Choice of Commercial Rice Production: Nanglue-Thachai Rice Seed Group in Chai Nat Province

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Abstract

Commercial rice production is the main source of income for farmers. The major problem is the high cost of production and environmental damage, impact on the economy and ecology. Nanglue and Thachai sub-districts have the same problems. The farmers in the area with the rice seed production center see a potential to work together to produce a comprehensive rice seed as an alternative to rice production. This research was aimed to study the development and evolution of Nanglue-Thachai rice seed production group, conditions, and achievement of product management and to study how transformation of rice production methods, which reinforced economic and social sustainability, was done in mainstream agriculture. The research methodology used mixed method research. Based on a questionnaire and a structured interview, it was found that the rice seed production of Nanglue-Thachai rice seed group reached agricultural production quality. It was neatly produced, and required an integration of groups to establish of community enterprises. In addition, it is a source of purchase and distribution of integrated products that increase farmers' incomes. As the market system has declined, there is a dependence and support for production factors, knowledge of production, which enable farmers to meet right conditions with clear advantages in terms of ecology, economic system and Social correlation system with traditional commercial rice production.

Keywords: Rice Seed Production, Commercial Rice Production, Alternative Agriculture, Commercial Rice Production

Introduction

The Commercial Rice Production at Nang Lue-Thachai Sub-districts has grown commercial rice for a long time. It was 60 years old and has expanded due to the good and thorough irrigation system under the Chao Phraya Dam built in 1956. After that the Royal Irrigation Department arranged a water delivery system to the area under the dam. The water delivery system completed in 1964. It had an Extensive marketing system from buying sources to exports (Phongpaichit and Baker, 2003; Li, 2007), in line with government policies that could be exported Thailand product about 36 million tons of rice annually and exports about 8 million tons annually, representing an export value of about 130,000 million baht (Office of Agricultural Economics, 2013). One year has been made in several production cycles. Concentration in the practice of production by the use of production technology, fertilizers, water, and seeds were the results of the beginning of the Green Revolution or the concentration of capital, machinery, and labor. The concentration of the chemical increased, resulting in the ecosystem, and soil quality issues. The problem was about the reverse of usage of chemical fertilizers and insecticides. Farmers needed to use more chemicals to obtain the desired quantity and quality as required by the source, which resulted higher costs. At the same time, the price of product, when the farmer returns to sell, is found to be unstable and determined by the mill including terms and conditions, the farmers are deducted from the purchase price, resulting in a revenue that should be received in full.

The commercial production is a form of intensive production in terms of production time in a year 2-3 times. At the same time, the concentration of capital, machinery and labor has evolved along with the capitalist

economy until founding of the current mainstream rice production system (Barbier, 1987; Beller, 2003). When farmers have switched to intensive agriculture, all tied to the market and the capitalist system as well as in other areas, producing intense negative effect under the reliance on market system, both in terms of machine production, agricultural technology and sales while farmers themselves have no bargaining power in determining price of products. For this reason, the capitalist ideology that transformed farmers' livelihood and commercial rice production based on unstable market systems (Conway and Pretty, 1991; Beck, 1994) caused problems to farmers. The intensive production has resulted in ecological losses, excessive inputs such as chemical, fertilizers, pesticides, combined with soil erosion (Nemes, 2009). From such factors, the final result was pollution, and environment was harmed.The focus on the object and comfort through dealing with money to make rice for sale to earn money was main goal of rice production in the mainstream (Lianjamroon, 1996; Pitakwong, 1984; Herzer and Nunnenkamp, 2014).

Farmers' income has a direct correlation with the control of the production factors. This was the result of being controlled by the external market while the ecological balance of intensive farming, the need for more inputs and when combined with other costs such as oil, labor costs were higher (Sōgawa, 1982). While the selling price of agricultural products was fluctuated in the market that could not be controlled, and it was very large. The results of the farmers were in the form of losses: the intensive farming one thing that′s lost- the cooperative work, exchanging labor, making it a community. The family had a simple lifestyle. Mutual dependence gradually diminishes (Prabudhanitisarn, 1988; Bernstein, 1981). From relationships in the way of the community, it led to the individuality.

When farmers tried to get out of convention and limitation of the mainstream production system by relying on different forms and techniques, there would be a new community that subsisted in sufficiency mainstream agricultural system that led the quality agriculture, but made the more specific agricultural product and was not in only producer status. This way created identity as producer and distributor by using name as Nanglue-Thachai rice seed producers with self-management through concept, instruction, and making own position in mainstream agricultural system. All relied on technology management, concept, knowledge in production, and the usual life style, and Nanglue-Thachai rice seed producers were considered the most successful group in management and making income. The success also came from government support and other part was from the physical features of the community that contributed to rice strain production.

The operation of Nanglue-Thachai rice seed producer groups was really the interesting area because they were the trouble-groups from the mainstream agricultural farming: in debt, lower price product, middleman, and so on. The problems made them change the lifestyle in community culture. In 1979, Seed Hub Center No 4, Chainart Province selected the area to do rice seed farm by inviting voluntary farmers from Moo 4. Nanglue to join doing the rice seed extended farm. There were 9 volunteers per 200 units of the plantation, and then they did more rice seed extended farm in Thachai and continuously did it until it was the concept for farmers to produce and manage the rice seed for distribution in the community and they were very successful in 2007. Then, they registered to be community enterprise within the name "Nanglue-Thachai rice seed producer groups." Nowadays, there are 190 members, more than 3,500 units of the plantation, which the producers could make 5,000 tons of the rice seed per year and send good- quality rice seeds to distribute among farmers all over the country. They focus on producing the non-toxic and standard rice seed for supporting and making campaign reducing the production cost according to the need of the domestic market, the international rice

consumption need, and the ability in competition with foreign market. By this, they arose the learning process and focused on creating processes and methods to maintain them. It was an important rice seed production source with good quality development and could compete with international market.

This research was aimed to (1) study the development and evolution of Nanglue-Thachai rice production group, the conditions, and the achievement of product management and to (2) study how the transformation of rice production methods, which reinforced economic and social sustainability, was done within the mainstream agriculture. In this study, form the presentation of rice seed production under the Community Enterprise Group, which aims to assess the commercial rice production model and rice seed production, the researcher hoped that the results will be applicable to promote the policy of Security and Sustainability farming for farmers in other areas under mainstream rice production.

Methodology

The research methodology used mixed method research. This study was an evaluation of the rice seed production model and commercial rice production of farmers in central Thailand with intensive rice cultivation. The study area is located in Nang Lue and Tha Chai sub-districts, Mueang district, Chai Nat province. There are 51,385 units of plantations all together, which are divided into 31,491 units in Nanglue and 19,894 units in Thachai. The general landscape is a low land, which was a part of Chao Phra Ya low land or Chao Phra Ya depression and occurred from the river sedimentation. There are two rivers, Chao Phra Ya and Tha Chin. The Chao Phra Ya dam can make diversion of river into agriculture all year round. The landscape is a bit slope from the South East to the North West, and Tung-la-harn is the main canal that is a branch of Chao Phra Ya and Tha Chin rivers, and Tha Chin flows from the West of Nanglue and Chao Phra Ya flows from the North and the West of Thachai. Moreover, there is an irrigation system across all the sub districts: Anusasdsananan canal, Maharaj canal, and Pholthep canal, and the height of are is at 16-21 meters above moderate sea level.

Data collection included 49 populations and samples by using purposive key Informants method, and purposive sampling of farmers in the area. The research sample was divided into 4 groups as follows:

1. Leader and executive of the Nanglue-Thachai rice seed producer group, President and Vice President, Secretary of Group totally 4 people.

2. Twenty five members of the Nanglue-Thachai rice seed manufacturer.

3. Ten Commercial rice producers in Nang lue-Thachai area.

4. One Head of Rice Research Center in Chainat Province, 2 staff from Chainat Rice Research Center, 2 officers from Chainat Agricultural Extension Center, 5 provincial agencies and 5 operational staff.

The data analysis was divided into 2 parts, namely: **Part 1**. The study and analysis of the rice production of Nanglue-Thachai rice seed producer group and the conditions of success of management, through document analysis from Rice Research Center, Chainat Province, Thailand Research Fund (TRF), Provincial Office Chai Nat Provincial Agricultural Extension Office, to learn about the history of rice seed promotion in the area, and the policies of the state, both in support and resistance, as well as in marketing management by using the interview, indepth interview, focus group. **Part 2**. Analysis of the variation in the rice seed production model of Nanglue-Thachai group on sustainability, under the mainstream rice production, by comparison between rice seed producers and commercial rice producers by using the interview, questionnaires, and observation.

Results

Development of Rice Production in the Area

Rice production system of the Nanglue-Thachai sub-district was a form of commercial rice production, which produced rice for sale to the mill and local capitalists. It was the concentrated production. The debt crisis and the price of paddy were in line with the monopolistic market mechanism with price-setting capitalists, as well as the uncontrollable cost of production. Efforts to break free from commercial rice production problem in the area has been implemented in the field operations and production cost management has continued until the year 1979, the 4th rice Chainat seed center encouraged farmers to cultivate rice seeds in the areas of Nanglue and Thachai sub-districts. There were many interested farmers, but with the conditions and methods of production, rice care was difficult and different from the original model so there were only farmers participating in the project. There were 9 people in the area of 200 rai, and has increased the number of members to make the conversion to the government agencies in Chai Nat, Nakhonsawan, and Lopburi provinces. This led to a high volume of quality output, beyond the ability of government agencies to buy, and resulted a sale of rice seeds. This led to the development of a group model for the standardization of rice seed through the extraction, sorting, and storage process as well as the seed supplier. Under the support of the group, under the name of the group of rice farmers in Nanglue-Thachai sub-districts, Mueang Chai Nat district, Chainat province has been registered with the Office of Seed Extension, Department of Agricultural Extension Registration No. 9/46 on March 14, 2003. Later, the Nanglue-Thachai Farmer Group faced the problem of rice seed production, both in terms of seed management and packing of seeds. It has been transformed into a community enterprise model, under the name of "Rice Seed Producer Group, Nanglue sub-district". Code 1-18-01-03 / 1-0001 as of September 28, 2005, and was supported by the budget for the construction of a factory to improve the seed size. 2.5-4 tons per hour, amounting to 20 million baht, under the promotion of the rice production and management program under the integrated provincial development strategy, and fully operated in the year. In 2006, there were 190 members, with a total area of more than 2,600 rais, with the focus on afforestation, extension of rice seed varieties, Chainat 1, Pathumthani 1(PTT.1), and RD.41, RD.61, RD.3, RD.57. The species are the needs of farmers in the area and nearby.

Factors and Conditions for the Development of Rice Seed Producers in Nanglue-Thachai Sub-Districts

Geographic factors, agricultural areas are characterized by very deep clay, bad drainage. (Soil group at 4, 4I (Irrigation Area), 6, 6I (Irrigation Area) 7 and 7I have soil texture as clay, soil has moderate natural abundance, Acidic acid, alkaline pH 5.5-6.5, suitable for rice farming. Chao Phraya River and Tha Chin River are flowing through these areas and Chao Phraya Dam can be used for agriculture throughout the year. Natural streams that are commonly used in the area include: The Chao Phraya River, Tha Chin River, Khlong Polthep Canal, Khlong Khayai, Klong Thung La Han and Nanglue lagoon.

Table 1 The Conditions of Soil Resources for Agriculture of Nanglue and Thachai Subdistricts

Area	Unit	Space		Soil Feature		Releasing Water	Abundance Level	PH	Area Condition
Sub-Districts	Landlord	Plantation	Percent	Upper	Lower				
Nanglue	4I	31,233	99.18	Sticky Soil	Sticky Soil	Poor	Moderate	5.5-6.5	Quite Smooth
Thachai	4I	17,654	88.74	Sticky Soil	Sticky Soil	Poor	Moderate	55.6.5	Quite Smooth

Factors in technology and knowledge transfer, the Rice Seed Producers of Nanglue-Thachai will be the promoted group, have been sent to carry out planting and propagation of rice seed both from the Rice Research Center of LopBuri and Chainat provinces and have contributed to the development of knowledge, skills and capabilities of rice farmers in the area.

Collaborative and governmental support, many organizations provide support and assistance in areas such as budgeting, machinery, the formation of community enterprises, marketing and accounting.

The economic and marketing factors in the cultivation and sale of rice seeds are an important factor in the development of the group. It is higher than the production of rice that sells to the mill, and it also has the advantage of bringing the product to an unused source from traditional marketing systems. Rice is a product of high market demand, where the grain market in the hands of the state cannot produce enough grain to meet the demand and the market, the grain of the private rice is very high. As a result, economic growth continued.

The need for farmers to break free from the problems of mainstream agriculture, the long-standing experience of conventional production, the fluctuating prices of rice and the price is set by the mill. It is an important condition for the decision to participate in rice seed production with the Rice Research Center, with only 9 farmers in the first group. They are ready to accept new changes in knowledge as well as potential farmers, both in their learning and in their own capital. The land is complete, close to irrigation resources that can efficiently manage water, as well as capital that can handle the investment. Increasing confidence and trust, the state agencies can help farmers to overcome the barriers of change in production patterns with greater sophistication.

Farm Operations and Returns

Commercial rice production and rice seed production differ in terms of product quality, with different farm operations. Rice seed production is refined, and causes higher yields. Commercial production of rice and the abundance of farmland ecosystems have led to a number of differences which can be seen in the following studies.

The area of cultivation is very important for the production of rice seeds because the production needs to be finely tuned to control the quality of the production. The amount of land used for cultivation depends on the potential of the farmers. The results of the study showed that the majority of the farmers had a paddy field of 11-20 rais, and the distribution of the area was different. The most common commercial rice production is the lowland area, which accounts for 80% of the total area, which is opposite to the area where the rice seed is grown. Rice seeds need to be able to manage water. Water is a major factor in the production of rice. For the selection of rice varieties, farmers choose to grow rice varieties that are needed. However, the demand of the seed market is more diversified because the market demand is different.

Table 2 Comparison of the Size of Production Area per a Household, the Paddy Field Condition, Water Resources and Rice Varieties

Characteristics	Commercial Rice Production %	Rice Seed Producers %
The Size of Production Area Per a Household		
not exceed 10 rais	20.0	28.0
11 - 20 rais	50.0	44.0
21 - 30 rais	10.0	16.0
More than 30 rais	20.0	12.0

Table 2 (Cont.)

Characteristics	Commercial Rice Production %	Rice Seed Producers %
The Size of Production Area Per a Household		
not exceed 10 rais	20.0	28.0
11 – 20 rais	50.0	44.0
21 – 30 rais	10.0	16.0
More than 30 rais	20.0	12.0
The Paddy Field Condition		
Upland	20.0	76.0
Boggy	80.0	24.0
Water Resources		
Rainwater, irrigation water and groundwater in the field	20.0	88.0
Rainwater and canal water and groundwater in the field	70.0	8.0
Rainwater and irrigation water	10.0	4.0
Rainwater only	–	–
Rice Varieties		
RD.41	60.0	56.0
RD.61	30.0	20.0
PTT.1	10.0	8.0
RD.31	–	4.0
RD.57	–	12.0

The pattern of cultivation is clearly different. By commercial rice production, it takes the form of sowing with lower production costs than transplanting rice farming, which produces seed. Rice planting is commonly used to control rice weeds and unrefined rice varieties. The rice farmers who produce rice seeds are important for soil rehabilitation to make the fertile soil due to the quality of agricultural production relies on the fertility of the ecosystem in order to get quality output on the market.

Table 3 Comparison of Forms of Cultivation, Soil Preparation for Rice Production

Characteristics	Commercial Rice Production %	Rice Seed Producers %
Forms of Cultivation		
Direct seeding pattern	100	8.0
Indirect seeding pattern		92.0
Soil Preparation for Rice Production		
Soil preparation for 2 times	100	32.0
Soil preparation for 3 times		68.0

The chemical treatment of rice seed production was reduced in comparison with commercial rice production because of soil reclamation and cultivation. It can reduce the amount of chemicals use which affects the amount of chemicals that enter the ecosystem.

Table 4 Comparison of Fertilizer Application, Rice Pest Control

Characteristics	Commercial Rice Production	Rice Seed Producers
Fertilizer Application		
Rice age 20 days	Yes	Yes
Rice age 30 days	Yes	Yes
Rice age 60 days	Yes	Yes
Rice age 75-80 days	Yes	No
Rice Pest Control		
Injection before sowing	Yes	No
Injection covered ground after the indirect seeding pattern	Yes	Yes
Injections to prevent and eliminate insects - caterpillars	Yes	Yes
Rice hormone injection	Yes	Yes

The Rice seed market was very different from the conventional rice market because the Rice seeds in the market of inputs were high demand leading to high sales prices. Grouping in form of community enterprises of rice seed producers was also important because the operation was a comprehensive operation both production and marketing by having modified from conventional rice producers to a group of enterprises that had the quality control in cultivation and management of seeds, processing, and the quality control of whole grain rice with multipurpose which held a critical chain that connects farmers and market systems. As a result, the price of farm produce was higher than the sale to a mill or capitalist as well as the advantage of bringing productivity to the buying source. Price was not taken into consideration in terms of moisture content, cheating the scales, the cost of sales to the mill, the braking cost, mixed rice varieties costs, the weedy rice. These were the factors that made farmers feel unfair. The production of rice kernels was higher than the production of rice for sale. It was about 1,600-2,000 baht per rai, which was the cost of rice farming system of 1,000 baht per rai, in terms of soil preparation, caring such as mixed rice varieties cutting, and caring for water systems in rice fields. The price of the product varied between 2,500-3,000 Baht per ton. It could be replaced properly also the exploitation of the conditions and the deduction of the cost of the mill. It would not happen because the rice seed producers would not carry out the humidity deduction. The rice seed producers and the converting members are mutually agreed upon. The price has been agreed together. The rice farmers who were members of the rice seed group and rice seed producers would be able to recognize and receive the rice price in the coming three months ensuring a clearer and more stable life plan.

The operation of rice seed production in the form of community enterprises has created a relationship system that was different from the commercial rice production that most farmers were highly individualistic. People were helping each other in the production of the individual or the relatives of the day to reduce the role. The formation of rice seed producers has established a new relationship under the support of farmers to produce quality rice seed which was a key raw material for the group. And when the group had quality raw materials, it could be processed and added to standard quality seed to market supporting each other by using quality of raw materials and quality of production in seed production. It was a system of relationships on the merits of fair business and interdependence.

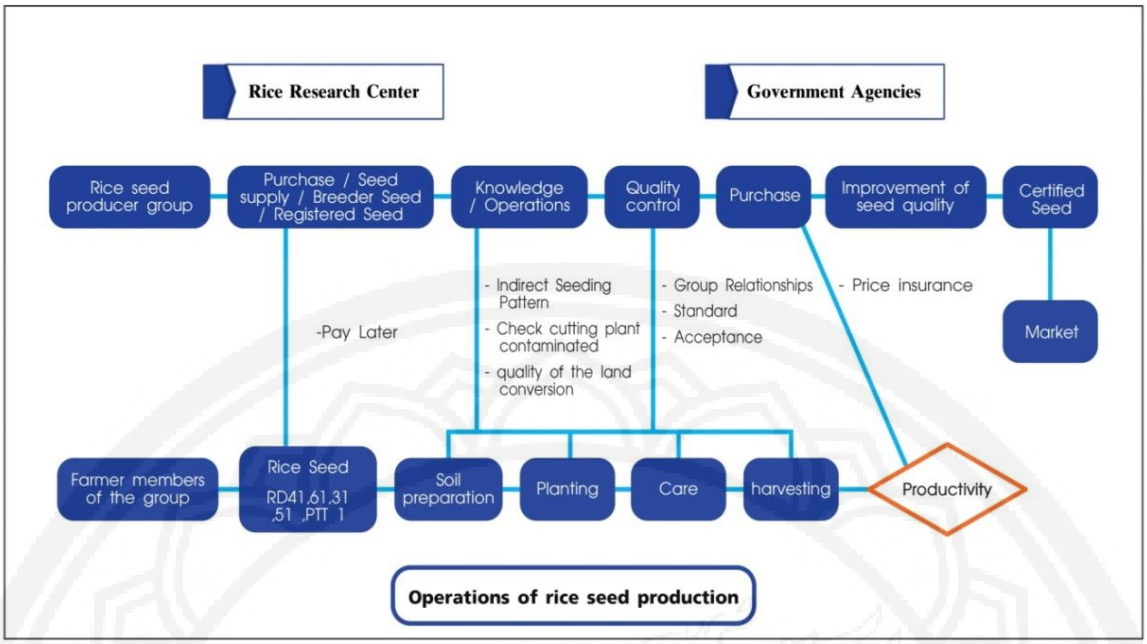

Figure 1 Operations in the Production and the Management of Rice Seeds Yield

Commercial rice production in the areas of Nanglue and Thachai sub-districts found that the cost of production was lower than the production of rice seed, but it could be sold at a lower price than that of rice seed production. Inclusion of integrated enterprise groups leads to fair business practices and generates economic benefits for members of the group, who produce rice seeds and commercial rice farmers. Difference at 2,550 Baht per rai leads to more income compared to conventional production.

Table 5 Show the Cost, Selling Price and Sales Locations

1 Rai	Rice Seed Production	Rice Production
Productivity	1.157 tons	1.133 tons
Sales Locations	Group of Rice Community Enterprises	Rice mill
Selling Price	8,500 baht /Not humidity	6,000 baht/Not humidity
Cost	4,174 baht	3,771 baht
Sold	9,837 baht	6,884 baht
Profit	5,663 baht	3,113 baht

Comparison of Commercial Rice Cycle and Rice Seed Cycle

Commercial rice production in the area study has shown that the economic system of the community is moving in the same direction with communities in every area of Thailand, which is integrated by the state and the external economic system into the capitalist economy and the production system. There are also attempts to freeze the community in such a relationship. It is important to understand the importance of capital and knowledge/belief in a better life in the past (Rigg and Vandergeest, 2012). Significant changes such as production costs, higher farm levies, exploitation, natural disasters, floods, drought, pest hazards, as well as product prices in the past, farmers were in a position to enter the capital system or market system, whereby farmers were not allowed to direct their livelihoods. When considering and looking at the structure, benefits, and supply chain of rice from source to destination, the beneficiaries of the whole process are not only available, but

also fertilizer traders, traders, agricultural machinery dealers, landlords/ lessors, capitalists, lenders, middlemen, mills, local rice traders and exporters, large department stores and small shops. As a result, low-income farmers are putting financial pressure on and moving on to the path of the loan leading to pressure on holdings. When income is subtracted from the cost of production, the difference between income and living costs increases, almost to fit or incomes are not enough to cover the cost of living. Therefore, farmers with big capital and factors of production will be affected less. Meanwhile, small farmers or renters will be affected quite a lot.

The production of rice seeds by Nanglue-Thachai rice seed producer group found that the factors of production within the community and the farmer, based on very specific conditions, the land became a unique condition that can be achieved only with land of the right size, and farmers own. As a result of change in the production pattern in the first stage, the confidence in the income and the success of the person, such as being a progressive farmer who is ready to be transformed from new techniques and innovations, leadership is ready with the risk, and the challenge of a rigorous approach to achieve quality output. External production factots, such as technology and production machinery, is defined by capital and market systems, but the dependence on the source of the seed produced by the supplier can be further refined. External factors have increased the level of technical support provided by Rice Research Center, as well as support from the group. Knowledge, techniques, methods, causes form of rice seed production is neatly produced, maintained and maintained to improve quality through the use of knowledge from the Rice Research Center, the group leader and group management to obtain the output in the form of rice seed in the class distribution. The market mechanism has separated from the farmers directly; the output is not mechanized by the capital system and the entire market system, because the farmers do not sell the output to the mill or the middleman straightforwardly and the rice seed varieties meet with specific markets. There is a quantity of demand in the production as a way of increasing the production of mainstream agriculture which is passed on to the seed producers who are responsible for managing the output instead of the market as well as the ability to negotiate with the market properly.

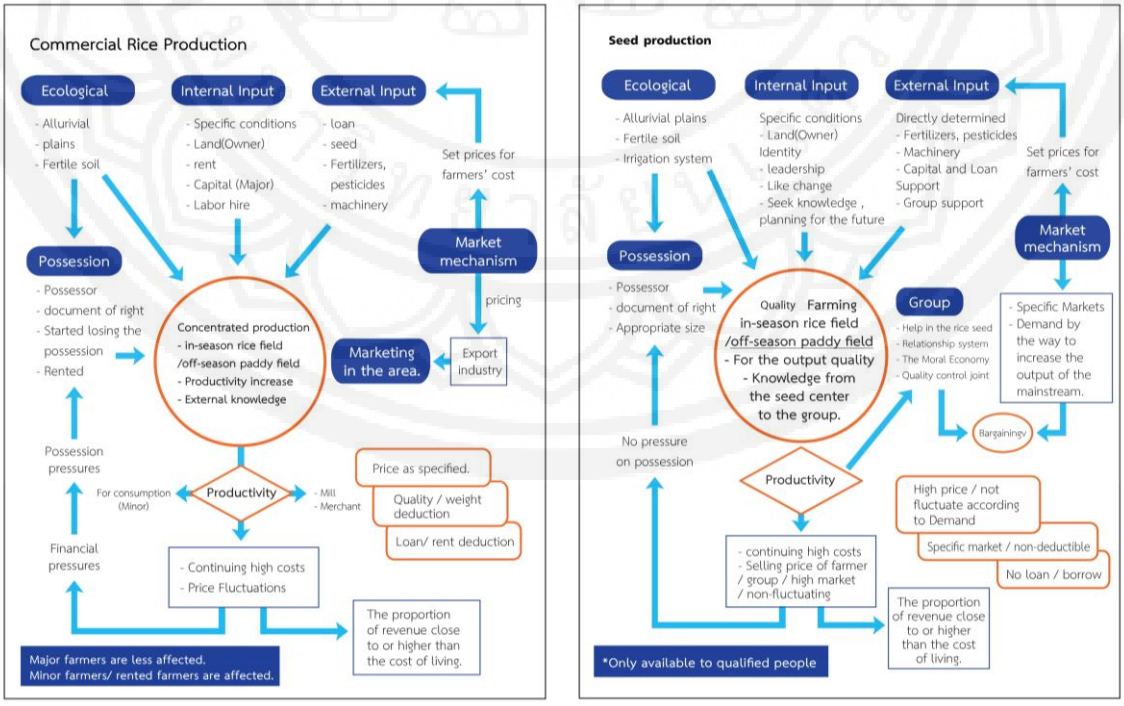

Figure 2 The Cycle of Rice Seed Production and Commercial Rice Production could be Summarized as Follows

It can be seen that seed production has a major chain that was a backlash in linking farmers and market systems. The production quality is meticulously designed to produce high quality products that meet the high demand. Although both rice seed production and commercial rice production were dictated by capital and market systems, the production of seeds was found to be more relaxed than the production of commercially harvested rice and freeze the peasants on all sides.

Discussion

Nanglue-Thachai rice seed business is a role of negotiator who can fight the capitalist system, control, and overpressure the rice seed business does not deny capitalist systems, market systems, and capital accumulation. It is the same business as capitalism, but it is a moral business, not taking advantage of the farmers, and creates the equality for farmers. Farmers can set up a system of economic relations, which in turn enters into economic relations in capitalism, and mainstream agriculture in the past, resulting in farmers becoming just those who create surplus value to the external economy. Economic relations are determined by the external economy which is always a problem for farmers in Nang Lue and Thachai districts. Efforts to change the conditions of economic relations are necessary to increase the bargaining power of the community and the farmers, whose power to negotiate when the community has the power to control its own economy (Toffler, 1990; Smith, 2007). In research by Kaufman and Watanasak (2011) and Ikerd, Monson, and Dyne (1992) support results of this study, solution of problem is to find a way to develop a community-based economy that is truly beneficial to the community.

The approach of alternative development of Thai rice production, in generating income for households, which is an alternative that is not only black or white, ones should not stick to the same as the opposition or duality, or dichotomy, between “mainstream agriculture” and “off-farm”, non-market oriented, where the development of production patterns from the mainstream agricultural production to the alternative agricultural production in a variety of dimensions. At present, there is the nature of controversy as a major Dominant Discourse, which questions the choice of development. In terms of the power to define meaning, questioned and criticized for still falling under the discourse of developmentalism (Ferguson, 1990; Escobar, 1995; Charoensin-o-larn, 2000) and alternative development has created opposites between the state and capital, which represents the mainstream of development with the other side is NGOs and communities, which are contradictory to the state and capital, or even the creation of a traditional community, and modern communities that reflect the view. The polarization of development choices (Pieterse, 1998; Quinn, 1997; Kerdnoi, Prabudhanitisarn, Sangawongse, Prapamontol, & Santasup, 2014), as well as the alternative of rice production, is emerging in current’ Thai society.

It is an attempt to capture the meaning of the definition. “Alternative Agriculture”, and alternative agricultural practices, and despite efforts to create new development alternatives in the society, such as Sustainable Development, Consumerism in the form of green Consumerism, or Alternative Agricultures, and other Approaches. There is no escape from the framework of mainstream development, which is integrated into capitalism. But the way of development should aim for happiness and balance to benefit the community and the farmers. The balance reflects the pattern of sustainable development which is focused on sustainability at the individual level. Community and environmental sustainability, alternative development, and production systems are different from mainstream production systems, so it is not a way of denying capitalism.

Conclusion and Suggestion

1. The seed production is not a substitute for mainstream rice because the seeds of agriculture are the main source of grain in the market, where seed production can be relied on by the mainstream agriculture system. As long as mainstream agriculture can survive and not be challenged by new systems, if other types of farmers are cultivated, there is a group or seed production.

2. Rice seed production under the Community Enterprise Group with intensive agricultural production model, it is possible for the manufacturer to at least be a progressive farmer, or a ready farmer to open his eyes, and the more they combine, the more seed is produced. They will not be divided into social classes, such as in capitalist systems, where the groups return in a non-exploitative manner, helping the society.

3. Rice seed farmers should look at other economic crops such as corn, sugar cane, beans, kale or other commercial plants in the mainstream which are almost completely in seed demand. There are farmers who meet the conditions, there are agencies to help, and there is a group to build a good relationship at least one group of the farmers will be able to have a better life.

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