

Jasmine Rice Overview

The Role of Rice in the World: “Rice is Life”

In the US, the role of rice is small and often misjudged by Americans. But to the majority of the world, it is not just their source of livelihood, but source of life. The United Nations (UN) reports that rice makes up 20% of the world’s dietary supply and that 1 billion households in rural areas of developing countries depend on rice production as a source of income (www.usda.gov)¹. Almost four-fifths of all rice produced is by small-scale farmers and is consumed domestically (*Ibid.*) with only 5% of all rice produced ever entering the world market (Udomkit, p.3)². The poorest members of society – urban poor and rural landless – spend between 50 – 70% of their income on rice (Oxfam, p.ii)³.

It is estimated that during 2003/2004, almost 400 million tons of (processed) rice will be produced all over the world⁴ (SEACON, p.1)⁵. By 2010, it is projected that the world consumption of rice will approach 420 million tons (*Ibid.*). The leading rice producer is China accounting for 118 million tons of rice (*Ibid.*). India is second with 90 million tons of rice, followed by Indonesia, Japan, Vietnam and Thailand with approximately 18 million tons (www.usda.gov *op.cit.*).

Thailand’s Rice Production

Although Thailand is not the leading producer of rice, it exports more rice than any other country in the world, accounting for 29% of all rice exported; Vietnam follows Thailand with an 18% market share (Piras, p.138)⁶. Thailand’s biggest importers are Nigeria, Senegal, Indonesia, Iran and Malaysia. Its largest importer for fragrant or Jasmine Rice, is China followed by Senegal and the US (Prasertsri, p.4)⁷.

It is estimated that more than 80% of Thais eat rice as their main meal and the average Thai consumes almost 109 kilograms⁸ of processed rice each year (NSTDA, p.32)⁹. Rice is produced on over 60 million rai¹⁰ or about 80% of all the arable land in Thailand (Udomkit, *op.cit.*, p.1). The majority of rice is grown in the northeast, which possesses 40% of the total agricultural land (*Ibid.*).

¹ (www.usda.gov): “UN Declares 2004 The International Year of Rice”.

² Udomkit, Nuntana. “Literature Review on Rice Trading”.

³ Oxfam GB: “The International Rice Market: A Background Study”. April 2001

⁴ The European Fair Trade Organization in their “Fair Trade Yearbook 2001”, estimates that total paddy rice (unprocessed rice) produced is closer to 595 million tons (Piras, p.137).

⁵ Southeast Asian Council for Food Security and Fair Trade (SEACON) – “A Study of Regional Policies and Initiatives on Rice Trade and Food Security”

⁶ Piras, Elizabeth: “Who reaps the benefits of the sowing”: Fair Trade Yearbook 2001. European Fair Trade Association (EFTA).

⁷ Ponnarong, Prasertsri: “Thailand Grain and Feed Annual”. United States Department of Agriculture. April, 17, 2003.

⁸ Approximately ¼ kg of rice is consumed in one meal by one person.

⁹ National Center for Genetic Engineering and Biotechnology, National Science and Technology Development Agency: “Science and Technology with Thai Rice”. Public Information Department. June 2003

¹⁰ 1 rai = 0.4 acre

Every year, Thailand produces nearly 20 million tons of rice, 2/3 being consumed domestically and 1/3 being exported (Oxfam, *op.cit.* p.13). Although there is no shortage of rice in Thailand, between 25% and 30% of the population is malnourished (*Ibid*, p.iii). Widespread debt forces farmers to sell the entirety of their rice, leaving none for household consumption. Debt and poverty among farmers has been primarily spawned by the failure of the Green Revolution.

The Growing of Conventional Jasmine Rice

“The cropping pattern begins in May after the first rainfall. Farmers plough the land to get rid of the weed. Weed residues are incorporated into the soil and the fields are left for the residues to be decomposed. After the decomposition, the second plowing is done to loosen the topsoil and to flatten the field in order to regulate the water level. Traditionally, water buffaloes are used for all the land preparation. However, increasingly a small plowing machine is used. Rice seedlings are prepared during the land preparation and transplanted into the field around June-August. Rice is an annual crop and takes around 90-120 days to mature. The grain is left to dry in the field before harvesting, which begins around the end of November and lasts until December. Very few farming activities occur after the rice is harvested, as there is insufficient water during the dry season. In areas where irrigation exists, farmers may plant legume crops (e.g. peanut or sward bean) or cash crops (e.g. melon) in the rice fields. Also, some may cultivate vegetable crops during the winter season (around December-January) as there are few pests on vegetables during this period.”

-Vitoon Panyakul, “Thai Organic and Fair Trade Rice”¹¹

sChemicals Used

“The conventional way to control it is to mix pesticides with boiled rice and carry out spot applications where crabs are found. Conventional farmers apply synthetic fertilizer during seedling, after the transplant, and just before the flowering stage. Average application of chemical fertilization is ranged from 15 to 28.95 Kg/rai (94-180 Kg/hectare) (*Ibid.*)”

Tatoom village in the northeastern province of Surin, is home to a strong group of farmers who have made the switch from chemical farming to organic. The Green Revolution arrived in Tatoom in the early 1980s and brought with it promises of higher rice yields. Farmers were encouraged to use high yield varieties of rice (HYV) and chemical herbicides, pesticides and fertilizers¹². A farmer I spoke to in Surin began using chemical fertilizers in 1981 and used one bag (costing 270 baht¹³) per one rai¹⁴ (*Ibid.*). By 1983, he was required to use 3 bags (costing 380 baht per bag) per one rai (*Ibid.*). The rising need for additional inputs and subsequent debt encouraged many farmers to go organic.

¹¹Panyakul, Vitoon, “Thai Organic and Fair Trade Rice”. p.2

¹² Information collected during interviews conducted on November 20th, 2003 in Tatoom.

¹³ One U.S. Dollar is equivalent to approximately 40 baht (November, 2003)

¹⁴ 1 rai = 0.4 acre.

Definition of Organic Agriculture

The International Federation of Organic Agriculture Movements (IFOAM), an internationally recognized organic agriculture accreditation non-governmental organization (NGO), defines organic agriculture as:

“Organic Agriculture includes all agricultural systems that promote the environmentally, socially and economically sound production of food and fibers. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, it aims to optimize quality in all aspects of agriculture and environment. Organic agriculture adheres to globally accepted principles, which are implemented within local social-economic, climatic and cultural settings (www.ifoam.org)¹⁵.”

The Maine Organic Farmers and Gardeners Organization (MOFGA) define the positive aspects of organic farming in relation to chemical farming as follows:

Feed The Soil - Organic	Feed the Plant – Conventional
Soil Fertility is a biological process.	Soil Fertility is an imported commodity.
Only the nutrients removed from the farm as crops need to be replaced	All nutrients required to “create” crop are purchased from off the farm.
Nitrogen is not purchased because it is supplied by symbiotic and non-symbiotic processes.	Nitrogen input is a very important purchased input.
Inputs are purchased in their least processed and least expensive form.	Inputs are purchased in their most processed and expensive form. Solubility and availability of these inputs is considered a chemical process performed on an industrial level.
75% of the nutrient value of all feed consumed by animals is returned in manure as nutrient input to the farm.	All feed is a pure expense; animal manure is treated as a problem rather than an asset.
Sustainable.	Nonsustainable.

(www.mofga.org)¹⁷

Current Council for International Educational Exchange (CIEE) Thailand students defined the importance of organic agriculture in the world as follows¹⁸:

- reduces mono-cropping
- better for environment
- improves soil quality
- decreases soil erosion
- maintains bio-diversity
- decreases water and air pollution
- decreases water and energy usage
- no reliance on chemical fertilizers
- decreases input costs for farmers

¹⁵ (www.ifoam.org) – International Federation of Organic Agricultural Movements (IFOAM) homepage.

¹⁶ (www.mofga.org) – The Maine Organic Farmers and Gardeners Association (MOFGA) homepage.

¹⁷ (www.mofga.org) – The Maine Organic Farmers and Gardeners Association (MOFGA) homepage.

¹⁸ The amazing team of “Greedy” Gene Stewart, “Hangry” Michael Risley, Brigid (Bree) O’Keane and Chris Westcott created this spectacular list on November 27, 2003. By-cracky, they are a sharp bunch.

- promotes self-reliance
- improves consumer health
- genetically modified organisms (GMO) free
- no pesticides, herbicides, or chemical fertilizers
- better quality
- less mechanization/technology
- sustainable
- non-corporate control/ no agribusiness
- full employment

The Growing of Organic Rice

Organic rice farming is very similar to conventional farming in terms of procedure, but it does not use synthetic fertilizers, herbicides and pesticides. Instead, organic farmers employ natural alternatives:

- Instead of chemical fertilizers, aged animal manure is used, i.e. chicken dung pellets and cow dung.
- Pest control is by physical methods, e.g. crab traps and hand weeding.
- Green manures are being promoted by NGOs and farmers organizations. This includes:
 - Green gram (*Vigna radiata L.*) broadcasting (at the same time as rice).
 - Sesbania crop (*Sesbania rostrata*) sown early in the rainy season.
 - Sword bean (*Canavalia ensiformis*) sown early in the rainy season or after the rice harvest as rotation crop. (Panyakul, *op.cit.* p.6)

Organic Certification

Once a farmer has chosen to transfer to organic farming, they often seek certification. Although organic certification is not required to sell one's product, it is often within the best interest of a producer to attain certification in order to attract more customers and achieve a greater level of commercial legitimacy. For example, in the United States the largest and most recognized organic certification body is the USDA. Once a product has met USDA standards it receives a label that clearly states that it is "USDA Certified Organic". Consumers that are conscious of the benefits of organic produce will specifically look for products bearing this label because they can be assured that the product they are buying truly is organic.

In Thailand, the organic certification body is the Organic Agriculture Certification Thailand (ACT). The ACT was established in 1995 with the help of NGOs such as Green Net, academic organizations, governmental bodies and consumer groups (ACT, p.4)¹⁹. Within Thailand, the ACT has the ability to certify producers that: "aim to avoid using any chemicals in the production and processing, improve and maintain soil fertility with organic matters, and maintain ecological system in the farm (*Ibid.*)."
In 2001, the International Federation of Organic Agriculture Movements (IFOAM) accredited the ACT therefore making their standards equivalent to international standards (*Ibid.*). An ACT accreditation is now transferable to all countries that accept IFOAM (*Ibid.*). Although IFOAM and ACT accreditation are recognized in every single EU country and many other parts of the world, the US refuses to accept it. Currently, it is exceedingly difficult and costly for a non-American producer to

¹⁹ Organic Agriculture Certification Thailand: "ACT Organic Agriculture Standards". 2003

become USDA certified organic²⁰. As of the writing of this report, there is not a single certified organic product from Thailand being sold in the US.

In order for an agricultural product to be certified by the ACT, it must meet, among others, the following standards:

- All synthetic chemical inputs are prohibited, including artificial fertilizers, pesticides and hormones.
- Clearing primary forest for practicing organic agriculture is prohibited.
- In case the producer does not convert all fields to organic farming, the organic plots and conventional plots must be separate clearly and all fields shall be inspected by ACT.
- A producer shall maintain and enhance biodiversity in the farm by conserving at least 5% of the field to be habitats of diversified plants and animals. Such areas may be forest land, flooded forest, bushes or big trees in the field, hedges in the borders, integrated orchards, ditches, natural fish ponds, and idle areas with natural plants.
- Using genetically engineered organisms and products thereof is prohibited in organic production and processing.
- In annual crop production, the producer shall establish diversity of plants in the farm by at least practicing crop rotation in order to reduce diseases, insects and weeds, including rotating leguminous crops in order to improve organic matter and soil fertility.
- No burning of crop residue is allowed as it destroys organic matters and soil micro-organisms.
- Synthetic dyes are not allowed for dyeing fruits to be colored.
- Spray equipment used in the conventional farming is not allowed to use in organic farm (ACT, *op.cit.* p.9).

There are also extensive standards about how organic products should be processed and handled in order to prevent chemical contamination. ACT also offers certification in the areas of wild production, input manufacturing and aquaculture (shrimp) (*Ibid.*).

The Harvesting Process

Rice has traditionally been harvested by hand using a tool called a sickle²¹. In recent times, it has been increasingly mechanized and a machine is being used that not only picks the rice, but also puts it into bags. Often times, farmers will hire others to help with the harvesting process and pay them approximately 140 baht per day, per person. It is commonly held that eight people can harvest 2 rai per day. Although, it is cheaper to rent a machine at 400 baht per day than hire people to do the work

If done by hand, harvesters will line up along the length of a rice paddy and move forward together, cutting as they go. The proper harvesting technique is to grasp a handful of rice and use the sickle to cut it below where one's hand is placed. One

²⁰According to P'Veena at ACT, they have tried to become USDA certified, but were forced to stop their application process due to lack of funding to bring a USDA representative to Thailand and also the amount of restructuring and paperwork required.

²¹All information in this section is taken from personal experiences in harvesting rice and conversations with the superhuman we commonly know as P'Joy, "Terminator" Gene Stewart, and "Righteous" Chris Westcott.

continues this process until they have accumulated a bundle the girth of a human leg. A few long strands of rice or even wet stalks of bamboo can be used to tie the loose rice stalks into a bundle.

After the rice has been harvested, it needs to be threshed. The threshing process entails exacting the raw rice, rice that still has a brown outer husk, from the dried stalks of rice. Threshing of rice takes place approximately one week after the rice has been harvested due to the fact that it needs time to dry. Once the rice has dried out sufficiently, the rice bundles are collected and piled. Threshing can either be done by hand or by machine²². If done by hand, threshing entails grasping a bundle of rice between two bamboo sticks approximately two feet long, one slightly longer than the other, connected by a rope and beating it on a tarp covered surface. After the rice has been threshed, it is loaded into sacks and heads off to the mill.

At the mill, the grain of the rice kernel is extracted and rice is either left that way (brown rice) or is polished and becomes conventional white rice.

Different Types of Rice

Brown Rice:

After the husk is removed the remaining product is called brown rice (or sometimes cargo rice). Brown rice is more nutritious than white, but very little rice is consumed in the brown form. Consumption of brown rice is low because it takes almost one hour to cook and consumers generally do not like the taste and texture. Small amounts of brown rice are exported from the US, primarily to Japan and Europe, for further processing.

Milled Rice:

Milled Rice has had the hulls and bran removed. It is also called white rice or polished rice. Most milled rice sold into northern domestic markets has been milled very hard and has had the broken content removed to below 4%. Less expensive rice sold to export markets may be milled to a lesser degree and may have higher percentages of broken kernels.

Parboiled Rice:

While in the paddy form, rice is soaked and then steam-cooked. The rice is then dried while still in the paddy form and then passed through a standard milling process to remove the hull and bran. Parboiling allows longer storage conditions. Parboiling also glues broken rice back together and dramatically improves the milling yield of whole kernels in the rice. This improvement in milling yield, especially for poor quality paddy, can justify the cost of the process.

Broken Rice:

Grains of rice can become cracked in the field, during the drying process, or during the milling process. The percentage of broken grains (relative to total milled rice) generated during milling ranges from 12 to 24 percent, though the percentage can be higher in countries with deficient processing equipment. Generally, the higher the percentage of broken grains, the lower the quality of rice.

²² I have also heard that water buffalo can be walked across the stalks of rice in order to do the threshing. This may be unsubstantiated and I'm sure there are far more methods than I am aware of.

- Oxfam: "The International Rice Market: A Background Study (*op.cit.*)"²³.

Processing of Conventionally-Grown Rice (see fig.1)

Conventionally produced rice can go to four places after it has been harvested: 1. Rice can be kept and used the following year as seed²⁴, 2. Sold 3. Used to pay debt (Bank for Agriculture or Agricultural Co-operatives), or 4. Saved for household Consumption (Udomkit, "Fair Trade in Organic Rice", p.9)²⁵. Rice that is going to be consumed by the farmer and their family is processed at a small local mill and then returned to the farmer (*Ibid.*). If a farmer has chosen to sell a portion of their rice, it can be purchased either by a small mill that will then sell it to a larger mill, a paddy trader or a farmer organization (*Ibid.*). Small mills and farmer organizations offer farmers the fairest prices for their products, while paddy traders are infamous for cheating farmers (*Ibid.*). Paddy traders have been known to under-weigh a farmer's rice, mix it with low quality rice or just give farmers an unfair price (Dr.Beedie, *op.cit.*). Farmers are often dependent on paddy traders because they do not have the ability to transport their own rice to a small mill or a farmer organization, while a paddy trader provides that service. If a farmer chooses to work with a paddy trader, rice is often sold to a medium size mill that then processes it and sells it domestically, or passes it on to an even larger mill to be processed (Udomkit, *op.cit.*, p.9). If rice is sold to a large rice mill, it is milled there and then sold to a rice broker (*Ibid.*). Rice brokers are responsible for selling rice either to a domestic wholesaler or an exporter (*Ibid.*). If intended for domestic consumption, rice goes from the wholesaler to a retailer to be purchased by a consumer (*Ibid.*). Rice that is going to be exported, is sold to a rice broker who then turns around and sells it to an exporter that is trying to fill an order for a foreign importer (*Ibid.*). Once rice has been shipped to the importer, it is distributed to retailers and then to consumers (*Ibid.*).

How the Price of Conventional Rice is Set

The setting of the price of conventional rice is a fairly involved and secretive process. Currently, there is no world rice price due to the fact that rice is produced in so many different countries and there are thousands of strains (Piras, *op.cit.* p.137). The most integral factor in determining the price of rice, is supply and demand (Dr.Beedie)²⁶. For example, in the northeast of Thailand an exceptionally large mill²⁷ in Buri Ram province determines the price for the area by monitoring how much rice is entering the mill, how much rice is being sold and how much rice is being held in stocks (*Ibid.*). This mill will then set the price, usually displayed in front of the mill, that it will buy rice at (*Ibid.*). Currently, the buying price of conventionally grown rice is 7 baht/kilo (*Ibid.*). The price drops in accordance to how much rice is flowing into the mill. For instance, during the rice harvest (mid-December), the price of rice drops because there is a great supply.

²³ Oxfam GB: "The International Rice Market: A Background Study". April 2001. p.8

²⁴ Rice still possessing the husk is put into water for three days until seedlings appear. The rice seedlings are then planted in the flooded rice paddy (check).

²⁵ Udomit, Nutana: "Fair Trade in Organic Rice: A Case Study from Thailand". – Paper produced as Ph.D. research and presented at Development Studies Association Annual Conference 2001, Institute for Development Policy and Management, University of Manchester, 10-12 September 2001. Please note: Figure 1 is taken from this piece.

²⁶ I had the opportunity to meet with Dr.Beedie on November 13, 2003. Dr. Beedie is a professor of Agricultural Economics at Khon Kaen University in Khon Kaen, Thailand.

²⁷ 80%-90% of all rice produced goes straight to a mill (*Ibid.*).

Other factors that affect the price of rice is information collected by the United States Department of Agriculture (USDA) (*Ibid.*). The USDA employs a system of satellites called the Geographical Information System (GIS) which can monitor how much rice is being grown anywhere in the world, weather that will affect the rice crop and pests (*Ibid.*). The information is not so much utilized by local rice mills, but is instead used in determining the price of rice after it leaves the mill.

After rice leaves the mill it can be sold directly to local consumers, paddy traders, brokers or the government (Udomkit, "Fair Trade in Organic Rice", *op.cit.*, p.9). The price that rice brokers and paddy traders buy rice at is not always fair, nor clearly determined. In theory, it should be determined by considering supply and demand on a global scale and the information provided by the USDA. In reality, ten families control the conventional rice trade in Thailand and it remains extremely secretive (Piras, *op.cit.* p.140). The price of rice is difficult to determine because as a crop, it is extremely susceptible to poor weather conditions and depending on the weather patterns in a country, a country can be an exporter one year and an importer the next (*Ibid.*, p.137). Another reason that the price of rice can be determined somewhat at will is that there is no futures market in rice (Dr.Beedie, *op.cit.*).

The majority of agricultural commodities i.e. wheat, coffee and grain are subject to a commodities market (www.futurestradingfacts.com). Most commodities are traded through futures contracts that promise so much of a given crop when it is harvested. The regulatory body for the commodities market, Commodity Futures Trading Commission, was established in 1972 and maintains fair trade practices in such exchanges as the Chicago Board of Exchange (*Ibid.*). Europe possesses its own electronic commodities market called Eurex (*Ibid.*). Currently, there are 48 commodities markets all over the world trading 96 different commodities (*Ibid.*). In order for a commodity to be considered as "trade-able" in the futures market it must meet the following requirements, 1. It must be standardized for agricultural and industrial commodities (Rice does not meet this standard) 2. Perishable commodities must have an adequate shelf life, due to the fact that delivery on futures contract is delayed (This is true for rice). 3. The cash commodities' price must fluctuate enough to create uncertainty (This is absolutely true for rice) (*Ibid.*). Rice stocks are currently traded, but without a futures market, it plays a very small role in determining the world rice price.

How the Price of Rice is Distorted

The price of rice is not simply defined by supply and demand, but is also vastly distorted by such things as subsidies, tariffs and food aid programs. The US plays a huge role in distorting the world rice price. Currently, the US is responsible for 12% of rice exports, nearly 150,000 tons in 1999 (Oxfam, *op.cit.*, p.28). In 1999, the US exported over 400,000 tons of rice totaling \$99.7 million to less economically developed countries²⁸ as part of its food aid program (*Ibid.*). In 2002, the US spent \$199.7 million on food aid to just three countries: Indonesia, Philippines and Uzbekistan (Reyes-Cantos, p.14)²⁹. One program in particular, "Food for Progress"

²⁸ Less economically developed countries are also commonly referred to as being strictly "less developed countries"

²⁹ Reyes-Cantos, Jessica: "Asian Rice Trade: Issues and Concerns". July 2004

that supplies rice to countries under the condition that they will open up their agricultural markets to free enterprise, exported over 40,000 tons of rice worth \$10.2 million (Oxfam, *op.cit.* p.28). This program distorts the price of rice because it forces a market for US rice that normally would not exist and therefore undermines the whole principle of supply and demand. The US also does not require countries receiving rice aid to pay back the loan immediately and therefore degrades the entire free market system (*Ibid.*, p.48).

The US also heavily subsidizes its farmers. Agricultural subsidies are meant to support farmers when there is a dip in the price of rice. Farmers enter into production flexibility Contracts with the US government which entitles them to receive market loss assistance (MLA) if the price of rice is low (*Ibid.*). In 1996, over 99% of land dedicated to rice production in the US was enrolled in this program (*Ibid.*). From 1996 to 2000, production flexibility contracts payments were well over \$400 million per year (*Ibid.*). By subsidizing its farmers so heavily, rice farms in the US are able to operate at a loss and sell their rice at far lower than the “real” cost. Subsidized rice does not represent the actual costs of input required for rice and allows US rice to be sold far below market value. This is extremely hurtful to producers in countries that don’t subsidize their farmers because producers are forced to sell their rice at a price competitive to US prices even though it is not representative of the actual cost of producing it. Low priced rice from the US also finds its way into countries where rice production is an integral part of the economy, undercutting local producers and forcing local farmers to lower their price in order to just be competitive within their own country (*Ibid.*).

The European Union (EU) is also responsible for distorting the price of rice. The EU, much like the US, subsidizes its rice farmers, but it has also created extremely high tariffs on rice imports (*Ibid.*, p.26). For example, in 2000 Thai Jasmine rice was traded at approximately \$300 per ton with a tariff of \$430 levied against it (*Ibid.*). This practice makes up the difference between lower priced imports and more expensively produced domestic products, such that when consumers go to buy rice there is essentially no difference in price; and may even make the imported rice more expensive. Japan is also guilty of the same trade practices (*Ibid.*).

All trade practices aimed at protecting domestic producers, distorts the free market system and indirectly hurts producers in less economically developed countries. Free trade, in its purest form without subsidies and trade barriers, ideally creates a level playing field between economically developed countries and less economically developed countries.

How Thailand Distorts the Price of Rice

Much like the US, Thailand subsidizes its rice farmers, but on a far smaller scale. It is estimated that within Surin Province, the largest rice producing province in Thailand, only 7.7% of farmers receive subsidy payments (SEACON, *op.cit.*, p.27). It obviously not by subsidization that Thailand mainly controls the price of rice, but by controlling the volume of rice stocks entering the market. In October 2002, Thailand, China, India, Vietnam and Pakistan, the largest rice producers in the world, formed the Rice Council and a partnership to control the world rice price by setting production quotas and stabilizing the world rice price (*Ibid.*). It has been argued that their partnership is far more of a cartel, than a legitimate agreement. This cartel

would allow member countries to agree on how much rice each country would produce and export (*Ibid.*). By keeping supply down in response to demand, the price of rice would rise (*Ibid.*).

Cartels, such as the Organization of the Petroleum Exporting Countries (OPEC), have been criticized because they often drive up the price of a commodity. If the Rice Council is able to raise the price of rice 30% to the 1997 average price, as desired by Prime Minister Tahksin, consumers will be the first to suffer (*Ibid.*, p. 45). It is believed that a 20% increase in the price of rice would constitute a 10% drop in consumption amongst poor consumers (Oxfam GB, *op.cit.*, p.6). There is also a strong desire by members of cartels to cheat and secretly produce more than they have agreed to. By producing a greater quantity, they are able to take advantage of the higher price without having to compete with the other cartel members that produce the same commodity (*Ibid.*). Other countries will then combat cheaters by also producing more (*Ibid.*). The market is then flooded with the product and the stabilized price is completely undermined and it drops once again. The fluctuation in price, and especially a drop, is extremely detrimental to the livelihoods of small-scale producers.

Free Trade³⁰

Definition: Free trade is when a producer from one country can sell his good in another country without any restrictions or without being taxed. The concept of free trade says nothing about middlemen or corporations (thus fair trade and free trade are not mutually exclusive). It simply means that a Thai producer can sell as much of her product in the US as she wants at whatever price she chooses (without the US government taking some of her profits in the form of tariffs).

Benefits to International Trade:

- 1 It allows countries to get resources they do not already have (e.g. Israel is rich in minerals, but has no oil, it can import oil and export minerals).
- 2 It increases variety (e.g. we can buy Japanese cars in the US).
- 3 It allows for new products (e.g. we can eat tropical fruit in the US).
- 4 It improves the quality of products in two ways:
 - a Encourages competition (e.g. Motorola has to compete with Nokia).
 - b Encourages specialization (this aspect is the heart of a free trade theory).

Comparative Advantage:

The concept of comparative advantage relates to the economic benefits of specialization. The theory compares the relative cost of production in each country and dictates that a country should produce what it is *relatively* more efficient at producing (i.e. what it can produce with relatively fewer inputs). If each country produces products for which they have a comparative advantage, then everyone will benefit from “getting more from less;” fewer inputs will lead to more outputs.

Note: Absolute advantage is when a country can produce a product more efficiently. E.g. the US may be really efficient in producing both jet engines and baby strollers. Guatemala CANNOT produce jet engines and CAN produce baby strollers (although less efficiently than the US). Therefore the US has an *absolute advantage* in

³⁰ This entire section is taken from a document defining free trade created by Susan Keppleman, CIEE Thailand Fall 2003.

producing jet engines and Guatemala has a *comparative advantage* in producing baby strollers.

Sources of Comparative Advantage:

- Productivity differences
- Factor abundance
- Human skills
- Productivity life cycle
- Preferences

Protectionism:

Protectionism is the opposite of free trade; it somehow limits one producer's ability to sell in another country. It comes in various forms:

1. Tariffs: taxes on imports that are designed to either prevent the product from coming in or raise money for the government (this form of protectionism is the most common, items 2-7 are known as "Non-Tariff Barriers").
2. Import Quotas: the government allows only a certain number of a product from another country (Voluntary Export Restraints are the same thing, only politically nicer).
3. Subsidies: the government gives money to domestic firms (and farms) to make domestic products cheaper.
4. Health, Safety, Environmental, or Technical Standards: imports have to live up to the same standards as domestic products.
5. Government Procurement Policies: the government purchases only products that have been produced or manufactured at home (e.g. the US president's plane is Boeing, not Airbus).
6. Domestic Content Rules: some part of an imported product has to be produced in the home country (e.g. in Mexico, all imported cars have to have a Mexican-made windshield).
7. Cultural, Religious and Institutional Restrictions: restricting a product for one of these reasons (e.g. no pornography in some Islamic countries).

Case for Protectionism:

1. To increase tax revenue: developing countries often use tariffs for tax revenue, as the tax structure is often very bad. Since everything that comes to a country has to go through a border, tariffs are harder to avoid than other forms of taxes.
2. It is politically and socially advantageous to diversify: countries do not want to put all their eggs in one basket (e.g. If a country is only producing cocoa and the world market price for cocoa changes a couple of cents, their whole economy could have major problems).
3. To maintain defense: countries need to be prepared for war and thus do not want to depend on another country for weapons, steel etc.
4. To protect national/ cultural traditions: E.g. there is a Minister of Canadian Heritage who makes sure that there are enough Canadian movies etc., and thus limits US cultural imports.
5. To retaliate against "dumping": countries can give companies high tariffs as a penalty for dumping (and the World Trade Organization (WTO) sanctions this sort of protectionism).

What is dumping?

Dumping is when a country sells a product abroad at a price that is either below the domestic price or below average total cost. Why would this happen?

- a. To allow an industry to reach its most efficient size (economic term: economies of scale) even if the domestic market is too small or the domestic economy is currently in a slump.
- b. As a predatory technique to destroy foreign competition and achieve monopoly status. Dumping allows consumers to benefit from lower prices, but it creates problems for domestic producers (why we do not just “give” all our food to Ethiopia). This reason is why dumping is BAD.

Fallacious Protectionist Arguments:

1. We want to prevent exploitation in developing countries: You can not prevent exploitation by *not* buying a product (e.g. if a child is not working for Nike, that child might be a prostitute). However, you can buy your sneakers from a different company with fair labor practices and this *will* prevent exploitation in developing countries (the child will have a different place to work).
2. To create more domestic jobs and increase employment: In the short run this protectionism will create jobs and provide employment, but in the long run there is retaliation. If we do not import from another country, they will stop buying our exports (e.g. US manufacturers will have Americans buying their product, but foreigners will stop buying it).
3. To offset overvalued exchange rates
4. To keep domestic currency from getting in the hands of foreigners.

Fallacious Free Trade Arguments:

Free Trade always benefits all countries: In the long run, free trade allows all countries to get “more for their money” and all production is more economically efficient. However, the switch to free trade can be bad in the short run. It can be quite costly for people to move to production different products: they have to learn new skills and acquire new equipment.

Infant industries never grow up: An infant industry is an industry that is just beginning (e.g. the computer industry in India). Protectionism can help infant industries develop by reducing foreign competition until the domestic industry has established itself in the domestic market.

Conclusion:

The choice is not between absolute free trade or absolute protectionism, and neither of those options are realistic or ideal. Trade policy is designed to weigh the different aspects of trade: political, environmental, etc. and find a combination of free trade and protectionism that is best suited for each particular country. We should keep in mind both the “Case for Protectionism” and the “Benefits of International Trade”.

-Susan Keppleman: “Free Trade”. Fall 2003

Free Trade Market Outlook for Conventionally Produced Rice³¹

The United States Department of Agriculture (USDA) predicts that during the year 2003, the world rice consumption will top 400 million tons with 26.6 million tons

³¹ Please Note: This section is a essentially a summary of the “Rice Situation and Outlook Yearbook” released by the USDA in 2002.

being traded (USDA)³². The United States is responsible for almost 100 million hundred weight (cwt.³³) of all rice exports (*Ibid.*). Domestically, the US consumes 125 million cwt. and dedicates nearly 32 million acres to rice production (*Ibid.*). Rice is mainly grown in the states of Arkansas, Kansas, California, Mississippi, Missouri, Texas and Louisiana (*Ibid.*). It is estimated that each acre produces approximately 6,000 pounds of rice with paddies in California producing over 8,000 lbs. (*Ibid.*).

The US mainly exports its rice to Central and Latin America followed closely by Japan, Turkey and Jordan (mainly medium/short grain) (*Ibid.*). More than ten percent of US produced rice, 380,317 tons, is exported as part of the US Food Aid Program (*Ibid.*). The Philippines, Niger, Burkina Faso, Benin, Nepal, Guatemala, North Korea, Ukraine, Congo, Nigeria, Gambia, El Salvador, Ghana, Cambodia and Senegal (*Ibid.*).

In 2003, the US will import nearly 13 million cwt. of rice, 80% of it from Thailand (*Ibid.*). The US mainly imports aromatic rice from Thailand that it is incapable of growing itself. Puerto Rico also imports a great deal of rice from Australia; although the continental US does not (*Ibid.*).

The current trend in rice consumption speaks of a slow down. During the 1980s, the per capita rice consumption was growing by one pound per year and dropped to a one half of a pound increase per year during the 1990s (*Ibid.*). Currently, the growth rate of rice consumption is approximately 2.5% and is expected to drop to 2% during the next decade (*Ibid.*). The increase, although small, in rice consumption is attributed to the large number of immigrants in Asia, Latin America and Africa since the 1970s that count rice as a staple of their diet (*Ibid.*).

Fair Trade

Fair trade is an alternative to the free trade system that strives to create the most direct links between producers and consumers. It is a model that subverts the free market system in a manner such that producers are treated with respect and encouraged to prosper. The fair trade umbrella organization “FINE” defines it as “a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalised producers and workers—especially in the south (Bowen, p.24)³⁴.” Current members of ENGAGE³⁵, when considering fair trade in Thailand, have designated the following points as being the backbone of what makes fair trade so vital:

- Supports the dignity of farmers
- Producer participation (price setting, mill owned).
- Direct producer connection to consumers (long-term).
- Living wage
- Maintains rural livelihood/local wisdom.
- Reducing debt

³² “Rice Situation and Outlook Yearbook”: Market and Trade Economics Division, Economic Research Service – U.S. Department of Agriculture 2002.

³³ 1 hundred weight (cwt) = 100 lbs.

³⁴ Bowen, Brid: “Let’s go Fair!”: Fair Trade Yearbook 2001. European Fair Trade Association (EFTA)

³⁵ Michael Risley, Gene Stewart, Chris Westcott and Brigid (Bree) O’Keane pounded out these points during an all day session in RDI on November 27, 2003 (Thanksgiving). Their sanity was barely sustained by coffee, cigarettes, Milo and nose convulsions.

- Decreasing out-migration (to slums, factories, sex work etc.)
- Promoting education.

The European Fair Trade Association (EFTA), a key player in the fair trade system, has defined its role as an importer and proponent of fair trade as:

- Provide direct access to the European market for producers' products, avoiding to the greatest extent possible, middlemen and speculators.
- Pay a fair price for the products that covers producers' basic needs and costs of production, and also leaves a margin for investment;
- Pay part of the price (40-50%) in advance so that producers can purchase the necessary raw materials to complete an order without falling into debt;
- Establish long-term working relationships and contracts with producers (*Ibid.*, p.25).

The roles of producers in partnership with the EFTA are as follows:

- Sustainable (economically, environmentally and socially).
- Must provide acceptable working conditions.
- Must contribute to the development of the community.
- Create jobs where possible.
- Must emphasize the fact that the development of an export product must not jeopardize local food security.
- Producers should seek to establish a balance between accessing a local market and an export market for their products.
- Producers should aim to, and be assisted to, process the product as far as possible in the region before exporting, thus obtaining a higher return on their sales and gaining additional technical skills (*Ibid.*).

During the past decade, fair trade has grown rapidly and today there are over 300 fair trade certified producer organizations and 500 first level producer structures all over the world (www.fairtrade.net)³⁶. It is estimated that these organizations represent as many as 900,000 families of small-scale producers and workers (*Ibid.*). In the past two years alone fair trade has grown by 21.2% with gross sales reaching almost 260,000,000 Euro (*Ibid.*). The majority of products are being sold in Europe, in particular Switzerland with 10.16 Euro per person spent on fair trade and the Netherlands with 2.16 Euro per head spent (*Ibid.*).

Fair Trade Certification and Labeling

Organizations that trade in items that are produced in manner meeting fair trade standards often wish to become certified. The largest and most well recognized certification organization is the Fair Trade Labelling Organizations International (FLO) (*Ibid.*). Although FLO is the largest certification body, it was the Dutch label "Max Havelaar" that began labeling fair trade coffee 11 years ago³⁷ (*Ibid.*). Currently, 17 fair trade labeling organizations are included under the umbrella organization – the FLO-International (*Ibid.*).

³⁶ (www.fairtrade.net) : The Fair Trade Labelling Organizations' home page

³⁷ The labeling of Fair Trade products began 11 years ago, but fair trade itself has been around for almost 40 years (*Ibid.*).

The task of becoming certified is often an arduous one, but the privilege of being able to put the fair trade label on one's goods is often worth the effort. In order for rice to receive the fair trade label, it must meet the following standards as outlined by FLO-International:

1) Product Description

1.1 Rice means non-glutinous and glutinous rice (*Oryza sativa* L.)

2) Qualities

2.1 Fairtrade rice can be traded in its different forms as paddy, cargo rice, white rice or parboiled rice. The required quality for all forms of rice are agreed between the buyer and seller with reference to customary international trade standards.

3) Purchase of Fair Trade Rice

3.1 Procure long term and stable relationship – Buyer and seller are interested in along term relation, fair and stable prices; to that behalf buying/sales commitments are negotiated at the beginning of the harvest season among the parties and fixed in a letter of intent that specifies quantities, quality and price with respect to the conditions of Fair Trade transactions.

4) Pricing and Premium

Fair Trade Price and premium are key instruments in Fair Trade Labelling. The core aim is to assure that the small farmers get a better, stable price for their product that should always cover the costs of sustainable production and living for the producers. These conditions have to be respected when fixing the Fair Trade contract price. The premium is an additional benefit of Fair Trade aiming at improving the socio-economic situation of their members and encouraging sustainable practices of production. FLO is aware of the complex realities and various changing factors that influence any pricing system. It is FLO's intention to assess regularly the workability of the price approach and define with its stakeholders a good practice for its price approach.

4.1 Export level

4.1.1 All Fair Trade (FT) rice export prices are established with the following price formula: FT price for rice = FT contract price (per variety and origin) + FT premium.

4.1.2 FT contract price for rice shall be fixed as a stable price valid over a harvest season for the respective variety and quality. The contract price shall be negotiated between the buyer and seller considering the conditions for internal buying and the prevailing market conditions.

4.1.3 Fair Trade premium varies between 10% (minimum) to 12% (maximum) of the FT contract export price, fob is fixed as follows:

\$ per Ton fob	Premium is %	But not more than \$ per ton
Under 350	12	35

Over 350	10	-
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- 4.1.4 Premium price for certified organic quality – For all Fair Trade transactions, the price for certified organic rice shall be fixed with a premium on the contract price. The premium organic certified rice shall in no case be less than 15% of the FT contract price.
- 4.1.5 Local buying – The buyer guarantees the buying prices for paddy or milled rice for all Fair Trade transactions are at the local or national market level at least 10% higher than local average price. Primary producer’s costs of production must be covered by the local Fair Trade price.
- 4.2 Pre-Financing – On request of the seller, the buyer has to make available pre-finance for the buyer up to 50% of the contract value. Pre-finance is meant for the financing of the operation of the producers’ organization on a local level. The involved parties arrange the details of pre-financing arrangements in the respective contracts on mutual agreement.

5) Rice Transactions

- 5.1 Physical Link – Fair Trade rice must be handled by all actors through the supply lines in such a way as to avoid mixing with rice from other non-Fair Trade certified producers. Processors and Exporters must introduce necessary procedures to guarantee that Fair Trade rice that is bought and processed as such is not mixed with other rice and document their Fair Trade transaction in such a way that the full traceability of every transaction is given.

6) Information Rights and Obligations

- 6.1 There must exist clear written agreements for the Fair Trade transactions with all involved parties on all levels of processing and marketing unto the export level.
- 6.2 All involved parties undersign the respective agreements with FLO that guarantee the required transparency for all Fair Trade transactions.

7) International Customary Conditions

- 7.1 All international customary conditions apply unless overruled by any of the special FLO conditions as specified in these criteria or other agreements with FLO (*Ibid.*).

FLO-International has certified Green Net as meeting the standards required to label the rice it exports from the Rice Fund as being Fair Trade.

The Rice Fund and Producer Organizations

The Natural Agriculture Group (NAG) in Surin was formed in June 1992 with the help of an NGO called Surin Farmer’s Support (Panyakul, *op.cit.*,p.1) The organization has burgeoned in the past ten years and now includes more than 450 families with 113 applying for organic certification during 2001 (*Ibid.*). It 2001, it

was estimated that almost 2,000 rai in Surin is being farmed organically (*Ibid.*). There is also a farmer's group in Yasothorn, called the Yasothorn Farmer Group (FGN-Yasothorn) that is part of the Rice Fund. The FGN-Yasothorn began in 1996 and today is made up of more than 7,000 families (*Ibid.*).

The Rice Fund is an organization comprised of both NAG and YGN-Yasothorn. There are local groups within each larger organization and representatives are sent to the annual Rice Fund meeting to determine such things as the price of rice for the year. Below is summary of the producer organizations in Surin and Yasothorn:

	<u>Producers in Surin</u>	<u>Producers in Yasothorn</u>
Farmer Organization	Natural Agricultural Group	Yasothorn Farmer Group Network (FGN-Yasothorn)
Founding	June 11, 1992	March 8, 1996
Areas of Operation	10 sub-districts of 6 districts in Surin (Northeast of Thailand)	43 sub-districts of 8 districts in Yasothorn (Northeast Thailand)
Total Members	456 families	7,087 families
Members applying for organic certification in 2001	113 families	192 families
Total farmers in province	167,362 families	70,514 families
Total rice land in province	0.467 million hectare	0.174 million hectare
Local NGOs supporting producer organization	Surin Farmer Support (SFS)	None

The Project Coordinators are:

- Earth Net Foundation: a national NGO with a main aim of promoting organic agriculture.
- Green Net Cooperative: a Thai fair-trade organization (*Ibid.*).

How the Rice Fund sets the Price for Organic Fair Trade Rice³⁸

The conclusions of the meeting between the group leaders of the Rice Fund in Surin for 2003/2004 are as follows:

Price of Husked Rice 2003/2004

The Rice Fund states that the standard price of rice for 2003/2004 will be processed as follows. First, local members will meet to propose a price and local representatives will then gather at the Rice Fund for the annual meeting to determine a suitable price by looking at the average market price for husked rice. The year, the committees set the prices for unhusked rice as follows:

Type of Rice	Organic Rice³⁹ (Standard) (baht/kilo)	Transitional⁴⁰ Organic Rice (baht/kilo)	1st-2nd Year⁴¹ Organic (basic) (baht/kilo)	Non-Chemical (baht/kilo)

³⁸ All information from this section was taken from a document provided to me by P'Nok from the Surin Farmer's Support. It was created during the Rice Fund's annual meeting and presented by representatives to the local organic farmers' groups on November 19, 2003.

³⁹ Standard organic rice refers to high quality rice that has full grains.

⁴⁰ Transitional rice is grown on farms that are in the process of switching to organic.

⁴¹ Basic organic rice refers to rice of a lower quality than standard rice.

Hom Mali 105	10.00	8.00	6.90	-
Tender Yellow	7.00	6.00	-	-
Red Jasmine	10.00	8.00	6.90	-

Please Note: If the standard rice price (conventionally grown rice) reaches 9 baht/kilo, 15% will be added to make the price 10.35 baht for members.

Moisture Standard⁴²:

Percent of Water in Rice	Penalty (kilo/ton)
14.00 – 14.50%	Nothing will be taken out of rice weight
14.60 – 15.00%	15 kilo/ton will be taken out of rice weight
15.10 – 16.00 %	30 kilo/ton will be taken out of rice weight
16.10% and up	Rice will not be bought until it has dried out more

- The local farmers' cooperative will test the moisture level of the rice and then it will be re-tested by the rice fund.

Standard Percentage of Quality of Rice:

The Rice Fund will buy rice at 35% un-broken for 10 baht/kilo. But, the price will be adjusted depending on how much rice is broken.

Percentage of Unbroken Rice	Baht/Kilo
45%	10.50
44%	10.45
43%	10.40
42%	10.35
41%	10.30
40%	10.25
39%	10.20
38%	10.15
37%	10.10
36%	10.05
35%	10.00
34%	9.95
33%	9.90
32%	9.85
31%	9.80

Standards on Quality of mixed rice⁴³, bad quality rice, dry rice and young rice⁴⁴:

The Rice Fund has adopted quality export standards on mixed rice, bad quality rice, dry rice and young rice from the Ministry of Commerce for the year 2003/2004. We must rely on these standards to test for mixed rice, bad quality, dry rice and young rice. If there is a large quantity of mixed rice you will be penalized and weight will be deducted from your total harvest weight.

⁴² The moisture standard refers to how much water is retained by the rice. Rice of a high quality, contains very little water, the majority of it being germplasm. Rice Farmers strive for the lowest water content as possible because the drier the rice, the more money they will make.

⁴³ Mixed rice is rice containing a variety of different types.

⁴⁴ Young rice is rice that has not fully matured yet and still retains its green color.

Penalty Rates:

The rice mill will penalize farmers in the same manner as last year and as follows:

Number of Sacks Containing Mixed Rice	Penalty
1 – 4 sacks	Nothing will be deducted
5 – 10 sacks	1 kilo will be deducted from total rice weight

Gathering of Unhusked Rice:

The Rice Fund will collect the organic and transitional rice and keep it in the warehouse at the rice mill. If the warehouse cannot hold all the rice, the Rice Fund will rent warehouse space from the villagers of Donlengneun Tai. The period for the collection for each type of rice is as follows:

- Organic unhusked rice will be collected on December 20, 2003 to January 31, 2004.
- Unhusked transitional rice will be collected on February 1, 2004 through February 28, 2004.
- Basic organic rice should be kept at farmers' homes and the Rice Fund will contact them at a later date to buy it.

Payment:

- The Rice Fund will pay for organic rice first and transfer rice will be paid for as soon as possible.
- For transitional rice that is not held at the Rice Fund warehouse, farmers can receive 40% of their total payment if approved by their local committee.
- If by January 31, 2004 the price of rice in the commercial market is at 9 baht/kilo and all payments have been made, the Rice Fund will not pay out an additional 15%.
- If by January 31, 2004 the price of rice in the commercial market is at 9 baht/kilo and no payments have been made, the rice fund will pay out an additional 15%.

What Makes the Rice Fund Different

The Rice Fund is different from traditional rice traders and brokers because it dares to include the farmer in the process. Farmers are empowered by forming their own community organizations, providing support for each other, having a voice in deciding the price of their own rice and owning the mill at which the rice is processed.

One would assume that the farmers would set their own price astronomically high in order to make as much money as possible, but the way the Rice Fund operates is that the farmers essentially buy the rice from themselves. Two bodies exist, the local farmers groups and the Rice Fund/mill; both organizations are made up of the same individuals. The farmers produce the rice, determine the price on a community level, meet with the larger group and agree on a standard price, and then as the Rice Fund obtain a loan to buy the rice from the local rice groups. This keeps the rice at a low price, but still representative of the actual input, in terms of materials and labor, required to produce the rice.

After the rice has been sold to the Rice Fund and processed, it is then bought by Green Net, a fair trade organic agriculture exporter.

Green Net

Green Net was founded in 1993 in Thailand by Vitoon R. Panyakul and Triyada Treemonka as an organic foods wholesaler and trader (<http://www.handlaihop.nu>). The Surin farmer's group made contact with Green Net in 1995 in order to ask them to act as the exporting organization for their rice (*Ibid.*). Green Net also set up the following education and conversion program:

Activities	Days/period	Objectives
1. Field survey	1 -2 days	- Collection of background information from producer groups, of current farming practices, and the farming situation.
2. Training Workshop #1: Organic Conversion Project	2 -3 days	- Principles of organic farming - Components and activities in organic conversion program - Farmers' participation and responsibility
3. Training Workshop #2: Organic Standards and certification	2 - 3 days	- Training on organic standards and certification requirements - Organic price setting exercise through a participatory cost-price exercise - Preparation for Farmer Field Schools
4. Farmer Field and School	Every 7 - 14 days during cropping season (half day for each session)	- Agro-ecology analysis - Group dynamic - Special topics on issues of interest to farmers.
5. Organic Technology Development	Optional	- Additional technical development employing participatory technical development (PTD) model.
6. Field Monitoring	2 - 3 times per year	- Field monitoring is done through an internal control system (ICS) as part of organic project certification
7. Evaluation	Once a year	- Overall discussion with all participating farmers to evaluate the program's activities and plan for future activities.

(Panyakul, *op.cit.*, p.5)

In 1995, Green Net set up a sister organization to deal with the export process called Nature Food Cooperative that later changed its name to Green Net Cooperative (*Ibid.*). Green Net is not just a business, but also does a great deal of work in the education of consumers and producers about organic agriculture. The wholesaler side of the organization buys products from more than 20 organic vegetable producers and over one hundred organic rice farmers (*Ibid.*). In 1997, Green Net exported nearly 150 tons of rice, totaling approximately 4.78 million baht. Green Net defines its objectives as being (*Ibid.*):

- To help provide market outlet for farmers practicing organic farming as to give extra incentive for farmers to stay on with organic agriculture.
- To mobilize local funds, through the sale of organic food, to support NGO's activities and initiatives.
- To raise awareness of consumers in urban areas about the impact of their consumption on the environment and on the livelihood of small farmers.
- To serve as a marketing channel for small-scale organic farmers with a fair trade principals in its marketing activities.
- To provide linkage between consumers and producers for better understanding and cooperation between rural-urban civil movement.
- To support the sustainable agricultural movement within the country and worldwide.
- To engage in sustainable development activities, especially those concerned with fair-trade, food processing, community enterprises, and learning process of producers.
- To conduct research on relevant issues such as local knowledge in organic farming and gender in agriculture (<http://www.greenetorganic.com>)⁴⁵.

Much like any commercial exporting company, Green Net receives orders and then orchestrates with the Rice Fund mill about how to fill those orders. The following is a brief description of Green Net's role as an exporter of Jasmine Rice:

Product	Hom Mali (Jasmine) Rice (White or Whole-grain)
Organic Certification	Green Net Cooperative and the supplied producers are certified by FLO
Quantity (estimated)	2,000 metric tons per year
Standard Packing	50 Kg polyethylene bag
Price	White Jasmine rice . . . USD per metric ton Whole-grain jasmine rice . . . USD per metric ton (Prices stand for 15 days and are subject to change) Please contact Green Net Coop for price quotation.
Minimum quantity	20 metric tons (or one full-loaded 20 foot container)
Shipment	30 days after confirmation of order by ship leaving Bangkok port.
Payment	-50% deposit when order is confirmed - 25% payment within 15 days after delivery

⁴⁵ (www.greenetorganic.com). Green Net's homepage.

	- Remainder of payment with 7 days after getting the products
Exporter	Green Net Cooperative 183 Regent House, Rajadamri Road, Patumwon, Bangkok 10330 Thailand Tel/Fax: (662) 651 - 9055/ 651 - 9056 Email: export@greennetorganic.com

Green Net is looking to expand its exportation of organic fair trade rice, but is facing such limiting factors as slow production, lengthy conversion time and inefficient packaging procedures and equipment (Loveman)⁴⁶. Currently, when rice arrives at the rice mill there is a long delay between its arrival and the packaging due to the fact that the whole sorting process is done by hand (*Ibid.*). Green Net does not have the funds to buy a machine to do this work and must therefore employ humans to do it (*Ibid.*). Once rice has been sorted, all packaging is done by hand and is therefore slower than if done by a machine. In terms of finances, Green Net is limited because it absorbs the cost of conversion rice that is produced by farmers who are in the midst of converting their fields from chemical to organic (*Ibid.*). Green Net pays conversion farmers a fair trade price, but can not turn around and sell the rice for a fair trade price because it is not yet “certified” organic (*Ibid.*).

After Green Net buys the rice from the Rice Fund, it transports the rice to Bangkok via a truck. The rice is then exported to Switzerland to be received by an organization called Claro - formally One Sustainable Third World (OS3).

The Export Process

After the rice is collected by the Rice Fund, Green Net pays for the rice to be packaged and for a truck to pick it up at the mill and transfer it to Bangkok. Green Net then contracts with a shipping company that transports the rice from the port in Bangkok to Claro in Europe.

The commercial rice trade between Thailand and the US is very similar to the fair trade partnership between Green Net as the exporting organization and Claro as the importing organization⁴⁷. I had the opportunity to meet with Kavee Thanapitak of the Siam Ka Kao Co⁴⁸. The Siam Ka Kao company is an exporter based in Bangkok which exports conventionally grown rice from Thailand to the US. As an export business, they receive orders from consumers (restaurants, grocery stores etc.) and then buy rice from rice brokers in order to meet their needs (Thanapitak). Once the shipment of rice has been put together, the export company applies for an export license (*Ibid.*). If a license is granted, the shipment is inspected to insure the quality of the rice (*Ibid.*). Currently, there are 23 inspection companies in Bangkok (*Ibid.*). In order for white rice 100% Grade A to pass an inspection, it must meet, among others, the following standards:

- Long grain Class 1 not less than 70.0%, the rest shall be Long grain class 2.
- Whole kernels not less than 60%.

⁴⁶ Loveman, Alisa: “Fair Trade in Thailand”. Spring 2003

⁴⁷ As businesses, Claro and Green Net cooperative are unable to release information to me about the exact process and costs of the export of organic fair trade jasmine rice from Thailand to Europe.

⁴⁸ I met with Mr. Kavee Thanapitak on December 1, 2003 at his office in Bangkok.

- Chalky kernels not exceeding 3.0%
 - White glutinous rice not exceeding 1.5%
 - Paddy not exceeding 5 grains per 1 kg. of rice.
- The standards for rice are more lax for white rice 100% Grade B and white rice 100% Grade C (Standards, p.93)⁴⁹.

After the rice has been deemed acceptable, an import company either specifies a shipping company or the exporting company will suggest one (Thanapitak, *op.cit.*). The rice can then be loaded into cartons and put onto the ship (*Ibid.*). The cost breakdown of this process is as follows for one 50kg bag:

Particular	Rate of Bag Carrying	Baht/Ton
1. Unload bagged rice from truck and lay down in godown (warehouse) Carry bagged rice to lay down in row at first and 2nd layers.	(B 5.38 x 10)	35.80
- Carry bagged rice to lay down at 3rd layer	(B 0.61 x 10) x 25%	1.53
- Carry bagged rice to lay down at 4th layer.	(B 1.27 x 10) x 25%	3.18
2. Carry bagged rice in godown (warehouse) for piling for shipment preparation. Carry bagged rice from 2nd and first layers.	(B 1.88 x 10)	18.80
3. Packing of rice into pp bags and piling for export shipment. Carry bagged rice to lay down in row at first and 2nd layers.	(B 1.54 x 20)	30.80
4. Carry bagged rice into lighter. Carry bagged rice from 2nd and first layers.	(B 1.10 x 20)	22.00
5. Lighterage		37.00
6. Inspection Fee		14.00
7. Fumigation Fee		17.00
8. Stevedoring Fee		17.00
9. Tea money (bribery) for inspectors, agricultural officers, BOT officers, customs authorities, etc.		30.00
10. Polypropylene bags	(B 6.00 x 20)	120.00

⁴⁹ Department of Foreign Trade and Ministry of Commerce, "Thai Rice Standards and Thai Hom Mali Rice Standards" 2003

11. Office and godown (warehouse) overheads and other expenditures such as godown (warehouse) rent, interest charges (about 15-18% pa.), loss weight of rice due to disappearing moisture (about 3% by weight), depreciation of equipment and machinery, water charge, power charge, etc.		417.11
12. Less: Selling of Jute bags	(B 20-30 x 10)	-200.00
13. Balance Left		217.11

(Ibid.)

An import company is responsible for costs accrued after the rice leaves the port in Bangkok. The following is a list of the costs of shipping to ports in the US:

Port in the US	Size of Carton	Costs
West Coast: Los Angeles, Long Beach, Oakland, Seattle, Tacoma, Portland	20'	\$ 1,775.00
	40'	\$2,350.00
Houston, TX	20'	\$2,550.00 + ACC 16.00
	40'	\$3,300.00 + ACC 31.00
Chicago, IL	20'	\$2,550.00 + ACC 16.00
	40'	\$3,300.00 + ACC 31.00
East Coast: New York, Newark, Norfolk, Baltimore, Charleston, Savannah	20'	\$2,350.00
	40'	\$3,250.00
Jacksonville, FL	20'	\$2,800.00
	40'	\$3,800.00
Tampa, FL	20'	\$2,900.00
	40'	\$3,900.00
Miami, FL - Subject to wharefage fee at \$1.70/2000 lbs	20'	\$2,350.00
	40'	\$3,150.00

- The above rates are inclusive of bunker surcharges.
- The above rates are subject to cargo declaration \$40/shipment (Ibid.).

Claro

Claro is a fair trade NGO based in Switzerland that works closely with the European Fair Trade Association (EFTA) and acts as the importing organization for organic fair

trade rice from Green Net (www.claro.org)⁵⁰. Claro receives the rice and then distributes it to NGOs in Europe such as Claro-Swiss, Solidar Monde-France, Oxfam-Belgium, GEPA Germany and Cooperazione Terzo Mondo (CTM) – Italy (*Ibid.*). From the NGOs, rice is distributed to fair trade, or one-world shops (*Ibid.*).

Claro has worked closely with Green Net since 1995 to create a fair trade network between Thailand and Europe (Loveman, *op.cit.*). As a fair trade importer, Claro requires the following from the producers that it buys from:

- companies must pay a living wage to their employees
- treat women and men as equals
- have democratic decision-making processes
- meet the minimum social and health requirements laid down by national legislation the ILO conventions (i.e. prohibition of child labor and the right to organize in trade unions)
- voluntary extra premiums paid (www.claro.org, *op.cit.*)

⁵⁰ (www.claro.org) - Claro homepage.