     |     |     |     |     |
| Pineapple     |     |     |     |     |     |     |      |     |     |     |     |     |
| Ginger        |     |     |     |     |     |     |      |     |     |     |     |     |
| Pepper        |     |     |     |     |     |     |      |     |     |     |     |     |
| Passion Fruit |     |     |     |     |     |     |      |     |     |     |     |     |
| Dragon Fruit  |     |     |     |     |     |     |      |     |     |     |     |     |
| Rubber Trees  |     |     |     |     |     |     |      |     |     |     |     |     |

*Remark 1:* The pattern stands for the preparation of soil and seeds.

The pattern stands for the process of planting.

The pattern stands for the process of harvesting

The pattern stands for breaking period.

According to the analysis of Ban Nam Yen Agricultural Calendar (Table 2), it was found that the Ban Nam Yen peasants cultivated a variety of crops and allocated the harvesting time to overlap one another in order to use less labor. Moreover, this allowed the villagers to earn income throughout the year. This is a big contrast from the past. In the past, single plant cultivation only led to a lack of income while the villager were waiting for the harvest season. The adaptation into commercial crops cultivation was considered as

a livelihood strategy to tackle with living problem on their self-reliance without asking for the help from the relevant authorities. The agricultural calendar of community also indicated that during February to April, which was summer, Ban Nam Yen faced the problems of water shortage. The peasants therefore sought to find work outside the community in order to earn income for their living. Some households had altered the cultivation period and harvested other crops in order to earn more income during the dry season. For example, some households changed their maize harvesting period to after New Year or they decided to harvest the cassava from February to March. Therefore, the peasants could take a break in March and April as it was dry season and there was no water for agriculture practices. Then they started the harvesting season again in August. This demonstrated the relationship between community activities and the cultural ecology

**The Social and Cultural Situations** The social and cultural contexts of the community were also affected by the new economic system. This can be attributed to the villagers having more contact with external society - creating new learning networks and transformed business negotiations. These innovations sought to increase the community's communicating and living conveniences. Most importantly, the villagers could send their children to study in urban society and the children can study at a higher level through the support of their parents. According to the values of Thai society: "the children shall study as much as possible in order to become more comfortable and richer when they grow up". This way of thinking has led to the current social situation - where the villagers became more dependent to the society outside.

Furthermore, in the future, there will be a change in household labors and working values because of the important social change in Ban Nam Yen. The social change included the transition to a non-farming communities. For example, they worked as a provincial government service. They ran their personal business. They also work as industrial labor. This resulted in social burden on the youth and elderly. There must be a policy to provide the support them. Moreover, the advancement of technology in the globalized society has the potential of reducing the amount of time to acquire new knowledge through technology in the globalized society. This in turn, can open new perspectives of people in the village. As a result, people in the community are more likely to change their opinions. As a result of improved education systems, the people in the community may be more driven to treat others equally.

Another important issue is the change of community culture, in particular, the culture that was considered as the heart of community known as the Rice Paddy Ceremony. It is known be one of the largest ceremony that every household in the community would attend. (The ceremony was held in February every year). The patterns of ceremony were changed based on the community situations. This is because some peasants did not cultivate rice. As a result of this, the paddy had to change from indigenous varieties rice to modern varieties. In addition to the rice varieties, one of the most obvious changes of the Rice Paddy Ceremony was the pattern of the ceremony. In the past, the Rice Paddy Ceremony involved was a belief that harvested rice in the current year would not be consumed or sold until it was blessed. The seeds would be selected for consuming and donating to the elderly. People in the community took care of another other. The rest of the rice would be sold to the mill. The earnings from selling the rice would be used for temple renovation. Currently, the rice paddy obtained from the ceremony was sold to the mill. Nonetheless, the money earned from the selling of the rice was not enough to renovate the temple.

The Indigenous Rice Variety Situation In the past 10 years, Ban Nam Yen community was more connected to outside society because of convenient transportation and income from commercial crops cultivation. Each household had a vehicle to commute to places. Moreover, it is the era where information and technology can be accessed easily through mass communication system in globalized society. There was a flow of electronic devices. As a result, people in the community have the chance to exchange and acquire more knowledge through communicating with other peasant communities in other remote areas. Consequently, people can learn and think in a more systematical way. This also affected the occupation pattern and the decision-making regarding occupation. Furthermore, the proactive operation of the government agencies encouraged people in the community to cultivate the improved rice such as the RD 6, RD 10, and RD 12. People in the community saw the differences of the rice varieties and therefore changed the method of cultivation. They saw that the improved rice cultivation was more convenient in terms of time and labor consumption. The villagers who cultivated the modern rice varieties therefore recommended this to their neighbours. Thus, the community has changed from cultivating only the indigenous rice for consumption within household to cultivating modern rice varieties. This led to the decline of the traditional rice varieties.

According to the field survey, there were more than 10 rice varieties but there were only about 4 varieties cultivation - dividing into 3 varieties of upland rice varieties and 1 lowland rice variety (as shown in Table 1).

Based on in depth interviews and field surveys, the community leaders explained that the obvious differences of indigenous rice and modified rice are “the indigenous rice (in case of upland rice) did not require the large-scale investment. The rice can be left to grown naturally. The farmers just needed to cut some grasses. When the time comes, the rice can be harvested in harvesting season. This indigenous rice was not destroyed by insects or plant hoppers. It also provided relatively good amount of yields. However, the mills tended not to buy this kind of rice due to the narrow consumer popularity and this indigenous rice was a type of glutinous rice which was unpopular varieties in the consumer market.” Moreover, its moisture differed from the modern rice. The disadvantages of this rice variety were known that it required a great number of labors for harvesting because its stems were very high. For this reason, harvester cannot be used (the harvester was modified from a lawn mower by adding the blades to more sharpen and the grilles for picking up the ear of the paddy). “But the modified rice (the villagers called Khao E Tia) required the fertilizers and chemical treatments. It was destroyed by insects and plant hoppers; however, it provided more yields than the indigenous varieties. One of its advantages was that it did not required a number of labors for harvesting because of its short stems. The rice can be harvested using the harvesters, so it did not consume much time and labors. A great number of yields can be sold to the mill.” This became another income of people in the community. Both rice varieties had different advantages and disadvantages. Hence, the villagers decided to choose the different choices.

For this reason, a number of peasants decided to choose to cultivate the modified rice for consumption. This resulted in the reduction of indigenous rice varieties, including the genetics, yield amount and cultural values. The reduction of the indigenous rice variety was due to the fact that modified rice saved time and labor in every production process and the upland fields for indigenous rice cultivation became other economic crops cultivation that made more money for the household. This was consistent with Pintobtang, P (2015) who stated that the current changes in rural community enabled the villagers to adapt, by accepting modern technology and becoming fully reliant on the currency-based economy. Thus, the rural people became the new generation that

is adaptable. Similar to the current study, the group of people who cultivated the indigenous rice had a higher price than those in modified rice varieties. They viewed it as an opportunity to create a career and income as a particular group of clients are interested in the indigenous rice. Together with outstanding packaging, the peasants will be able to generate higher income than conventional rice varieties. Moreover, with the trend of healthy food focused on non-toxic components and the food that can provide high nutritional value, indigenous rice can meet these requirements. The community leaders therefore agreed that indigenous rice varieties should be conserved in order to show the community's identity and the cultural history. Thus, they have established a group of indigenous rice cultivation in order to gather, distribute products, and create networks with people outside of the group, who share the same ideology. Thus, they have been able to exchange knowledge, techniques, methods and marketing together.

However, there was a major turning point for the situation due to the economic conditions. The members of the household stopped cultivating indigenous rice and turned to modern rice varieties. This is consistent with the concept of Santasombat (2003) who explained that the peasant in globalization era must be "the flexible peasant" for a sustainable livelihood. With the reasons as mentioned above, the number of indigenous rice varieties cultivation has decreased and the most common indigenous rice cultivation is the upland rice. There are also a few of lowland rice. For this reason, the lands are divided to cultivate other economic crops of community. This has led the remaining members and community leaders to find strategies to maintain the survival of indigenous rice and generate income for the community rather than selling as the seeds only. To begin with, the group leaders and members had launched about 10 varieties of indigenous rice at the Upland Rice Day Festival. It was a great success. The general public and government agencies were informed of the indigenous upland and lowland rice. The peasants exchanged the rice varieties, cultivation knowledge, and other strategies to promote the cultivation. Moreover, the peasants created networks to conserve indigenous rice. However, the consequence from the festival was the social network of indigenous rice cultivation, allowing the peasants to exchange, learn and expand varieties of indigenous rice. The expanding route of upland rice began from Ban Nam Yen to Nan Province located in the northern part of Thailand and lowland rice was expanded to Roi Et province located in the northeast of Thailand. Currently, there still is seed trading. In the future,

the community leaders and peasants who cultivate the indigenous rice view that the indigenous rice cultivation of Ban Nam Yen will not be lost, because they believe that there are members of the new generation who are passionate about sustaining these practices and developing their hometowns. Moreover, the youth who decide to halt their studies, may learn about the lifestyle of peasants, and by doing this, they may continue to inherit and extend the community wisdom. However, the community leaders are not confident about whether the new generation will be able to sustain these traditions.

## 5. The Future of Peasants and Indigenous Rice in the Globalization

According to the interview and the observation of people in Ban Nam Yen and the attitude of the peasants, the researcher has analyzed the future of the indigenous rice. The research has examined two main factors. The main factors are the internal factors such as the identity of the peasants, the culture, the rituals, land ownership, or physical features of the area. This is because it can be seen from the in-depth interview and the observation the elements of the important rituals of the community. Normally, indigenous rice is used in the ritual but nowadays it was changed to modern variety rice. Nevertheless, the ritual was still carried on. Moreover, in the Ban Nam Yen Community, people paid attention in the crops that can generate more incomes to them. For this reason, the majority of people in the community turned to modern rice variety and commercial crops. Furthermore, land ownership was another factor affecting the decision on what to cultivate. For example, those with small land tended to cultivate economic crops because they were mainly concerned about their income. For those with more land, they were able to divide their land to cultivate a variety of crops. Parts of the lands were allocated to grow indigenous rice in order to conserve the rice variety and generate more income to the household. Thus, land ownership affects the existence of indigenous rice in the future. It does not mean that people in the community do not want to grow indigenous rice anymore, but that they are facing challenges when they have to allocate their limited land. Nevertheless, external factors also play a significant role that drives the community to continue cultivating the indigenous rice.

The external factors consisted of the government sector, community and government fund, financial fund from other departments, social networks, or product processing process. The researchers believed that the indigenous rice will continue to exist

due to the support from external factors. For example, the community can be supported in terms of technology and processing process. They can learn through the networks with the influences that come from outside society. This is because people in the Ban Nam Yen chose only to grow the rice variety that can attract people from other societies. They tended to leave their indigenous behind even though they have cultivated it for generations and it was a part of their ritual. However, they have not totally abandoned their indigenous rice. There are still groups of people who have conserved the indigenous rice and processed the rice product. Besides, in many families, the main income does not come from the indigenous but from the monoculture rice they chose to cultivate. Additionally, young generations who left the community to study and work elsewhere also sent some money to support the family back home. Therefore, the peasants in Ban Nam Yen can still survive. According to what has been mentioned, the external drives play a vital role to keep the indigenous rice in the era of globalization. Without the external supports, indigenous rice will gradually fade from the society. There might be only a small plot to demonstrate the indigenous rice for those who are interested and to maintain the identity of the community.

## 6. The Conclusion: Peasant and Indigenous Rice in Globalization

The reduction of indigenous rice reflected food security because in the past, the seed for cultivation would be in the hands of peasants. If peasants cultivated any plants, there would always be a market to support the yields. The peasants would keep certain seeds for cultivation in the next season. However, when there was the establishment of an international agricultural institution supported by the World Bank and indigenous rice declined. The modern rice variety would be the key foundation of Thai food security in which the economy would be monopolized by major companies and multinational corporations. As a result, Thai peasants did not rely on the foundation of Thai cultural identity anymore. They have instead become the 'slaves' of commercial agricultural systems.

When the indigenous rice was considered as a pattern of lifestyle and culture, it was found that the culture was the power in the negotiation and the struggle for survival of the lower-class people. In this dimension, the lower-class people of society cannot fight or express on their resistance to the power or even political bargains openly. However, these people were not willing to compromise the power dominance but they had sought

the ways to express their power in order to show their own identity. They fought through the symbolic expressions in various forms especially the communication through culture in order to be a representative image of power struggle in local or small-scale politics. Wittayapak (2015) stated that Ban Nam Yen villagers was using the indigenous rice as a representative of traditional peasant community to fight with the modern rice variety which was a representatives of peasant society in globalization era. It was therefore a representative of the cultural politics in local politics focused on the insistence power of the Ban Nam Yen indigenous upland and lowland rice peasant group.

In addition to this, the most important issue is that the Ban Nam Yen villagers had to face in indigenous rice cultivation in globalization. The intervention of state and markets in the community caused the breakdown of the peasant community, but it also created a new relationship system known as the social network. The villagers were not forced to enter in the relationship system but they built the relationship system together in order to survive. Besides, social capital was a driven to place the foundation for the community strength and was considered as a livelihood strategy that allowed the community to survive and further develop. As it was mentioned above, the indigenous rice group in Ban Nam Yen was built by a network of peasants who were interested in indigenous rice conservation and the continuation of indigenous rice culture. They were supported by the government agencies in many sectors and became a small network for conserving indigenous rice. In terms of the livelihood strategies, occupation, and decision making in the forms of agricultural cultivation, it was a form of social network in which the villagers of Ban Nam Yen village joined together to think and decide based on the causes and outcomes of sustainable livelihood in the community level.

Another issue was the peasants' survival approaches. In globalized society, everything has cross-border links between countries in terms of transportation, market, trading, human migration and energy network. They were also linked to the new liberal market under globalization. The most important issue was how the process changed such linkage. This affected the life and relationships of various people in rural areas, states and markets. This caused the villagers in various communities to struggle and adapte their livelihoods to create a rural society in their modern world. Ganjanapan (2011) and Chiengthong (2018) said that structural adaptation was used to create a society that could survive in the changing world flows. In addition to this, they also viewed that

the changes in peasant society occurred in rural areas of Thai society. These changes gave rise to qualifications, characteristics of rural society. Sattayanurak (2017) described that the New Characteristic of Rural Society led to the traditional characteristic description framework of rural society. The structural adaptation resulted in the peasants to become the entrepreneurs with reasonable decision making. They were able to create sustainable livelihoods.

Therefore, the peasants and indigenous rice in a globalized society must be adapted to catch up with the capitalist economy. When the indigenous rice cultivation was the root of ancestors, the contract farming and economic crops were life. The peasants should have strategies for changing the indigenous rice to be economic crops of community by creating an agricultural network to raise the quality of life of peasants. The community could design the lifestyle of community according to the needs. Thai society in rural areas must be aware of the changing global trends. Rural society in the modern world still maintains the value of local plants as these were considered as the geographical indicator of the ecosystem abundance and diversity of biological resources, space and identity, as well as culture and lifestyle of the community.

## **7. Recommendations for the Peasants When Confronting with Globalization**

I would like to recommend the peasants in Ban Nam Yen for their adaptation to the changing context of agricultural society, during a time of globalization. They can use the advanced technology to minimize the time and space to build networks between people. This can create the power to negotiate and help one another in academic, financial and marketing aspects. The peasants can also adapt themselves from peasants to entrepreneurs, based on traditional agriculture of the community. This can be a way of allowing them to survive in the weave of development and the beginning of green revolution. Moreover, they should gather together and build networks. This will enable them to build better ways to negotiate, conserve, and develop the community's identity in the future.

Furthermore, the peasants should consider bringing their indigenous rice to organic agricultural process in order to increase market shares and generate a higher income to the peasants. The peasants should also be promoted and supported by

the governmental sector. The government should place an importance on every kind of rice. They should not just pay attention to the rice guaranteed by the government. This can create more opportunity for the peasants to develop themselves to be more stable. Currently, there is a department that intends to connect the organic rice market with GAP rice of the Rice Department. The Rice Department has defined the definition of organic rice but it does not include indigenous rice. However, they should support the peasants to play a role in planning and developing the rice varieties so that the peasant community will better future opportunities.

## References

- Atthakor, W. (2018). Political Economy Analysis of Large-scale Farming and Sustainable Agriculture. *Journal of Public and Private Management*, 25(1): 5-15.
- Chiangthong, Jamaree. (2018). Rural Society in Modern World. Faculty of Social Sciences, Chiang Mai University. Chiang Mai: Wanidakanpim.
- Chanta, Satian. (2015). Indigenous Rice in Isaan: Local Wisdom and Resource Management of the peasant Community. Bangkok: KrungthepKanPim.
- Ganjanapan, Anan. (2011). The Change of Social Structure in I-San Context: What have the local people adjusted? A Synthesis Research on Rural Economy of Isaan. Faculty of Social Sciences, Chiang Mai University. Chiang Mai: Chiang Mai University
- Gladwin, C., Thomson, A., Peterson, J. and Anderson, A. (2001). Addressing food security in Africa via multiple livelihood strategies of women farmers. *Food Policy*, 26(1): 177-207.
- Kollmair, M. and Gamper, S. (2002). "The Sustainable Livelihoods Approach". Input Paper for The Integrated Training Course of NCCR North-South. Development Study Group: University of Zurich. <https://pdfs.semanticscholar.org/05c5/9067287e8168324aee61478e15e487995fd0.pdf>
- Laungaramsri, Pinkaew. (2011). Livelihoods. Faculty of Social Sciences, Chiang Mai University. Chiang Mai: Pongsawaskanpim
- Lianjamroon, Witoon. (2011). Agricultural Revolution for Food Security: The Analysis and the Practical Policies. Nonthaburi: Cheewaveethee Foundation.

- Pintobtang, P. (2015). The changes in Political Economics in Rural Community and the Adjustment of Peasants. *The Journal of Social Development, The Faculty of Social Development and Environmental Management, National Institute of Development Administration*, 17(1): 29-63
- Santasombat, Yos. (2003). Dynamics and Flexibility of Peasant Society: Northern Thailand Economy and the Paradigm Shift regarding the Third World Community. Chiang Mai: Within Design.
- Sattayanurak, Attachak. (2017). From Rags to Riches: From Peasant to Entrepreneur. Bangkok: Mathichon.
- Vandergeest, P. (2014). The Social Lives of Organic and the Politics of Food. in “The Social Life of Organic Farming and Politics in Food in Thailand” Rakyuttitham, A (Translated and Summarized). The Department of Social Sciences, Faculty of Arts, Silpakorn University and Yoowanaboon, N (Recorded) in *The Journal of Sociology and Anthropology*, 33(1): 179-184
- Wittayapak, Chusak. (2015). Culture is Power, the Power Implementation, Identity and New Social Class in the Culture Space. Faculty of Social Sciences, Chiang Mai University. Chiang Mai: Wanidakanpim.
- You, H and Zhang, X. (2017). Sustainable livelihoods and rural sustainability in China: Ecologically secure, economically efficient or socially equitable? *Resources, Conservation and Recycling*, 120(1): 1-13.