# What is the situation of rice production in Southeast Asia?

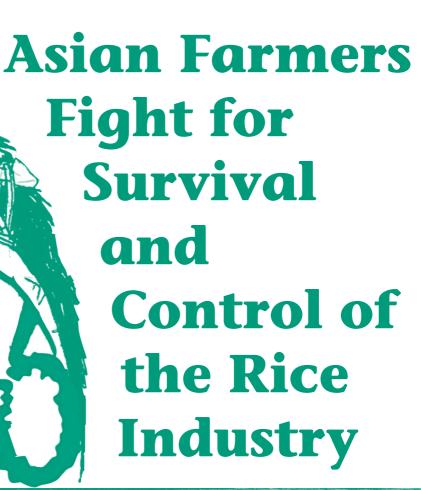
ice is a very important commodity in our lives, as it is the staple food of about 3 billion, or three quarters, of the people in the world. Two hundred fifty million farmers depend on rice cultivation. Ninety percent of the world's rice is produced and consumed in Asia. Rice farming is thus an important part of the culture, spirituality and survival of people in Asia.

Rice has political, economic and social significance in the Southeast Asia (SEA) subregion, , which includes eight agricultural countries (Cambodia, Indonesia, Laos, Malaysia, Myanmar/Burma, the Philippines, Thailand, and Vietnam) of the Association of Southeast Asian Nations (ASEAN). It is the most important crop grown in this sub region, producing 150 million tons of paddy annually. (IRRI:2001).

Rice production in the eight SEA countries are associated to irrigation, use of modern varieties, and inputs of fertilizer nutrients. Expansion in any of these production inputs rationalizes the increase in rice production. The greatest level of productivity is in irrigated rice where more than one crop is grown annually and yields are high, followed by rainfed rice. The largest irrigated rice area is in Indonesia, followed by

Vietnam, the Philippines and Thailand. Rainfed systems, which have lower yield

potentials, are dominant in Cambodia, Laos, Myanmar/Burma and Thailand. Vietnam, Cambodia and Myanmar have large rice lands under flood-prone areas; relatively smaller areas are also found in Thailand and Indonesia.





Indonesia has the highest yield followed by Vietnam and Myanmar. Laos, with only a small percentage of rice land planted with modern varieties, has a productivity level that equates with that of the Philippines --- the region's premier user of modern rice varieties (second is Indonesia). This is partly due to the latter country's smaller inputs of NPK fertilizer nutrients. Meantime, the small national average yields for Cambodia, Laos, Myanmar/Burma and Thailand are caused by the lower yield potential of the dominant rainfed systems, greater use of traditional varieties and less efficient management of water and nutrients (Mutert & Fairhurst:2002).

In the trade of rice, Thailand maintains its position as the region's major rice exporter, followed by Vietnam. Both countries demonstrate increasing use of NPK during the past 10 years. Except for Thailand and Vietnam, all other six countries are net rice importers, with Indonesia, followed by the Philippines, as the region's highest rice importers.

## What is the situation of rice in the whole world?

Worldwide, the countries with largest rice consumption, from highest to lowest, are: China, India, Indonesia, Bangladesh, Vietnam, Thailand, Myanmar/Burma, Japan and Philippines. The top countries in rice production are China, India, Indonesia, Vietnam, Thailand and the Philippines. Top rice-exporting countries are Thailand (1st), Vietnam (2nd), United States of America (3rd), China (4th), Myanmar (10th) and Taiwan (14th). Indonesia (1st) Philippines (8th) and Malaysia (9th) are top rice importing countries.

## What are the major problems in rice production in AFA member countries?

From the country rice reports presented by members of the Asian Farmers' Association for Sustainable Rural Development (AFA) in Indonesia, Malaysia, Philippines, Thailand, Cambodia, Laos, Vietnam, Japan, South Korea and Taiwan, we learned that overall rice production is characterized by low productivity. This is mainly due to poor production techniques, lack of irrigation, high dependence on weather conditions (particularly in Cambodia, Laos, and Thailand), and decline in rice areas, which are largely due to massive land conversion (particularly in Indonesia, Japan, the Philippines and South Korea).

Because of high costs of inputs such as fertilizers and seeds, and the inadequate credit support by their governments, small rice farmers are also highly indebted to private money lenders, and loan sharks, who usually charge high interest rates.

On the other hand, small rice farmers, especially in Japan, Malaysia, South Korea and Taiwan, are faced with labor shortage, because more and more people migrate to urban centers for better income opportunities. This is also becoming the trend even in the Philippines and Thailand.

Rice trade, on the other hand, is generally controlled by private capitalists, with whom farmers have debts. Small rice farmers, having no bargaining position in the trade of their produce, may, at times, sell at the paddy price level (particularly common in Cambodia, Laos and Indonesia). There are reports of illegal rice trading activities in Laos and Cambodia



with neighboring countries Vietnam, Thailand, China and Myanmar.

With increasing population, less production and higher costs of production, food security issues prevail: countries begin to be unable to meet their citizens' consumption demands for rice.

# What is the effect of GATT WTO-AoA on the rice industry?

The World Trade Organization-Agreements on Agriculture (WTO-AoA) were multilateral agreements made under the Uruguay Round of Negotiations of the General Agreements on Tariffs and Trade (GATT). It aimed for the establishment of a 'fair and market-oriented' global agricultural trading system. A 'fair and market-oriented' trading system was to be achieved by eliminating trade barriers and trade-distorting supports in agriculture.

The liberalization of the rice industry through WTO agreements plus the Asia Free Trade Agreement (AFTA) have resulted in opening up of rice markets whereby farmers/producers become market partners in previously governmentmonopolized rice trade industry. Through AFTA, ASEAN member countries are also phasing in the Common Effective Preferential Tariff (CEPT) Scheme of gradually reducing tariff rates.

AFA and AsiaDHRRA members recognize that globalization and liberalization in general may offer the following as possible positive effects:

· maximization of economies of scale through increased access to regional and international markets,

- heightened awareness and participation of civil society in local governance, regional and international processes that will place the civil society in good bargaining with the government and other institutions.
- larger markets for rice farmers,
- international competition that may stimulate production and improve the quality of rice production
- heightened awareness on agriculture. In Japan, this has pushed the government to put in place policies and principles that set the country's directions for food, agriculture and the rural areas. In Taiwan, it has pressured the government to stabilize the market price of rice by subsidizing imported rice and enlarging the farm scale since 'idle lands' (or lands that have been abandoned from cultivation) can be rented or purchased from the farmers who have abandoned them.

Participation in AFTA-CEPT Scheme and WTO negotiations have however brought more negative impacts and outweighed the (perceived ) positive impacts. Many Asian developing countries are unprepared to embrace trade liberalization of rice. The small rice farmers both from the poor and richer Asian countries (such as South Korea) are suffering most from these agreements and schemes. With the free flow of cheaper imported rice, liberalization meant loses to farmer incomes, increased use of costly farm inputs as the farmers attempt to increase their rice productivity, and increased risks on farmers' health due to chemical inputs. Specifically, the negative effects came in the forms of:





- losses to farmers' income with the entry of cheaper imported rice;
- free flow of goods and services through market streams that adversely impact the still weak production base and economic structure of the countries;
- displacement of agriculture. In Taiwan, there has been increases in 'idle lands', or lands given up by farmers since cultivation is no longer a productive venture. WTO participation resulted to adjustments in the production of guaranteed price crops thereby reducing the acreage of rice plantation from 364,000 acres in 1997 to 272,000 acres in 2003. As agriculture loses its productivity, its rural population (like in Indonesia, Japan and South Korea) migrated to urban centers to look for income opportunities.
- health risks through water pollution, and food and water contamination due to increased use of chemical fertilizers in farming;
- food insecurity. As governments start to rely on cheap imported rice to feed its

growing population, their people start to depend on other nations for their staple food, rice. What happens when rice is not sold by these exporting countries?

# What is hybrid rice and will it cause problems for rice farmers?

Pioneered in 1974 by Chinese scientists, hybrid rice is developed by cross pollinating two distinct rice lines which involves the separation of sexes and movement of pollen from male to female parts. The production process renders hybrid rice more expensive than any other high-yield bred varieties. Hybrid rice varieties, however, increases yield by about 15 to 20% higher than the best of other improved or high-yield bred varieties. Thus, it is seen to have a particularly good potential in the poor countries where arable land is scarce, populations are expanding, and labor is cheap. Owing to this potential, FAO, IRRI, UNDP and ADB support improving the national capacities in hybrid rice development and dissemination.

In China, about half of rice area (15 million has) is now under hybrid rice cultivation, accounting for an increase in the national average rice yields of 3.5 to 6.2 t/ha (FAO, 2004). In 2001/2002, a total of 800,000 has of hybrid rice were planted in Asian countries other than China --- in Vietnam (480,000 ha), India (200,000 ha), Bangladesh (20,000 ha), Myanmar/Burma (10,000 ha), and Indonesia (1,000 ha).

Hybrid rice cultivation has its own stakes, however, as exemplified in the Philippines' Hybrid Rice Commercialization Program, implemented for 2002-2004. The Program aimed to popularize the use of hybrid rice



among Filipino rice farmers. It targeted the planting of 300,000 has of rice land with hybrid rice in 2004. A 50% subsidy of price of seeds was given to farmeradaptors.

However, to date, a total of only 132,289 has have been planted with hybrid rice. Farmers reasoned that aside from the need for extensive extension services, the hybrid rice seeds cost more despite the subsidy and have to be bought every planting time. The technology requires large amount of high cost inputs for non-adoption or non-repeat use. Owing to these reasons, hybrid rice and other chemical-dependent rice technologies remain to be unsustainable

# What are emerging issues on rice technology?

Multinational corporations (like Monsanto, Syngenta, Bayer and Dupont) who are providing pesticides and chemicals for production have also gone into seed production, which ties the use of the seed with a particular pesticide or fertilizer. This is to force farmers to continue the use of chemicals. This is to counter the shift to organic farming and sustainable agriculture by more and more farmers.

Giant agribusiness transnational corporations who, armed with trade rules and technology, are taking over the food and agricultural systems at unprecedented scale and pace. New plant varieties and technologies, protected by intellectual property rights, prevent farmers from saving and exchanging seeds. Apart from this disruptive and alienating effect on women's farmers' roles in the food production system, this makes rice

cultivation vulnerable to monopolistic control by giant agribusiness transnational corporations. Patents to rice varieties, genes and gene constructs are held only by a handful of transnational corporations. Today, new plant varieties are "owned" by corporations and even universities. This means that the rights of farming communities who actively improve rice varieties are not recognized under the current rules. (EARWG, 2004)

## What can small farmers and NGOs do?

Farmers' organization s, especially AFA members, and their NGO partners and support groups, should

#### **Urge their government to:**

- At most, take rice out of WTO-AoA talks; and at the least enlist rice as primarily a sensitive and special product
- ensure the country's self sufficiency in rice production, mainly by environmentfriendly methods,
- expand extension services, agricultural infrastructure (such as irrigation), enhance marketing channels for farm produce, and promote alternative sustainable (low-cost) rice production.
- implement interventions that ensure good and stable price for farmers' produce at affordable price to consumers by developing value-added farming techniques, and advanced postharvest processing techniques
- actively promote the production, processing, marketing and consumption of organic rice, through well-budgeted government programs in support for these as well as the use of various forms of mass media



- stop the promotion of rice seed varieties produced by transnational corporations that will make rice farmers dependent on them for seeds and technology
- instead, promote and support local seeds production by upgrading extension services, farm facilities and infrastructure; and
- conduct participatory processes with credible farmers' groups when enacting policies and programs affecting rice farmers.
- to stop big companies from buying land from small farmers, which leads to further displacement and food insecurity

### On their part

- continue and expand production, processing and marketing of organic rice in a cooperative manner
- In parallel as well as in cooperation with other civil society groups, conduct advocacy and campaign activities to make governments listen to our calls.
- conduct massive information campaigns with farmers and together with them analyze and plan solutions to their problems and concerns.
- Educate our consumers in favor of a sustainably produced and fair-traded food and other agricultural products.
- share experiences among organic and SRI rice farmers, and lead in the certification system of agricultural products
- strengthen AFA and the international farmers' movements through farmers' exchanges and farmer-to-consumer linkages.

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