

Chapter 10

The latest phase in globalising Thailand's agricultural resources

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Introduction

Thailand was, as the only country in Southeast Asia, never colonised. It has, however, ever since the signing of the Bowring Treaty in 1855 been very open towards the surrounding world while at the same time trying to preserve its own uniqueness. This chapter focuses on the present phase of globalisation and how global rules, in this case the WTO Agreement on Agriculture, are changing the agricultural landscape of rural Thailand. In this perspective the opportunities and constraints ahead for Thai agriculture shall be analysed. The present phase of globalisation builds on the trends and dynamic relationships established between external and internal forces and institutions during earlier phases of globalisation. A brief overview of the historical background to Thai agricultural development shall, therefore, precede the analyses of the WTO Agreement on Agriculture and its impact on the present trends of changes.

Brief historical background to Thai agriculture

When the neighbouring territories were colonised, their agricultural sectors were simultaneously partly being transformed to be specialised in producing cash crops for their colonial masters. Siam (as the present Thailand was called up to 1939) could, therefore, fill the role of providing basic foodstuff for its neighbours in the Region. With the signing of the Bowring Treaty the rice production for export increased rapidly. The volume of export increased 20 fold from 1870 to 1934(Falvey, 2000)) p.95. It was, however, mainly the central region that was drawn into this trade.

From the late 19th Century, the system with the King and the state as the sole owner of land was gradually being dismantled and a land owning class

developed of Chinese grocery traders and moneylenders who accumulated land by seizure from farmers who could not repay their loans. This made the village communities dependent on the outside world. Instead of the dynamics of social and economic transformation evolved in the rural areas, the rural areas were left behind and the dynamics evolved in the trading centres, at a later stage, mainly concentrated in Bangkok, while the rural areas remained impoverished.

The agricultural development discourse

From 1958 Thailand, with the help of USA, embarked on the development discourse. The agricultural sector became the foundation of the development model by taking the role normally assigned to it for economic development. This happened basically in four ways. Firstly, the agricultural sector was providing cheap foodstuff for the urban population. Secondly, agricultural export provided the capital needed for industrialisation through the rice premium and thirdly, it provided the necessary currency earnings for the import of industrial capital goods. The rural areas remained impoverished without a social and technological transformation and the agricultural sector hereby fourthly served as a labour pool for the manufacturing industry. When embarking on the development discourse, Thailand was responding to the increasing demands at the world market for agricultural commodities, which resulted in increased production through rapid expansion of cultivated land from the 1960s, especially in the North and Northeast. The agricultural communities in these regions became commercialised in the way the central region had started almost a century earlier. Although the expansion of land under cultivation was primarily a result of various government policies, much of the land encroached by cultivation unfortunately was or became demarcated as forest reserves according to the Forest Act of 1964.

During the development era Thailand became the fifth biggest exporter of agricultural commodities among the developing countries. A number of agribusiness companies, most of them owned by Sino-Thais grew big, mainly based on the rice export business. Among the Thai agribusiness companies, the Charoen Pokaphand (CP) is one of the biggest TNC agribusiness companies in the world now having activities all over the Region, not least in China⁶⁰. Although the Thai agricultural sector can be

⁶⁰ By 1996, CP had become the largest agro-industrial enterprise in China with more than 100 feed mills and more than 170 other involvements, which together produced 30% of total group turnover. Altogether CP has an annual turnover exceeding 5 billion USD, and more than 80 000 employees in 300 companies in 25 countries(Falvey, 2000), p.309

categorised as commercial as practically all farmers sell some surplus production and buy some input, the majority of the Thai farmers do not benefit from the global commercial success of Thai agriculture. The majority of Thailand's rural population is small-scale farmers⁶¹, many with insecurity of land tenure, who mainly survive on partly self-sufficient agriculture, selling the surplus production and increasingly supplement the daily diet by purchase from the market. Most small-scale farming households have become dependent of off-farm incomes to supplement their livelihood based on agriculture.

In the perception of most officers in the Ministry of Agriculture and Co-operatives, the Thai agriculture can broadly be divided into two categories. The "upper economy" is consisting of the commercial, export-oriented agriculture, dominated by agribusiness and supported by the government agencies and extension services and for which the modern vocabulary related to agriculture is developed. The other category, the "lower economy", is consisting of the poorest segment of the smallholders. The poorest smallholders are being increasingly squeezed ecologically, economically and socially due to insecurity of tenure or being remote from infrastructure or for a number of other reasons (Buch-Hansen, 2003). Ecologically they are squeezed by being pushed towards marginal soils that they have no resources to maintain and by being subjects to water from contaminated rivers and depletion of nutrients from shrimp farming or eucalyptus planting (Bello et al., 1998). Economically and socially they are squeezed by being kept outside mainstream development with their traditional self-sufficiency being eroded and being further dependent on off-farm incomes, often as migrant labourers.

The contemporary significance of the agricultural sector and its change

Although the total number of farms and farm land holdings more than doubled during the first 30 years of the development epoch (Pasuk Phongpaichit and Chris Baker, 1999), p.56 the economic contribution of the agricultural sector to the GDP grossly fell from half to one quarter of the GDP during the same period. The agricultural economic surplus was invested in urban based manufacturing industry and in infrastructure that further enhanced the extraction of the rural surplus to be invested in the

⁶¹ In 1993 more than half of agricultural land was occupied by land holdings between 1.66 and 6.66 ha in size (Dixon, 1999), p. 185

urban areas. A population growth of more than 2.5% up to the beginning of the 1980s, the existence of a free peasantry and a perception of unlimited land and natural resources explains the rapid growth of farms and expansion of farm land holdings. As the Royal Forest Department from the beginning of the development epoch was entrusted with the task of preserving 50% of the land under forest cover, that was revised downward to 40% with the Forestry Act of 1964 (Pasuk Phongpaichit and Chris Baker, 1999), p.62, a major contradiction evolved between the RFD feeling obliged to protect national resources and small-scale farmers struggling to protect their livelihoods. These conflicts have dominated the political scene ever since the 1970s and have become major issues in the struggles for democracy and decentralisation during the 1990s and into the new century.

The Impact of the WTO Agreement on Agriculture

Thailand is a member of the Cairns group and is as such a staunch supporter of the WTO and of liberalising world trade also with agricultural commodities under the Agreement on Agriculture (AoA). Especially the Ministry of Trade sticks to the official perception of Thai agriculture as a commodity producing trade and hence considers growth of volume in production and promotion of commodities for the export market as the main role for the agricultural sector. The former minister for Trade, Dr. Supachai Panitchpakdi therefore was an obvious choice as the Secretary General for WTO from 2002⁶².

The official Thai perception of the WTO AoA is very much in line with the official WTO neo-liberal perception of free trade that will benefit developing countries. A closer look at the AoA reveals that it will impact the Thai agricultural sector along three main avenues:

The export market. Thailand is together with the other members of the Cairns Group working hard within the WTO to remove export subsidies and domestic support of agriculture in EU, US and the other rich OECD countries. The Ministry of Trade is a firm believer, for good reasons, that if all subsidies and other trade barriers were removed at the world market, Thai agriculture and not least Thai based agribusiness companies stand to gain

⁶² In an interview with the Thai newspaper, The Nation after the 2001 WTO Ministerial Meeting in Doha, Dr. Supachai was confident that Thailand will gain from the world market liberalisation and was so frank as to consider the September 11 terrorist attacks on the US as 'blessings that helped galvanise agreement on a new round of trade talks' (The Nation, November 22, 2001).

major market shares. A further liberalisation of the world market will further enhance competition and subsequently enhance product specialisation. The famous Thai Jasmine rice can undoubtedly increase its market shares among affluent consumers world-wide, while low quality grades will meet stiffer competition from countries in the Region with higher productivity and lower wages. However, the comparative advantages Thailand enjoys for producing Jasmine rice due to its favourable natural conditions can possibly be overtaken by genetic modification of the rice strain. One American based TNC has already genetically modified the Thai Jasmine rice with the likewise famous Indian Basmati rice and is marketing its own Basmati rice. According to the WTO/ TRIPs rules, the company has claimed intellectual property rights to the new strain, which they have the economic power to market world-wide. Similarly, an American scientist has developed a new strain of the Jasmine rice that can grow under the climatic conditions in the USA and potentially threaten a major export market for Thai rice⁶³.

In another case there are examples of Mexican farmers complaining that cheap Thai pineapples are ousting pineapple farmers in Mexico. At a world market without subsidies and other trade restrictions, the most effective producers (from a market-economy point of view) will gain market shares, which will always be felt as a disadvantage to the local producers. Even though this is not the case, Thailand has in recent years become one of the world's biggest exporters of canned pineapple, exporting 11.768 metric tons in 1999 at a price of 2.4 million Baht per tons, which was the third lowest price at the world market that year, surpassed only by Indonesia and the Philippines (Office of Agricultural Economics, 2001a). What the market price does, however, not include are the ecological and social costs of production and trade. The more competitive products at the world market might be produced under ecologically adverse conditions that possibly erode long-term ecological sustainability. Anyhow, the ecological costs of transportation are not included, as they mainly will be born by future generations. Also the socio-political costs of eroding self-sufficiency of local communities by importing cheap foodstuff from the world market are not considered in the utilitarian economy⁶⁴.

⁶³ The issue is widely discussed in Thailand where there is a fear that American scientists will steal indigenous resources belonging to the Thai farmers. The Thai newspapers during the last half of 2001 brought many stories describing the issue, e.g. Bangkok Post, October 24, 2001.

⁶⁴ In the case with Thai pineapples, the import has sent prices plummeting in Mexico where 100 000 people depend on pineapple for their living. The price of the imported canned Thai fruit is so low that

The domestic market. According to the AoA all non-tariff barriers shall be tariffed and subsequently reduced by 24% for developing countries before 2004. Thailand, therefore, shall remove tariff quotas on 23 commodities that were considered sensitive to small-scale farmers. For two such products, maize and soybeans a steady decrease in the areas planted with the two crops can be observed during the 1990s. The area harvested with the two crops fell between 1990 and 2000 from 1.5 million ha to 1.3 million ha for maize and from 408 000 ha to 241 000 ha for soybeans(FAO, 2001). Meanwhile the value of imported soybeans has tripled from 1996 to 2000(Office of Agricultural Economics, 2001a), replacing the deficit in domestic production⁶⁵. The farmers instead concentrate on export products. One example is the many farmers in northern Thailand who have given up production of the traditional sticky rice for home consumption and now concentrate on paddy for export.

Minimum access requirements are part of the AoA that enforce developing countries to establish import opportunities for 1% in 1995 (of 1986-88 domestic consumption) that is to increase to 4% by 2004. When the AoA came into function in 1995, Thailand didn't import rice but was forced to establish import opportunities and in 1999 the world's biggest exporter of rice imported 1400 metric tons. But wheat, that is not produced in Thailand and never was part of the Thai diet, is now being imported in a big way with 788 000 metric tons in 1999, which is 135% more than Thailand imported in 1989(FAO, 2001), p.147, before the commencement of the AoA.

Also the domestic support of agriculture, that for developing countries is a major obstacle to compete at the rich countries markets is going to be reduced by 20% for the developed countries (except for 'green box' measures) and only 13.3% for developing countries (see Chapter). As for most developing countries, the domestic support of agriculture is negligible. In Thailand the domestic support of agriculture is 443 Baht (app. 10 USD) per person or less than one fourth of a percent of the per capita support of US agriculture(Kittampon and Nabangchang, 2001)

despite 23% import duties the local growers cannot compete. The result is that children are pulled out of schools to replace hired farm labour who subsequently are trying to cross illegally into the USA to flee the economic hardship. (Chris Kraul. Chicago Tribune, September 16, 2001).

⁶⁵ A decrease in area planted or harvested in all of the 23 sensitive products can, however, not (yet) be statistically observed.

Transformation of agriculture as a way of life. The above mentioned changes at the export market and the domestic markets have a major impact on the transformation of the Thai agriculture, producing both losers and winners. The NGOs and the civil society in Thailand, however, have mainly been concerned with the impact of the AoA on food security and on agriculture as a way of life. With higher specialisation in exportable commodities, the farmers become increasingly dependent on the market for buying agricultural inputs and foodstuff for consumption. Many farmers already have experienced decreasing prices for their cash crops and increasing prices for the purchase of agricultural input and basic necessities. Many farmers subsequently have become indebted and dependent on moneylenders, agribusiness companies and agricultural financial institutions. As admitted by one of Thailand's main negotiators during the Uruguay Rounds leading up to the establishment of the WTO: 'that our farmers are still poor despite rising export. Now we know that small farmers did not gain from the (WTO) negotiations' (The deputy permanent secretary, Ministry of Agriculture and Co-operatives quoted in the Bangkok Post 2.9.2000). In the same article the deputy permanent secretary confirms the concern of the NGOs and leading critics from the civil society that Thailand's agricultural policies during the development epoch of introducing the technologies of the green revolution and boosting trade only led the small-scale farmers into debt problems, which the Ministry could not help them with.

The somehow romantic picture of the Thai self-sufficient agriculture with colourful women transplanting rice in the green paddy fields with water buffaloes roaming is changing. Tractors have almost entirely replaced the buffaloes. Only in the three years from 1997 to 1999 did the number of buffaloes decrease from 2.9 to 1.9 million (Office of Agricultural Economics, 2001b), p.83. The young women (and men) do not any longer want to work in agriculture but are supplementing the household livelihood through off-farm incomes, often in urban areas. Transplanting rice is too labour demanding and has in most cases been replaced by direct seeding. Food production, however, keeps on increasing with the production in 2000 almost 20% above 1990 level (FAO, 2001), p.18. But agriculture as a way of life is gradually being replaced by a number of alternative income-generating activities that enable the household to stay on the farm. Farming, once a way of life, is now a livelihood, one occupation among others. Declining land resources, stagnant prices for farm produce, and a rising

range of demands on families' incomes has sharply curtailed the ability of agriculture alone to meet household needs(Rigg and Nattapoolwat, 2001), p.957 and off-farm occupations and activities have become important for most households' livelihood strategies.

Ways ahead for Thai agriculture

The financial crisis of 1997 made it clear that Thailand has become very integrated in the new phase of the global economy. Due to its high dependence of FDI and the low value-added in the manufacturing export sector, Thailand found itself in a vulnerable position. The government hence sees the need to revitalise the agricultural sector to make it increase its contribution to the national economy. At the one hand there was a need to enhance the commercial sector in terms of increase in productivity and market shares and at the other hand a need to ensure a better livelihood for the majority of the Thai population that is dependent on agriculture for their daily livelihood.

Constraints and options for the commercial sector

Agriculture's contribution to Thailand's GNP has fallen to below 10% by year 2000, while its contribution to total export stood at 22.6%. Thailand kept its position as the world's biggest exporter of rice, natural rubber and canned pineapple. Rice that used to be the most important export item, has fallen to a third rank behind shrimps and natural rubber(Office of Agricultural Economics, 2001a). Meanwhile both the production and export of high value commodities such as fruits and horticultural products together with poultry keep increasing. Thanks to the expansion of airfreight, fresh and frozen products from Thailand are gaining shares in up-markets, mainly in the rich countries. The success of Thai agricultural exports largely attributes to Sino-Thai export companies that have evolved into fully fledged agribusiness companies that have their own primary production but also engage a large number of small-scale farmers producing on contracts.

Although Thailand has started diversification of its exports away from the mono dependency of rice to high value commodities, the case of cassava shows the vulnerability of the export markets. During the 1970s and 1980s Thailand promoted the farmers in the poor Northeast Region to grow

cassava in big scale⁶⁶ and export it to the European market that had a rapid growing demand for its high content of starch for its animal feed production. However, due to the Common Agricultural Policy of the European market, the European farmers were subsidised to produce a surplus of grains that eventually substituted the cassava in the feed production. This resulted in a major crisis for the farmers in the Northeast as they had exhausted their poor soils by growing cassava and had become economically dependent on the European market that eventually closed off.

Commercial agriculture has reached a point of saturation. The agricultural frontier has closed off as the real forest cover now maybe less than 20% despite the official policy of retaining 25% as protected forest(Bello et al., 1998), p.175. The percentage of agricultural land out of total land fell from 40.3% in 1989 to 35.2% in 1999(FAO, 2001), p.4. The agricultural productivity of its main commodity - rice - is the lowest in the region with yields per ha of only two thirds of Vietnam, its closest competitor at the world market(Office of Agricultural Economics, 2001b), p.1 . The use of agricultural inputs like fertilisers is still remarkably low although it increased rapidly during the economic boom years from 1985. The lack of agricultural labour, due to competition from non-farm activities, further constrains the future growth of the commercial export oriented agriculture.

New export niches, like shrimps, fruits and horticulture maybe economically beneficial and may be able to revert the decline in agriculture's contribution to the GNP but have at the same time major adverse environmental impact. Thailand's largest agribusiness company, CP, is also the biggest operator in the new and rapidly growing shrimp industry. CP is producing some 70% of all shrimp feed which has increased from 5000 tons in the beginning of the 1980s to 700 000 tons in 1997. CP has adapted its vertical integration model from chicken contract farming and now have control over some 5000 ha in the coastal zone through some 10 000 contract farmers(Falvey, 2000), p.311). Both the feed and the antibiotics applied in the aquaculture pose major environmental threats to surrounding paddy fields and to the breeding grounds for fish in the coastal zone. Also the mangrove forests that protect the coastal zones have been destroyed in big scale as the number of shrimp farms have almost doubled during the 1990s⁶⁷. With the present

⁶⁶ The area planted with cassava expanded from 225 000 ha in 1970 to 1 117 000 ha in 1980 and 1 530 000 ha in 1990(Dixon, 1999) p. 150).

⁶⁷ The number of shrimp farms, according to some sources, increased four times and the area covered by shrimp farms increased two and a half times during the 1980s(Bello et al., 1998), p.189. According to the

technologies, land and mangrove forests that have been used for shrimp farming turn into bad land that cannot be reclaimed due to the high level of chemical contamination. Likewise agro-chemicals applied to enhance production of fruits and horticulture and not least to preserve them for long distance transport creates environmental problems. The apparently reasonable returns to small-holders have yet to be weighed against the cost of an unsustainable practice or the wider economic cost of this modern form of shifting agriculture which leaves final risks with the small-holder⁶⁸. However, the more environmental regulations the Thai government imposes on these, to the investor economically beneficial commodities, the more will the investors look for alternative opportunities in neighbouring countries blessed with similar natural resource endowments⁶⁹.

Also in the use of modern technologies like GMO will Thailand have to take side, by either allowing the already widespread use of GMO technologies for scientific purposes to be used for regular commercial production or, alternatively, follow the EU and Japanese markets and let the principle of precaution prevail. On the investment side, Thailand in 1998 requested the ADB for a loan for restructuring of the agricultural sector.

This was shortly after the IMF had extended substantial loans to Thailand to bail it out of the financial crisis and the request to ADB was an effort to balance between the conditionalities given by the global IMF and the regional, Japanese influenced, ADB although the two institutions by and large supported each others (Buch-Hansen, 2001a), (Bello, 2000). Especially on credits to small-scale farmers did IMF insist on an equal rate of interest for small-scale farmers as for the industrial sector, while ADB accepted a subsidised rate of interest for small-scale agriculture credits⁷⁰.

Office of Agricultural Economics, the number of farms increased from 14235 in 1989 to 25977 in 1998 surprisingly without the area has increased according to (Office of Agricultural Economics, 2001b), p.113. Vandergeest et. al. report that it's difficult to get the correct number of shrimp farmers and area of farms as most small farmers avoid registering their farms. However, by 1998, according to one survey, 24% of the west coast mangroves of the Thai peninsula was converted to shrimp farms, even though the west coast was less severely damaged than the east coast. (Vandergeest et al., 1999)p. 581

⁶⁸ quoted from (Falvey, 2000) p.311)

⁶⁹ Vietnam has experienced a rapid growth in shrimp farming which will, with little doubt, happen in Myanmar and Cambodia as well, similar to what happened to the logging of valuable tropical timber after Thailand imposed a ban on tree logging in 1989.

⁷⁰ Personal communication in the Ministry of Agriculture and Co-operatives, April 2002.

Constraints and options for self-sufficiency agriculture

The King already under the economic boom in 1994 and again in 1995 in his traditional birthday speeches introduced his New Theory for Thai smallholder agriculture. Although the Thai economy was booming at that time and still more small-scale farmers got themselves involved with non-farm occupations, the King feared for the sustainability of the development being pursued. After the crisis, government officials again point to the need for “Sufficient Economy” as defined by the King⁷¹ and raise concerns on the ecological sustainability of resource uses. As suggested by the deputy permanent secretary to the Ministry of Agriculture and Co-operatives is the purpose of sustainable production to ensure reproductive capacity of the natural resource base. It does not mean, however, that the State is encouraging producers to withdraw from the market economy. Widespread adoption of sustainable agriculture means that the practice have to be economically viable at the micro-level in terms of costs and benefits of different methods of production(Kittampon and Nabangchang, 2001), p.14)

Local communities and a broader range of the Thai civil society have for years been striving to pursue a more sustainable development model. They were joined by many academics that after the 1997 financial crisis asked: “what have we learnt?”⁷². Obviously sustainability needs to include both economic, socio-political and institutional, apart from ecological aspects(Buch-Hansen, 2001b), but a major constraint directing attention to this other half of Thai agriculture has been clearly expressed by Mr Channuan Rattanawaraha, a former deputy Director General of the Department of Agriculture:

”the main obstacle to revising agriculture in Thailand along more sustainable lines was the idea of cash crops was now deeply embedded in the psyche of both farmers and civil servants. What was needed was to change the philosophy of civil servants”(Rojanapaiwong, 2000), p. 127).

⁷¹ “Sufficient Economy” is based on the principle of economic moderation of Thailand to building resilience, ensure sustainability of agriculture and economic livelihood as protection against the fluctuations from the internal and external shocks of the market economy(Kittampon and Nabangchang, 2001), p.13)

⁷² See for example (Sauwalak Kittiprapas and Chettha Intharawithak, 2000),(Srisuan Kuankachorn, 1998)

While powerful agribusiness companies and government agencies support the commercial sector of Thai agriculture, the traditional small-scale farmers who are striving to enhance their livelihoods by obtaining self-sufficiency are being marginalised and left to seek non-farm employment to supplement the outcome of the farm. However, many NGOs and part of the civil society work for the hope that it will be realised that traditional small-scale agriculture can contribute positively to the welfare of the Thai economy, applying a broader perspective on economic values than strictly utilitarian values⁷³.

The efficiency of small-scale integrated farming systems in terms of resource use, risks minimisation, less need for commercial inputs and its potential contribution to gain markets shares in niches like organic production, not to mention its contribution to maintaining health and Thai cultural values, are so far untapped resources. Furthermore, a number of new production methods, such as integrated pest management, organic fertilisers application, root to plant biomass ratios, bio-extracts, agro-forestry, and improved water uses are seen as new scientific insights that can further enhance commercial agriculture, yet each has its antecedents in the type of agriculture practised by smallholders. To support the small-scale farmers outside the commercial sector with sustainable practises might mean re-educating the civil servants and change the general perceptions of agriculture in Thailand. However, coinciding with a growing global appreciation of smallholder solutions for commercial agricultural problems, this link between Thailand's two agricultural sectors can work against further marginalisation of small holder farmers (Falvey, 2000), p. 340-343.

Conclusions

The present phase of globalisation that in Thailand was started by the liberalisation of macro-economic policies from the mid-1980s that shifted the importance of export earnings from the commercial agricultural sector to manufacturing industries has somehow changed the image of Thailand. From the image of a rural society with a deeply rooted and unique culture of

⁷³ John Madely in his book calling for a new agriculture, reviews how Western-style, chemical based agriculture is facing a host of problems why it has no right to be considered a model for Third World countries to follow. Meanwhile there is a host of examples of organic, integrated and holistic, sustainable agriculture practices that are increasing productivity while maintaining long-term production capacities and reducing rural poverty. (Madeley, 2002)

its own to the economic powerful potentials of the urban-based 'fifth-tiger-economy' causing environmental degradation and loss of cultural integrity. The financial crisis of 1997 made it obvious to the Thai government that Thailand was in a vulnerable position, not because the new phase of globalisation was deviating so much from the development model embarked upon during the development epoch of the 1960s and 1970s, but because that model created a deep rift between the commercial, export-oriented agriculture and the mainly self-sufficiency agriculture left outside the mainstream development. When the agricultural frontier became closed off and the productivity the commercial agriculture was among the lowest in the Region this was neither economically viable nor was it ecologically sustainable when seeking to diversify into new products like cassava, shrimps or horticulture.

With the present policies of decentralising the responsibilities for local natural resource management there is a raising demand for devolution of power that will enable the small-scale farmers and local communities to develop agricultural practices that can in reality contribute to the self-sufficiency economy. While it is unrealistic to completely change the role of the commercial, export-oriented agricultural sector in the Thai economy, there is a need to create enabling conditions to enhance traditional technologies and local wisdom to improve agricultural practices among smallholders. This could both enhance economic sustainability through supplying new market niches as well as it will sustain long-term ecological productivity of natural resources while also maintaining health and cultural integrity. With the 1997 Constitution as well as the 8th and 9th Economic and Social Development Plans providing the political and legal framework for this endeavour, practical implementation still lacks behind.

The present phase of globalisation supports both trends of Thai agricultural development. The WTO Agreement on Agriculture will push for a further specialisation of the commercial, export-oriented agriculture promoting the big agribusiness even further and potentially creating further adverse environmental impact. The present phase of globalisation also calls for democratisation and decentralisation, that in the Thai context is support of local communities for sustainable utilisation of natural resources. The internal response to that in Thailand could very well be a question of neo-liberal utility economy measured in terms of money versus an ecological economy of sustainability measured in terms of life quality.

References:

- Bello, Walden. ADB 2000: Senior Officials and Internal Documents Paint Institutions in Confusion. *Creating Poverty: The ADB in Asia*. 2000. Bangkok, Focus on Global South.
- Bello, W., Shea Cunningham, and Li Kheng Poh, 1998. *A Siamese tragedy: development and disintegration in modern Thailand*. Zed, London.
- Buch-Hansen, Mogens. Is Sustainable Agriculture in Thailand Feasible? *Journal of Sustainable Agriculture* Vol. 18, no 2/3. 2001.
- Buch-Hansen, Mogens. Local institutions and the Political Process of Controlling Land and Resources in Thailand. Occasional Paper, International Development Studies No. 21, 175-201. 2001. Roskilde University.
- Buch-Hansen, Mogens. The Territorialisation of Rural Thailand between Localism, Nationalism and Globalism: Institutional Forces in a Theory of Local Development. *Tijdschrift voor Economische en Sociale Geografie* 94, no. 3. 2003.
- Dixon, C., 1999. *The Thai economy :uneven development and internationalisation*. Routledge, London.
- Falvey, Lindsay. *Thai Agriculture. Golden Cradle of Millennia*. 2000. Bangkok, Kasetsart University Press.
- FAO. *Selected Indicators of Food and Agriculture Development in Asia-Pacific Region, 1990-2000*. 2001. Bangkok, FAO Regional Office for Asia and the Pacific.
- Kittampon, Ampon and Nabangchang, Orapan. *The Grounds for Public Intervention in the Agricultural Sector in the Thailand*. 2001.
- Madeley, John. *Food for All. The Need for a New Agriculture*. 2002. London, Zed Books.
- Office of Agricultural Economics. *Agricultural Statistics of Thailand. Crop Year 2000/2001*. 2001. Bangkok, Ministry of Agriculture and Co-operatives.
- Office of Agricultural Economics. *Thailand Foreign Agricultural Trade Statistics 2000*. 2001. Bangkok, Office of Agricultural Economics.
- Pasuk Phongpaichit and Chris Baker, 1999. *Thailand: economy and politics*. Oxford University Press, Kuala Lumpur.

Rigg, Jonathan and Nattapoolwat, Sakunee. Embracing the Global in Thailand: Activism and Pragmatism in an Era of Deagrarianization. *World Development* 29 (6), 945-960. 2001.

Rojanapaiwong, S., 2000. State of the Thai Environment 1997-98. The Green World Foundation under the royal patronage of HRH Princess Galyani Vadhana, Krom Luang Naradhivas Rajanagarindra, Bangkok.

Sauwalak Kittiprapas and Chettha Intharawithak. Social Impact of the Thai Economic Crisis: What Have We Learned? 2000. Bangkok, Thailand's Development Research Institute.

Srisuan Kuankachorn. The Roots of the Thai Crisis: A Failure of Development. *Watershed* 3(3). 1998.

Vandergeest, P, Flaherty, Mark, and Miller, Paul. A Political Ecology of Shrimp Aquaculture in Thailand. *Rural Sociology* 64, no. 4, 575-596. 1999.