The Place of Small-Scale Thai Farmers in the World of Organic Agriculture¹

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Abstract

There is a growing body of studies in rural development today that examine alternative forms of agriculture and food systems and the implications to the Global South. The issue is quite relevant in Thailand, a country where a large proportion of the population is still engaged in agriculture, in one way or the other, despite the steady growth in industrial sectors.

Out of several different forms of alternative agriculture models, the focus of this article is organic agriculture, which has become popular in agricultural development alternatives, especially in reference to small-scale farmers in the Global South.

Specifically, I will challenge the common dictum that organic agriculture, as narrowly defined by certification standards, is a viable alternative for small-scale farmers in the Global South, making reference to a Thai example from fieldwork in northern Thailand, and provide additional recommendations.

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Introduction

In recent years there has been a growing body of rural development studies which have examined alternative forms of agriculture, as well as food systems, and their implications to the Global South.³ The search for alternatives comes from the lessons learned from productivity-centered, modernized agricultural schemes developed on a large scale during the 1950s and 1960s, or what Lyson calls "commodity agriculture," which, despite short-term growth in production, has in many cases created environmentally and economically unsustainable conditions, such as a heavy reliance on agrochemical inputs, a growing use of fossil fuels for mechanized cultivation and harvest operations, decreasing agro-biodiversity due to specialization in only a few commercial crop varieties, and longer-distance distribution channels between production, markets and the consumption loci.

The suggested alternative forms of agriculture include organic farming, fair-trade markets, Community Supported Agriculture (CSA), farmers' markets, direct marketing and urban farming, all of which can be summarized under what Thomas Lyson calls "civic agriculture" or Alternative Agri-Food Network (AAFN), as has often been discussed in rural sociology and related disciplines in recent years.

In this article, out of several different alternative agriculture models, I will focus on organic agriculture, because (1) it is the most well-defined and demarcated category, one which itself has become an object of scrutiny, (2) it has become the only form of alternative agriculture to have substantive meaning in the marketplace today, 6 and (3) it has been increasingly prescribed as one of the more desirable

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³ I am using the term 'the Global South' in a similar sense to the developing countries, the less developed countries, and in some instances, non-OECD countries, of which many, if not all, are located in the southern hemisphere.

⁴ Thomas A. Lyson, *Civic Agriculture: Reconnecting Farm, Food, and Community* (Medford: Tufts University Press, 2004).

Lyson.

⁶ Julie Guthman, *Agrarian Dreams: the Paradox of Organic Farming in California* (Berkeley: University of California Press, 2004) 111.

agricultural development alternatives, especially in reference to small-scale farmers in the Global South, for a variety of development projects at the grassroots level, for NGO activities, and within national agricultural policies and international development organizations.

Specifically, I will challenge the commonly held dictum that organic agriculture, as narrowly defined by certification standards, is a viable alternative for small-scale farmers in the Global South. I will first review the typical rationale for promoting organic agriculture and its problems. I will then present examples of organic agriculture initiatives that have already taken place, with particular reference to the Thai example from my fieldwork, and provide additional recommendations.

Certified Organic Agriculture: A Narrow Definition

Although vernacular uses of the term 'organic agriculture' are diverse, in the global marketplace, organic agriculture is clearly codified by independent, regional and national certification standards, such as: certification by the International Federation of Organic Agriculture Movements (IFOAM);⁷ the National Organic Program (NOP) through the United States Department of Agriculture (USDA);⁸ EU Regulation (EC) 834/2007,⁹ as published by the European Union (EU); Japan Agriculture Standards (JAS),¹⁰ published by the Japanese Ministry of Agriculture, Forestry and Fishery (MAFF); to name a few of the most commonly used standards.

While more than seventy governments have implemented regulations on organic farming and 21 countries are currently in the

⁷ The first set of standards was established in 1980; a certification program was established in 1992.

⁸ Organic Food Production Act of 1990. The NOP came into effect in 2002.

⁹ This new regulation came into force on January 1, 2009, with inclusion of regulations concerning Genetically Modified Organisms (GMOs); formerly it was European Union Organic Standard EEC 2092/91, which was agreed to in 1991 and came into effect in 1993.

¹⁰ JAS Organic standard was initially established in 2000 and amended in 2005.

process of drafting regulations,¹¹ many of the regulations are, in principle, compliant with the IFOAM Basic Standards and the Codex Organic Guidelines established in 1999 under the Codex Alimentarius Food Standards Program, as launched by the United Nations Food and Agriculture Organization (FAO) and the World Health Organization (WHO).

Today, 481 accredited organizations worldwide offer organic certification services. Most certification bodies are located in the European Union, the United States, Japan, South Korea, China, Canada and Brazil. In contrast, countries with emerging organic sectors, including Thailand, the Philippines, Senegal and Zambia, have few, if any, private agencies. 13

The definition of organic agriculture, recently updated and ratified by IFOAM in June 2008, is as follows:

Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.¹⁴

On the other hand, the Codex Alimentarius Commission states that:

Organic agriculture is one among the broad spectrum of methodologies which are supportive of the environment. Organic

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¹¹ Helga Willer and Lukas Kilcher, eds., *The World of Organic Agriculture: Statistics and Emerging Trends 2009*, IFOAM FiBL Report (IFOAM, Bonn, FiBL, Frick and ITC, Geneva: 2009) 20-21.

¹² Willer

¹³ Stewart Lockie, Kristen Lyons, Geoffrey Lawrence and Darren Halpin, *Going Organic: Mobilizing Networks for Environmentally Responsible Food Production* (Wallingford, UK: CABI, 2006) 63.

¹⁴ IFOAM, June 2008.

production systems are based on specific and precise standards of production which aim at achieving optimal agroecosystems which are socially, ecologically and economically sustainable... 'Organic' is a labelling term that denotes products that have been produced in accordance with organic production standards and certified by a duly constituted certification body or authority. ¹⁵

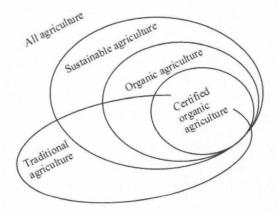
While organic agriculture as a whole is succinctly defined above, when it comes down to organic certification, there are usually technical criteria to comply with, those that follow formal, complex and documented processes administered by third-party certification bodies. Certified organic agriculture, so far, has been defined according to production process-oriented standards, rather than the final product-oriented standards; that is, the farming process itself is monitored instead of quantifying any synthetic substance residue in the final product. While the scope of this article does not allow me to list every single detail, one of the most commonly used criteria, in addition to the obvious prohibition of the use of synthetic pesticides and fertilizers, is that no synthetic substance should be applied to the land during a few years prior to sowing the crop, typically two years for annual crops and three years for perennial crops. Some certification standards acknowledge those crops going through the transitional periods to organic cultivation, while others only provide organic certification after the full duration of the transitional periods are over. Specifications, such as buffer zone requirements, physically separating the organically certified and conventionally managed land, also differ depending on the certification programs being followed.

In this narrowly defined sense, unless the product is certified by accredited entities, the use of the term *organic* in labeling is prohibited, with limited exceptions. For instance, under the USDA NOP regulation, farms selling less than US\$5,000 annually are exempt from formal inspection and allowed to use the term *organic*, not on product labeling, but on signs, although they are expected to comply with the organic production criteria.

¹⁵ Codex Alimentarius Commission, 2001.

Certified organic agriculture, therefore, is a narrowly defined subset of a variety of alternative, more environmentally sustainable forms of agriculture. Sophia Twarog visually shows the overlapping categories of agricultural practices found in developing countries in Figure 1 below.

Figure 1: Categories of Agricultural Practice Prevalent in Developing Countries 16



Note: Although the above figure is presented as "categories of agricultural practices prevalent in developing countries," it is also applicable to agriculture in the developed countries, those where some form of traditional agriculture is still practiced. Likewise, conventional agriculture does exist in developing countries. Whether conventional agriculture overlaps with sustainable agriculture, is a question that needs to be answered by carefully reviewing each agro-ecosystem over the long-term.

Traditional forms of agriculture include swidden ('slash-andburn') systems commonly found in tropical Asia and the Pacific, agroforestry, mixed farming and natural ('do-nothing') farming, to name but a few. Although some forms of traditional agriculture still

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¹⁶ Source: Sophia Twarog, "Organic Agriculture: A Trade and Sustainable Development Opportunity for Developing Countries," Chapter 3 in: UNCTAD, *Trade and Environment Review 2006* (New York and Geneva: United Nations, 2006) 144, UNCTAD/DITC/TED/2005/12.

remain to some extent in the so-called developed countries, in the development discourse, traditional agriculture in the developing countries has been the most problematized. While some forms of traditional farming have been found to be ecologically sustainable and more efficient in labor-crop turnout ratio than modern high-input agriculture, reduced fallow periods resulting from growing population pressure on marginal lands have in some cases driven traditional agriculture itself to become unsustainable. Likewise, some forms of traditional agriculture may fulfill the criteria of organic certification, but not always so; for instance, it is not always possible to establish the non-usage of synthetic substances during previous years, due to the lack of documented records.

Organic Agriculture: A Market Opportunity?

In the past decade, as the growth in certified organic agricultural products has become significant, organic agriculture has also started to appear within pro-poor policy recommendations, especially when referring to small-scale farmers in developing countries, those who were 'bypassed' by previous agricultural developments.

One of the common arguments is that conventional, productivity-centered "commodity" agriculture relies on mechanized cultivation and the application of agrochemicals, a system of production which benefits only those who can compete by expanding the scale of their production activities. Organic agriculture, on the other hand, relies more on labor inputs, something which the proponents of organic agriculture often argue farmers in developing countries have a relative advantage with because their labor costs are low or internalized within the farming household economy, especially in the case of small-scale farmers. Increasing oil and agrochemical prices have also acted as a rationale for advocating organic agriculture, which supposedly requires less oil and no agrochemical

¹⁷ See, for instance, Harold Conklin, for the swidden agriculture system in the Philippine. Harold Conklin, *Hanunóo Agriculture: A Report on An Integral System of Shifting Cultivation in the Philippines* (Rome: Food and Agriculture Organization of the United Nations, 1957).

inputs, safeguarding organic farmers against global price fluctuations for costly inputs, something that is beyond their control.

Another aspect is the potential market opportunities to be explored through the price premium that can be charged for organic produce and the growing demand for organic products in the global marketplace. While the growth in the global food industry overall has stagnated at four to five per cent, 18 the market for organic food, although small in total, 19 has been growing steadily at an annual rate of fifteen to twenty per cent since the 1990s. 20 For instance, the market for organic milk in the United States grew twenty per cent in 2003, despite having more than a fifty per cent price premium, while the conventional dairy sector stagnated.²¹

The global sales of organic food are estimated to have reached some 30 billion Euros in 2006, a twenty per cent increase from 2005, and are expected to increase to 52 billion Euros by 2012.22 Most certified organic food products are consumed in countries from the Organization for Economic Cooperation and Development (OECD). Other similar statistics suggest that, of the total global market of US\$33 billion in 2005, Europe occupied US\$17 billion, while North America made up US\$15 billion, together occupying ninety-seven per cent of the global market and leaving sales of US\$0.75 billion in Asia and US\$0.3 billion in Oceania far behind.²³

¹⁸ Michael Sligh and Carolyn Christman, Who Owns Organic? The Global Status, Prospects, and Challenges of a Changing Organic Market (Pittsboro, NC: Rural Advancement Foundation International (RAFI)-USA, 2003) 18.

¹⁹ It is estimated the market for organic food occupies only about two per cent of total global food sales, although in Denmark, one of the countries with the most developed markets for organic food, it has reached five per cent of market share (UNCTAD 2008: 8).

²⁰ Erik Millstone and Tim Lang, The Atlas of Food: Who Eats What, Where and Why (Berkeley: University of California Press, 2008) 88; Philip H. Howard, "Consolidation in the North American Organic Food Processing Sector, 1997 to 2007," International Journal of Sociology of Agriculture and Food, Vol. 15, No. 1 (2009): 13-30.

²¹ Samuel Fromartz, Organic, Inc.: Natural Foods and How They Grew (Orlando: Harcourt 2006) 218.

²² UNCTAD iii.

²³ Millstone 89.

Since the organic producers in OECD countries alone have not been able to catch up with this fast-growing demand, a large proportion of organic food, especially which sold in supermarkets, has been imported.²⁴ It is commonly argued that the producers in the developing countries should be able to seize this market opportunity by filling-in the shortage for in-season produce, as well as supplying the counter-seasonal and tropical organic food market in the more economically developed countries.

Organic producers, on the other hand, are concentrated in the Global South. The countries with the highest numbers of organic producers are Uganda and India; and almost half of the world's organic producers are located in Africa. Many of these producers in the developing countries are small-scale. Despite the fact that more than half of organic producers are located in the developing countries, only about one-third of the world's organically managed land, totaling approximately eleven million hectares, is distributed throughout Latin America, Asia and Africa.²⁵

This suggests that the market structure for organic food today may not be so drastically different from that of conventional food: the northern consumers with purchasing power demand the certified standards for agricultural products from the producers in the developing countries, a situation persisting from the colonial powers' domination of previous centuries. There is a growing body of literature on Mexican organic agriculture which suggests that Mexican organic agriculture simply reproduces existing social inequalities between large and small producers, as found in conventional Mexican agriculture. ²⁶

Although organic farming is considerably more environmentally sustainable than "conventional" or "commodity" based agriculture, its economic sustainability for small-scale farmers in the developing

²⁴ Millstone 88.

²⁵ Willer.

²⁶ For example, see: Laura Gómez Tovar, Lauren Martin, Manuel Angel Gómez Cruz, and Tad Muterbaugh, "Certified Organic Agriculture in Mexico: Market connections and Certification Practices in Large and Small Producers," *Journal of Rural Studies*, 21 (2005): 461-474.

countries is ambiguous, especially when the market structure for certified organic products operates in a similar way as for conventional agricultural products, or say, any commodity market.

The "Conventionalization" of Organic Agriculture

What is becoming prevalent in the market of organic food, in particular the certified organic food product market, especially in North America, is that the organic food industry is becoming larger in scale; either through the organic food companies themselves becoming larger, or that existing large-scale food companies are acquiring other organic companies or even starting their own organic business. This trend has made the organic food marketplace a tough battleground for independent small-scale producers to compete in and, at the same time, has brought about compromises in organic standards. all for the sake of appeasing growing industrial interests.²⁷

For instance, Earthbound Farm in California, despite its humble beginnings as an independent small-scale organic farm, grew a lot larger after they introduced bagged pre-washed baby lettuce and later expanded into a large-scale operation of pre-prepared salad mix. It has now become the largest organic food producer in the United States, and is the fourth largest in the US\$2.5 billion bagged-salad industry, holding a five per cent share of the entire bagged salad market, or 76 percent of the total organic salad market. 28 Such largescale production and market share has been achieved through the "organic mono-cropping" of salad greens, utilizing cheaper migrant labor and long-distance freight, in other words, going against the initial ideals of the organic agriculture movement that recognized the value of locally managed food systems.

There is also a trend towards the acquisition of independent organic brands by multinational food companies. For instance. Stonyfield, initially a small independent organic yogurt producer founded in 1983, has grown to be the fourth largest yogurt producer in

²⁷ Guthman: Fromartz.

²⁸ Fromartz.

²⁹ Guthman 138-139

the United States.³⁰ Eighty-five per cent of its shares, which is all of the non-employee owned shares, were acquired by the French company, Danone in 2004.³¹ The major acquisitions of organic food processors and their brands in North America occurred between 1997, when the first draft of the US national standard was released, and October 2002, when the prescribed eighteen month phase-in period was completed.³²

Such a capitalistic transition in the organic food industry structure, especially in the highly lucrative western markets, does not leave much room for small-scale producers in the developing countries to enter, let alone successfully compete in, because (1) the small-scale producers have a relative disadvantage in terms of economies of scale, and also (2) due to the highly complex and bureaucratic system of organic certification, within which paying the high certification fee is itself a stumbling block.

The Cost of Organic Certification

There are 481 certification organizations worldwide, offering certification services using the relevant organic certification standard criteria. While fee schedules differ among the accrediting organizations, depending on the concerned certification standards, they are usually composed of an initial application and inspection fee and an annual inspection fee, plus the travel costs of the inspectors.

For instance, California Certified Organic Farmers (CCOF), which was the first organization to provide organic certification services in the United States in 1973, charges US\$275 for the first-time application, and in the case of small- to medium-sized firms, certification inspection charges are approximately US\$700 in the first year, and US\$300-500 in subsequent years. Similarly, Oregon Tilth offers certification services, with its fees ranging from approximately US\$550 to US\$920, varying between in-state and out-of-state farms.

31 Howard 19.

³⁰ Sligh 19.

³² Howard 16.

³³ Willer 20-21.

Such organic certification fees are not small, even for North American small-scale organic growers, whose annual gross profit was as low as US\$20,000 in 2002.34 This cost is certainly beyond the reach of small-scale farmers in the Global South; the GNI per capita in sub-Saharan Africa, for instance, was a mere US\$951 in 2007.35

When the producers in developing countries acquire organic certification, they typically target the OECD countries' market, such that if the producers of organic baby corn in Thailand, for instance, have a contract with an European buyer, they seek to obtain EU certification, or an internationally recognized certification, such as IFOAM, or an accredited certification of another type, such as the 'bioagricert', an organic certification standard based in Italy. The high costs and complex processes involved in obtaining internationally accredited certification eliminates small-scale producers, and in reality, only existing large-scale enterprises can take the risks involved to enter the competitive export market.

The "Bifurcation" of Organic Agriculture

National agricultural policies and international development organizations reports often present organic agriculture as a magic wand which will solve most, if not all, of the world's rural development problems: lowering the costs of agricultural inputs and, therefore, reducing the farmers' debt burden; increasing environmental sustainability and food security; improving health; raising incomes; and empowering women.

Realizing the gap between the costly and complex process of export-oriented certified-organic agricultural production and the resources available for small-scale producers in developing countries, several scholars have pointed out that a "bifurcation" trend has begun to occur between the "conventionalized" form of organic agriculture and small-scale producers practicing a more regenerative form.³⁶ A

³⁶ Lockie 21, 35.

³⁴ Fromartz 97.

³⁵ World Bank, Key Development Statistics, World Development Indicators, August 2009 http://go.worldbank.org/1SF48T40L0.

positive recognition of such a "bifurcation" process will help to align rural development policies with their specific target beneficiaries across different settings.

In a similar sense, Vitoon and Wantop have recognized the two streams of development taking place within organic agriculture in Thailand, these being the rural development oriented programs and business oriented enterprises.³⁷ The rural development oriented programs, promoted by NGOs, farmers' groups and, in limited cases, local researchers, since the early 1990s have focused on creating sustainable rural livelihoods, and, in some cases, have incorporated market incentives by creating local organic certification services at much lower costs than international certification. The focus here is on sustainable rural livelihoods and the use of domestic markets. The latter group, the business oriented programs, refers to local entrepreneurs who have linkages to overseas markets and seek foreign organic certification as suggested by their overseas trading partners. The focus here is on revenue production and overseas markets. A failure to demarcate these two streams may bring disappointment to those small-scale producers who dream about one day exporting their organic products overseas, when they are then faced with the reality of high costs and a complex certification process, along with other demanding conditions presented by the commercial buyers, such as the contractual requirements to supply large quantities and provide timely deliveries.

In order to overcome the challenges of such bifurcation within organic agriculture, several approaches have been taken, such as: (1) exporting companies, NGOs, and governments bearing the international organic certification costs for the farmers in developing countries, (2) farmers forming cooperatives to share collectively the financial burden of international organic certification, (3) farmers and supporting agencies creating alternative and/or local certification systems, such as the Participatory Guarantee System (PGS), at a lower certification cost, (4) Fair Trade certification and other alternative

³⁷ Vitoon Panyakul and Wanlop Pichpongsa, Country Report: Thailand, Regional Conference on Organic Agriculture in Asia, December 12-15, 2007, Bangkok, Thailand.

trade schemes to ensure a fair price for producers and socially responsible production and distribution systems, (5) government intervention to promote more sustainable stewardship of farmland, such as area payments in some OECD countries, mainly in Europe, in order to give incentives for producers to convert to and continue with organic farming, and (6) harmonization and creation of regional organic standards, such as the East African Organic Products Standards (EAOPS) developed by a public-private-NGO partnership in 2007.

How Organic Agriculture Does Not Solve Everything: An Example from Thailand

To demonstrate the fact that organic agriculture does not solve all small-scale farmers' problems, I will take the example of a farming community in the northern uplands of Thailand, where what Vitoon and Wantophave called a "rural development oriented program of organic agriculture" has taken place.³⁸ The observations I reveal here are taken from fieldwork that took place between 2007 and 2009, and the names of the people involved have been concealed in order to protect their privacy.

In this farming community, except for my key informant household and just a couple of others, who are or once were locally certified organic farmers, the rest of the villagers conduct some form of conventional agriculture utilizing agrochemical application, even though they typically expressed an interest in using fewer agrochemicals when asked. One of the reasons why my key informant converted from conventional to organic agriculture more than ten years ago was deterioration in the household members' health, which they suspected was caused by exposure to the agrochemicals they used. Another reason was their encounter with the organizer of a local NGO, who preached the benefits of organic agriculture throughout the farming areas of northern Thailand. However, even though a group of more than twenty or so interested farmers were trained in organic farming practices, many went back to conventional farming after a

³⁸ Vitoon.

couple of years due to the initially declining yields and increased labor effort, and with the price premium in local and other domestic markets being negligible.

Weeding, especially, makes organic farming quite a labor intensive practice, and this makes the use of herbicides an attractive proposition for farming households whose children are either in school outside the village, or pursuing off-farm employment in urban areas. My key informant household stuck to organic farming, partly because they are happy with their improved health, but also because organic farming methods require a lower cash investment in terms of field preparation, as long as they have livestock manure and pairs of hands to do the work. Unlike the large-scale, commercial organic growers in the central plains, the smaller, scattered patches of upland farmland in northern Thailand force farmers to remain small in scale. In a way, my key informant's farm strikingly resembles the archetypal portraval of a small-scale farm as shown in the development reports: they plant rice for subsistence while growing mix-cropped vegetables in small patches and raising pigs, cows, chickens and, occasionally, catfish and frogs, both for sale and for home consumption.

It is, however, important to point out that as conventional farming requires external inputs and markets outside the village, this is also the case with what would seem to be a self-reliant organic farming system. Along with the annual spending on seeds and seedlings, fuel, agrochemicals (in the case of conventional farmers), and the miscellaneous need for consumer goods, the biggest expenditure is on debt repayments to the Bank of Agriculture and Agricultural Cooperatives (BAAC).

The typical reasons for applying for a debt facility include the purchase of property, farming inputs, the acquisition of vehicles and the children's education. Even though my key informant organic farmer told me that they have less debt than when they farmed using conventional agrochemicals, it may well be due to their frugal nature. They are one of the very few households who do not possess a pick-up truck in the village. An effort to spend as little as possible seems to be their strategy for keeping going on a day-to-day basis, but with little in the way of a retirement plan. Their children, the traditional social

safety net for parents in many parts of the developing world, are struggling to make ends meet in the city, and even themselves rely on their parents' agricultural loans from time to time. The fact that the majority of other farmers have not joined this almost stoic way of life may be a good indicator as to why a highly self-reliant sustainable agriculture lifestyle is not very popular, and, in most instances, requires the individuals involved to have an overarching philosophy, such as strong religious beliefs, in order to compensate for the material paucity involved.

One sentiment that is commonplace is that there are now more affluent lives to be experienced outside the village. Even in the uplands and hills, there are few places left that have not been influenced by global capitalism, including the movement of people, goods and information. Most of the Thai countryside now receives an electricity supply, and a TV set and satellite dish are one of the top priority items in Thai houses; providing evening entertainment. There are many houses with a TV connection, even though they have no indoor plumbing or windows. In some villages, foreign husbands, often from Europe and Japan, build modern, large, Western-style houses, highlighting that what affluent outsiders already have, might take the villagers more than a lifetime to accumulate. The inevitable upward mobility of rural agricultural producers, stimulated by the representation of a materially, more affluent outside world, does not ensure that a conversion to organic agriculture will reduce the debt burden on local farmers, as the development policymakers tend to formulate. Items that are considered absolute necessities, an education or a luxury item, continue to strangle the household budget.

Summary and Conclusion

It is essential to recognize the difference between the targeting of export markets in the Western markets and developing the yet untapped domestic market for organic agricultural products in the developing countries. Globally, food sold within borders, both conventionally and organically produced, still accounts for ninety per cent of the food traded globally; therefore, the export market, although

significant in absolute terms, still represents a small segment of all the food sold.³⁹ At the same time, however, in developing countries, particularly in Africa and Latin America, agricultural exports make up more than 50 per cent of the trade revenue. 40 Thus, certified organic agriculture still makes up a small segment of a small proportion of the food traded on the world economy, but at the same time, it is of significant importance for developing countries, where the growth of other revenue-generating industries lags behind. As a result, many developing countries have made it a priority to develop certified organic products, primarily to boost foreign earnings, and also because the domestic organic market is in its infancy or may be nonexistent, due mainly to the continued practice of subsistence agriculture for growing food crops. 41 In Africa, almost all certified organic food is grown for export, primarily to Europe. 42 It has been recognized, however, that production for export brings little benefit to local populations "especially for the poor". 43

Although organic agriculture may be seen by policy makers as a fix-all formula for all aspects of rural development, it would be more constructive to recognize that the markets for agricultural products are very different and may place very different requirements on producers in developing, high-risk, export-driven agriculture and maintaining locally based sustainable rural livelihoods. Ultimately therefore, as the case in Thailand suggests, the challenges for agrarian development also lie within the wider framework, that agriculture pays producers so much less than other sectors, thus maintaining social inequality.

³⁹ Millstone 74.

⁴⁰ Millstone 74.

⁴¹ Lockie 26.

⁴² Nicholas Parrott and Fred Kalibwani, "Organic Agriculture in the Continents – Africa," *The World of Organic Agriculture: Statistics and Emerging Trends*. Eds. Eds. Helga Willer, Minou Yussefi-Menzler and Neil Sorenson (Bonn: International Federation of Organic Agriculture Movements, 2004) 55-68; Lockie 26.

⁴³ Miguel Altieri, "Non-Certified Organic Agriculture in Developing Countries." Organic Agriculture, Environment and Food Security, Eds. Scialabba, Nadia El-Hage and Caroline Hattam. Environment and Natural Resources Series No. 4 (Rome: FAO, 2002) Chapter 4.

References

- Altieri, Miguel. "Non-Certified Organic Agriculture in Developing Countries." *Organic Agriculture, Environment and Food Security*. Eds. Scialabba, Nadia El-Hage and Caroline Hattam. Environment and Natural Resources Series No. 4. Rome: FAO, 2002. Chapter 4.
- Conklin, Harold. Hanunóo Agriculture: A Report on An Integral System of Shifting Cultivation in the Philippines. Rome: Food and Agriculture Organization of the United Nations, 1957.
- Fromartz, Samuel. *Organic, Inc.: Natural Foods and How They Grew.* Orlando: Harcourt 2006.
- Goodman, David and E. Melanie DuPuis. "Knowing Food and Growing Food: Beyond the Production-Consumption Debate in the Sociology of Agriculture." *Sociologia Ruralis*, Vol. 42, Number 1 (January 2002): 5-22.
- Guthman, Julie. *Agrarian Dreams: the Paradox of Organic Farming in California*. Berkeley: University of California Press, 2004.
- Howard, Philip H. "Consolidation in the North American Organic Food Processing Sector, 1997 to 2007." *International Journal of Sociology of Agriculture and Food*, Vol. 15, No. 1 (2009): 13-30.
- Levin, Penny and Vitoon Panyakul. "Thai Farmers Search for Viable Alternatives: Agriculture of Agribusiness?" *ILEIA Newsletter*, Vol. 9, No. 4 (1993): 11-14.
- Lockie, Stewart, Kristen Lyons, Geoffrey Lawrence and Darren Halpin.

 Going Organic: Mobilizing Networks for Environmentally
 Responsible Food Production. Wallingford, UK: CABI, 2006.
- Lyson, Thomas A. *Civic Agriculture: Reconnecting Farm, Food, and Community.* Medford: Tufts University Press, 2004.
- Millstone, Erik and Tim Lang. *The Atlas of Food: Who Eats What, Where and Why*. Berkeley: University of California Press, 2008.

- Parrott, Nicholas and Fred Kalibwani. "Organic Agriculture in the Continents Africa." *The World of Organic Agriculture: Statistics and Emerging Trends*. Eds. Helga Willer, Minou Yussefi-Menzler and Neil Sorenson. Bonn: International Federation of Organic Agriculture Movements, 2004. 55-68.
- Reynolds, Laura T. "The Globalization of Organic Agro-Food Networks." *World Development*, Vol. 32, No. 5 (2004): 725-743.
- Rundgren, Gunnar. "Number of Organic Certifiers Jumps to 468." *The World of Organic Agriculture: Statistics and Emerging Trends.* Eds. Helga Willer, Minou Yussefi-Menzler and Neil Sorenson. Bonn: International Federation of Organic Agriculture Movements, 2008. 73-75.
- Sligh, Michael and Carolyn Christman. Who Owns Organic? The Global Status, Prospects, and Challenges of a Changing Organic Market. Pittsboro, NC: Rural Advancement Foundation International (RAFI)-USA, 2003.
- Tovar, Laura Gómez, Lauren Martin, Manuel Angel Gómez Cruz and Tad Muterbaugh. "Certified Organic Agriculture in Mexico: Market connections and Certification Practices in Large and Small Producers." Journal of Rural Studies, 21 (2005): 461-474.
- Twarog, Sophia. "Organic Agriculture: A Trade and Sustainable Development Opportunity for Developing Countries." Chapter 3 in: UNCTAD 2006. *Trade and Environment Review 2006*. New York and Geneva: United Nations, 2006. UNCTAD/DITC/TED/2005/12.
- UNEP-UNCTAD. Capacity-Building Task Force on Trade, Environment and Development. *Organic Agriculture and Food Security in Africa*. New York and Geneva: United Nations, 2008. UNCTAD/DITC.TED/2007/15.
- UNCTAD. *Trade and Environment Review 2006*. New York and Geneva: United Nations, 2006. UNCTAD/DITC/TED/2005/12.

- Vitoon Panyakul and Wanlop Pichpongsa. Country Report: Thailand. Regional Conference on Organic Agriculture in Asia. December 12-15, 2007. Bangkok, Thailand.
- Willer, Helga and Lukas Kilcher, eds. *The World of Organic Agriculture: Statistics and Emerging Trends 2009*. IFOAM FiBL Report. IFOAM, Bonn, FiBL, Frick and ITC, Geneva, 2009.
- World Bank. Key Development Statistics. World Development Indicators. Accessed online, August 2009 http://go.worldbank.org/1SF48T40L0.