CHAPTER 3
ORGANIC RICE PRODUCTION WITHIN NORTHEASTERN THAILAND IN GLOBAL AGRO-FOOD NETWORK

3.1 Introduction

This chapter examines the organization of organic jasmine rice production within northeastern Thailand in global agro-food networks. This chapter aims to study the recruitment of northeastern farmers to grow organic rice and the re-arrangement of organization of organic rice production to create flexible specialty. Therefore, this chapter is divided into three parts.

The first part examines a process of market integration of northeastern Thai farmers into global niche markets which relies on personnel relationships between the committees of the producer's group, the NGO staffs, and the farmers who act as a node to link between the project developer and the farmers within local communities. Moreover, contract farming is a principle means to recruit northeastern Thai farmers to grow organic rice to serve global niche markets. The role of contract farming in fair trade and organic rice scheme is vital, because it makes the international regulations enforceable on the farmers.

The second part examines the creation of flexible specialization in fair trade and organic rice production; it presents the place of hybrid of alternative food network (AFNs). On the one hand, the fair trade and organic rice production is implemented through rural development project. Once conventional farmers are mobilized to grow organic rice to serve fair trade and organic niche markets, they are imposed by the international regulations. The fair trade regulations aim to establish an agricultural trading that is fair and market-oriented in neoliberalizaton. The organic agricultural regulations intend to establish environmentally-friendly agricultural practices. On the other hand, the local NGO adapts a market orientation initiative and an entrepreneurial framework to facilitate organic and fair trade rice production. The

organizational innovations create flexible specialization which helps to reduce transaction costs, increase bargaining power, and enlarge market opportunities.

The third section examines the organization of production of fair trade and organic rice. The organization of production of fair trade and organic rice is based on the creation of downward linkage which links suppliers of production inputs with the family farms. Moreover, the organization of production of fair trade and organic rice is based on the creation of upward linkage which links the production of alternative food system local rice mills with processing and distributing channels in conventional food system.

3. 2 Process of Market Integration

According to the fair trade standards, most producers who enter into fair trade markets must be smallholders. To be able to export organic jasmine rice[1] to the fair trade markets, the small-scale farmers have to be united as an organic jasmine rice producer's group. The process of market integration into niche markets for fair trade and organic rice begins when the farmers are recruited to apply for membership of the organic jasmine rice producer's group. The NGO sets pre-existing conditions for participating in fair trade and organic food production. Theoretically, fair trade opens spaces of inclusion for all potential farmers who produce good quality products. In practice, however, fair trade production has limited the capacity to absorb labor in northeastern Thailand. Indeed, the fair trade rice production presents an "exclusive club", since certain groups of farmers, with certain characteristics, are recruited to produce rice of a certain quality to serve certain groups of consumers.

The interviews with the new farmers' group members involved show that they are connected to the fair trade rice producer's group, because of their personal connections with NGO staff, committees of producer's group, and former farmer members. Therefore, the committees of producer's group and the former farmer

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[1] Hom Mali rice or jasmine rice is called the 'Khao Dawk Mali 105' (KDML 105) (in Thai script, it is written as 'ข้าวดอกมะลิ').

members are mechanism of recruitment of new farmer members to grow organic rice. As the organic jasmine rice project manager explained in training on 12 March, 2008:

> *We choose the farmers who will be our members. We have extension agents which come from different villages. Thus, it is not difficult for us to recruit new members. Our extension service staff acts the same as governmental agencies of the department of agricultural extension do. They often visit farmers to convince them to apply for membership. We have a training course for new farmer members every year. Now we have more than 500 members from different villages in two provinces. However, the number of members changes year by year according to the changing market demand for organic rice. We recognize that we produce organic rice for sale, not for our own consumption. Therefore, the most important thing to be concerned about is rice quality.*

When I conducted the intensive fieldwork in the production sites of organic jasmine rice, I found that some farmers act as a node of the networks that link the project developer with the farmers. These people are committee members of the producers' group, well-to-do farmers, village heads, elders, and those who have positions within the communities which are respected by the farmers. Due to their close relationship with the organization staff and their privileged status in the village, these people play an important role in mobilizing farmers to apply for new membership, transfer information, and coordinate between the project developer and the farmers, including self-monitoring agricultural practices of neighboring farmers and conduct surveillance of farmers in the auditing process. Therefore, the recruitment of farmers to produce organic rice and the performance of surveillance and control the farmers relies on the personal relationships between the project staffs and the farmers.

Nevertheless, the interviews with farmers find that most farmers had experienced of organic agriculture prior to their decisions to engage in export-oriented organic rice farming. As I said earlier in Chapter Two, the export-oriented organic jasmine rice scheme in northeastern Thailand occurred in the context of Thailand agricultural restructuring. From 2005 to 2009, Thai government set up a policy and allocated a budget to implement action plans to support a training of farmers, to increase the number of organic farmers, and to expand the planted areas for organic crops. As a result, during that period governmental agencies of the department of

agricultural extension who worked in the district in comparison with Tambon or Sub-district Administration Organization had arranged training programs for farmers who were interested in organic agriculture; the farmers were provided with food and equipments free of charge. Yet the governmental officers did not force to farmers to discontinue using chemical fertilizer. They only encouraged to farmers to adapt the chemical-reduced style of agriculture and to use organic compost to replace chemical synthetic fertilizer. Moreover, the state officers also provided the farmers organic compost natural fermented fertilizer, molasses and EM free of change. So the farmers had good impression about organic agriculture, due to their direct experiences of organic agriculture in the training.

Therefore, the government's policies associated with organic agriculture contribute to the growth of export-oriented organic agriculture in northeastern Thailand. Many farmers said that they had more confident to apply for new membership of the organic jasmine rice producer's group because they had experienced of participating in the training arranged by governmental bodies. Saisin Youyen, a 44 years old farmer from Pratomraratwongsa District, Amnartcharoen Province said that she applied to be member of the organic jasmine rice producer's group in 2008. In the same year the number of farmers from her village who were mobilized to grow organic rice had increased from 4 to 5 persons in 2007 to be 18 persons in 2008. She said that she was told by the former members of the group that she could sell rice at relatively higher price than rice price sold in the local markets, if she is integrated into the organic jasmine rice scheme. So, she told a committee member who came from her village that she was expected to apply for the new member of the organic jasmine rice producer's group. Then a farmer who is a committee member of the producer's group and came from her village encouraged her to participate in a two days training for a new batch of organic rice farmers which was held in March, 2008. At the time of interview she was grown organic jasmine rice in the second year of transitional period (Interview, Saisin Youyen, 3 March, 2008).

The first procedure of export-oriented organic agriculture involves applicant farmers being required to participate in a three-day training course. If farmers have no commitment to participate in the training course, their requests for application are instantly rejected. After participating in the training, the farmers are informed about

the conditions of production; so they can make their decisions to apply for new memberships. Afterward, land to be used for growing organic rice needs to be examined and approved by the project experts to prevent potential risks of waterborne and airborne contamination.

If land is approved by the NGO staff, the individual farmers have to sign the contract. Therefore, the mobilization of conventional farmers to produce organic rice for export and the control of food quality depends significantly upon contracting. Contracting is one of the central mechanisms of neo-liberalism to shape the forms of economic exchange (Rose 1992). Contract farming was considered by the Thai government as a fundamental device to generate cooperation among governmental agencies, corporations, private enterprise, financial institutions, and independent farmers to upgrade management skills, technology, and marketing of small-scale farmers (Manarangsan 1992). Contract farming is a form of vertical coordination between growers and buyers-processers that directly shapes production decisions through contractually specifying market obligation, providing specific inputs, and exercising some control at the point of production (Watts 1994).

To understand the reason why northeastern Thai farmers decide to engage in the contract farming, the study finds that northeastern Thai farmers have engaged in contract farming, because they need information on the technology required for efficient and optimum production and the desired characteristics of the product in the niche markets. Contract farming is attractive for northeastern Thai farmers who have limited capacity to access to financial capital, technology, and production inputs. Contract farming assures the farmers entry into niche markets, the capability to access to production inputs, and a predictable rice price.

Fair trade also encourages the use of contracting to mobilize fair trade producers and to maintain fair trade systems. A contract will be signed for the first part of the season. Contract must clearly indicate the agreed volumes, quality, price, payment terms, and delivery conditions[2]. This condition has directly affected the farmer's decision to engage in the export-oriented organic rice production and to invest in improvement of the conditions of production. Coordination under contracts

[2] www.fairtrade.net/standards.html

can take two broad forms: marketing contracts[3] and production contracts[4]. The contracting used in the fair trade and organic rice scheme is termed "contract-provided production"; it covers three main issues of the production system: (i) details of input decisions, (ii) operational decisions, and (iii) marketing decisions (Welsh 1997).

The development programmer is the integrator of inputs who provides necessary production inputs to the local farmers and acts as a buyer who specifies and controls overall production practices and quality of rice in accordance with international regulations. The farmers provide facilities and production and maintenance labors. However, the supervision of the internal system of management is conducted by the local NGO staff. External inspections are practiced by independent contract inspectors.

The resource-provided contract specifies the details of input decisions. Many items are provided by the integrator such as organic rice seeds, production ingredients, rice sacks, processing and cargo delivery, marketing, and transportation. As the integrator purchases and provides the production inputs, the integrator can control the quantity and quality of organic production being produced by individual farmers and can improve the production system toward flexible specialization. At the same time, the project can maintain standardized mass production and can re-arrange the production system to comply with international regulations, based on closed supervision and the auditing culture. Details of production contracts in organic jasmine rice production are illustrated in Table 3.1.

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[3] In marketing contracts, the producers sell their products to a particular buyer on a pre-determined schedule and set price. The producer makes most managerial and production decisions, except what to produce and where and when to sell the products (Welsh 1997).

[4] Production contracts go beyond marketing contracts because they shifts control over production decisions off the farm level by specifying one or more production practices, such as specified seeds, planting dates, and planting techniques. If the buyer is also resource-providing, it is called a "resource-provided contract". In the resource-provided contract, the buyer has the strongest power to control the production process without the need to own the production operation (Welsh 1997).

Table 3.1 General Contract Specifications of Organic and Fair Trade Rice Production

Item	Integrator	Producer
Land, road, building, equipment, and water		X
Waste handling and disposal facilities		X
Rice seeds	X	
Production ingredients	X	
Rice sacks	X	
Fuel, electricity and telephone		X
Repairs and supplies		X
Delivery		X
Processing and cargo delivery	X	
Marketing and transportation	X	
Labor: production and maintenance		X
Labor: supervisory and specialist	X	
Labor: internal inspector and external inspector	X	

Resource-provided contracts also specify operational decisions which include those regarding the type of rice seeds to be used, quantity and quality of inputs, choice of production regime, design of farms, and decisions concerning when and how to intervene in production, and off-farm processing firms. Under the resource-provided contract, the local farmers have less to say about the production process than they do with production on the open market, under marketing contracts, or production manager contract arrangements.

Lastly, the resource-provided contract specifies marketing decisions. It covers when, where, at what price, in what quantity, at what quality, and to whom the product is sold. The farmers are required to sell all of their organic grains to the development program. In the conversion period, the farmers cannot sell their produce

at the guaranteed farm-gate price set by FLO. The farmers who convert to organic rice farming in the first year of the transition period can sell their rice at 11,000 baht per one ton (US$ 335.64) and in the second year at 12,000 baht per one ton (US$ 16.24). The delivery of organic rice to the rice mills and the cost of delivery are the responsibility of the farmers. Adjustment of production post-harvest as well as pest epidemic control must be reported to the development programmer. Finally, the resource-provided contract covers the farmer's freedom of action in the allocation of resources outside contract production, such as for subsistence crops.

The resource-provided contract represents a vertical integration of small-scale farmers into the international markets for fair trade and organic rice. Moreover, it is an important tool to facilitate the re-arrangement of agricultural practices, the re-organization of production at the firm level, and the re-rationalization of production along industrial lines. Closer coordination enables processors to shift risk toward producers, to manage the product for consistency in quality and to derive more profits from the final sale of the products.

Contract farming is often assumed as a "free will" convention between a contractor and independent farmers who are engaged in the contract. However, Roger A. Clapp contests that the inspectors, not the farmers, decide how the standards are interpreted, and the contractor can reject products which do not meet the standard. Hence, inequity of power relations between the contractor and the producer is established in contract farming. The concern of the issue of autonomy of farmers under contract production is critical.

According to Clapp, a contract is a form of hegemony. Contracting represents what the farm daily practices should be. On the other hand, it is an instrument for the subordination of smallholders. The hegemony of contract farming is seen in the fact that contract farming is a form of disguised proletarianization. The farmers are turned into laborers working on their own land. They own the lands and tools but use the means of production to make a profit for contractors (Clapp 1994).

Watts contests that the widespread adoption of contract farming accelerates agro-food industrialization on a global scale. Contract farming serves to transform independent farmers into semi-proletarians on their own land. Under contract production, farmers are forced to rely on off-farm inputs and tend to loose their

capability to maintain control over the means of production because they are subordinated to management through a distinctive labor process. The proliferation of contract farming suggests certain parallels between the rise of flexible accumulation in advanced capitalist industrial organization and the restructuring of agriculture in global agro-food systems (Watts 1994).

My observation in the meeting of organic farmers held in 2008 find that the farmers recognize the risks of organic rice production; these risks are increasing transaction costs, decreasing yields in the transitional period, and no compensation in the transitional period. Rice mills in Thailand generally do not recognize the difference between organic and non-organic rice. Therefore, they purchase organic rice at a price equal to that of non-organic. A lack of markets for organic rice in the province and guarantees of premium prices are considered by farmers as high risks. Hence, they do not rely on organic agriculture to serve organic markets alone, but combine conventional and organic agriculture to diversify their product line and mitigate risks.

The farmers consider organic agriculture as not absolutely good but as context-specific; therefore, goodness of organic agriculture cannot be understood without contextualization. Hence, I examine farmers' motivations for participation in the fair trade and organic rice production to understand why some groups of farmers choose to be incorporated into the export-oriented organic rice production while others do not.

The farmers' motivations for participation in the fair trade and organic food commodity chains vary: economic benefits, market enlargement, fair pay for the producers, social and environmental concerns, anxiety avoidance, quality food, sensory pleasure, and self-esteem. Northeastern farmers compare advantages and disadvantages in relation to organic rice farming and conventional rice farming. In a meeting among organic farmers that I observed, the farmers said that disadvantages of conventional rice farming were the lower price, expensive inputs, increased reliance on chemical fertilizers, deteriorated agro-ecological environment, pest outbreak, destructive soil fertility, low quality, and unsafe food quality. The farmers said that the disadvantages of conventional rice farming have forced them to shift from conventional to organic rice farming.

On the other hand, the farmers identified advantages of organic rice farming as being high rice prices, non-use of synthetic chemical fertilizers and pesticides, reduction of pollution, increased safety, and healthier environments. The farmers identified the disadvantages of organic agriculture as increasing transaction costs, intensive labor input, lower yields in the transitional period, unavailability of markets for organic rice, uncertainty of rice price, conflicts within the family and within the community, tighter control under the contract, and lack of capability to control the means of production. These disadvantages are considered by some farmers as difficulties in the maintenance of their status as organic farmers (Participatory observation field notes in a meeting of farmers on March 12, 2008).

Many farmers admitted that the economic benefit is an important reason behind their decision to participate in the fair trade and organic ago-food networks. They were told that if they become members of the fair trade networks, they would sell their organic rice at the premium price. Although the economic benefit is an underlying reason for explaining the peasant decision to grow organic rice, the farmers also clarified social benefits and care of environment as a part of their decision to participate in organic farming. Some farmers said they have learned about organic agriculture for ten years before making the decision to change to organic agriculture. After starting to practice organic agriculture, the farmers determine its advantages and disadvantages in relation to changing contexts.

3.3 The Creation of Flexible Specialization in the Fair Trade and Organic Rice Production

The organic and fair trade rice scheme is based on the transformation of conventional to organic rice production and the transformation of conventional to alternative rice trade. As I said earlier in Chapter 2, the conversion to organic agriculture in northeastern Thailand reflects the reorientation of the agriculture[5] to respond to emerging niche markets and constraints posed by public health, environmental concerns, and farm-animal welfare, and to respond to Thailand agricultural restructuring policy.

[5] This reorientation has been termed "ecological modernization" (Watts 2005: 24).

In the global context, a re-orientation of agribusiness strategy to organic agriculture reflects two contrasting and inseparable trends. On the one hand, a re-orientation of agribusiness strategy to organic agriculture is a response to environmentalism in the late twentieth century; a scare[6] of conventional agriculture and industrialized foods among consumers has put organic agriculture on the policy agenda. On the other hand, a re-orientation of agribusiness strategy to organic agriculture is a response to a set of guiding principles for the preservation and enhancement of the environment. Therefore, the growth of pressure on agriculture from international regulations opens up market niches for environmentally-friendly products (Jansen 2004: 1).

In 2000 FLO tried to capture the growth of certified rice in global niche markets, at the end of 2006, a total of 15 rice producer organizations in Thailand, India, Egypt and Laos were certified as fair trade producers. Sale volumes of fair trade rice steadily increased from 1.383 metric tons in 2004 to 2.985 metric tons in 2006 as illustrated in Appendix N. The growth of organic rice production in northeastern Thailand is driven by the retailers on the one hand, and is driven by the forces of abstractions of international regulations on the other.

The fair trade and organic rice scheme is a buyer-driven commodity chain because it allows large retailers, brand-named merchandisers and trading companies to link the overseas production networks of niche products within exporting countries with the consumers of niche products within developed countries. This chain is assumed to have a greater capacity to deal with the changing conditions of doing business in a post-Fordist world, due to its characteristics concerning the re-arrangement of organizations of production to crate flexible specialization (Gereffi 1994; Watts 2005: 30).

The creation of flexible specialization is key feature in alternative food networks (AFNs), as the production of specialty foods could generate endogenous rural development (Watts 2005: 28). The creation of flexible specialization takes

[6] Consumers scare of recent outbreaks of mad cow disease (BSE), foot and mouth disease, avian influenza, and other food scares, such as GMO, pesticide residues and chemical food additives.

place through the changes in three domains[7] (Raynolds 1994: 143). Basically, the creation of specialty agro-food products focuses mainly on production of differentiated and segmented products, however, it is increasingly re-shaped by the demands of retailers and the forces of abstractions from international regulations (Hughes 2004: 215-232).

In export-oriented organic jasmine rice scheme in northeastern Thailand, flexible specialization is created through: (i) the production of organic and fair trade rice, (ii) the re-arrangement of internal organization management to comply with fair trade standards, and the re-arrangement of farm management to comply with organic regulations, and (iii) the re-arrangement of the farmers' relations with suppliers or buyers to bypass the local rice merchants and to strengthen the producers' capacity to export rice.

Firstly, to create flexible specialization in fair trade and organic production, the international regulations are enforced on the farmers to ensure that they discontinue doing conventional agriculture in all plots which are managed by them, and that they do organic agriculture in all plots, including in the subsistence crops.

Secondly, flexible specialization is created through re-arrangement of internal organization management to comply with fair trade standards. Therefore, the farmers are united as a producer's group and they are required to participate in the decision making of the organization. Fair trade[8] is mainly concerned with fair pay for the producers and workers' rights. Fair Trade standards[9] set by the Fair Trade Labeling Organizations International (FLO)[10] aims to create free and fair trade to improve

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[7] In a post-Fordist production, the creation of flexible specialization takes place through changes in three domains: across volume and differentiation of the farmers' product, farm management and a mix of internal factors, and the farmers' relations with suppliers or buyers (Raynolds 1994).

[8] The birth of first fair label, namely Max Havelaar, was created in the Netherlands in 1988. It started from an alternative store to sell a few products which represented Third World products (Renard 2003: 89).

[9] Fair Trade standards set by the Fair Trade Labeling Organizations International (FLO) in accordance with International Labor Organization (ILO). Basic codes of conduct of ILO Conventions are: (i) employment is freely chosen, (ii) freedom of association and the right to collective bargaining are respected, (iii) working conditions are safe and hygienic, (iv) working hours are not excessive, (v) no discrimination is practiced, (vi) regular employment is provided, (vii) no harsh or inhumane treatment is allowed (Hughes 2006).

[10] The coordination among the alternative trade organizations emerged in 1977 under the name of Fair Trade Labeling Organization International (FLO). The intention of the Fair Trade labeling is to securing certification of all the labeled products as well as to granting licenses for the use of the label to manufacturers who comply with the conditions f Fair Trade (Renard 2003: 89).

living conditions of small-scale producers in developing countries and to change the unfair structures in international trade (Renard 2003: 87). In the fair trade systems, buyers are required to pay producers a guaranteed minimum price which is intended to cover the costs of production, and to protect producers against market-price fluctuations. They also pay an additional "social premium" that can be directed to local development needs (Blowfield 1999: 70).

To accept a guaranteed minimum price, the producers are required to coordinate as a producer's group. The producer's group must consist of small-scale producers who rely on family labor to produce fair trade products. Additionally, the producer's group must be organized and operated along democratic lines, where a democratic decision making process must extend from the producer's group to include hired laborers participating in the fair trade production. Moreover, the organization of production must be politically independent, be open to accepting new members, and not practice discrimination. Lastly, financial information must be transparent and accountability is needed. Recently, the FLO has recognized the importance of ecological well-being; therefore, FLO requires fair trade producer's organization to pursue environmental goals[11] (Rice 2001). In this sense, fair trade re-inserts social meanings into abstract commodities, advertising to consumers that their products are authentic, quality, and natural (Raynolds 2002).

Moreover, to transform the farm management to be environmentally-friendly agriculture and to concern about animal welfare to comply with organic regulations, the international regulations are enforced on the farmers to ensure that they follow the guideline instructions to produce organic rice according to international regulations. Organic farming pursues basic principles of sustainable agriculture,[12] with an improvement in soil fertility, the prohibition of synthetic agro-chemical use and minimizing off-farm resource use (Darnhofer 2005). Yet organic regulations play a critical role both in determining the legal definition of organic and in providing the

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[11] These environmental goals include encouraging biodiversity, preventing erosion and water pollution, controlling pesticide and fertilizer use, and reducing waste.

[12] Basic components of sustainable agriculture are: (i) the use of cover crops, mulches, and no-till practices of soil and water conserving measures, (ii) the promotion of soil biotic activity through the regular addition of organic matter such as manure and compost, (iii) the use of crop rotation, crop-livestock mixed systems, agro-forestry, and legume-based intercropping systems for nutrient recycling, and (iv) the encouragement of biological pest control agents through biodiversity manipulations and the introduction and conservation of natural enemies (Guthman 2004).

guidelines and standards for practice of organic agriculture (Guthman 1998). The transnational regulations are enforced in three levels.[13]

One of the most important regulations is the transnational regulatory mechanism established by International Federation of Organic Agriculture Movements (IFOAM). The IFOAM basic principles[14] focus on themes such as the conversion to organic agriculture, crop production, animal husbandry, storage and transportation of products, processing, and labeling. Recently, the organic movements have recognized the importance of the issue of fairness[15].

The European Union (EU) Regulation No. 2092/91, which came into force in 1991, provides specific rules for the production, inspection, and labeling of products, with implications for farming systems and the environment. It ensures that no harm is done to workers through the use of toxic pesticides, which is one of the commonly mentioned ethical criteria. Recently, it integrates the theme of animal well-being[16] as a part of its certification (Browne 2000).

In addition, the emergence of the United Nations Codex Alimentarius Commission in 1999 reasserted at an international level the authority of standards, monitoring, and certification in governing organic agro-food networks. Codex promotes technical production norms and industrial verification procedures, defining

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[13] Three levels of organic regulations are: (i) the transnational regulatory mechanism are ISO guides 65 (certification), ISO Guide 61 (accreditation), and the UN-FZO Codex Alimentarius (organic standards), (ii) the regional regulatory mechanisms for organic program includes EU Regulation No. 2092/91 (organic standards), EN 40511 (certification norms, and EN 40510 (accreditation of certification bodies), and (iii) the national regulatory mechanisms for organic programs such as the national standard for USA, or NOP, and the Japanese Agricultural Standard (JAS) (Mutersbaugh 2005).

[14] The basic principles of organic agriculture according to IFOAM include the mission to (a) develop the production system to integrated farming which has diversity of plants and animals, (b) develop the self-reliant production systems in terms of organic matters and nutrients in the farm, (c) improve and maintain natural resources by trying to use renewable resources in the farm, (d) maintain ecological systems in the farm and sustainability of the whole ecology, (e) protect and avoid practices that will cause pollution to the environment, (f) promote the production system and management with care of humanity, (g) adhere to principles of handling and processing that are natural method, conserving energy and having minimum impacts on the environment (IFOAM).

[15] http://www.ifoam.org/about_ifoamtml/principles/index.h

[16] "Animal welfare" refers to the state of a being in relation to its environment. The definition implies that it is possible to measure animal welfare by assessing an animal's ability to cope with its environment and that failures to cope, or difficulties in coping, indicate poor welfare. Measurement of animal welfare is subject to debate but typically uses science-based indicators. Three main indicators to assess the animal welfare are: whether or not the animals suffer from their living conditions, the extent to which biological systems are functioning normally with respect to animal growth, reproduction and longevity, the extent to which the animals can be able to express the full range of movements compatible with their natural state.

organic as a labeling term that denotes products that have been produced in accordance with organic production standards and certified by a constituted certification body or authority. This definition ignores the organic movement's civic and domestic principles and affirms the position of commercial and industrial conventions in shaping global organic norms, enterprises, and exchanges (Raynolds 2004). An outlines of the Basic Organic Standards according to IFOAM, FAO/WHO, and FAO/ITC/CTA are illustrated in Appendix P.

The organic jasmine rice scheme in northeastern Thailand has been certified by many organic standards such as the EEC No. 2092/91 (regional organic standards for EU), BIO SUISSE (national organic standard for the Switzerland), and NOP (national organic standard for USA). And in 2007 the project was prepared for additional certification by JAS (national organic standard for Japan). Distinct international standards have a range of regulations which are different from one standard to another. Therefore, northeastern Thai farmers are imposed by complex abstractions of many international regulations. It is difficult for both development practitioners and local farmers to make sense of, communicate, and handle them. Therefore, the key person of the development program simplifies the international standards-based regulations into 20 locally established rules according to the suggestion of an external inspector from IMO. The reason for this is that it makes the imposition of international regulations on the local farmers feasible, as a development programmer stated:

> *An international certifier from IMO told us about the general objectives of international standards-based regulations. Then, I selected some core ideas of these regulations, screened out other regulations, and integrated the selected requirements into twenty locally-based regulations. I myself made a decision about what requirements are considered necessary to follow, but we (development programmers) didn't need to follow the details of all the regulations. We need to simplify international standards-based regulations to make practical the regulations to be enforced on northeastern Thai farmers. International certifiers will check to what extent the group meets the requirements of international standards-based regulations. The important thing that the international certifier will check is our intention to follow the rules. If we have intention to follow the rules, and we have done what we intended to do. Though we fail to achieve the set goals for whatever reasons, it will be acceptable insofar as we can*

explain why we decided to do so (Interview, The head of development project, December 28, 2009).

The process of enforcement of international regulations on the farmers and its effects will be discussed in Chapter Four. Nonetheless, it is worthy noted that certification and labeling communicate with the consumers about the particular quality of certified products, thereby creating economic rent for food products. For instance, Renard studies the fair trade label and argues that fair trade labels informs the fair price; therefore, it guarantees better living conditions for the growers and guarantees the consumers about the productive conditions according to given criteria[17] (Renard 2003: 90).

The combination between fair trade and organic labels in organic jasmine rice scheme presents high premium quality, so it creates relatively higher economic rent for rice than those which are certified as fair trade rice and organic rice only. The organic jasmine rice scheme in northeastern Thailand has been certified by seven certification systems: Fair Trade, EEC No. 2092/91, BIO SUISSE, HACCP, SQF, ISO 9001/2000, and NOP. Therefore, certifications and labeling of organic jasmine rice scheme in northeastern Thailand create greater economic rent, this call into question: how much the farmers gain from certification and labeling?

One of fair trade organic jasmine rice labels sold in the Netherlands is an example. A package of 400 gram of organic fair trade rice produced by northeastern Thai farmers was sold under the brand name "Pandan Rijst" at EUR 1.49 in 2007. It means organic jasmine rice price was sold at 3.725 EUR[18] per kg (US$ 7.73 or 272.75 baht). Yet, farm gate price of organic rice sold by northeastern Thai farmers in the same year was 13 baht per kg only. Therefore, certification and labeling create greater economic rent for organic jasmine rice products. Put in other words, rent is created through the difference between certified and non-certified rice. And what actually creates rent here is the difference between rice selling in monopolized and fair competition markets. Yet the farmers gain relatively less benefit from the economic

[17] Fair trade guarantees the producers in several issues such as direct purchase, a price that cover the cost of production and a social premium to improve conditions, advance payment to prevent small producers organizations from falling into debt, contracts that allow long-term production planning and sustainable production practices (Renard 2003).

[18] It is estimated about 272.75 baht. The conversion rate of 1 EUR is equivalent to 2.09 USD in March, 2011.

rent created by certification and labeling. To know who gains more benefits from the economic rent created by certification and labeling, we need to understand the position of farmers within the organic jasmine rice commodity chain.

Both organic and fair trade is considered ethical trade[19], therefore, it has potential links between organic production and ethical trade. However, the combination of organic and fair trade labeling together has led to conceptual and practical constraints. Table 3.2 shows contrasts between organic production and ethical trade. Organic agriculture is basically concerned with ecological well-being and originated largely in the developed countries. Meanwhile, fair trade is mainly concerned with the creation of fair trade between the developed and developing countries. Unlike organic agriculture which has well developed criteria which can be universally applied, fair trade is concerned with employment and the social conditions of production which is difficult to evaluate, because the fair trade depends on voluntary codes of practices and is self-regulated (Browne 2000: 71-84).

[19] Ethical trade is defined as trading in which the relationship between the interested parties is influenced by concern about workers' pay and a range of rights and conditions, producer livelihoods, sustainable production methods, animal welfare. Ethical trading is concerned with the trading relationship between the developed and developing countries. The concept of ethical trading is sub-divided. The first is development driven, seeing trade as a means by which entering world markets can bring about development, whereby ethical trading is a development tool. The other is trade driven, seeing a need to provide consumers with products that are not exploitative of producers (Brown 2000: 76, 84).

Table 3.2 Contrasts between Organic Production and Ethical Trade

	Organic	Ethical
Origins	As a method of agricultural production, originating in the 1930s	As a description of trade between the developed and developing worlds, becoming widely used in the 1990s
Focus	Focus on agricultural production systems that utilize biological rather than chemical inputs	Focus on people's working conditions, especially in the developing world
Development	Is not a development issue but is concerned with sustainability of farming systems	Is a development issue, and many contribute to livelihood enhancement
Standards	Universal production standards, assured through accreditation and inspection	No universal standards. Voluntary codes of conduct and self-regulation becoming more common
Certification	Yes, based on regulation by the state. Assured by legally registered labeling symbols on market produce	Yes for fair trade, no for ethical. No legal status for ethical claims on marketed produce

Source: (Browne 2000: 84)

Producers in developing countries confront difficulties in relation to the transition to organic and fair trade. If they are already fair trade producers, they confront constraints in relation to the transaction costs of becoming fully organic, and the associated producer-based constraints of technical and market knowledge. In

addition, many producer organizations complain about the added costs and burdens on organic producers that they must bear if they expect to become fully fair trade by adding workers' rights and complying with social justice criteria (Browne 2000: 84).

Thirdly, flexible specialization in organic jasmine rice scheme is created through re-arrangement of the farmers' relations with suppliers or buyers within organic rice commodity chain to bypass the local rice merchants and to strengthen the producers' capacity to export rice. The organic rice commodity chain is re-shaped to be compatible with the horizontal networks and the short food supply chains (SFSCs).

The horizontal networks refer to networks that operate within a local area and link small-scale producers with external actors in food supply chains and external market outlets. In contrast, the vertical networks refer to networks which are incorporated into large-scale production and consumption networks. The conceptual difference between the horizontal and vertical networks is that the former is locally embedded, but the former is spatially extended. The horizontal networks are relevant to alternative food systems, because the networks have ability to engender rural development (Watts 2005: 30).

The short food supply chains (SFSCs) refers to the re-localization of food supply chain to bypass large retailers, brand-named merchandisers and trading companies and to empower the local producers and local merchants through the creation of four dimensions of alternativeness. Firstly, SFSCs present a spatial alternative to conventional food supply chains, as they can reduce the distance that food travels between the sites of its production and sale. Secondly, SFSCs present a social alternative to conventional food supply chains. It is assumed that buying local foods may improve the flow of information about it, thereby improving food traceability and reducing the scope for commodity fetishism. Moreover, the benefits of consumption of local foods are that it helps to re-establish trust between consumers and producers, and promote a sense of community integration. Thirdly, there is a potential of SFSCs to be alternative economically, as local producers and merchants can benefit more from consumption of SFSCs rather than it occurs in the conventional food supply chains. Finally, SFSCs may provide a stronger alternative to conventional agriculture by engendering a wider range of produce than alternative food networks (Watts 2005: 31-34).

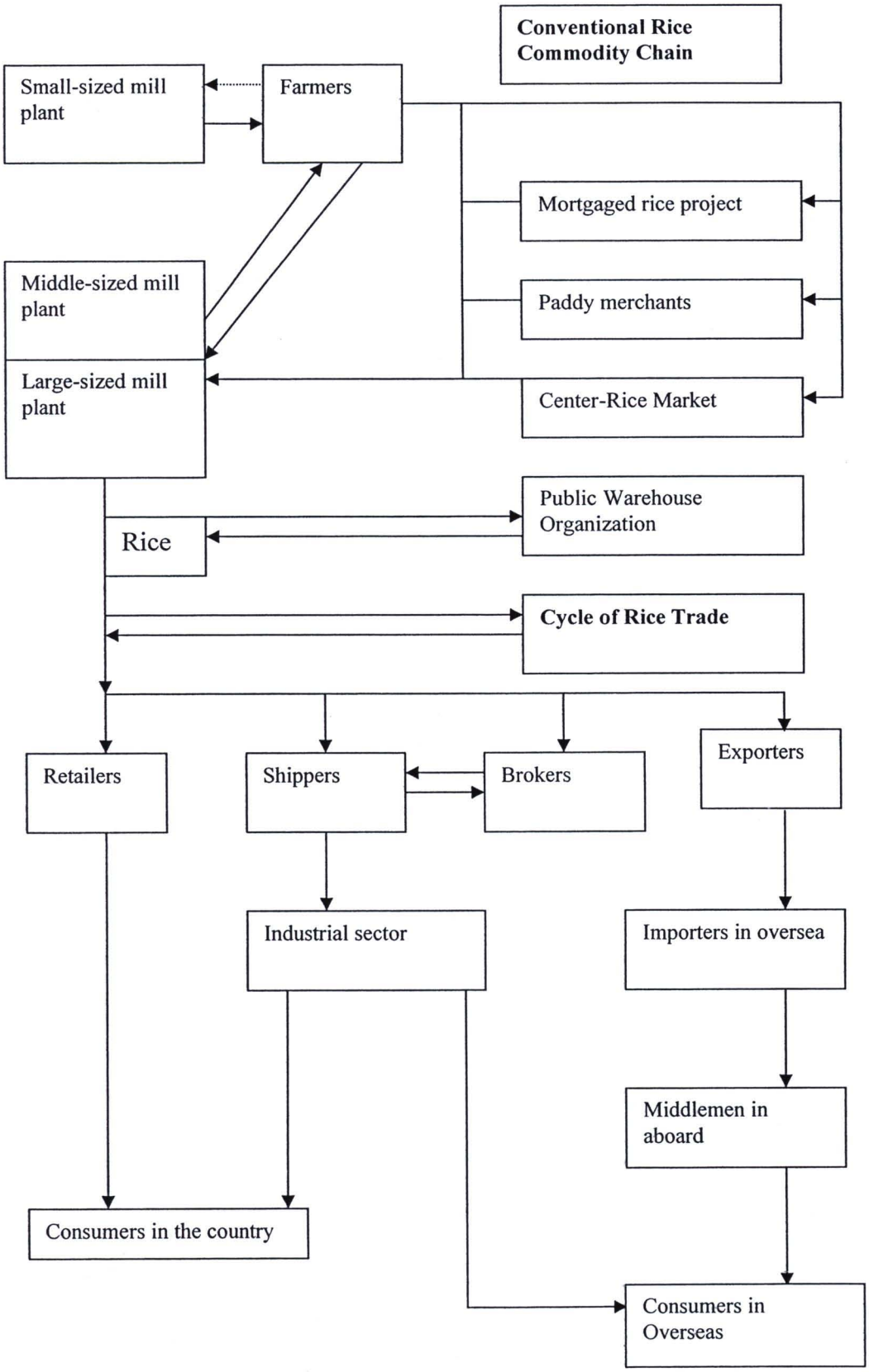

Figure 3.1 Conventional Rice Commodity Chain

We are left with the question: "Does the organic rice commodity chain is shorter than the conventional rice commodity chain?" And "does the organic rice commodity chain a horizontal network?" Figure 3.1 illustrates the conventional rice commodity chain, local rice mills and local rice merchants play an important role in buying rice from the farmers to sell at both local and international markets. Figure 3.1 shows two cycles of rice trade in the conventional rice commodity chain. In the cycle of national paddy trade, the farmers sell the paddy to the middlemen or the local rice mills. A number of farmers who live in Central Thailand might sell the paddy through the mortgaged rice project of a public warehouse organization. Another important method of paddy collection is through the central rice exchange[20]. Afterwards, rice is traded through the conventional trade system. The rice is distributed from the mill plant to domestic markets through brokers who are middle merchants connecting the shippers and retailers to consumers. Some rice is exported and distributed to consumers overseas (Petchprasert 2006).

In conventional rice commodity chain, middle merchants play a critical role in collecting paddy from farmers and taking it to the mill plants. The mill plants usually prefer buying paddy from these intermediaries because it is easier, takes less time, and has lower transaction costs than buying the paddy from the farmers. The advance contracts are made between the large-scale mill plants and the middle merchants to assure that a sufficient amount of paddy is sold to the mill plant according to the orders for the rice.

To ensure that farmers sell their output to particular middle merchants, a loan[21] is always provided to the farmers at the beginning of the transplanting season, on the condition they sell their rice to the middle merchants who provided them the loan. The farmers must repay the loan, plus interest, which is at a relatively high rate. The rice price that the middle merchants give to the farmers is usually equal to the

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[20] In the past, rice was primarily delivered by boat to the central rice exchange, particularly the most important exchange, namely the "Leader Rice Granary", located in Phitsanulok province. The rice price at the central rice exchange is the basic point of reference for the rice to be sold in other provinces. The Thai government later encouraged the formation of cooperatives to replace of the central rice exchange, including rice milling services. Until now, the exchange has been important in the central and lower northern parts of Thailand. In northeastern Thailand and in Southern Thailand, it is non-existent.

[21] The loan can be given to the farmers in terms of cash or inputs such as rice seeds, fertilizers and pesticides. It is called "virgin bride guarantee" and becomes an important means by which the middle merchants used to assure certainty to access to paddy.

rice price sold in the local markets. Some middle merchants who buy paddy at relatively high prices often cheat on the weight of the rice. Although the farmers acknowledge that they are cheated by the middle merchants, they agree to sell their paddy to them because they are satisfied with the loan which they are given and they do not want to waste time pay for cost of rice delivery. The farmers see no difference between the net incomes derived from selling the paddy to the middle merchants versus derived from selling the paddy to the mill plant (Petchprasert 2006).

Figure 3.2 illustrates the complex web of social relations that exist between firms, NGOs and farmers within the organic jasmine rice commodity chain. This figure shows the cycles of organic rice production within Thailand and the cycle of post-production within oversea. In process of organic rice production in Thailand, the individual farmers are organized as a producer's group, according to the fair trade regulations. They directly sell paddy to the NGO, which is a development programmer. Later, the NGO further sells paddy to a local rice mill. Milling, processing and packaging processes are operated by a local rice mill under control of the NGO and the international inspectors.

In process of post-production in Thailand, audit inspections are conducted by independent inspectors under the control of international certifying bodies such as FLO-CERT and IMO. Later, unpolished organic jasmine rice is exported by another export firm, one which has market ties to importers overseas. In process of post-production in oversea, the importing firms within overseas mill unpolished brown organic jasmine rice to be polished white organic jasmine rice, then processing of polished white organic jasmine rice follows. Following this, polished organic jasmine rice is packaged by different brand-name companies and is sold to fair trade and organic food retailers. Lastly, different labels of fair trade and organic jasmine rice are distributed to consumers through niche marketing chains overseas such as supermarkets.

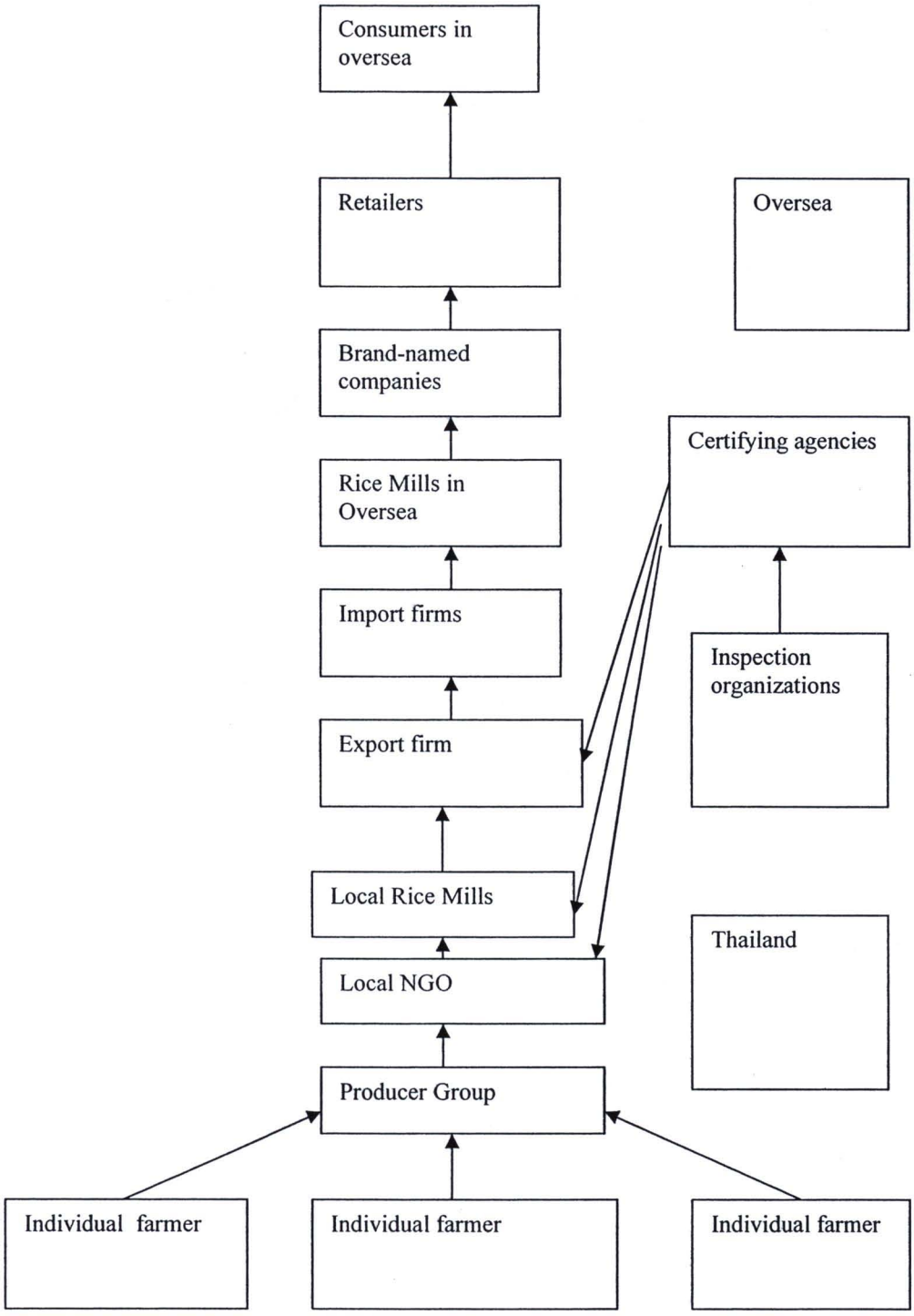

Figure 3.2 Organic Jasmine Rice Commodity Chain in Northeastern Thailand

Although the organic jasmine rice commodity chain is initiated by the local NGO which is the project developer, the chain is driven by international institutions

and global actors such as retailers and certifying bodies. The local NGO buys rice from the farmers to sell to a local rice mill; therefore, the role of local middle merchants is replaced by the NGO. However, many actors such as the exporter company, importer companies, retailers, brand-named companies play a key role in facilitating the organic rice trade and gain most benefits from the added value created in the organic rice commodity chain. As the number of nodes between the producers and the consumers is not diminished, the organic jasmine rice commodity chain is not shorter than the conventional rice commodity chain.

Moreover, since the contract farming is employed to link the farmers with global agro-food networks, I argue that the organic jasmine rice commodity chain is a vertically network, not a horizontal network as it is often assumed. Furthermore, fair trade and organic rice is sold in the channel which is generally used in the conventional trade such as supermarkets. This call into doubt about Fair Trade's role in inducing social change, and about its alternative status, as Renard argues:

> *The mainstreaming of Fair Trade products in the global market is leaded to the fear that the ideology of fair trade would be diluted by the market. The organizations find themselves in the dilemma of continuing to be marginal and pure or aligning with large distribution and losing their soul. The contradiction is more obvious than ever, while producers, to increase their sales, need to enter the market full steam, getting "fair" price, but submitting themselves as suppliers to gigantic transnational companies-with the risk that come with it-fair trade organization criticize this decision that they judge to be unilateral* (Renard 2003: 92-93).

3.4 The Organization of Production of Fair Trade and Organic Rice

Ideally, the organic food networks rest on production inputs which are derived from on-farm resources and local-based suppliers. However, in practice only some production inputs of fair trade and organic rice are derived from on-farm resources and local-based suppliers, but other production inputs are obtained from non-local suppliers. I examine upstream and downstream linkages of the organic and fair trade networks and illustrate the linkage in Figure 3.3.

If we consider the upstream linkages between fair trade and organic food production units and others which are suppliers of production inputs, it is clear that

what are formally called "alternative food producers" now use conventional suppliers which are not embedded in the local to supply production inputs and technologies including rice seeds, seeds for rotation crops, EM, rice containers, organic compost, buffalos, cows, machines, and knowledge of organic rice production and harvest.

For instance, the NGO plays a crucial role in supplying production inputs for the farmers. For example, organic hybrid seeds need to be certified by government officials. The basic complement of organic fertilizer is manure derived from buffalos and cows, but buffalos and cows are sought via local suppliers. Furthermore, some farmers sought organic fertilizer produced by industrial companies and sold by local suppliers. Organic green bean seeds used for rotating crops are sought via the project developer, but are bought from suppliers. Moreover, the local rice mill is responsible for processing organic rice bought from smallholder members. In addition, national and international suppliers are responsible for the export and distribution of fair trade and organic rice products.

The study of downstream linkages clearly indicates the continual contradictions and blurring boundaries between conventional and alternative food systems. Fair trade and organic food production is based in the northeastern Thailand. Yet it is adopted local rice mills and wholesalers and retailers in overseas as channels to process and distribute fair trade and organic commodities to consumers in developed countries.

In fair trade and organic rice commodity chain, arenas of exchange are sweatshops and supermarkets, embedded with ethical values in overseas, not local markets. Moreover, producer-consumer interactions can be seen through the interactions between retailers and consumers, interactions through websites, newsletters, demonstrations, field trips, visits, social events, exhibitions, annual subscriptions, and emphasis on closeness, connection and commitment. Fair trade and organic food provision therefore contains hybrid spaces which are contingent upon conventional links if they are to survive. The heterogeneity of the producers' initiatives which involve cooperation through the creation of linkages with the "local", "alternative", and "quality" point to hybridized space found in the AFNs. Such hybridized space can be seen from associations between the fair trade and organic networks and conventional agriculture and conventional trade.

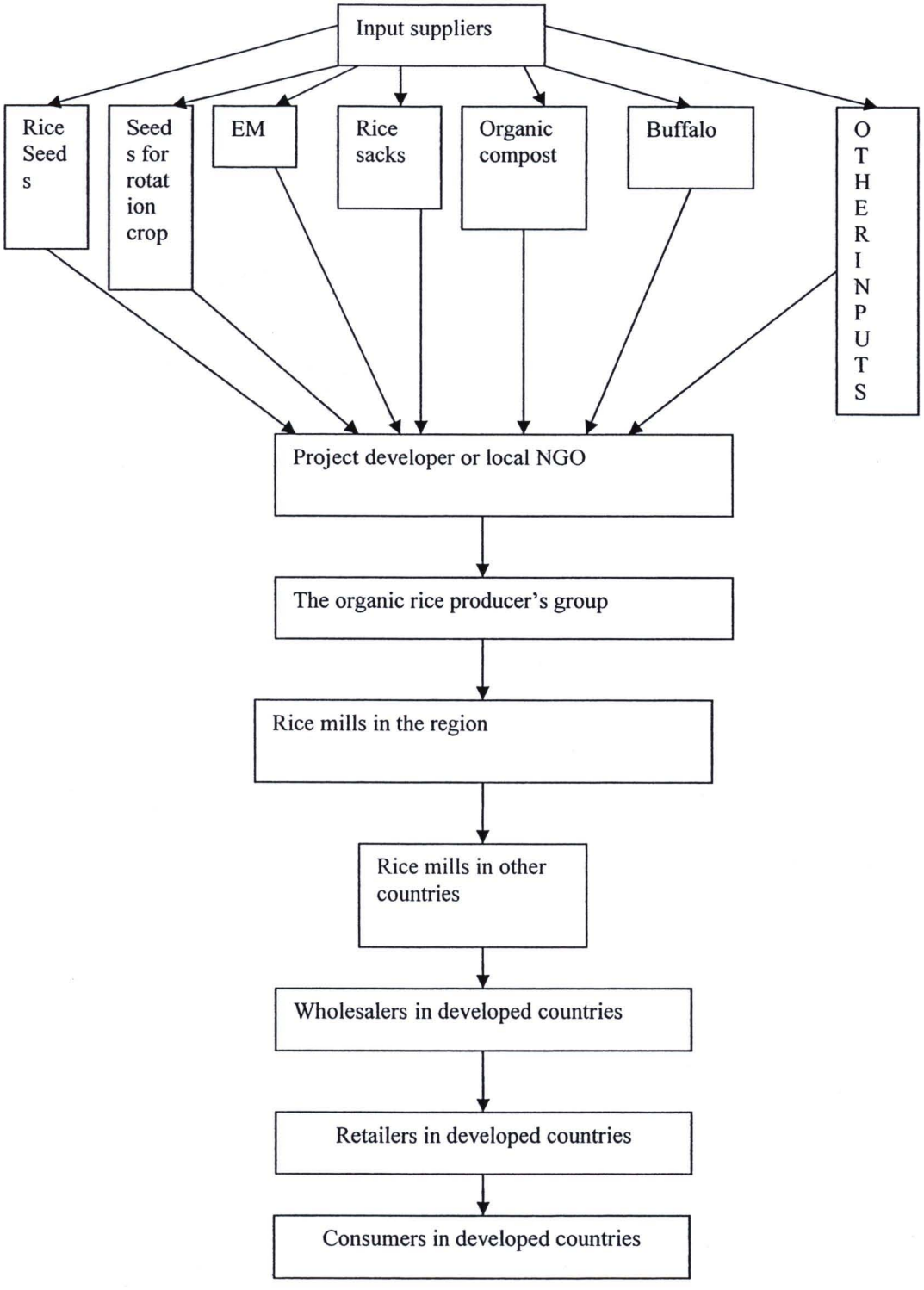

Figure 3.3 Illustration of the Upstream and Downstream Linkages Within the Fair Trade and Organic Food Supply Chain

The supply chain for fair trade and organic products involves a cooperation through the creation of linkages with the "local", "alternative", and "quality"; it points to hybridized space found in the AFNs. Such hybridized space can be seen from associations between the fair trade and organic networks and conventional agriculture and conventional trade.

3.5 Conclusion

The expansion to export-led organic rice production in northeastern Thailand has resulted from the attempt of agribusiness to "green" agriculture by incorporating public awareness of issues of environmental conservation and social justice to add value to products.

Theoretically, organic jasmine rice commodity chain in northeastern Thailand is regarded as alternative agri-food networks (AFNs). The characteristics of alternative forms of food production are defined by reference to the notions of localness, trust, embeddedness, and quality. The characteristics of conventional and alternative agri-food systems are shown in Appendix O (Ilbery 2005: 285). The AFNs refer to food "re-localization" and the turn to quality food production which has capacity to resist conventional food networks. The re-localization[22] means the re-making connections between food products, process, and place to add value to agricultural products (Marsden 2000; Maye 2007). On the other hand, the alternativeness of AFNs is created by re-making connections between producers and consumers (Ilbery 2005: 285). These connections include face-to-face interactions between producer and consumer, and relations of spatially proximate[23] and spatially extended[24] (Ilbery 2005; Maye 2007; Murdoch 2006; Parrott 2002: 285; Whatmore

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[22] Re-localization is a process in which locally distinctive quality food products are transferred to regional and national markets through the use of food labeling, emphasis on quality, and changes in rural policy which encourage spatially extended, short food supply chains (Marsden 2000).

[23] Within the spatially proximate chains, products are sold through local outlets, locality, or place of production, so that the consumer is immediately aware of locally embedded nature of the product at the point of retail (Ilbery 2005: 826).

[24] The spatially extended chains exist where products are sold to consumer who are located outside the region of production and have no experience of the area. The key is to use product labeling and imaginary to transfer information about the production process and the place of production (Ilbery 2005: 826).

1997). Raynolds argue that the fair trade commodity chains try to re-embedded global agriculture in equitable social relations (Raynolds 2000: 297).

Using the debate on conventional and alternative food systems as a starting point, I argue that export-led organic rice production in northeastern Thailand has developed toward the conventionalization. The organic jasmine rice commodity chain relies on the conventional suppliers which are not embedded in the local to supply production inputs and technologies. Moreover, export-led organic rice production in northeastern Thailand is adopted local rice mills and wholesalers and retailers in overseas as channels to process and distribute fair trade and organic commodities to consumers in developed countries.

Moreover, organic jasmine rice commodity chain is spatially extended chain, not the locally embedded as it claims, as organic jasmine rice is sold to consumers who are located outside northeastern Thailand and have no experience of the region of production. The fair trade label, which is a symbolic form of external quality and justifies the added price, does not guarantee for the consumers about certain conditions of production and commercialization of the product as it claimed (Renard 2003; Sonnino 2006: 96).

The integration of organic and fair trade networks into conventional food chains points to complexity and diversity in the AFNs. The development of fair trade and organic food networks in northeastern Thailand points to the fact that the alternative food networks are becoming more hybrid. The hybridized nature of contemporary alternative agri-food networks comes from increased reliance on conventional suppliers and non-local actors both in the upstream and the downstream linkages, and the combination of commercialization and social development together. This calls into doubt the alternativeness of fair trade and organic agriculture has been reduced.