

## **CASE STUDY OF UBON RATCHATHANI RICE FARMERS: THAI GOVERNMENT'S RESPONSIBILITY IN SUPPORTING THE EXPORT OF RICE**

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### **ABSTRACT**

*Thailand is the biggest rice exporter in the world market. However, Thai farmers, the rice producers, receive less benefits from the continuously increasing price of the rice products. Most of the farmers do not export by themselves. According to the research survey, more than 90 percent of the farmers in Ubon Ratchathani (province in Thailand) do not have the knowledge and ability to export. This case study explains how the Thai government should support the Thai farmers to receive more benefits from exporting the rice. The results show that the Thai government can act as a key organization to fairly allocate benefits among stakeholders, such as farmers, middlemen, and exporting companies along with the rice private organizations. The Thai government also should integrate the different government sectors to smoothly enhance the farmers' productivity and quality.*

### **INTRODUCTION**

North-Eastern Thailand is an important area for the production of rice, a significant agricultural product for the country in terms of consumption and export. It is also a major source of high quality rice such as Jasmine rice for export (Wijnhoud, Konboon, and Lefroy, 2003). In 2006, Ubon Ratchathani, a province in this area, produced 11.88 tons of good quality Jasmine rice from 24,764 rai of land in 2005. Leading areas of Jasmine rice production in Ubon Ratchathani were Kudkhawpun, Muangsamsib, Dechudom, Buntharic, Sumrong, Piboonmungsahan, Trakanpudpon, Srimungmai, Nayia, and Luasuacoke (Theerapongthanakorn, 2006).

Jasmine rice (Thai Hom Mali) is a soft, fragrant, delicious rice popular domestically and internationally, and represents 40.22 percent of Thailand's exported rice (Department of Trade Negotiation, Ministry of Commerce; The Office of Agricultural Economics (OAE), Ministry of Agriculture and Cooperatives of Thailand, 2006). Its export is worth more than 20,000 million baht per year (Krungtheptharakit, 2007). Major export markets are the European market, United States, Canada, Africa, China, Hong Kong, Malaysia, Taiwan,

Brunei, and Singapore (Rice Trade Management Unit, Department of Foreign Trade, Ministry of Commerce, 2010). Jasmine rice for export accounted for 40 percent per year of total production and the rest was for domestic consumption. Jasmine rice from Ubon Ratchathani constituted the highest proportion of rice for export (<http://Department> of Foreign Trade, Ministry of Commerce, 2010).

Foreign demand for Thai Jasmine rice increased from 60,282 million baht in 2008 to 68,578 baht in 2009, a rise of 13.76 percent.

**TABLE 1 THAILAND’S EXPORT OF JASMINE RICE**

**Value: millions baht**

<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>35,572</b>	<b>34,904</b>	<b>40,341</b>	<b>47,988</b>	<b>60,282</b>	<b>68,578</b>

Source: The Office of Agricultural Economics (OAE), Ministry of Agriculture and Cooperatives of Thailand

Although the export market continues to grow, Thai farmers receive few benefits. Most do not export by themselves and even in Ubon Ratchathani, an area with an integrated network of agricultural workers and rice mill associations, exports are via middlemen or export companies. Only one agricultural institution in Ubon Ratchathani, the Progressive Farmers Association in Trakanpudpon district, handles its own export affairs.

This case study investigated ways in which the Thai government can assist Thai farmers to receive more benefits from exporting rice. The study had four specific objectives. The primary objective was to compare farmer groups involved in direct export with those involved in indirect export. The second objective was to examine factors related to Ubon Ratchathani farmer groups’ capability in exporting Jasmine rice. Examples of these factors were production costs and efficiency, financial funds in marketing operation, export knowledge, and export capability. The third objective was to investigate problems of and obstacles to Ubon Ratchathani farmer groups in exporting Jasmine rice. The final objective was to study government support for Thai farmers to receive more benefits from exporting the rice. .

The following section provides an overview of Ubon Ratchthani farmers’ institutions, Thailand rice production, the rice market, competition in the world rice market, and rice exporters’ government policy, theories, and conceptual framework. Section 3 demonstrates methodology. Section 4 shows the results of the case study. Finally, section 5 presents discussion and conclusion.

## AN OVERVIEW

### Farmers' Institutions

Farmers' institutions in Ubon Ratchathani are classified into agricultural groups and cooperative agricultural groups. Some of the agricultural groups coordinate and cooperate with entrepreneurs and others have their own rice mills.

TABLE 2 FARMERS' INSTITUTIONS

Farmers' Institutions	Number	Responsible Units
Agricultural groups	100	The Office of Agriculture, Ubon Ratchathani
Cooperative agricultural groups	47	The Office of Cooperatives, Ubon Ratchathani

Source: The Office of Agriculture, Ubon Ratchathani, The Office of Cooperatives, Ubon Ratchathani, 2010

### Rice Production

North-Eastern Thailand is responsible for the production of 82 percent of Thailand's Jasmine rice. The most important provinces are Ubon Ratchathani, Amnat Chareon, Roi-Et, Yasothorn, and Srisaket (Economic Agricultural Department, 2006). North Thailand accounts for 11 percent of Jasmine production (Luawmek, 2008). Organic Jasmine rice is found in this region, providing more produce per rai and improving the soil conditions (Theerapongthanakorn and Namdang, 2006). In some Western countries, it is also more acceptable.

Inputs of rice production are classified into tradable inputs, such as imported fertilizers and pesticides, and non-tradable inputs, such as land, labor, and local capital (Yao, 1997). According to Sudanich (2002), inputs that were important to Thai farming were capital, labor, chemical fertilizers, pesticides, and technology such as harvest tractors. Thai farmers have incurred higher costs due to their use of pesticides and chemical fertilizers rather than using organic fertilizers. Farmers' sources of funds are Bank for Agriculture and Agricultural Co-operatives, merchant, and relatives (Sudanich, 2002).

The most popular rice for trading is Jasmine Khor Kor 105 and Sticky Rice Khor Kor 6 is popular for their consumption (Sudanich, 2002)

Studies of farmers in Tumbol Bunggam, Tungkuawluang District, Roi-Et Province showed that growing rice in 10 rai lots provided higher yields per rai than in larger areas because farmers were able to take care of all factors related to productivity (Sudanich, 2002).

Productivity of Jasmine rice in Thailand increased from 6.42 tons in 2005 to 6.49 tons in 2006. Seventy percent of Jasmine rice is exported and thirty percent is for internal consumption in 2006 (The Office of Agricultural Economics (OAE), Ministry of Agriculture and Cooperatives of Thailand, 2006).

## **Rice Market**

Marketing channels of Jasmine rice involve the domestic and foreign markets (Patthanapongpaiboon, 2003). Thai farmers have several ways to sell their rice in the domestic market. They might sell their produce direct or indirectly to agricultural cooperatives, rice mills, local merchants, or middlemen. In the case of export produce, most farmers sell through rice mills, middlemen, or export companies. Few of them handle the exporting themselves.

In the world market, important importers of Jasmine rice are the European countries, the United States, Canada, Africa, and Asian countries (Rice Trade Management Unit, Department of Foreign Trade, Ministry of Commerce, 2010).

## **Competition**

Competition in the world rice market is intense. The dominant rice exporters are Thailand, Vietnam, and India, their exports accounting for 60 percent of global exports (Headey, 2010). Thailand is the largest rice exporter even though its rice production ranks fourth behind China, India, and Vietnam (Co and Boonsarawongse, 2007; Food Institution, 2007). Its rice comprises around 30 percent of global exports (Headey, 2010) and important competitors of Thailand are Vietnam, India, and Pakistan (Co and Boonsarawongse, 2007, Hansutthiwarin, 2004).

Vietnam is a crucial competitor of Thailand and enjoys the advantage of low costs due to the government's support to reduce the cost of production via the provision of materials, equipment, and/or subsidized funds. Therefore, Vietnam uses price strategy to compete in the world market since its costs are lower than other rice exporters (Luawmek, 2008). However, Vietnam's rice quality is lower than Thailand's.

## **Rice Price in the World Market**

The international rice price is influenced by demand and supply, government intervention, export volume, rice quality, slow yield growth, macroeconomic imbalance, and speculation (Headey, 2010; Co and Boosarawongse, 2007).

Basically, the price is determined by demand and supply in the rice market. If there is more demand than supply, the price rises. For example, Thai farmers receive a low price at the beginning of the harvest season because there is a large amount of produce in the rice market. In contrast, they prefer to sell at the end of the farming season, during July to October, because the price is higher. However, occasionally, governments intervene in the rice market. To control price fluctuations in the domestic market, governments extract surplus supply in the domestic market and may promote export. Governments may also influence the rice price in the international market by restricting exports, leading to an increase in price. It should be noted that governments sometimes restrict rice exports because of their desire to provide food security in their countries. Import surges are also important direct determinants of increases in rice price. The improvement in rice quality is another factor to increase rice

price in foreign markets as importing countries often specify high quality standards for imported rice.

The rice price is also affected by other uncontrollable factors (Headey, 2010). If rice production has a slowing yield growth, sometimes caused by drought, this reduces the supply of rice and increases the price in the world market. In addition, macroeconomic imbalance, such as different interest rates among countries, could cause currency depreciation in major developed countries and increase the rice price. Moreover, if the information related to the true levels of rice stocks is unreliable, speculators tend to panic buy, and this pushes up the rice price.

### **Government Rice Export Policy**

A government's policy regarding the export of rice is an important factor in its competitive capability in the world rice market. In the past, governments pursued protectionist policies that aimed to guard their producers against international competition, correct market failure, such as surplus agricultural supply, provide food security to the poor, and raise national revenue (Choeun, Godo, and Hayami, 2006). Today, governments around the world favor freer trade policies to encourage international trade, seeking to provide the best choices to consumers, maximizing international trade, and providing food security to their own populations. These policy choices have been the rational responses to an array of political lobbying pressures from vested interest groups, including urban consumers, industrialists, and labor unions that may lead to a reduction in the social welfare of the nations (Choeun, Godo, and Hayami, 2006).

Government intervention in the rice market affects private production, prices, and market demands, and benefits exporter countries in the following ways:

1. **Production policy.** Normally, government production policies increase productivity, reduce costs, and improve rice quality to meet GAP<sup>1</sup> of export markets. The Thai government provides farmers with knowledge and financial assistance to improve farmers' rice productivity and standard of product, and reduce costs. For example, money is used to train farmers and extension workers in appropriate nutrient management (Wijnhoud, Konboon, and Lefroy, 2003). Similarly, the Vietnamese government exempts imported inputs used to produce exports and allow farmers to exchange, transfer, lease, inherit, and mortgage land, leading to a growth in rice production, improvements in cropping intensity, and reduction in costs of production and exports (Ryan, 2002). The Vietnamese government has also commenced cultivation of hybrid rice.

A recent study showed that agricultural policy distortions influence rice productivity (Rakotoarisoa, 2010). It was found that high levels of rice subsidies and protection in developed countries combined with taxation of rich farming in developing countries widened the gap in rice productivity between developed and developing countries (Rakotoarisoa, 2010). Developed countries, such as Australia, Italy, Japan, Korea, and the United States, heavily subsidized their rice production and export, setting high and numerous import protections. A second group of countries consisting of China, India, Vietnam, Thailand, Pakistan, Argentina, Columbia, Egypt, Guyana, Myanmar, Suriname, and Uruguay, applied few producer subsidies but often taxed their exporters. A third group of countries, composed

of mostly low income countries such as Bangladesh, Brazil, Cambodia, Guinea, Indonesia, Iran, Laos, Madagascar, Mali, Malaysia, Nepal, Nigeria, Peru, Philippines, Sri Lanka, and Tanzania, often taxed their rice production and export. Rice productivity was highest in the group of developed countries and lowest in the third group made up of low income countries.

2. Agricultural diversification policy. Currently, many countries support farmers to diversify their plantings to include rubber and crops suitable for making bio-fuels, leading to a reduction in the total area used for rice and rice production (Headey, 2010). Rice supply in the world market reduces resulting in a price increase.

3. Free trade policy. The agricultural sector has lagged behind other sectors in the free trade process. Policymakers are reluctant to move rapidly to free trade in rice because they are concerned about the stability of the domestic price and a strong demand desire for national self-sufficiency as a route to food security (Dawe, 2001). Dawe explained that large adjustments in price of rice can lead quickly to political instability and governments might be more willing to accept higher levels of imports if adequate supplies of rice can be easily obtained on the international market. Dawe believed that, under free trade, domestic prices of rice were influenced by world prices and speculation of private traders and speculators.

However, other studies showed that government policies of open borders or import relaxation offered a financially inexpensive means of reducing the domestic consumption and price volatility of staple foods (Sanogo and Amadou, 2010; Dorosh, Dradri, and Haggblade, 2009; Ryan, 2002; Dorosh, 2001). These studies found that private traders enjoyed the freedom to import and export agricultural products when market conditions permitted and that free trade allowed domestic markets to moderate the demand and supply of rice, and the price. If governments restricted import or closed borders, this might lead to a reduction in consumption and expensive rice .

AP is a standard for exporting rice. It states all production processes that are required to meet exporting standards (The Office of Product Standard, Ministry of Agriculture).

the domestic market. Likewise, export restrictions could lead to reduced supply in the world market and stimulate high prices, and finally to a food crisis (Headey, 2010).

Similarly, export promotions, such as removing export restrictions and export quotas, reducing export duty, subsidizing, supporting exporters to access foreign markets, completing trade negotiations, and reducing transportation costs, benefit domestic and international markets. Vietnam's easing of export quotas, reduction of export duty, relaxation of internal trade, and elimination of price controls assist farm prices and poverty (Ryan, 2002). In addition to Vietnam's welfare gains, the world rice market benefits from that country's relaxed policies, resulting in an increased supply of rice on the world market. In summary, reductions in import and export restrictions enhance a country's competitive capability in the world market.

4. Internal trade policy. A relaxation of internal restrictions, such as the movement of rice, price control, and reductions in wholesale taxation, supports free trade and a country's welfare (Ryan, 2002).

5. Government-to-government purchases. These are conducted to support farmers and exporters and to generate revenue for the countries, and usually occur in times of surplus supplies.

6. Rice security stock policy. Governments need to ensure that there are adequate supplies of rice for internal consumption before selling abroad. At the same time too much should not be retained as this may affect increases in price (Headey, 2010). Appropriately sized rice stocks in domestic and world markets act as protection against panic purchases and price increases.

7. Price stabilization policy. Price stabilization<sup>2</sup> benefits consumers, producers, and the macro-economy (Dawe, 2001). Poor consumers are protected from periods of abnormally high rice prices ensuring their access to their major staple food and farmers are protected from periods of abnormally low prices. It is also a crucial policy that maintains stable conditions for private investment and growth.

In conclusion, rice production is very important to numerous Asian governments because the process involves many smallholders and the food forms a large proportion of the diets of millions of people (Headey, 2010; al Timmer, 2009). Therefore, these Governments normally intervene in the rice trade through export and stock policies to protect their own people (Headey, 2010). However, such interventions drive up the price of rice on the world market.

Governments' policies regarding the export of rice are viewed as the most important factor to enhance competitive capability in the world rice market. Governments' interventions affect private production, price changes, market demands, and provide advantages for the exporters. Vietnam provides financial support to its farmers to compete in the world market. In Thailand, despite increased exports and rice prices on the world market, farmers do not receive benefits because of their inability to export directly. There is strong evidence that agricultural factors, such as the government policies and the prices of agricultural products, are significant in the determination of income equality in Thailand (Motonishi, 2006). Choeun, Godo, and Hayami (2006) indicated that the Thai government's reduction of rice export taxation distributed more benefits to farmers.

This study investigated the government's distribution export benefits to Thai farmers.

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<sup>2</sup>Price stabilization is defined as a reduction in the variability of prices without any change in the average level of prices. Generally, government stabilizes rice price using taxation or subsidization (Dawe, 2001).

## **Theory of International Trade**

International trade is defined as the exchange of products and services among countries and is composed of exports and imports (Hill, 2009).

Neo-classical Theory of International Trade. Heckscher (1919) and Ohlin (1933) stated that international trade originated from the differences in costs of production of different countries. If one country has more favorable production factors, such as capital and labor, and/or has lower production costs than another country, then the first country should have a comparative competitive advantage regarding production costs (Hill, 2009).

Absolute Advantage Theory. Adam Smith (1776) explained that a country that has absolute competitive advantage in producing goods through more efficiency resulting in

higher quality and lower costs than other countries should be producing and exporting the product to those other countries, thus creating international trade (Hill, 2009).

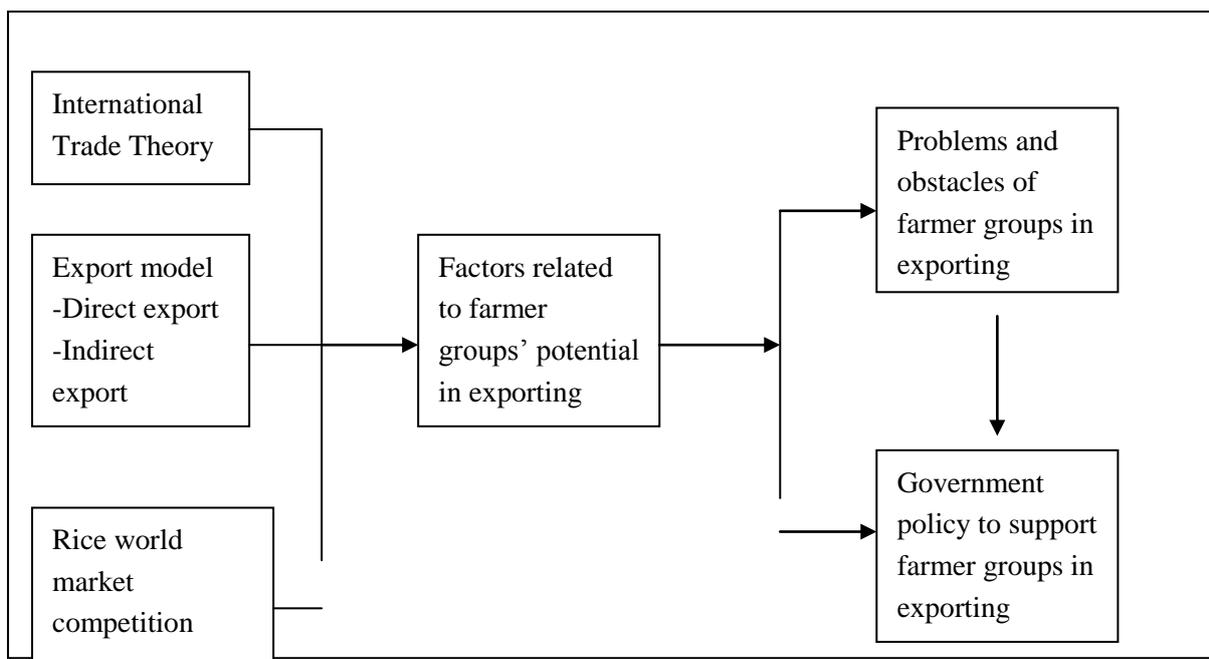
Comparative Advantage Theory. David Ricardo (1817) explained that each country should produce and export products that it has the most comparative advantage and import products that it has the least competitive advantage. This results in the two countries receiving mutual benefits from international trade (Hill, 2009).

## Exporting

Exporting is the process by which companies produce goods and send them for sale in foreign markets (Ball *et al.* 2010).

Exporting is classified into direct exporting and indirect exporting (Ball *et al.* 2010). Direct exporting occurs when a company contacts target markets, governments, and related people in the foreign markets itself. Exporters need to have a potential in finance, knowledge, and capability to be successful in international business, making direct exporting riskier than indirect exporting via an agency that manages the risk for the producer. Export agencies buy goods from producers at low prices to compensate for this risk and this reduces producers' profits from indirect exporting.

**FIGURE 1: CONCEPTUAL FRAMEWORK**



## METHODOLOGY

### Data Collection

Primary data were collected from questionnaires completed by members of farmer institutions and interviews of leaders of farmer institutions, owners of rice mills, rice exporting companies, and government officials in the Ministry of Commerce and Ministry of Agriculture. The questionnaires and interviews focused on Ubon Ratchathani farmer institutions' ability to export Jasmine rice and related government policy. Secondary data were collected from public and private organizations in Ubon Ratchathani and Bangkok, international business textbooks, and research journals. Statistical data of rice production, standards, and farmer institutions were obtained from the Ministry of Agriculture and data related to exporting from the Ministry of Commerce.

This study involved a total of 19,764 persons including farmers who were members of farmers' institutions in Ubon Ratchathani, and individuals from private organizations, such as rice mills and export companies, and government organizations related to the export of Jasmine rice in Ubon Ratchathani. The 717 farmers in this population were randomly selected by the use of the Taro Yamane formula. There were 11 district farmer leaders, 3 rice mill owners, the Director of Rice Exporting Association, Director of the Commercial Office in Ubon Ratchathani, Director of Agricultural Office in Ubon Ratchathani, Director of Cooperative Office in Ubon Ratchathani, Director of the Office of Product Development, Ministry of Agriculture, and Director of the Office of Rice Administration, Ministry of Commerce.

The study areas were Bangkok, Ubon Ratchathani and the districts in Ubon Ratchathani of Warinchamrap, Trakanpudpon, Kudkuawpun, Mungsamsip, Detudom, Buntracic, Sumrung, Piboonmungsahan, Nayia, Srimungmai, and Luasuakok.

The study analyzed data qualitatively using content analysis and triangular analysis and quantitatively via percentages, frequencies, and standard deviations.

## RESULTS

The results are derived from the interviews and the questionnaire.

### Interviews

The following is derived from data collected from interviews of the people mentioned above.

### Export process of farmer institutions

Most farmer institutions in Ubon Ratchathani export Jasmine rice through middlemen, rice mills, and export companies. Two farmer institutions, Development Agricultural Group and Progressive Agricultural Group, arrange their own export of rice. The Development Agricultural Group in Warin Chamrap sells their rice to an export company owned by Wanlop Pitchpongsa, Director of Organic Agriculture of Thailand. The Progressive Agricultural Group in Trakanpudpon is the only institution that is able to complete the export itself. The leader of this group, Montri Kosonlawat, has the language skill and personal contacts with foreign businesspeople in European markets, and knows the standards required for successful exporting. His group is able to produce rice, mill and package it, and operate the export process. In summary, farmer institutions in Ubon Ratchathani export through middlemen, rice mills, and export companies. Individual farmers sell their produce to middlemen, rice mills, and government projects.

### **Farmer institutions' ability to export Jasmine rice**

Most farmer institutions do not have the ability to export Jasmine rice because they lack knowledge in exporting, marketing, management, negotiation techniques, rice standards, producing quality rice to meet export standards, and skills in English.

Also, they do not have sufficient funds to accumulate rice and operate the export process involving buying machines and equipment to transform paddy into rice, packaging, and other expenses for export operations.

Therefore, at present, farmers are rice producers only, not having the opportunity to develop their exporter skills. To export, they need to have their own quality production process, mills, packaging, customs process, and export management with foreign companies.

### **Factors related to farmer institutions' ability to export**

1. The institution leader needs to have ability as a professional manager. He/she should have knowledge in exporting and language skills, be able to find foreign markets, handle trade negotiations, operate the export process, and control production to achieve the group's goals.

2. Farmers have knowledge of exporting, marketing, management, and language to contribute their ability to develop the groups' export capability.

3. Farmer institutions need equipment for exporting, such as milling machines, equipment to test rice qualities, equipment to grade rice, and refining machines. These machines and equipment are expensive and most farmer institutions cannot afford them.

4. Farmers are required to produce quality rice to meet export standards. Important rice importers, such as the European market, United States, Canada, China, Hong Kong, Malaysia, Taiwan, and Singapore state their rice standard for marketing as GAP. If farmer institutions could produce rice that meets the standards of GAP, they can sell it at a higher price. Few farmers know about these rice standards for export.

5. Farmer institutions need capital funds to operate the export process. They need funds to produce quality rice, invest in mill and export operations, and use as current capital

for other important activities such as purchasing rice from farmers and accumulating supplies to meet the orders of foreign markets. The institutions need to purchase rice from farmers before they sell to middlemen. Such investments require a large amount of money.

6. A strong group network of farmers enhances their export ability. They are able to purchase a large amount of rice and accumulate supplies to fulfill export orders, increase their rice productivity and quality, have more power in marketing negotiations with middlemen, and have higher levels of operation.

7. There needs to be sincere support from government sectors, including the Ministry of Agriculture and Ministry of Commerce. The Thai government should embrace stable policies and measures to provide consistent development of farmers' ability in production and export. Also, private sectors should provide opportunity for farmer institutions to export by opening the export process and supplying information about exporting. There should be a genuine integration and distribution of benefits among stakeholders such as farmers, middlemen, rice mills, and export companies.

### **Problems and obstacles of farmer institutions in the export of rice**

1. Farmer institutions lack leaders who are knowledgeable and capable in exporting and professional management. They need leaders who have skills in language, and knowledge of exports and trade negotiations.

2. Farmers lack knowledge about exporting, management, language skills, global information, and capital funds in export operations.

3. Farmer associations have several weaknesses. Farmers' lack of knowledge means that they sometimes hire a manager for their associations. However, the farmers often face problems of non-professional managers, and investigations of associated matters are impracticable due to the farmers' lack of knowledge. It is becoming increasingly common that farmers' children are not willing and/or able to take care the family businesses, most preferring to work in the big cities.

4. Local entrepreneurs and leaders of farmer institutions lack confidence in exporting.

5. The government sector is not able to develop managers for farmer institutions because it cannot find persons suitably qualified.

6. Most farmers cannot produce sufficient rice to meet export standards. Major export markets, such as the European countries, Singapore, and United States, specify and accept different rice standards. This causes difficulties for the farmers because they do not know the appropriate rice standards for export or the quality of Jasmine rice.

In addition to the problem of farmers lacking knowledge about the standards of rice, Thai farmers have also lowered their rice standards. In the past, Thai farmers planted rice using a natural process and equipment and harvested the rice manually. Today, they use more chemical products, technology, and machines in planting and harvesting the rice. The chemical products destroy the soil and affect the quality of the rice. Harvesting machines also cannot grade quality rice because it indiscriminately cuts ready rice and unready rice. Finally, high quality rice requires a high quality rice mill process.

Therefore, producing rice of a sufficiently high standard to meet export requirements must begin with farmers and also relates to rice mills and exporters. Governments, at first, need to develop farmers to produce good quality rice.

7. Farmer institutions do not have enough productivity volume for export orders. Thus, it is difficult for groups to expand into exporting.

8. Most farmer institutions cannot access exporters through the many middlemen between them and exporters. Only big export companies approach farmers, leaving many to try to access exporters directly in the search for more benefits from rice exporting.

9. Most farmer institutions cannot access Ministry of Commerce, limiting their opportunities to receive knowledge and benefits from the Ministry's work.

10. Farmer institutions do not receive sincere support from government and private sectors. The government does not have stable policies for farmers and lacks integrated works among government's units. Private sectors often set up obstacles to farmers' access to the export process and cover important information such as rice prices. Generally, private organizations, including export companies, shipping companies, and middlemen, work together for their own benefits.

11. Groups and networks of farmers are not strong. Members often withdraw from their groups for personal reasons and benefits. Farmers might quickly sell rice to middlemen, rather than to their group, to solve problems of personal debt and may receive a better price offering from the middlemen. In addition, farmers prefer chemical farming to organic farming because of the effort in the latter.

These limitations indicate that farmers will not be directly involved in export but will continue to play the role as rice producers.

### **Government policy**

There are a number of important policies of the Thai government aimed to support stakeholders in export businesses. These include:

1. Revenue insurance project. The Thai government created this project in 2009 to solve problems experienced by a previous scheme, the rice deposit project. Through the revenue insurance project, farmers can receive a guaranteed rice price based on the government's announced price. If the market price differs from the announced price, farmers receive compensation for the difference in prices. Farmers are required to register with the government's units and specify a period of insurance.

The revenue insurance project benefits all stakeholders, especially farmers as all registered farmers receive a guaranteed and fair price for their rice. In contrast, the rice deposit project did not cover all farmers, some selling their rice to middlemen because they were not able to afford transportation costs involved in the delivery of their rice to specified places. The revenue insurance project does not require farmers to deliver their rice to specified places and they receive compensation as soon as there is difference between the announced and market prices.

Also the revenue insurance project allows middlemen, rice mills, and export companies to trade rice at the market price regularly so that they can receive normal profits.

2. Road show project. The government operates the road show project to introduce rice mills and exporters to foreign exporters and helping them in trade negotiations.

3. Reduction of export and import restrictions. Thailand has for several years removed export restrictions to support free trade. One of the measures involves the removal of export duty for rice exporters, benefitting all stakeholders. In contrast, the existence of export duties usually means that the export companies pass this cost onto rice mills, middlemen, and farmers, the last group being the poorest with little power.

The government has also removed and/or reduced some tariffs and non-tariffs for rice import. These measures allow the government to increase its rice stock, exporters to be able to sell more rice, and Thai consumers to have more choice in the domestic market. However, these measures create more competition in the domestic market, affecting the benefits of the middlemen and rice mills. It should be noted that this competition might affect exporters if some traders import rice into Thailand at low costs and export the rice to foreign markets at a lower price than Thai rice.

4. Price stabilization. The Thai government pursues price stabilization to control price in the domestic market. This policy benefits consumers, farmers, and the Thailand economy. Generally, the government controls the internal supply of rice and international trade volume. If there is an over-supply in the domestic market, the government extracts some from the market. To control international trade volume, the government might use export quotas or tariffs. In addition, the revenue insurance is another project to stabilize the price of Thai rice.

5. Rice stock policy. The Thai government maintains levels of rice stock to ensure that Thai consumers have enough rice to consume. Surplus rice is allowed to be exported to foreign markets. This benefits consumers' and farmers' welfare. The rice stock policy is parallel to the price stabilization policy, ensuring the rice price and security of consumption for farmers.

### **Thailand's difficulties in exporting Jasmine rice**

Thailand is faced with several problems in the export of Jasmine rice. These include:

1. Increased numbers of Jasmine rice producers in the world rice market, such as Vietnam, Cambodia, and China. China has announced that it will produce enough Jasmine rice in 3 to 5 years to allow it to stop imports from Thailand.

2. Thailand's policymakers and marketing makers are not integrated in their operations, affecting the efficiency of the operation of exports.

3. Policy inconsistency. Thailand often has problems of inconsistency of policies. Changes in government often result in changes of rice policy.

4. Thailand has difficulty in improving the quality of rice export.

5. Traders in the foreign markets mix artificial Jasmine rice with the Thai Jasmine rice product and then sell it on international markets. This ruins the reputation of Thai Jasmine rice, causing confusion for buyers and affecting future developments.

### **RECOMMENDATIONS TO ASSIST FARMER INSTITUTIONS TO OBTAIN BENEFITS FROM THE EXPORT OF RICE**

In the short term, the Thai government should distribute benefits to all related stakeholders, export companies, rice mills, middlemen, and especially farmers. Farmers are a group that has lower economic welfare and poorer negotiating power than other groups. As their export role is limited, the government should train them to be the producers of the best rice that meets export standards.

Today, the government has a clear policy to distribute benefits to farmers through the revenue insurance project and the road show project. Farmer groups should also be encouraged to coordinate with rice mills and rely on them in this short-term period. Rice mills should act as farmer leaders in this project because farmer groups do not have the export capabilities. Farmers should produce GAP quality rice and sell it to rice mills which then complete the GMP<sup>3</sup> standard and export processes. Rice mills usually operate through exporting companies and do not directly export through the road show project because of language difficulties.

In addition, the government should establish a training project that joins farmers with export companies, rice mills, middlemen, consumers, and academics to integrate and distribute benefits among stakeholders in the short- and long-terms.

In the long term, the government should have projects to develop farmer groups' capabilities in exporting rice as follows:

1. Leaders of farmer institutions and farmers should be trained in exporting, marketing, management, and English language, to operate their own marketing activities, and be encouraged to be active, independent learners.

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<sup>3</sup>GMP is a standard of rice transforming and packaging. (Source: The Office of Product Development, Ministry of Agriculture).

2. Farmer should be trained to produce quality rice to meet GAP export standards. Further, they should be encouraged to market the rice so that they can obtain more benefits. The training courses should provide fundamentals of developing good quality rice, production for marketing goals, standard goals, increased productivity, and reduction in costs, and building strong networks for rice accumulation and stronger price negotiation.

3. The government should create a learning center for farmers to develop their knowledge of efficient production process and the production of quality rice.

4. The government should assist farmer institutions and rice mills in recruiting managers.

5. The government should analyze the strengths and weaknesses of farmer institutions in a bid to increase their efficiency. In addition, it should support farmers to build more institutions to increase production efficiency and marketing negotiation power with middlemen. Farmer institutions should cooperate in planning the production system to produce quality rice to meet GAP standard and serve market demands. The systems should include cultivating, harvesting, and milling.

6. The government should develop a network of farmer institutions capable of directing the export process.

7. The government should support farmers to establish more institutions.

8. The government should support farmers' and farmer institutions' access to financial resources, thus encouraging investment in rice accumulation, equipment, and machines involved in the export process.

9. The government should support farmer institutions to export by surveying high productivity districts that produce around 20-30 tons, and then planning for these districts' marketing.

10. The government should have stable policies in relation to farmers.

11. Education institutions should promote students to be involved in local farming and their home provinces. In addition, both the government sector and farmers should encourage farmers' children to assist their parents to continue their farming and associations with farmer institutions. These students should aim to develop themselves as the new, professional, and knowledgeable farmer executives. In addition to these government initiatives, it is recommended that the private sector should provide farmers with opportunities to learn about exporting rice. Export companies, rice mills, and middlemen should not block farmers' access the export process. Private organizations should also provide important information in relation to exporting. For example, Mr Wanlop Pitchpongsa has supported farmers' access to the export process for a long time. He makes an initial contract with an organic farmer association so that the institution learns how to deal with an export company, coordinates farmers to meet with financial sources and insure debts for the farmer institution. This supports the farmer institution to accumulate a large amount of organic Jasmine rice

## Questionnaire

### Export capability

A total of 717 farmers answered a questionnaire about their capability in exporting. The results showed that most of them did not have capability in knowledge and/or finance to successfully operate the rice exporting process.

### Export knowledge

More than 90 percent of farmers lacked knowledge of exporting knowledge:

**TABLE 3: FARMERS LACK OF KNOWLEDGE OF EXPORTING**

<b>Lack of knowledge</b>	<b>จำนวน</b>	<b>ร้อยละ</b>
1. Marketing	675	94.54
2. Exporting	662	92.72
3. English language	661	92.58
4. Management	656	91.88

5. Others	53	7.42
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### **Factors related to farmer institutions' capability in exporting**

The five factors identified by the farmers as most important in the enhancement of the farmer institutions' capability in exporting were:

1. Capital funds for exporting – ranked first by 71.41 percent.
2. Sincere government support - 69.74 percent.
3. Support of private sector - 59.97 percent.
4. Developing leaders' ability - 56.62 percent.
5. Cooperating in rice accumulation - 55.09 percent.

### **Requirements of farmer institutions in developing their export capability**

The five requirements viewed by farmers as the most important in the development of farmer institutions' export capability were:

1. Capital funds for exporting – ranked first by 82.51 percent.
2. Sincere government support - 81.73 percent.
3. Support of private sector - 73.08 percent.
4. Strong network - 71.41 percent.
5. Knowledgeable leaders - 68.20 percent.

### **Problems of and obstacles to farmer institutions in exporting**

The farmers identified the following as the five most significant problems for farmer institutions in exporting:

1. Lack of government support - ranked first by 69.87 percent.
2. Lack of funds to purchase important equipment - 67.92 percent.
3. Lack of funds to purchase and accumulate rice - 63.46 percent.
4. Lack of private sector' support - 63.04 percent.
5. Farmers' lack of knowledge - 58.72 percent.

### **Recommendations for developing farmer institutions' export capability**

The farmers made five recommendations to enhance farmer institutions' export capability. These were:

1. Support farmer institutions to access financial sources – ranked first by 77.13 percent.
2. Support farmer institutions to access foreign markets - 71.97 percent.
3. Training projects for leaders - 69.81 percent.
4. Training projects for farmers - 64.16 percent.
5. Promote cooperation among institutions - 64.16 percent.

## **SUMMARY OF THE RESULTS**

Both quantitative and qualitative research showed that most farmer groups in Ubon Ratchathani did not have ability in the direct export of Jasmine rice. Most farmer groups exported through middlemen, rice mills, or export companies, there being only one group able to complete direct export to foreign markets because the group leader had the language skills and personal contacts with foreigners.

It was found that the important factors related to farmer groups' ability in rice exporting were the group leader who was knowledgeable in exporting and language and was capable in marketing and trade negotiation. Other important factors for farmers were knowledge in exporting and ability in marketing trade negotiations. Farmers also needed capital funds to accumulate rice to fulfill foreign orders and operate the export process. Rice production must meet export standard requirements. Also, the establishment of new groups and networks and sincere and continued support from the government and private organizations were seen as crucial factors to support groups' development in exporting. The lack of these factors led to problems of developing farmers groups' ability in exporting the rice. According to this research, more than 90 percent of farmers in Ubon Ratchathani lacked these qualification factors and supporting factors, resulting in most farmer groups not being able to be involved in direct exporting.

Existing government policies include insurance projects for farmers' revenue, providing knowledge about producing quality Jasmine rice, and subsidies for farming. To promote export, the Thai government relaxes export duties and conducts road shows for entrepreneurs of rice mills and exporters. However, most policies and measures lack integration in planning and implementation among related government sectors.

Guidelines to improve farmer groups' ability in rice exporting mostly rely on Thai government support. The Thai government should have several policies and measures to help farmers to receive more benefits from exporting rice. In the short term, the government can act as a key organization to fairly allocate benefits among stakeholders, such as farmers, middlemen, and export companies along with the private rice organizations. This action should be based on sincere principles and information available to all stakeholders. The government also needs more policies and measures to support farmers.

In the long run, the government should develop the capability of farmer groups in rice exporting by providing knowledge and assistance continually. It should develop training projects for farmers and their leaders about exporting, marketing, language, and rice production standards for export. The government also needs to assist farmers to access funds for their farming and exporting. In addition, the government should develop policies and measures to enhance farmers to develop strong group networks for mutual exporting and marketing activities. Cooperation among government and private organizations is necessary to support farmer groups' ability in exporting. The Thai government also should integrate the different government sectors, including educational institutions, to enhance farmers' productivity and quality. These actions in assisting farmers and other stakeholders will support the export of Jasmine rice through comparative advantages in quality and cost to Thailand's competitors.

## **DISCUSSION AND CONCLUSIONS**

## **Discussion**

This research provides similar and different results to previous studies. Similar to Patthanapongpaiboon's study (2003), marketing channels of Thai farmers involve the domestic and foreign markets. In addition, there are similarities in farmers' exporting process. This study also demonstrates similar problems of farmers about production costs and marketing to the study of Sudanich (2002) and Patthanapongpaiboon's study (2003). The Thai government subsidized policies of rice production and exporting are mentioned in this study and the study of Wijnhoud, Konboon, and Lefroy (2003). Furthermore, this study shows similar result to Luawmek's study (2008) that Viet Nam has a comparative advantage of rice price in the world market.

Different results adding to existing evidence of farmers' exporting process and exporting capability are Ubon Rachathani farmer groups' ability in exporting Jasmine rice as a statistical number, factors related to Ubon Ratchathani farmer groups' ability in exporting, problems of Ubon Ratchathani farmers in exporting jasmine rice in details of many aspects. In addition, this study reveals in details how government policies and projects support farmers and other stakeholders to export the rice. Comments of all related stakeholders are included in the results.

This study found that a major policy of the Thai government, the Revenue insurance project, benefits all stakeholders, especially farmers. However, other policies of the Thai government had some weaknesses such as production policy and export policy. The Thai government has not integrated related sectors to assist farmers and cannot solve problems of high cost and debts due to their production improvement. This has made Thai exports less competitive in terms of costs compared to Vietnam.

The Thai government's policy about free trade supports exporters and other stakeholders, but not farmers. Policies that remove export duties, subsidies, and trade shows also assist other groups, but fail to help farmers. There is a clear need to introduce policies and measures to assist farmers as well as other groups.

The rice security stock policy of the Thai government is admirable because it maintains a good level of stock to secure internal consumption and controls the stock compatible with assistance for farmers by extracting surplus rice from the domestic market.

Similarly, the price stabilization policy of the Thai government is also good as it allows the government to intervene to assist consumers, farmers, and the economy. However, in the future of Asian free trade, the government might have to rethink its balance between importing rice and rice stocking. Under the free trade condition, even though Thailand is the biggest rice exporter who has enough rice to consume in domestic market, it needs to allow rice importing into its domestic market.

This study was limited by the unavailability of a number of farmers at the beginning of the rice season to complete the questionnaires.

## **Conclusions**

The rice industry has long been a critical player in the Thai economy (Choeun, Godo, and Hayami, 2006). It provides the main staple food, employs a large portion of the labor force, and contributes revenue and foreign exchange earnings to the government. Thai rice exports have grown continually. However, Thai farmers have not always received the economic benefits from the export of rice and their earning growth is not compatible to export growth and rice price increases. The Thai government has created some good policies, nevertheless, there are some weaknesses and incomplete issued are needed to be addressed.

## **RECOMMENDATIONS**

This study makes a number of recommendations. The Thai government has made efforts to develop farmers' knowledge in the improvement of rice productivity. However, integration of different government sectors is required to further enhance farmers' productivity and quality. This would support Thailand's comparative advantage to compete in the world market in term of quality rice in short term and compete with the price strategy in the long term.

The government's actions to distribute benefits to stakeholders, especially farmers, should be performed as equally as possible. There is a need for private sector involvement in exports, price control, marketing assistance, information perfection, and stable policy.

The Thai government's road show projects for exporters and rice mills are helpful but they need to be extended to support farmers. In addition, the government should provide farmers with access to financial sources and information sources on price, food production, international markets, and public and private sector marketing systems.

Another important policy is the price stabilization policy. The Thai government as a rice exporter should pursue this policy continually. Price control is necessary to control demand and supply of rice in the domestic market. Major measures to stabilize prices control the quantity of international trade and quotas or tariffs (Dawe, 2001).

Furthermore, the government should find a balance between free trade and price stabilization. Thailand needs to import rice in the era of Asian free trade so the government needs to carefully determine the rice stock and conduct appropriate measures to stabilize the rice price. Effects on stakeholders are important factors for the government to consider.

Finally, the government should also provide a stable and credible policy for stakeholders in rice exporting and assist farmers and other stakeholders continually.

It is suggested that future research related to this area of study should involve pilot projects in Ubon Ratchathani to promote some areas for rice exporting. This may include groups of farmers who produce large quantities of rice and wish to be involved in direct exporting. Other research could investigate and assess government policy in exporting Jasmine rice.

## REFERENCES

- Ball, Geringer, Minor, and Mcnett, (2010). *International Business*. McGraw-Hill/Irwin Publisher, New York, NY.
- Co, H.C., Boonsarawongse, R., (2007) Forecasting Thailand's rice export: Statistical techniques vs. artificial neural networks. *Computers & Industrial Engineering* 53, 610-627.
- Choeun, H., Godo, Y., Hayami, Y., (2006.) The economics and politics of rice export taxation in Thailand: A historical simulation analysis, 1950-1985. *Journal of Asian Economics* 17, 103-125.
- Dawe, D., (2001). How far down the path to free trade? The importance of rice price stabilization in developing Asia. *Food Policy*, 26, 163-175.
- Dorosh, P.A. (2001). Trade Liberalization and National Food Security: Rice Trade between Bangladesh and India. *World Development* Vol. 29, No. 4, 673-689.
- Dorosh, P.A., Dradri, S., Haggblade, S., (2009). Regional trade, government policy and food security: Recent evidence from Zambia. *Food Policy* 34, 350-366.
- Hathaphanich, K.,( 2009). The export of Thai Hom Mali Rice to the people's Republic of China. Mater Thesis. Thailand: Ramkhamhaeng University.
- Headey, D. (2010) Rethinking the global food crisis: The role of trade shocks. *Food Policy*, doi: 10.1016/j.foodpol.2010.10.003
- Hill, C.W. (2009). *International Business: Competing in the global marketplace*. McGraw-Hill/Irwin Publisher, New York, NY.
- Luawmek, K., 2008. The export of Thai Jasmine Rice to the United States of America. Mater Thesis. Thailand: Ramkhamhaeng University.
- Motonishi, T.,( 2006). Why has income inequality in Thailand increased? An analysis using surves from 1975 to 1998. *Japan and the World Economy* 18, 464-487.

- Pattanapongpaibul, K., (2009). The export of Thai Hom Mali Rice in the world market. Master Thesis: Ramkhamhaeng University.
- Rakotoarisoa, M.A.(2010), The impact of agricultural policy distortions on the productivity gap: Evidence from rice production. Food Policy. doi:10.1016/j.foodpol.2010.10.004
- Ryan, J., (2002). Assessing the impact of food policy research: rice trade policies in Viet Nam. Food Policy 27, 1-29.
- Sanogo, I., Amadou, M.M.,( 2010). Rice market integration and food security in Nepal: The role of cross-border trade with India. Food Policy 35, 312-322.
- Sudanich, W.,( 2002.) Rice Trade of Thai farmers: A cast study of farmers in Shee River area, Tumbon Bungngam, Tungkuawlung Subdistrict, Roiet Province. Master Thesis, Thailand: Roiet Rajjapat University.
- Theerapongthanakorn, S., Namdang, N., (2006). The possibility of Hom Mali Rice production in organic Framing systems as an alternative farming career with poverty alleviation potential for lower-Northeastern Farmers: A case study fo Ubonrachathani Province. Print. Ubonrachathani University.
- Wijnhoud, J.D., Konboon, Y., Lefroy, R.D.B., (2003). Nutrient budgets: sustainability assessment of rainfed lowland rice-based systems in northeast Thailand. Agriculture, Ecosystems and environment 100, 119-127.
- Yao, S., (1997). Rice production in Thailand seen through a policy analysis matrix. Food Policy, Vol. 22, No.6, 547-560.