

Certification Standards and the Governance of Green Foods in Southeast Asia

Steffanie Scott (University of Waterloo, Canada, sdscott@uwaterloo.ca)
Peter Vandergeest (York University, Canada) and
Mary Young (York University, Canada)

Paper prepared for the
'Private Governance in the Global Agro-Food System' Symposium
23-25 April 2008, Muenster, Germany

Introduction

With the advent of widespread ecological and socioeconomic concerns over the model of 'green revolution' agriculture in the global south, social movements emerged in the 1970s and 80s to work with farmers to develop 'alternative' agricultural practices. In the case of Southeast Asia, these were the seeds of current-day organic production, which has become increasingly subject to certification in order to market products in corporate-controlled supply chains. These shifts in the agri-food system have paralleled growing concerns by consumers—subsequently played up by advertisers—in the global north and south about the quality and safety of the food system. Discriminating consumers have increasingly demanded environmentally friendly production that is respectful of animal welfare, labor, and social standards. This in turn has led to the introduction of a plethora of eco-labels and standards, set by public as well as private sector agencies, including standards for organic production. Other transformations in the agri-food system in recent years include shifts in marketing power from manufacturing to retailing, a more strict regulatory environment, a stronger voice of consumers and civil society, and the globalization of supply and distribution systems (Fulponi 2007).

These trends have understandably led to concerns over the corporate role in the food system, including retail power (Lang and Heasman 2004; Fuchs et al. forthcoming), and to growing demands for transparency in food system governance (see Smyth, forthcoming). Many consumers, food activists, and academics have associated organic or similarly labeled foods as with healthiness, environmental sustainability, and more broadly with a critique of conventional or industrial agriculture, as summarized by Julie Guthman (2004: 3-9; Pugliese 2001). More recently, however, agri-food scholars and activists have elaborated a scathing critique of the industrialization of organic farming. How environmentally friendly is it to ship organic greens produced on corporate Californian farms to supermarkets in Toronto, let alone to ship organic apples from New Zealand? As the organic sector in the US and other sites in the global north become increasingly mainstreamed into conventional agriculture (Guthman 2004; Pollen 2006: 134-184), observers accuse it of "floating in a sinking sea of petroleum" (Pollen 2006: 184) for the way the organic industry rests on hydrocarbon energies for processing and transportation.

At the farm level, meanwhile, local ecological knowledge has been pushed aside by international standards that remove organic farming from social and ecological

contexts and reduce it instead to a set of techniques and documentation requirements that can be applied around the world (Campbell and Stuart, 2005, Vandergeest, 2007, Mutersbaugh 2005b). According to Campbell and Stuart (2005: 95), “by shifting the disciplining of organic from the mutable immobile realm of co-production between the organic social movement, growers, and biophysical nature at the local level, to the wider audit disciplines of immutable mobile global standards, the chances for long term sustainable outcomes for organic production are clearly diminished.” One response among those who reject these trends has been to put more emphasis on buying from local farmers, now codified in the popular terms like “food miles” or the hundred mile diet.

In this paper we outline how parallel debates have emerged in the global south, drawing on our research in three Southeast Asian countries: Thailand, Indonesia, and Vietnam. We track the various controversies over the growth in influence of local and transnational agri-food corporations into organic agriculture, noting how the latter have in some senses taken advantage of the past efforts of social movements and NGOs working with farmers to develop alternative agricultural practices. The controversies take different forms in the three sites depending, among other things, on the relative influence of vigorous social movements promoting alternative agriculture, the degree to which agriculture is export-oriented, the relative importance of supermarkets in the domestic food market, and the support of government and donor agencies for organic production. We first review the debates over the conventionalization or mainstreaming of organic production, and the centrality of certification and corporate interests in this process.

Corporate power, certification, and the mainstreaming of organic agriculture

The world of organic certification is increasingly complex and contested, encompassing to various degrees private, state, and local processes. Organic and related farming systems (e.g., biodynamic) emerged during early 20th century in the global north, starting in Europe, and spreading to North America, Australia, and New Zealand. Organic farming was based in a critique of environmental and human health effects of petrochemical-based agri-inputs, and instead emphasized an integrated approach to cultivating the vitality of soils, plants, animals, and human health.

Certification of organic production was a response to growing consumer interest in organically produced food during the 1960s and 1970s; as an ‘extrinsic’ quality, not visibly detectable in the product itself, consumers and retailers needed to find a way of clearly identifying foods produced by farms that met clear standards. Initially, these guarantees were often provided by social movement organizations through personalistic and local associations—producer associations, food cooperatives, cafes and so on (e.g., see Campbell and Stuart, 2005; Mutersbaugh, 2005a: 397; Reynolds and Wilkinson 2007). In other words, certification was generally unnecessary in cases of direct marketing in which consumers know and trust producers. Certification tends to be introduced by agribusiness to create consumer confidence in instances where the consumer is not in direct personal contact with the producer (Johannsen et al. 2005). In this way, certification can be understood as an artifact of an increasingly commodified agri-economy that distances consumers from food production.

As the products of organic agriculture moved into more anonymous markets, with longer supply chains, larger organizations like the UK’s Soil Association formulated

general standards and inspection processes. The Soil Association began inspections and certification in 1973 (Smith 2006: 448). The 1970s also marked the formation of the International Federation of Organic Agriculture Movements (IFOAM), an umbrella organization of the major organic farming organizations of the global north; it facilitated the growth of organic certification through the formulation of its “basic standards,” first published in 1980. These standards, which are continually under revision, have formed the basis for private, state, and UN (Codex Alimentarius) organic standards (Organic Europe, n.d.).

The certification of organic food has been given an additional push as food safety and traceability have become cornerstones of new ‘value added’ qualities through which agri-food corporations sought to expand what could otherwise be a limited market growth potential in the global north, given slow-growing populations and “natural” limits on how much food any one individual can consume. Retailers are taking advantage of consumer concerns about food safety and environmental issues through niche marketing of ‘green’ foods, the labels of which can translate into significant price premiums paid by consumers. Private and commercial organic certification organizations emerged in part from the demand by supermarket chains to facilitate arrangements with producers, and a desire to sell qualities like food safety, animal welfare, environmental protection, and worker welfare to consumers.

As organic commodities have continued to grow in economic significance, additional layers of regulation and accreditation were formed, through intersecting networks of government, intergovernmental, NGO, and private bodies. Beginning with the EU’s adoption of organic agriculture standards in 1992, governments have created standards that increasingly restrict the use of the label “organic,” and have instituted accreditation of certifying bodies. The EU standards and process have been the model for many other governments. Also of growing importance are the standards adopted by the UN’s Codex Alimentarius, which are intended to be used for resolving trade disputes where exporting countries claim that importing government restrictions on the use of the label organic constitutes a trade barrier. Meanwhile, yet another level of standards for standards has been created by the increasing need for third party organic certification systems to conform to ISO Guide 65 processes, which sets out general requirements for third party certification systems (ISO, n.d.). As described by Mutersbaugh (2005b), third party certification systems that do not comply with the ISO 65 template can be challenged through the WTO as constituting a trade barrier.

IFOAM’s basic standards also function as a second level of standards for standards, and its accreditation is the key for international recognition in Southeast Asia. IFOAM in turn participates in a number of other international bodies that aim to harmonize international certification systems. IFOAM, the United Nations Commission on Trade and Development (UNCTAD), and the United Nations Food and Agriculture Organization (FAO) created the International Task Force on Harmonization and Equivalence in Organic Agriculture (ITF) in 2002 to facilitate discussion and harmonization among the international organic standards. The ISEAL Alliance has developed a “Code of Good Practice for Setting Social and Environmental Standards,” for member organizations, who include Fair Trade Labeling Organization International, the Forestry Stewardship Council (FSC), and others. Although the FSC was created partly out of a recognition of the need to more effectively link social and environmental

justice, the effect of these layers of standards for standards is also to continually move the templates that shape certification further and further from farmers. These moves are linked to a broader neo-liberal project of working with corporations to facilitate and regulate international trade, and to commodify environmental and labour qualities for sale to consumers.

The world of organic certification, in other words, has moved a long way from the days that groups of farmers could set standards in accordance with their local understandings of what constituted organic. The growing significance of ISO regulations, and the development of organic standards by Codex Alimentarius for the purpose of resolving trade disputes around organic food demonstrate how a corporate vision has arguably re-organized certified organic farming into a disciplinary process in which farmers need to comply with global standards to obtain entry into this sector. These layered, hybrid public-private, semi-transparent rules can be seen as a form of structural power that is remaking the organic agri-food industry in ways that are pro-market, that is, creating a new forms of commoditization and thus opportunities for corporate accumulation.

In terms of what this means for farmers: when organic food becomes defined by certification, then producers must follow explicit technical and administrative guidelines for certification from accredited agencies, and face regular inspections to test for compliance. Participation in the organic certification economy demands investment in compliance with internationally-established standards for the production of documents, inspections, and laboratory testing. Farming practices must be rendered visible and measurable. Keeping adequate records requires significant changes in farmers' practices. Other requirements (for 'good agricultural practice' standards) include farm upgrades (waste treatment and disposal, toilet facilities for workers, storage structures for farm inputs); use of protective equipment; training in hygiene and safety requirements; and avoidance of using fresh manure (Nguyen Phuong Thao et al. 2006). Certification requires inspections and documentation not only on the farm, but at each step in the commodity chain. This 'audit culture' (Friedberg 2007; Hatanaka et al. 2005) in global food regulation reflects neoliberal reforms that some authors argue have shifted governance from state organizations to the private sector (Campbell 2005). As we described above, however, the incursions specifically related to organic have taken place in the opposite direction, through state regulation into what began as primarily private—though not corporate—regulation.

The setting of standards, inspections, monitoring, and accreditation activities have become an industry in itself—employing workers to produce certified qualities through monitoring, and the production of documents that themselves become commodities (Mutersbaugh, 2005a: 393) Programs to certify food production are in effect a labor process for the production of values that are appropriated by different actors along the commodity network. The boom in international demand for organic products has created a burgeoning field of certification bodies and inspection companies. Not all are 'for profit' but they are jockeying for clients, and expanding rapidly.

Although IFOAM or Codex Alimentarius standards are intended to be flexible, and can technically be adapted when applied to local conditions, the bottom line is that international trade and corporate marketing require standardized standards. Moreover, individual buyers interested in increasing the market competitiveness of their products

can dictate the terms of what constitutes high quality standards and impose rigid and demanding requirements above and beyond those set by national standards or IFOAM and Codex Alimentarius. Activists and concerned consumers in the global north also tend to be more concerned that northern-based standards are properly enforced in southern contexts—whether the product is truly organic—than that the standards are flexible and locally appropriate. Thus, there is ongoing pressure to ensure that inflexible standards are rigidly enforced in the name of maintaining consumer confidence, at least in the agribusiness-controlled distribution channels.

A number of food activists and NGOs are rejecting the industrialization and mass marketization of organic food, provoking a number of schisms in the organic or alternative farming movement. In reaction to government restrictions on the use of the term organic, and the corporatization of organic food production, food system activists have become more interested in promoting local food systems and direct consumer-producer links. The criticisms have had an impact on IFOAM and other certified organic organizations that now recognize the need for increasing the scope for local-level flexibility to counter the exclusion of small farmers from using certified organic labels. Organizations like IFOAM are also paying more attention to social justice and labour standards, which in turn helped prompt the formation of ITF¹ and ISEAL.

These debates are particularly significant in the context of how certified organic farming has moved into the global south, where certification has become associated not just with industrial agriculture, but also with northern imperialism. Because certification is especially important for long distance supply chains, the certification of organic farming was introduced to global south producers by global north suppliers and retailers. Domestic certification systems in the global south often lack credibility (IFAD 2005), so most organic products destined for global markets require certification with international standards—or more specifically, with global north certification bodies. This leaves organic certification susceptible to an additional layer of criticism: in Thailand, for example, activists in the alternative agriculture movement argue that international organic standards were created on the basis of northern agriculture, and that there are many obstacles to participation by small farmers in the global south. Friedberg (2007) argues that the overriding of practical, local knowledge by codes of standards ensuring safety, quality and ethical content constitute an imperialism that builds on other forms of imperial governance (see also Vandergeest 2007).

These debates are articulated among food and agriculture activists in Southeast Asia—an important site for the expansion of certified organic agriculture. The specific ways in which corporate organics has influenced agri-food systems and alternative agriculture movements depends on a series of contextual conditions including (1) the significance of export agriculture; (2) the relative importance of supermarkets; (3) the strength social movements promoting ecological or alternative agriculture, and (4) the role of government. In the next section we describe emergence and context of corporate organics in Thailand, Vietnam, and Indonesia.

¹ “A plethora of certification requirements and regulations are considered to be a major obstacle for continuous and rapid development of the organic sector, especially in developing countries. Sharing great concern in this regard, IFOAM, FAO and UNCTAD decided to join forces and agreed, that harmonization, mutual recognition and equivalency in the organic sector offer the only viable solution to overcome the problems indicated above” (ITF, n.d.)

Organic agriculture in Thailand, Vietnam and Indonesia

In Southeast Asia, certified organic production comprises one part of a larger movement to promote both organic farming and so-called ‘safe’ or ‘hygienic’ foods which are now common in food markets around the region. The number of farmers involved in producing ‘safe’ foods is growing rapidly, with the support of NGOs, development agencies, and governments. Many are sold uncertified in local markets; some are certified for food safety by health departments, others by agricultural departments, development agencies, and farmer cooperatives for characteristics including ‘pesticide free,’ ‘good agricultural practices,’ or corporate quality labels. Thus, local markets—including wet markets, small shops, and supermarkets—in these three countries sell a range of ‘green’ foods, much broader than only certified organic.

We use the term green foods as a catch-all label for a variety of foods with value added qualities promoted as natural or alternatives to mainstream products. These include those that indicate no chemical residues, sustainable farming, and, less often, traditional varieties. Conventional definitions of *organic* (e.g., IFAD 2005: xiii) explain it as an internationally certifiable (based on controls and traceability) farm management system that employs soil conservation measures, crop rotation, and the application of biological and manual methods instead of synthetic inputs. This can be contrasted with ‘safe’ or ‘hygienic’ foods, which are produced in accordance with maximum allowable residue limits for pesticides, nitrate and heavy metals, and microorganisms. These safe vegetable products use integrated pest management (IPM) or a reduced level of synthetic inputs than conventional/intensive (green revolution) farming, and may be domestically certified and labeled as such. While products may be labeled as clean, safe, green, or natural, the certification of such products is not necessarily clear. Finally, the products of what may be labeled as ‘*traditional farming*’ increasingly obtain premiums in local and regional markets. Traditional farming may be oriented toward local consumption, and use little or no purchased synthetic inputs; as such, some observers refer to these as ‘uncertified’ organic.

The following sections outline (1) the introduction of organic farming and (2) the introduction and current status of certified organic production in the three countries considered here. To set a brief context for the heterogeneity between the three countries, some basic socioeconomic data is presented in **Table 1**.

First phase: alternatives to the Green Revolution

Indonesia and Thailand have had a longstanding presence of strong development NGOs working to advance alternative agriculture. These organizations were critical of the ‘green revolution’ of the 1960s and 70s that promoted packages of high yielding seeds that required heavy applications of chemical inputs, and brought considerable profits to input supplying companies. Vietnam, in contrast, has had no significant domestic NGOs promoting alternatives to green revolution approaches.

In Indonesia, one of the best known NGOs is WALHI (Wahana Lingkungan Hidup Indonesia or the Indonesian Environmental Forum). WALHI was formed in 1980 as the result of the first national environment congress. In its early years, it focused on raising public awareness of environmental issues, specifically on air pollution, water pollution, pesticides and forest protection. Seen as pioneering the national environmental

movement and as a national level umbrella organization, by June 2004 it had grown to 438 member organizations across Indonesia. Moreover, in 1989 WALHI became the national member of Friends of the Earth International, supposedly the world's largest grassroots environment federation. WALHI is well known among local NGOs for its support of various other environmental and community organizations (WALHI n.d.).

Another well established Indonesian NGO that raised public awareness of the dangers of green revolution technology is the Pesticide Action Network (PAN) Indonesia. PAN started out as a group of representatives from various citizen groups that gathered in Penang, Malaysia in 1982 under the auspices of the International Organization of Consumer Unions (IOCU). These groups shared a concern over the "irrational spread and use of pesticides" and eventually an Asia Pacific Regional Office for the network (PAN AP) became independent of the IOCU in 1991. PAN AP promotes alternatives to pesticide use, the "best and the most viable" being "sustainable agriculture" or "bio-dynamic agriculture" (PAN International n.d.). PAN supports numerous projects and campaigns aimed providing information to individuals and other local environmental NGOs to reduce pesticide use.

A third example of an NGO in Indonesia that has played a role in sustainable agriculture is the Seloliman Environmental Education Centre (PPLH Seloliman). This NGO started later than WALHI and PAN; it was founded in 1991 in East Java. The Environmental Education Centre focused on promoting the basics of ecological farming, established a farmers field school and a community seed bank to preserve genetic diversity in rice, vegetables and corn. Courses on environmental education have been offered to school classes and other visitor groups (PPLH n.d.).

These three examples cannot adequately reflect the diversity of the alternative or sustainable agriculture movement in Indonesia, or even on Java. However, the three NGOs do show how a variety of environmental groups share some common vision about creating new agricultural practices, as alternatives to the green revolution model of farming. In addition, despite different foci, all three NGOs engage in campaigns to increase public awareness and generate critical dialogue around the social and environmental effects of green revolution technologies.

In Thailand, these kinds of NGOs worked with farmers during the early 1980s at the time that NGOs started to emerge. These organizations expanded their activities into many fields of alternative development, including alternative agriculture and environmental conservation. Farmers and NGOs working in specific sites around the country formed the national "Alternative Agriculture Network" (AAN) in 1984 in order to promote exchange and gain a voice in national-level social movement and policies. This network was in turn tied to a broader network of activist development NGOs organized around alternative development and challenging the government's priorities not just in promoting conventional agriculture, but also around forestry and commercial plantations, hydropower dams, fisheries, pipelines, and so on. It was a founding member and active participant in the well-known Assembly of the Poor, which subsequently staged massive demonstrations in Bangkok and forced a series of government policy concessions. The AAN eventually came to diverse organizations, including Bangkok-based NGOs such as BioThai², set up to address government policies and link to international activist networks; Green Net, which promotes certified organic and fair

² See <http://www.biothai.org>.

trade; Organic Agriculture Certification Thailand (ACT)³; and regional networks of NGOs and farmer groups such as the Southern Alternative Agriculture Network and the Northern Alternative Agriculture Network.⁴ Today some of the sites where the first farmer groups and local NGOs were most active in the 1980s are “exemplary sites” in these networks; sites that receive many visitors both from within Thailand and internationally.

The activities of these early NGO-led projects shows that the support of organic farming was embedded in a broader effort to promote agriculture that was an alternative to the input-intensive green revolution approach. This work was not just about a specific form of agriculture, but included a range of activities that sought to “empower” farmers and improve incomes. For example, many of these groups initiated marketing efforts that aimed to bypass traders whom farmers and NGOs thought were exploitative; these efforts formed the basis of cooperative rice mills that today are certified organic. In many cases, the narrative histories that visitors hear in these sites state that farmers became interested in organic agriculture because of the adverse health effects of agriculture chemicals. In other words, the primary emphasis was on “organic agriculture” as a component of a broader search for alternatives to conventional development practice—very little attention was given to marketing “organic food.”

In Thailand the significance of these NGO-organized projects for the later development of certified organic agriculture was also that the technical and managerial capacity developed in these sites made available potential “rents” (Mutersbaugh 2005b) associated with certification. In other words, the farmers and local NGOs had built up considerable capacity in technical, administrative, and marketing aspects of converting to and becoming certified in organic production. Continued NGO activities in farmer training and marketing up to the present arguably creates a kind of subsidy that can be appropriated by more market-oriented certification actors.

In Vietnam there is no parallel history of ‘civil society’ lobby groups advocating for alternative agriculture, although since the 1990s there has been a Vietnam Gardening Association, which promotes a model of ecological agriculture through nutrient cycling, and some international NGOs have formed a working group on sustainable agriculture. But the turn to green production has predominantly emerged in response to market incentives (to garner price premiums) and as government responses to food safety crises (through ‘safe’ foods). Traditional farming aside, organic agriculture arrived in Vietnam much later than in Thailand, and primarily through international NGOs and donor agencies and small private companies, although corporations buying organic products are now expanding their presence there.

The introduction and current status of certified organic

Corporate influence in green agriculture has spread unevenly and in various forms. In Southeast Asia, ‘alternative agriculture’ practices emerged in response to the chemical-intensive green revolution agriculture and were first oriented to subsistence production or local markets. Later, buyers from Europe seeking to buy organic crops approached farmers in areas where NGOs had already been working at promoting less

³ See <http://eng.actorganic-cert.or.th>.

⁴ See http://www.isacnn.org/isac_eng/ISAC_eng.html.

chemical-intensive production. As organics became mainstreamed, this demand gradually led to initiatives to certify production, with donor and NGO assistance.

There are elements within the alternative agriculture movement in Southeast Asia that are very interested in ‘market access’ for organic products. For these actors, value added is important to getting that access, and discipline (compliance with standards) is the means by which value added is attained. As shown below, certification was introduced by corporate buyers from abroad, and then facilitated by the expansion of supermarkets and the growing domestic market for safe and organic foods. In other words, the involvement of corporations made certification necessary. The implications of this led to greater debate (and dissention) within the broader alternative agriculture movement.

The story of what is likely the first case of certified organic farming in Thailand illustrates its corporate association.⁵ In 1989, Capital Rice, part of the Thai conglomerate STC and one of Thailand’s major rice exporters, was approached by an Italian buyer (Riseria Monferrato S.R.L.) about the possibility of producing organic rice. Capital Rice in turn contracted the Chiangmai-based Chaiwiwat Agro-Industrial Company to handle the production of the organic rice, with technical information provided by the Italian buyer regarding the creation of organic and associated documentation as required by the EU and IFOAM. The group identified sites in mountainous valleys in Chiangrai and Payao provinces that they understood to be relatively untouched by agri-chemicals. The government’s Department of Agriculture also participated in the project, conducting extension work with farmers, and then developing their own government standards for organic rice under what would later become the government’s Organic Thailand label (recently changed to ‘Organic Q’). The requirements built into the international standards regarding research and conversion periods meant that it was not until 1995 that Capital Rice started to sell organic rice under its Great Harvest label, mostly distributed through the Italian buyer throughout Europe, and certified by Bioagricert. Capital Rice has today branched out into other organic food products, and Bioagricert remains one of the major certifiers in Thailand, often working with government departments to expand organic farming.

Expanding market access for organic foods is often presented as a ‘solution’ to farmers and agribusinesses trying to cope with global market challenges. In the Indonesian case, for producers who have long engaged in export oriented agriculture, the incentive for organic certification may come from two factors: retaining existing market share, particularly if the export markets are becoming more stringent about standards; and the reverse situation: to preempt the above problem of hanging on to their existing market share by offering product diversification, both conventional and organic. Thus, there are two kinds of niches in the same market. In some cases, as with Indonesian export crops, it is not so much a move towards exporting organics as it is offering organics to already existing foreign buyers, given that some producers are already export oriented.

Thailand has been leading the region in the production and certification of ‘green’ foods, which are marketed both for export and domestically. The international demand for these value added products is spilling over onto domestic consumers in Thailand, to the point where the market of certified organic foods within Thailand bypassed the export market as of 2006 (Ratanawaraha et al. 2007). Visits to supermarkets (see below) show

⁵ Based on interviews 1 June 2007, and on Vandenberghe and Sarakosas (1997).

that certified organic is only the tip of the iceberg with respect to a wide range of food products certified as ‘green’, ‘natural’, or ‘safe’. The strength of the NGO movement in Thailand accounts for the establishment of Organic Agriculture Certification Thailand (mentioned above) as a member of the AAN. ACT is Southeast Asia’s only IFOAM and ISO 65 accredited certification organization, and offers certification for EU, NOP, and JAS standards. It has recently expanded its operations to establish itself as a regional services certification and inspection body, active through much of Southeast Asia. ACT can also inspect for other certification programs, and trains other inspectors.

Certified organic agriculture in Vietnam began in the early 2000s, and constitutes a mainly export-oriented enclave, subsidized by development donors, with some support from a government keen to promote exports. Vietnam produces certified organic vegetables, herbs and spices (cinnamon, star anise, ginger), tea, fruit, shrimp, catfish (*pangasius*), cashew nuts, and essential oils. As yet there is a very limited domestic market for organic produce, although national organic standards were introduced in 2007. A strong and growing domestic demand does exist for ‘safe’ food, particularly vegetables and meat. Safe vegetables are produced by commercial growers, near to urban areas, for urban markets. The organization and certification of these foods in the late 1990s followed from a string of food safety crises, most prominently associated with pesticide residues. In larger cities of Vietnam, a range of safe produce and poultry is increasingly available in supermarkets and some wet markets and small shops (Ho Thanh Son and Dao The Anh 2006; Moustier et al. 2006). The production of ‘safe’ vegetables in Vietnam has been clearly market-driven rather than for subsistence or as part of a food sovereignty movement.

The push for ‘safe’ or ‘clean’ vegetables and meats for the domestic market has also received impetus from the Vietnamese state, in collaboration with local-level farmers’ cooperatives⁶ and foreign and domestically-owned supermarkets⁷ (Phan Thi Giac Tam 2006). Vietnamese-owned Saigon Coop Mart has a reputation for promoting high-quality Vietnamese goods, and was the first supermarket to collaborate with an agricultural cooperative and the Department of Agriculture and Rural Development to market safe vegetables in Ho Chi Minh City in the late 1990s. Safe vegetables are now carried by foreign supermarkets in Vietnam, including the French-owned Big C, and German-owned Metro Cash and Carry.

Certified organic agriculture also began in Indonesia in the early 2000s. Indonesia’s organic sector is divided between an export-oriented production sector that is located mainly off Java, and a sector of food-crops on Java that targets the domestic market. Even though organic production is limited and there are no reliable statistics for the amount of production actually taking place, general and specific industry media coverage concur that the market for organics within Indonesia and for Indonesian exports has been increasing and is expected to continue doing so. One representative of

⁶ Until the 1980s, Vietnam’s agricultural production was largely organized into agricultural collectives, in which land and labor were pooled. These were subsequently disbanded to allow for the emergence of a market-oriented economy and allocation of land directly to households. A large number of voluntary cooperatives have since been formed, but mainly for coordinating agricultural services and inputs, while production is managed by each household, which has been issued a long-term land use-right certificate (Scott 2008).

⁷ The number of supermarkets in Vietnam grew from 2 in 1999 to over 100 in 2006. These food outlets account for approximately 10 percent of food sales (Agriculture and Agri-Food Canada 2008).

BIOCERT provided a rough estimate of the value of organic production in Indonesia as US\$250 million.⁸

Organic production in Indonesia is split in two streams. There is the export oriented production sector, mostly on islands other than Java, and its products are certified by representatives of international bodies and meet international standards. These export crops make up the bulk of the certified organic products in Indonesia. These include cashews, coffee, spices, and shrimp. There is also a domestic market oriented food crop sector on Java. The latter is composed of rice and vegetable products and are either uncertified but labeled “organic”, or certified by Indonesian companies or agencies, according to national standards or private industry standards (set by individual certification companies). In contrast to Thailand and Vietnam, products for the domestic market in Indonesia are not uniformly labeled with the term ‘safe’ or ‘hygienic’. Producers use a variety of terms including ‘healthy’, occasionally ‘chemical free’, and most commonly ‘pesticide free’. Generally, these products for the domestic market include fruits, vegetables and rice and are grown with ‘alternative’ or sustainable agricultural methods, for domestic consumption, they are mostly uncertified. However, there are signs that this may be changing as domestic (nationally-based) certification is developing quickly. As a first step, in 2002, the National Standardization Agency (BSN) issued Indonesian National Standards (SNI) for organic food systems. Thus, although certification in Indonesia only occurs with a small percentage of agricultural crops, both the export and domestic market production sectors appear to be on the increase, particularly as a result of growing buyer demands from retailers.⁹

National data in Thailand, Vietnam, and Indonesia on the volume and value of overall organic production, organic exports, and on the scale of farm operations tends to be unsystematic and lagging behind the rapid increases that we observe in both export and domestic sale of organic food. **Table 2** shows official figures on the extent of organic land area and ‘in conversion’ land area for selected countries in Asia. However, this table arguably understates the rapid growth of certified organic in these countries by a considerable amount. Koen den Braber, an advisor with the ADDA organic agriculture project and formerly involved with Hanoi Organics and Ecolink Tea Company, estimated that there are probably an additional 6,000-7,000 hectares of land under organic management in Vietnam that are not accounted for in the IFOAM figures (den Braber and Hoang 2007). Moreover, a brief search in the online business section of Thailand’s English language daily newspaper, *The Nation*, for example, turns up the following indicators of how organic is rapidly becoming a normal form of production for corporations: “The country’s largest sugar refiner, Wangkanai Group, has decided to convert all of its 20,000 contract farmers to organic by 2010, beginning with a program to train 800 ‘leaders’ among these farmers.”¹⁰ In another instance: “A major organic exporter, Swift Co., now wants to capture the domestic market to reduce risks inherent in overseas sales. Its brand will be sold in supermarkets and by direct sales; the company plans to have more than 100 centres in the Bangkok area to handle direct sales. More than 10,000 family farms are employed as contract growers”.¹¹

⁸ Interview with BIOCERT representative, June 14, 2007.

⁹ Specialty chain stores such as Healthy Time in Jakarta advertise on their premises the requirement for all their produce to be certified, though they do not specify by which standards.

¹⁰ *Marketplace with The Nation*, “Wangkanai takes the organic route.” September 4, 2006.

¹¹ *Marketplace with The Nation*, “Swift’s ‘green’ greens come home.” July 9, 2007.

The above news item, and data cited earlier showing that domestic markets for certified organic in Thailand is now greater than exports, underscore the shift toward domestic markets that is driven by the very high premiums available for certified foods. Our own supermarket surveys in the three countries confirm Roitner-Schobesberger et al.'s (2008: 117) statement that most organic vegetables obtain premiums of 100 to 170 percent above non-labelled produce, and 50 percent compared to vegetables labeled hygienic or safe (under government certification). A survey in supermarkets and wet markets in Chiangmai, Thailand during 2005 showed popular vegetables like Chinese Kale and Morning Glory carrying premiums of up to 400 percent for certified organic; premiums for rice are lower but certified organic nevertheless still obtained a premium of close to 100 percent above equivalent grade and variety uncertified rice. In Vietnam, safe vegetables typically garnered a premium of at least 20 percent higher than regular vegetables.

In 2004, there were 91 certification bodies in Asia, as listed in the Organic Certification Directory. In 2005, this number had risen to 117, 104 of which were located in China, India and Japan (Willer and Yussefi 2006). Certification bodies can be governmental bodies, private entities, or foreign entities. Many Asian countries still do not have local service certification providers. There is a growing push to have in-country professionals for inspecting and certifying, to overcome the high costs of certification. But in the meantime, the majority of certified organic production is carried out by foreign certification bodies such as the Swiss-based Institute for Marketecology (IMO)¹², the French-based Ecocert, or the Dutch-based Control International, rather than by national agencies. These bodies can certify products according to a range of international standards, depending on the final market for the goods. Some of the common governmental regulatory standards for organic production are the USDA National Organic Program (NOP), the Japanese Agricultural Standards (JAS), and the EEC Regulation No. 2092/91 of the EU. A range of private organic standards are also common, such as Naturland, Bio-Suisse, and Aquaculture Certification Council (see **Table 3**).

Certified organic farming in Southeast Asia involves a wide range of farmers and relationships, including small farmers under group certification; corporate farms similar to those emphasized in some North American literature (Guthman, 2004); smaller contract farmers; and farmers enlisted through government projects. The presence of larger corporate farms is indicated by the lists of farms certified by a major EU-based certification company in Thailand: it includes a 600 hectares oil palm farm, a 600 hectare sugar cane farm, and a 270 hectare farm certified for cassava. At the other end of the spectrum are smallholders under contracts that specify organic or similar arrangements. Rice, one of Thailand's major certified organic products, most often appears in certified lists through group certifications; thus the same EU-based certification company lists over 1000 hectares of paddy certified through an agricultural cooperative. ACT's list of certified operators as of March 2005 (see ACT n.d.) includes five grower groups with over 100 members each, and more groups with smaller numbers of members, with rice the most common product. In addition, as the above reports from the Thai media indicate, a significant portion of the market-oriented organic farming is comprised of smallholders

¹² As of 2007, IMO Vietnam was engaged in consulting, training, surveys, and inspection, but certification was performed by IMO Switzerland.

who do contract farming through corporate buyers. Finally, many development programs run by the government and by international development agencies (DANIDA, others) are now adopting certified organic farming.

The rise of certified organic food production among small farmers and small and medium-sized enterprises in Southeast Asia has been facilitated by a range of funding and technical support programs, provided by agencies such as the Swiss Import Promotion Programme (SIPPO), the German development agency GTZ, the Danish development agency DANIDA, the USAID-supported Vietnam Competitiveness Initiative, and AusAID. Some companies use a smallholder group certification mechanism and internal control system (ICS) to enable certification at a lower cost for small-scale producers in developing countries.¹³ One example of this is the ICS established by Ecolink with organic tea farmers in Thai Nguyen province in Vietnam.

Another recent development in green certification is the establishment of participatory and pro-poor food quality guarantee systems. Initiatives such as these are often supported by international development donors, thereby subsidizing production and potential appropriation by corporate buyers. The principle behind this is to enable poor producers to earn higher profits from supermarket-driven and other value chains by enabling them to demonstrate the quality of their food products through certification at an affordable cost. A formal certification system provided by departments of agriculture at the provincial level may not meet the level of reliability demanded by urban consumers concerned about food safety. Thus, one collaboration in Vietnam between the Asian Development Bank's Making Markets Work Better for the Poor (M4P) program, CIRAD (Centre de coopération internationale en recherche agronomique pour le développement), and an NGO, ADDA, is seeking to develop a pro-poor food quality guarantee system that is geared to small-scale producers, targeted at local consumers, and developed in a participatory manner (M4P 2006). This is based on IFOAM's experience with Participatory Guarantee Systems (PGS).

Specificities of organic sector development in Southeast Asia

The production of certified organic food and agriculture has grown substantially over the past 10 years in all three countries considered here, as has the influence of corporate agri-food actors. At the same time, there is considerable variation across these countries, and among regions within them, in the rate of growth; the relative orientation to domestic versus export markets; and the forms that organic farming takes. Although the reasons for these differences are complex, we discuss three conditions that account for some of this variation. These are the (1) the growth of the corporate retail sector, linked to the growth of urban middle classes; (2) government support; and (3) the way corporate influence and organic certification has been contested. The constellation of actors shaping the certification of green foods is illustrated in **Figure 1**.

¹³ Farmer groups in some parts of Thailand have rejected the model of smallholder group certification for perpetuating a culture of mistrust among farmer groups.

Corporate Retailing Supermarkets and the middle class

Southeast Asia is a region of rapid urbanization and a growing middle class. The increased employment opportunities for women and growing proportion of nuclear families mean that there are greater opportunity costs on women's time. These factors make ready-to-eat and semi-prepared food items more appealing than preparing meals from scratch. Urban consumers have begun to rely less on the traditional 'wet' markets and instead on corporate retailers (supermarkets, hypermarkets, convenience store chains etc), stocked with large volumes of ready-to-eat, snack, and highly processed foods. These trends are reinforced by the changing lifestyles and diets, and the increased demand for out-of-season and imported foods. The growing use of credit cards, cars, and refrigerators further propels the shift to corporate retailers as opposed to "Mom and Pop" shops and traditional markets (Phan Thi Giac Tam 2006).

Corporate retailers are perceived as the logical retail outlets for higher value products such as organic food. Organic foods are sold on a construction of "quality" characteristics and corporate retailers, with their concentrated position in the retail market, possess the buying power to reinforce these quality standards. In Vietnam, 60 percent of the country's 82 million people are under the age of 30 (Agriculture and Agri-food Canada 2004), and it is this group—particularly young urban residents with sufficient disposable income—that is most receptive to new food trends and higher value products such as organic foods. Moreover, a recent study found that 88 percent of surveyed Hanoi residents considered vegetables to be a health hazard due to the increased use of agro-chemical inputs (Figuie et al. 2004). This is indicative of the growing consumer concern about the safety of the food supply, a further impetus for consumers to purchase safe or organic foods at high premiums.

Prior to the late 1990s, expansion of the supermarket/hypermarket sector was secured through Asian investment, both domestic and Japanese (Commonwealth of Australia, 2002). Since the late 1990s, this sector has experienced accelerated expansion, increasingly driven by foreign chains, although domestic chains continue to operate and in some cases expand as well. Major transnational investors include Carrefour (France), Casino Guichard-Perrachon (France), Royal Ahold (Netherlands), SHV Holdings Makro (Netherlands), Delhaize Group (Belgium), Tesco (UK), and Metro (Germany) (Commonwealth of Australia, 2001; Wiboonpongse and Sriboonchitta, 2004). There are also some important locally-owned supermarkets, including Central Group and Charoen Pokphand (in Thailand), Maximark, Coop-mart, and Intimex (in Vietnam), and Hero and Matahari (in Indonesia).

It is striking the degree to which European-based supermarkets dominate in Southeast Asia. This is significant because European retailers are also leaders in introducing private standards, and Europe is major market for organic products (Willer and Youssefi 2007; Barrett et al. 2002). European regulation on mergers and acquisitions in the early 1990s inhibited further corporate concentration of retail holdings in the EU. The solution for companies like Tesco, Metro, Carrefour, among others, was to expand overseas. Following the 1997 Asian financial crisis, there was an even stronger European corporate presence in agri-food commodity chains in Southeast Asia. The 1997 crisis made Asian companies cheap for foreign direct investment and many of these European corporations then bought up shares of struggling Southeast Asian companies as a result. This was also made politically possible with the crisis giving further impetus to

liberalization and decrease protectionism, which in some cases was part of the conditionality of IMF loans during the crisis period.

Government roles

The governments of Thailand, Vietnam, and Indonesia are engaged in a number of activities regarding organic agriculture, which facilitates corporations' influence in the organic sector. First, they have promoted green certification, including aquaculture, as part of a broader export strategy promoting high value-added agri-food exports. This promotion involves a range of measures including farmer training, using development funds to pay private certification companies to certify farmers, and assistance with international marketing. The facilitation of certified organic exports include the creation of national standards and accreditation procedures for certification bodies. All three countries have developed national organic standards and procedures for certification, even if few products are currently certified for domestic markets in Vietnam and Indonesia due to limited consumer demand in these countries. Indonesia's and Thailand's national organic standards are drawn from the Codex Alimentarius (established in 1991 as a joint FAO/WHO standards program) and the IFOAM. In both cases, government standards are being revised to allow for adapting the standards to local conditions.¹⁴

In Thailand, government agencies have been constituted as certifying bodies as well—a role that is contested by activists who accuse the government of conflict of interest. So far only the government of Thailand has created its own brand/label ('Organic Thailand', being transformed into 'Organic Q'). Although not recognized internationally by IFOAM, Organic Q products are sold in local supermarkets and purchased by crown corporations such as Thai Airways. The Thai government entered the field of organic certification in 2000, with the establishment of the Organic Crop Institute, which later shifted to the National Bureau for Food and Agriculture Commodity Standards, established in 2002 (Ratanawaraha et al. 2007). In 2005, the government created the National Agenda for Organic Agriculture, which involved multiple ministries and departments, with a goal of reducing the volume of imported agrochemicals through converting 850,000 farmers to organic agriculture within five years. This agenda has been given an additional push by the government's commitment to the King's Sufficiency Economy initiative. The government promotes ecological agriculture through major extension and training programs, a government certification program for both farmers and retailers/wet markets, a propaganda campaign, export promotion, and by using its influence among key locally-owned or crown corporations to push the expansion of organic and green production/retailing. Particularly significant is an expanding program to train farmers in organic farming practices. According to interviews conducted in June 2007, the Ministry of Agriculture was completing a program that funded 40 organic farmers to train 40,000 more farmers; the plan was to expand this program the following year to enlist 300 organic farmers to train 150,000 more farmers. The Ministry also has a key role in publicizing the importance of ecological agriculture and safe food.

¹⁴ International standards are usually phrased broadly and it is up to a variety of parties—government, national certification bodies and standards agencies, as well as local inspectors for national and these agencies—to decide how they are to be interpreted for the purposes of, first, application to national standards and, second, conducting inspections when local producers apply for certification by international standards.

The Indonesian government undertook a program called “Go Organic 2010” aimed at raising national awareness of the benefits of organic farming. The Department of Agriculture is promoting the growth of organic agriculture through this initiative as a form of “eco-agribusiness” targeting primarily export but also domestic markets.

The role for government in promoting safe agricultural products in Vietnam includes training in IPM and testing and certification of safe foods. Testing is periodically carried out for heavy metal content and pesticide residues (Ho Thanh Son and Dao The Anh 2006). While safe foods are being promoted by government, organic certification appears to be mainly driven by the private sector in liaison with some NGOs (such as ADDA, Agricultural Development Denmark Asia), local government authorities, and the national Farmers’ Association, which supervise the production and packaging in conjunction with the Department of Plant Protection.

Earlier in this paper we noted the increasing roles of government and inter-governmental organizations in certification. This trend reinforces the removal of farmers or even national-level organizations from the role of setting standards, when it is these groups who generally understand local and national production conditions best.

Contesting corporate influence in organic production

Local as well as transnational NGOs and international donor agencies have been divided over the expansion of organic production. There are a number of organizations that see the future of green agriculture through engagement with corporations and international markets. In Thailand, Green Net (and its influential director, Viton Ruenglertpanyakul) supports the move to export-oriented organic agriculture, as does ACT. Fair trade networks also promote international marketing of their organic products, and sometimes sell through large retail chains. In Vietnam, Agricultural Development Denmark Asia (ADDA) is an NGO that has provided substantial support for the development and marketing of organic products. Many of the organic products in Vietnam are farmed by small producers and coordinated by small domestic companies, sometimes in liaison with an NGO or international donor agency who facilitates the contact with international buyers (e.g., a supermarket chain in Europe).

A contrasting position of some NGOs vis-à-vis corporate engagement is to reject the market orientation of organic agriculture and the propagation of international standards for large-scale and export-oriented organic production as potentially undermining the rural ways of life that they seek to support. This position can be found among both local and transnational NGOs. Transnational NGOs that are critical of corporate engagement include Via Campesina and Focus on the Global South. Within Thailand, some members of the AAN are critical of this shift, including, prominently, the Northern Alternative Agriculture Network. Most of these organizations promote the importance of self-sufficiency, and diversified production for local markets. In some cases, they also facilitate consumer-producer linkage, and certification based on local standards.

Perhaps more so than in the global north, NGOs have played key roles in the development of alternative agriculture practices, which led into what is now known as organic farming. Yet ironically, when farmers who have been working with NGOs turn to selling certified green products to corporate buyers, the corporate rents are being created by the work of NGOs and farmer groups. Thus, like the role of the state, the strong

presence of local organizations and international development agencies in promoting greater roles for smallholders in certified organic production is serving to bring down (i.e., subsidize) the costs of certification.

Many of the key debates within the alternative agriculture movement now turn around the question of international certification, arguably an outcome of corporate appropriation of organic agriculture and food. Indeed, even the initial anti-green revolution movement, to the extent to which it is anti-corporate, is shaped by corporations (e.g., Delforge 2004). However, even within this critical discourse, there are differing views as to how green production can address the problem of farmer vulnerability vis-à-vis other social agents (commodity buyers, corporate retailers) in the commodity chain. Some argue that rather than empowering farmers (as envisioned by alternative agriculture advocates), green production subjects farmers to greater external control though complying with strict standards of the organic food industry. Thiers' (2005: 11) insights regarding the hierarchical system of research and extension in China are echoed to a large degree in Vietnam: "there is only limited evidence that farmers themselves have any influence on the research agenda. ...in the culture of Chinese agricultural development ... the top-down approach is deeply ingrained and local governments exercise considerable authority. This issue is further complicated by the emphasis on quality control and enforcement of standards inherent in organic food certification and marketing." In other words, "The strict demands of the organic food industry may eclipse the ecological principles of organic farming, particularly where the need for 'quality control' can be used as a justification for local authoritarianism" (Thiers 2005: 11).

The presence of other social agents in the making of green agriculture can influence the struggle over corporate control in these three countries. The role of the state is important in all three countries, but Vietnam lacks the kind of domestic NGOs and farmer groups present in Thailand and Indonesia, which challenge and lobby the state over the direction of agricultural policies. These groups can serve as a counterweight or at least exert a moderating effect to corporate influence. In Vietnam, in contrast, although some international NGOs are quite vocal, overall there is a lack of grassroots organizing. For green agriculture, this has resulted in an approach that is primarily driven by the state agenda of improving food safety and health, along with continued access to profitable export markets.

Conclusion: From organic production to organic foods

Corporate influence has expanded in both structures of governance of agriculture and food and in commodity chains, from inputs and production to retailing (Fold and Pritchard 2005; Marsden et al. 2000; Higgins and Lawrence 2005). This dominance has now expanded into the production and retailing of organic and other 'green' foods in international markets. A related facet of the power of private interests concerns the requirements for certification of organic and 'safe' foods.¹⁵ Thus, what once constituted 'alternative' production approaches and retail networks are increasingly falling under the dominion of private (and often corporate) agri-food chains. In the process of

¹⁵ Although IFOAM now emphasizes flexibility, the daily work of these certifying bodies involves monitoring farmers to ensure they meet standards specified by importers and importing companies, which are relatively inflexible.

‘mainstreaming’ corporate organics, less of the value added is fed back into local economies, and farmers have less autonomy over the process.

This paper traced the shift in ‘alternative’ agriculture and ‘green’ food products in Southeast Asia from its original domestic orientation—as a reaction to and critique of ‘green revolution’ approaches—to become the subject of growing international demand and strict certification standards. Subsequently, and to some extent in response to this trend, there has also been a reorientation of ‘safe’ if not organic food products for the domestic market to meet the demands of the growing middle classes for healthy and safe—and, to an extent, locally branded—foods. In the backdrop of these shifts is the role of corporations, first in promoting agri-chemical inputs for green revolution agriculture, which in turn was an impetus for organic farming, as a counter-movement. Later, corporations—and supermarkets in particular—became important buyers of organic products, and promoted their certification.

Thus, although the recent boom in organics globally may be attributed most recently to the spreading of certification programs, the origins of this shift away from chemical-intensive production lie in sustainable local development initiatives at the community scale, with collaboration between farmers, activists (social movements), and NGOs (Allen and Kovach 2000; Reynolds 2004). The corporatization of organic foods spurred an anti-corporate reaction among farmers groups and consumers who in turn began to promote locally-sourced and domestically certified goods as an alternative to corporate-driven supply chains. This reaction has also raised debates over whether the alternative agriculture movement should promote the export of certified organic products, and over who should participate in setting organic and related standards.

Our analysis in this paper looked at these dynamics in a Southeast Asian context, and specifically identified how the activities of non-corporate actors can reinforce—or sometimes counter—the power and influence of corporate interests. We showed that the governments of Thailand, Vietnam and Indonesia—together with some development and donor agencies—have played an important role in facilitating the expansion of organic certification, which has been paralleled by an increasing role for corporate retailers in purchasing organic foods, for both international and domestic markets. NGOs and farmer organizations have been divided over this issue of international certification and expansion of market access for organic foods.

In sum, the current promotion of certification by global south governments in particular, but also among some NGOs, can only be understood in relation to the structuring power of the corporate agri-food industry. Without the demand for certified organic from abroad, and its subsequent adoption by supermarkets in Southeast Asia as well, it is not likely that the Thai—and to a lesser extent, the Vietnamese and Indonesian—governments would be involved in promoting organic certification. Indeed, the emerging centrality of certified organic farming for sustainable, alternative, and locally-oriented agriculture can arguably be traced to the power of corporate buyers.

Acknowledgements

Thanks to Erin Nelson for constructive feedback on an earlier version of this paper. Funding for some of the fieldwork conducted for this research was provided by the

Challenges of the Agrarian Transition in Southeast Asia project, supported by the Social Sciences and Humanities Research Council of Canada.

References

- ACT (Organic Agriculture Certification Thailand). n.d. "List of ACT Certified Operators." Accessed March 15, 2008 at http://eng.actorganic-cert.or.th/list_oper.html.
- Agriculture and Agri-Food Canada. 2008. *Agri-Food Regional Profile: ASEAN*. Ottawa: Agriculture and Agri-Food Canada.
- Agriculture and Agri-food Canada. 2004. Vietnam Agri-Food Country Profile Statistical Overview. Accessed 10/10/05 at http://atn-riac.agr.ca/asean/3834_e.htm.
- Allen, Patricia and Martin Kovach. 2000. "The capitalist composition of organic: The potential of markets in fulfilling the promise of organic agriculture." *Agriculture and Human Values*, 17(3): 221-232.
- Barrett, H.R., A.W. Browne, P.J.C. Harris, and K. Cadoret. 2002. "Organic certification and the UK market: organic imports from developing countries." *Food Policy*, 27: 301-318.
- Campbell, Hugh. 2005. "The Rise and Rise of EurepGAP: European (Re)invention of Colonial Food Relations?" *International Journal of Sociology of Food and Agriculture*. 13(2): 1-19.
- Campbell, Hugh and Annie Stuart. 2005. "Disciplining the organic commodity." In Vaughan Higgins and Geoffrey Lawrence (eds.), *Agricultural Governance: Globalization And The New Politics of Regulation*. London: Routledge.
- Commonwealth of Australia. 2002. *Subsistence to Supermarket II: Agrifood Globalization and Asia. Volume 1: Agrifood Multinationals in Australia*. Canberra: Department of Foreign Affairs and Trade.
- Delforge, Isabelle. 2004. "Thailand: From the Kitchen of the World to Food Sovereignty." Bangkok: Focus on the Global South. Accessed Nov. 13, 2007 at www.focusweb.org.
- Den Braber, Koen and Hoang Thi Thu Huong. 2007. *Feasibility Study for Organic Bitter Tea Production and Marketing in Cao Bang Province*. Cao Bang, Vietnam: Helvetas Vietnam. December.
- Figuie, M., N. Bricas, Vu Pham Nguyen Thanh, Nguyen Duc Truyen. 2004. "Hanoi Consumers' Point of View Regarding Food Safety Risks: An approach in terms of social representation." Presentation to the XI World Congress of Rural Sociology, Trondheim, Norway, July 25-30.
- Fold, Niels and Bill Pritchard (eds.). 2005. *Cross-Continental Agro-Food Chains Structures, Actors and Dynamics in the Global Food System*. London: Routledge.
- Friedberg, Susanne. 2007. "Supermarkets and imperial knowledge." *Cultural Geographies*, 14 (3): 321-342.

- Fuchs et al. forthcoming.
- Fulponi, L. 2007. "The Globalization of Private Standards and the Agri-food System." In J.F.M. Swinnen (ed.), *Global Supply Chains, Standards and the Poor*. Oxfordshire: CABI, pp. 5-18.
- Guthman, Julie. 2004. *Agrarian Dreams: the Paradox of Organic Farming in California*. Berkeley: University of California Press.
- Hatanaka, Maki, Carmen Bain and Lawrence Busch. 2005. "Third-party certification in the global agrifood system." *Food Policy*, 30(3): 354-369.
- Higgins, Vaughan, and Geoffrey Lawrence (eds.). 2005. *Agricultural Governance: Globalization and the New Politics of Regulation*. London: Routledge.
- Ho Thanh Son and Dao The Anh. 2006. *Analysis of Safe Vegetables Value Chain in Hanoi Province*. Report for Metro Cash and Carry Vietnam, GTZ, and Vietnam Ministry of Trade. Hanoi.
- International Fund for Agriculture and Development (IFAD). 2005. *Organic Agriculture and Poverty Reduction in Asia: China and India Focus*. Report no.1664. Rome: IFAD.
- International Standards Organization (ISO). n.d. Accessed March 15, 2008 at http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=26796.
- International Task Force on Harmonisation and Equivalence in Organic Agriculture (ITF). n.d. Accessed March 15, 2008 at http://www.unctad.org/trade_env/projectITF.asp.
- Johannsen, Julia, Birgit Wilhelm, and Florian Schone. 2005. *Organic farming: A contribution to sustainable poverty alleviation in developing countries?* Bonn: German NGO Forum on Environment and Development.
- Lang, Tim and Michael Heasman. 2004. *Food Wars: The Global Battle for Mouths, Minds and Markets*. London: Earthscan.
- Making Markets Work Better for the Poor (M4P)-Asian Development Bank, MALICA-CIRAD (Centre de coopération internationale en recherche agronomique pour le développement), and ADDA (Agricultural Development Denmark Asia). 2006. Setting a participatory and pro-poor food quality guarantee system: Draft proposal. March 21. Accessed Sept. 14, 2007 at <http://markts4poor.org/?name=currentwork&op=viewDetailNews&id=1121>.
- Marsden, Terry, Michelle Harrison, Andrew Flynn. 2000. *Consuming Interests: The Social Provision of Foods*. London: UCL Press.
- Moustier, Paule, Muriel Figuié, Nguyen Thi Tan Loc, and Ho Thanh Son. 2006. "The role of coordination in the safe and organic vegetable chains supplying Hanoi." *Acta Horticulturae*, 699: 297-307.
- Mutersbaugh, Tad. 2005a. "Just-in-space: Certified rural products, labor of quality, and regulatory spaces." *Journal of Rural Studies*, 21: 389-402.

- Mutersbaugh, Tad. 2005b. "Fighting standards with standards: harmonization, rents, and social accountability in certified agrofood networks." *Environment and Planning A*, 37: 2033-2051.
- Nguyen Phuong Thao, John E. Bowman, John Campbell, and Nguyen Minh Chau. 2006. "Good Agricultural Practices and EUREPGAP Certification for Vietnam's Small Farmer-Based Dragon Fruit Industry." Presented at the USAID Regional Consultation on Linking Farmers to Markets, Jan. 29-Feb. 2, Cairo, Egypt.
- Organic Europe, n.d. Accessed March 15, 2008 at http://www.organic-europe.net/europe_eu/standards.asp.
- PAN International webpage. n.d. Accessed Dec. 9, 2007 at <http://www.pan-international.org.panint/?q=en/node/33>.
- Phan Thi Giac Tam. 2006. "Vietnam." In Bill Vorley, Andrew Feane and Derek Ray (eds.), *Regoverning Markets: A Place for Small-Scale Producers in Modern Agrifood Chains?* Aldershot, UK: Gowler, pp. 125-132.
- PPLH website. n.d. Accessed Dec. 9, 2007 at www.paneco.org/Library/Projects/Indonesia/Java/PPLHSeloliman/default/htm.
- Pollan, Michael. 2006. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin Press.
- Pugliese, Patrizia. 2001. "Organic Farming and Sustainable Rural Development: A Multifaceted and Promising Convergence." *Sociologia Ruralis*, 41(1): 112-130.
- Ratanawaraha, Chanuan, Wyn Ellis, Vitoon Pinyakul, and Burghard Rauschelbach. 2007. *Organic Agribusiness: A Status Quo Report for Thailand 2007*. Bangkok: Thai-German Programme for Enterprise Competitiveness (Thailand), Sustainable Agriculture Foundation (Thailand), and GreenNet Foundation.
- Raynolds, Laura. 2004. "The Globalization of Organic Agro-Food Networks." *World Development*, 32(5): 725-743.
- Raynolds, Laura and John Wilkinson. 2007. "Fair Trade in the Agriculture and Food Sector: Analytical Dimensions." In Laura Raynolds, Douglas Murray, and John Wilkinson (eds.), *Fair Trade: The Challenges of Transforming Globalization*. London: Routledge, pp.33-46.
- Roitner-Schobesberger, Birgit, Ika Darnhofer, Suthichai Somsook, and Christian R. Vogl. 2008. "Consumer perceptions of organic foods in Bangkok, Thailand." *Food Policy*, 33: 112-121.
- Scott, Steffanie. (forthcoming, 2008). "Agrarian Transitions in Vietnam: Linking Land, Livelihoods, and Poverty." In Max Spoor (ed.), *The Political Economy of Rural Livelihoods in Transition Economies: Land, Peasants and Rural Poverty in Transition*. London: Routledge.
- Smith, Adrian. 2006. "Green niches in sustainable development: the case of organic food in the United Kingdom." *Environment and Planning C: Government and Policy*, 24(3): 439-458.

Smyth, forthcoming.

Thiers, Paul. 2005. "Using global organic markets to pay for ecologically based agricultural development in China." *Agriculture and Human Values*, 22(1): 3-15.

Vandenberghe, Dirk, and Somprot Sarakosas. 1997. "Capital Rice Co. Ltd. In Europe." ASEAN Business Case Studies No. 5. Centre for International Management and Development, Antwerp, Belgium.

Vandergeest, Peter. 2007. "Certification and Communities: Alternatives for Regulating the Environmental and Social Impacts of Shrimp Farming." *World Development*, 35(7): 1152-1171.

WALHI website. n.d. Accessed Dec. 9, 2007 at www.eng.walhi.or.id/ttgkami/prof_walhi_eng/.

Wiboonpongse, Aree, and Songsak Sriboonchitta. 2006. "Thailand." In Bill Vorley, Andrew Feane and Derek Ray (eds.), *Regoverning Markets: A Place for Small-Scale Producers in Modern Agrifood Chains?* Aldershot, UK: Gowler, pp. 51-66.

Willer, Helga and Minou Yussefi. 2006. *The World of Organic Agriculture: Statistics and Emerging Trends 2006*. Bonn, Germany: International Federation of Organic Agricultural Movements (IFOAM), and Frick, Switzerland: Research Institute of Organic Agriculture (FiBL).

Willer, Helga and Minou Yussefi. 2007. *The World of Organic Agriculture: Statistics and Emerging Trends 2007*. 9th revised edition. Bonn, Germany: International Federation of Organic Agricultural Movements (IFOAM), and Frick, Switzerland: Research Institute of Organic Agriculture (FiBL).

Table 1. Basic socioeconomic data for Thailand, Vietnam and Indonesia

	Indonesia	Thailand	Vietnam
Population (millions)	222.0	65.2	84.2
GDP per capita (in PPP*)	\$4,321	\$9,163	\$3,373
FDI** inflows	\$5,556	\$10,756	\$2,360

*Purchasing Power Parity

**Foreign Direct Investment

Source: Agriculture and Agri-Food Canada (2008).

Table 2. Area under organic management (fully converted and ‘in conversion’) and organic farms, for selected countries in Asia

Country	Year	Organic land area (hectares)	Share of total agricultural land (%)	Number of organic farms
China	2004	3,466,570	0.60	1,560
India	2003	114,037	0.06	5,147
Indonesia	2004	52,882	0.12	45,000
Japan	2004	29,151	0.56	4,539
Korea	2005	28,218	1.46	28,951
Laos	2005	60	0.00	5
Malaysia	2003	600	0.01	--
Philippines	2004	14,134	0.12	34,990
Thailand	2004	13,900	0.07	2,498
Vietnam	2001	6,475*	0.07	1,022

*Note: The 2007 version of Willer and Yussefi’s report has this same 2001 figure for Vietnam, which suggests that the government is not collecting data on this. Den Braber and Hoang (2007) estimate that the actual figure is probably 6000 to 7000 hectares higher.

Source: Willer and Yussefi (2006: 115).

Table 3. Some common certification bodies and organic standards used in Thailand, Vietnam and Indonesia, with countries of origin

International certification bodies	Food quality standards
<ul style="list-style-type: none"> • ACT (Organic Agriculture Certification Thailand) • IMO (Institute for Marketecology) (Switzerland) • Ecocert (France) • Control International (formerly SKAL International) (Netherlands) • Bioagricert (Italy) • ICEA (Istituto per la Certificazione Etica ed Ambientale) (Italy) • The Soil Association (UK) 	<p>Foreign governmental standards</p> <ul style="list-style-type: none"> • EEC Regulation No. 2092/91 (EU) • USDA National Organic Program (NOP) (USA) • Japanese Agricultural Standards (JAS) (Japan) <p>Foreign private standards</p> <ul style="list-style-type: none"> • Naturland (Germany) • Bio-Suisse (Switzerland) • KRAV (Sweden)

Figure 1. Actors involved in the making of certified organic and ‘green’ foods in Southeast Asia

