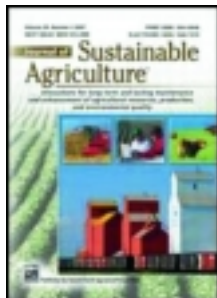


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Rethinking Sustainable Agriculture in Thailand: A Governance Perspective

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This paper examines the feasibility of official institutional programs for sustainable agriculture in Thailand during the last decade. In Thailand, both popular and official attention was paid to sustainable agriculture well before the Asian economic crisis occurred in 1997. However, the policy implementation of sustainable agriculture programs began only after the turn of the millennium, and the processes and outcomes have not been adequately studied from a feasibility standpoint. This paper aims to fill the gap by employing a 'sustainable governance' perspective for examining the programs of three main official institutions promoting sustainable agriculture in Thailand. It is concluded that the social impacts of public sustainable agricultural interventions in the past decade remain limited for the estimated 5 million small-scale farmer households in Thailand.

KEYWORDS *Sustainable agriculture, sustainable governance, small-scale farmers, good agricultural practices, debt suspension, democratic decentralization*

INTRODUCTION

Since the 1990s, Thailand has undergone dramatic transformations of the national constitution and polity. Starting with the civil riot and the subsequent oppression by the military in May 1992, the unwitting synchronicity of the Asian economic crisis and the effectuation of the new constitution in 1997 became a landmark in Thai history for reshaping the path of

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the nation's social and economic development. The Eighth National Social and Economic Development Plan (1997–2001), the following Ninth Plan (2002–2006) and the Tenth Plan (2007–2011), were thus set to encapsulate a people-centric vision of development for Thailand, with emphasis on increased people's participation, self-sufficiency, poverty alleviation, and protection of the environment for reversing the previous elite-led, growth-centered development approach.

Sustainable agriculture is among the major reform policy portfolios that have been transforming the rural landscape since around the turn of the millennium. Although conceptually rather ambiguous, the planning document of the Eighth National Social and Economic Development Plan identified sustainable agriculture as “natural farming, organic farming, integrated farming and agro-forestry” (National Economic and Social Development Board, 1997: 65). While the Seventh Plan (1992–1996) already expressed an official interest in sustainable agriculture, the Eighth Plan was groundbreaking in setting up concrete targets in converting 20% of the national arable land (approximately 4 million ha) to sustainable agriculture (Vitoon, 2002). This inclusion of sustainable agriculture in the official reform agenda indicated a milestone in efforts to reverse the country's consistent pursuit of modern agricultural development planning since the 1960s. It was in large part the crystallization of policy advocacy efforts by NGOs and farmer movements that had resisted the adverse tide of mainstream agricultural industry and associated technocratic groups. In addition, the highly respected Thai King's declamation of the “New Theory Farming,” the compounded notion of integrated farming systems and the Buddhist self-restraint, provided further impetus to the widespread recognition of sustainable agriculture in Thai society.

There is a growing body of literature on the role of sustainable (or alternative) agriculture for rural development and livelihoods in Thailand (Apichai, 1996; 1997; Aphipan, 1995; Buch-Hansen, 2001; Delcore, 2004; Sathorn, 2000; Sununtar and Gilman, 1999; Thanwa, 2001, 1995; Trebuil, 1993; Vitoon 2001, 2002). Many of the discussions in the literature begin with highlighting the historical process of Thailand's national agricultural development up to the present. They then attempt to conceptually demonstrate the socio-economic and environmental potential of sustainable agriculture for overcoming the negative impacts of conventional agriculture in Thai countryside (i.e., resource-poor farmers' economic insecurity, chemical pollution, environmental degradation, and loss of biodiversity).

Aside from these ‘normative’ approaches, Mogens Buch-Hansen (2001), published in a past edition of this Journal, represents an exception in the sense that it has to date been the only work that comprehensively examined the potential feasibility of sustainable agriculture in Thailand. In the face of the poor official specification of the concept of sustainable agriculture, coupled with its yet unrealized policy implementation at the time of

his research, Buch-Hansen analyzed the theme by calling into question the political feasibility of the concept. Such an inquiry should come first and foremost for discussing sustainable agriculture in Thailand and elsewhere, because “unless a framework of enabling policies (and their operational mechanisms) is brought in place, there is no way in which agriculture will be sustainable from an economic, socio-cultural, ecological, nor institutional perspective” (Buch-Hansen, 2001: 156). The timing of his study did not yet allow his feasibility analysis to be based on empirical scrutiny of ongoing institutional programs of sustainable agriculture in Thailand. Nonetheless, he presented a number of critical insights and useful clues worth exploration for undertaking such an examination.

BUCH-HANSEN’S PERSPECTIVES

In operationalizing the concept of sustainable development, Buch-Hansen analyzed the feasibility of sustainable agriculture in Thailand in light of four aspects of agricultural sustainability in Thai contexts: 1) economic, 2) socio-cultural, 3) ecological, and 4) institutional. From the economic viewpoint of sustainability, he first paid attention to Thailand’s remarkable records of economic success of export-oriented agriculture, asking whether export-oriented farmers, closely tied to various agribusiness interests with marginal profits and cumulating debts, would be able to convert to sustainable agriculture. Second, he raised doubt about the Thai government’s capacity to implement a national-scale conversion to sustainable agriculture, based on the fact that external debt doubled from 1992 to 1997, the year of the Asian financial crisis. Third, his questions about the viability of sustainable agriculture were related to the draft Agreement on Agriculture that was supposed to be discussed at the WTO negotiations in Seattle in 1999, which eventually collapsed. His concerns with the draft content related to minimum access quotas, trade related intellectual property rights, sanitary and phytosanitary standards, and the role of consumers were linked to a further commercialization of agricultural practices, decline of the small-farm sector, and loss of agriculture as a traditional way of life (Buch-Hansen, 2001).

Buch-Hansen went further to consider the economic alternative for a viable sustainable agriculture in Thailand along the two options Thailand appeared to be pursuing: “(1) Let farmers, who are capable of commercial farming, shift into commodities which can compete at the world market (this *could be* ecologically produced), (2) Find ways and means of supporting the non-competitive part of the farmers through non-trade related measures” (p. 152, original emphasis). Taking the first option as not operative at the time of his research, he focused on the possibilities of the second option. Regarding Thailand’s incapacity to provide public financial support for farmers through non-trade related measures (as opposed to those

available in the European Union and the United States through the Blue Box and the Green Box in the WTO Agreement), he expressed skepticism on the chance of donor support. He reasoned that if sustainable agriculture is feasible as a donor supported program, the money should come from the productive agricultural countries that subsidize their own farmers in the first place, and who are in competition with the Thai farmers in the global market. Thus, he implied that none of the economic options is available for sustainable agriculture in Thailand (Buch-Hansen, 2001).

Second, his socio-cultural viewpoint addressed broad long-term changes in the constituents of Thai society. On one hand, there was an increasing outflow of workforce from the rural and agricultural to the urban industrial sector in the decades the government pursued import-substitution and export-oriented policies, leading to a rapid westernization of social values and behavior among the youth. On the other hand, a series of negative repercussions of urban-based, extremely liberal economic development strategies led the critics to pay more positive attention to Thai rural life and underscore the significance of traditional, community-based cultural livelihoods. With such broad trends in mind, Buch-Hansen asked whether sustainable agriculture in Thailand would be able to reverse the urban bias, revitalize rural livelihoods via consumer demand for sustainable agriculture produces, care for over one million land insecure, resource-poor smallholders, and go beyond the cheapest way to stock a potential labor force for the manufacturing industries (Buch-Hansen, 2001).

Third, Buch-Hansen discussed the ecological sustainability of production methods with regard to a specific production method called 'natural farming.' As a type of agriculture requiring the complete absence of agro-chemical use, together with elimination of human manipulation of nature, this farming practice was, he argued, favored by green movements in Thailand primarily from a bio-centered ideological perspective. Since the urban middle class (or white-collar salariat) might not view it from the standpoint of local empowerment by the rural population but from a bio-centric viewpoint of intrinsic values of nature, he thought of the possibility of their role in green movements primarily as consumers. Meanwhile, he pointed to the underdeveloped state of consumer movements in Thailand with regard to the lack of public regulations over the content and production methods of food commodities, coupled with the general opposition of agribusiness interests to incorporate consumer influence in the campaign on safe foods and labeling (albeit noting the exception of some supermarkets) (Buch-Hansen, 2001).

Fourth, his institutional viewpoint highlighted Thailand's weak institutional base for economic incentives to be created to encourage conversions of conventional agriculture to sustainable agriculture. With regard to the deeply ingrained mechanisms of official cooperative credit and extension

systems to serve the interests of conventional agriculture, he questioned sustainable agriculture and its alternative methodology to economically induce changes toward more dissemination of ecological farming practices. The stagnating conditions of land ownership in many rural areas, along with the lack of certification services for ecological produce, compelled him further to wonder about the ability of sustainable agriculture to solve the problem of land insecurity for many resource-poor farmer households, as well as to come up with a sustainable marketing structure that attracts a fair number of consumers (Buch-Hansen, 2001).

Much of Buch-Hansen's discussion summarized above emanated from the socio-political contexts of an early period of official introduction of sustainable agriculture in Thailand. He posed a series of questions about the future feasibility of sustainable agriculture in Thailand from an *ex ante* perspective. With nearly a decade of policy planning and implementation of sustainable agriculture since the time of his research, it is argued that the situation has noticeably changed. Despite the still developing nature of the policy programs, the time span may be sufficient for retrospection.

Given the far-reaching inventory of questions Buch-Hansen posed in his analysis, it is beyond the ability of this paper to address all of them. This paper will instead focus on institutional aspects of sustainable agriculture in Thailand by setting out the following frames of analysis. First, concurring with Buch-Hansen's notion that the presence of an appropriate framework of enabling policies is essential for the feasibility of sustainable agriculture in Thailand, this paper aims to continue and develop a dialogue by examining the institutional development of official policies promoting sustainable agriculture observed in the past decade. This interest is usefully linked to the analytical concept of 'sustainable governance,' as detailed below. Second, for the governance analysis, three government institutions, namely the Ministry of Agriculture and Cooperative (MOAC), the Bank of Agriculture and Agricultural Cooperative (BAAC), and the Subdistrict Administrative Organizations (SAOs), are selected to analyze the structure of incentive systems and institutional processes of change. Although these are not the only institutions promoting official policies of sustainable agriculture in Thailand, they are without doubt among the most important. Third, with the aim to qualitatively enrich the analysis, this study utilizes on-site information obtained from field research conducted in particular localities of a province. This approach is in contrast to the more theoretical orientation of Buch-Hansen's analysis administered from an *ex ante* perspective to good effect.

The reminder of the paper is organized in four sections. The next section introduces conceptual underpinnings for this study. The third section provides research contexts and methods. The fourth section presents the findings. The final section is devoted to discussion and conclusions.

CONCEPTUAL UNDERPINNINGS: SUSTAINABLE GOVERNANCE

Governance is a concept that highlights the critical role of politics in development, having arisen from the recognition of failures of past development efforts that focused on macro-economy management and of people constituting the principal force of development (Ellis, 2000). It addresses a long-term transformation of a polity and associated changes in its development path by transcending the institutional boundaries of government, legal institutions, and formal leadership. It also perceives the public realm as an integral arena of the state, private, and civic sector engagement in development activities (Amalric, 1998; Hyden, 1992), thus taking into account the resources or services that the state bureaucracy alone cannot provide for people.

The concept of sustainable governance has appeared in the field of natural resource and environmental management, most notably in literature on common pool resources and common property (Agrawal, 2001, 2003; Constanza et al., 1998; Pomeroy, 1996). No explicit definition has so far been conferred to the concept, yet it implicates the framework of institutions, both formal and informal, involving the body of rules and enforcement mechanisms through which natural resources are managed in a sustainable manner. The governance literature that emphasizes the role of formal institutions such as a large bureaucracy underscores the importance of policy integration, shared objectives, and trade-offs across multiple institutions for sustainable resource management (Kemp and Gibson, 2005). Meanwhile, the bodies of literature which are more attentive to the role of informal institutions, such as the commons, have expressed skepticism about the role of the central authority and privatization of property, stressing the effectiveness of the self-governing communal institutions instead (Dietz, Ostrom, and Stern, 2003). This stream of thought has paid closer attention to resource system characteristics, group characteristics, local institutional arrangements, and their relationships (Baland and Platteau, 1996; Ostrom, 1990; Wade, 1988).

The notion of sustainable governance is not only relevant to the sustainability of particular natural resources, but it is premised on the long-term durability of institutions responsible for managing them. Agrawal (2003) cautions that institutional sustainability could be attained through an unequal allocation of benefits among local stakeholders managing the resources (a similar argument might hold with distribution of costs). Such a management is ultimately unsustainable in terms of stakeholder engagement. Thus, certain mechanisms of democratic local governance that ensure the development of credible rules for fair allocation of costs and benefits among local stakeholders are the critical prerequisite for sustainable governance.

Out of the numerous ways to examine the governance of natural resources and associated challenges (e.g., Campbell and Sayer, 2003;

De Groot et al., 2002; Fischer et al., 2007; Hagedorn, 2002; Oakerson, 1992; Ostrom, 1990), the conceptual framework of sustainable governance by Fischer et al. (2007) is opted for the analytical purpose of this study (Figure 1). Drawing on elements of multiple social science disciplines, including institutional analysis, policy sciences, and resource economics, the conceptual framework represents a revised and extended form of the Institutional Analysis and Development (IAD) framework presented by Thomson and Freudenberger (1997). The modified version addresses three shortcomings of the conventional IAD framework it identifies: 1) Its institutional analysis of incentives deals only with the current situation or *status quo*, which falls short of adequately assessing impacts in development cooperation, 2) Its overemphasis on the role of resource user communities cannot address many recent cases where multiple actors, such as governments, NGOs, or private agencies, are stakeholders, 3) Few existing comparisons between applied case studies go beyond a single sectoral focus and specific types of resources in question (Fischer et al., 2007).

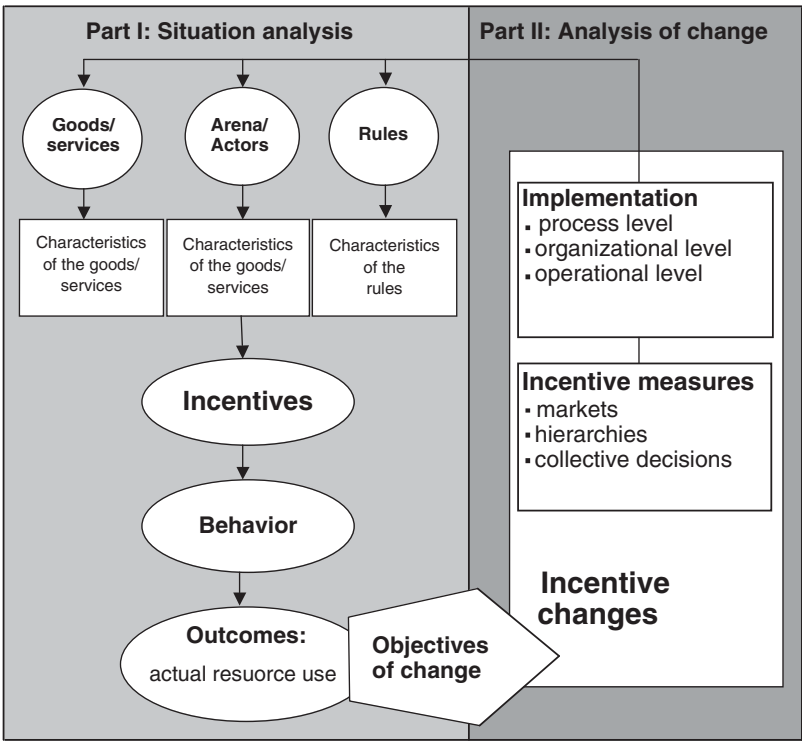


FIGURE 1 Conceptual framework of sustainable governance

(Source: Fischer et al., 2007).

Fisher et al.'s version of framework consists of two parts. First, the modified form of 'situation analysis' begins with examining an inventory of incentives that stimulate or lead to problematic behaviors of specific actors in resource use with regard to "(i) the characteristics of the goods and services involved; (ii) the characteristics of the actors and the arena; (iii) the characteristics of the rules with regard to resource management in the respective community" (2007: 127). The major modifications lie in (ii). The original IDA framework places emphasis on the attributes of the community of resource users involved in either one sector of forestry, watershed management, or inshore fisheries. The modified version allows for an inventory of actors in the arena interacting in less conventional sector(s) of natural resource management, including agriculture (Fischer et al., 2007).

Second, the extended framework proposes a critical addition of 'analysis of change' where a dynamic perspective of institutional change is proposed. The analysis involves three steps. The first step relates to a normative dimension. It is to identify the overarching guiding principles or implicit ideals, such as the Millennium Development Goals (MDGs) or the general concept of sustainable development, laid down at a strategic level of development cooperation. Such norms are then to be compared to more specific project goals or consequences at an operational level, where the implicit agendas of actors had been identified in the analysis of incentives in the situation analysis. Such a reality check provides a critical basis for enhancing feasibility and appropriateness in development interventions (Fischer et al., 2007). The second step is to examine changes in incentives that result from a development intervention. Based on the distinction between two dimensions of interventions, namely the character and type of incentive measures and their actual implementation mechanisms, this analytical step utilizes a classification of incentive measures. A cluster of incentives is constituted by particular coordination mechanisms such as prices, regulations or norm-building, while they are categorized within particular governance structures involving markets, hierarchies, and collective decision-making (Fischer et al., 2007) (Table 1). It is important to note that the classification of governance is an ideal type. A program might involve mixtures of different governance modes (Dietz, Ostrom, and Stern, 2003). In an actual intervention, therefore, several measures categorized across different structural modes of governance might be combined with varying emphases to produce changes in incentives.

The third analytical step focuses on the level and approach used to execute incentive measures. Three different levels mentioned, that is operational, organizational, and process levels, represent the conceptual division of policy, polity, and politics established in political science, with each level consisting of different approaches to implement incentive measures. The operational level involves traditional technical and financial assistance for infrastructure in addition to direct technical advice to local

TABLE 1 Examples for Incentive Measures and their Links to Governance Structure

Governance mode	Markets	Hierarchy	Collective decision making
Governance mechanisms	Framing	Framing	Framing
• Incentives	• Assignment of property rights • Creation of markets • Individual tradable quotes (ITQs) • Tradable permits • Payment for environmental services • Minimum and maximum prices	• Empowerment and development of organizations to enforce rules	• Capacity building • Cooperation management • Round tables etc. • Conflict management • Stakeholder alliances • Introducing community-based management
	Prices	Regulation	
	• Fees • Charges • User Taxes • Tax exemptions • Refund systems • Market protection: tariffs • Facilitate market access • Subsidies to inputs • Market support • Reform/removal of adverse subsidies	• Taxes (unspecific) • Fines • Liability for damages • Standards • Best practices • Access restrictions • Moratoria • Tariff design • Exclusion of particular groups of users • Non-tariff market protection	Norm-building
		Public funding	• Establishing operational rules • Establishing rules on decision-making • Establishing enforcement mechanisms
	Contracts		
	• Performance bond • Revenue sharing • Audits	• Public financed maintenance measures e.g. maintenance contracts for conservation • Common property management by publicly funded agents	Information
	Information	Information	• Information on externalities, property rights, legal aspects etc. • Accounting for non-monetary values • Economic valuation • Cost-benefit-analysis • Technology transfer • Establishing information and measurement systems
	• Information on externalities, efficient practices, property rights, legal aspects etc. • Labelling • Signalling • Certification • Establishing information and measurement systems • Technology transfer	• Audits • Eliciting public preferences • Accounting for non-monetary values • Economic valuation, cost-benefit analysis • Establishing information and measurement systems	

Source: Fischer et al. (2007)

resource users or organizations. The organizational level comprises less direct approaches such as advisory services on regulatory policy or on management and organizational issues to organizations, coupled with organizing practices such as public relations, mainstreaming, or networking. The process level is linked to an even more indirect approach, such as advisory services on general and/or long-term policy processes (Fischer et al., 2007).

According to Fischer et al.'s exemplification, a subsidy policy under the market-oriented mode of governance is operated through provision of information on efficient practices to inputs at the operational level, establishment of payment schemes and introduction of performance bonds at the organizational level, and development of payment schemes for environmental services at the process level (Fischer et al., 2007). Hence, the same incentive measure could be implemented in a multiplicity of ways across different levels of activities.

CONTEXTS AND METHODS

This study is the product of multiple field research conducted in several district sites in Chaiphaphum Province between 1998 and 2008. Chaiphaphum is located in the western part of the northeastern region (Figure 2). This region, domestically called Isan, has been referred to as the least developed out of four regions in Thailand, with land salinization and drought-stricken environment making it the region with the lowest agricultural productivity and income level. The major ethnic composition of this region is Lao, whose major spoken language is Isan, a sister language to Lao. Historically, this region consisted of kingdoms extending to the contemporary national territory of Laos.

Chaiphaphum Province geographically confronts the commercial pressures from Central Thailand but is culturally akin to the agrarian tradition of Northeast Thailand. Unlike most other northeastern provinces, however, which are covered by the plains of the Korat Plateau and are characterized by rain-fed rice farming, this province contains hilly areas suitable for producing a variety of vegetables and fruits aside from main crops such as rice, cassava, sugarcane, corn, and taro root. Such diversity makes the province an excellent space for studying changing rural governance in the field of sustainable agricultural development in Thailand.

As mentioned above, this study examines the cases of three institutions. Each case reflects broader societal changes, national or global, that have occurred over several decades. The first case is the national food safety program called 'Q-GAP' (Q is the acronym for 'quality,' and GAP is for 'good agricultural practices'). In response to the growing global demand to ensure reliable systems for food safety, the MOAC was assigned the task to develop this public food safety program for field-level quality assurance. This quality



FIGURE 2 Research area.

assurance system is linked to issues of agricultural sustainability as it relates to grower safety and environmental protection mainly through the improved control over the use of agrochemicals and alternative production inputs.

To examine this institutional program, the author visited the district offices of the Department of Agricultural Extension (DOAE) in six districts, namely Chaiyaphum City, Phakdi Chumpon, Nongbua Daen, Nongbua Rawae, Kaset Sombun, and Bang Taen, in July 2007 and throughout the period between February and April 2008. In addition, the provincial office of the Department of Agriculture (DOA) was visited in February 2008 for interviewing a professional Q-GAP inspector. Further, one day in early March 2008 was spent with a team of Q-GAP inspectors from the provincial office for participant observation of their field inspection on pummelo orchards in a community of Kaset Sombun District. In interviewing government officers, the author employed semi-structured interview lists on the organization of the program. After 1 week of preliminary research, he also conducted structured interviews with 29 Q-GAP certified pummelo farmers in highland areas

of Kaset Sombun District and an equivalent 36 farmers in lowland areas of Ban Thaen District, coupled with participant observations of their work in half of their pummelo orchards.¹ The interviews were conducted in Thai for a comparative study on the impact of Q-GAP implementation on farmer perceptions, production practices, and their livelihoods.

The second case is related to the national-level debt suspension program under the BAAC, the major public credit institution in Thailand. Since 2001 technical assistance for organic food production and marketing has been promoted by the BAAC for dealing with client farmers' loan default problems, career rehabilitation, and debt-related poverty. Data collection was administered in January 2004 and July 2007 through secondary documents collection and semi-structured interviews in Thai with the BAAC officials in four BAAC offices of Chaiphum Province, namely municipal and provincial offices in Chaiphum City, district offices in Phakdi Chumpon and Nongbua Rawae, plus the central office in Bangkok.

The third case involves looking at the transitioning of organic agriculture enterprises administered by former officials of Wangthong SAO, a decentralized subdistrict administrative unit in Phakdi Chumpon District.² This transition represented a development from a foreign NGO-supported small organic vegetable operation to a major subdistrict industrial enterprise of organic fruit production and processing under the SAO, and the eventual collapse of the programs. The industrial enterprise was partly a product of the rural industrialization campaign called the "One Tambon One Product" (OTOP) that has been promoted nationwide in Thailand since the former Prime Minister Thaksin Shinawatra took office in 2001.³

The case of the NGO-led organic vegetable project was researched in October-November 1998, when the author was not fluent in Thai. In interviewing local farmers, translators from Khon Kaen University in Khon Kaen Province, Northeast Thailand, assisted with preliminary research and structured interviews. The development of the organic fruit-processing program under Wangthong SAO was observed in periodic one-week visits in 2003, when the author gained the command of Thai. During a visit in June 2007, the implementation of the program from 2004 and its eventual cancellation in 2005 was scrutinized by interviewing key informants who had previously been involved in the planning and enforcement of the program.

FINDINGS

The Case of the MOAC: Sustainable Agriculture under Good Agricultural Practices

In Thai history, the Ministry of Agriculture was established in 1910 during the reign of King Rama V. It was renamed as the Ministry of Agriculture and Cooperative (MAOC) in 1962 by absorbing four departments following

the dissolution of the Ministry of National Development (MOAC, 2008).⁴ Since that time, the MOAC has led agricultural modernization in Thailand in conjunction with other relevant ministries, with many of its governance efforts directed to promotion of the Green Revolution. The Department of Agricultural Extension (DOAE), created under the MOAC with assistance by the World Bank, played a direct role for disseminating green revolution innovations, including new high-yielding varieties, pesticides, chemical fertilizers, and associated labor-saving machineries, in every subdistrict through the staff stationed in the district center.

As elsewhere, these goods and extension services have provided economic incentives for farmers to increase crop yields and incomes. Indeed, by drawing rural surplus labor and resources, they contributed significantly to Thailand's initial capital accumulation for rapid national industrialization. Yet, except for Central Thailand, where rice yields have risen considerably with developed irrigation systems, the widespread adoption of Green Revolution technologies has resulted in stagnating market prices and yields throughout most areas of the country (Pasuk and Baker, 1995), persisting poverty of small-scale farmers in many rain-fed areas (Apichai, 1997), recurrent pest resistance and resurgence to pests (Sathorn, 2000), health hazards related to farmers' inefficient use of pesticides (Nipon, Ruhs, and Sumana, 1998), among others. Furthermore, a rapid expansion of export cash crop cultivation in the uplands of the North and Northeast, promoted by the MOAC during the 1970, with crops such as maize, cassava, kenaf, and cotton, resulted in rapid deforestation and massive displacement of the poor from the paddy tracts as dependent labor on agribusinesses with no secure titles to land (Pasuk and Baker, 1995).

Aware of the problems that have accrued in rural Thailand from agricultural modernization, the government assigned MOAC to implement a new, epoch-making agricultural development program related to sustainable agriculture. The national GAP program established in 2003 has its own quality management system developed by modifying the concepts of international standards such as Hazardous Analysis and Critical Control Point (HACCP) and the International Organization for Standardization (ISO) method (Surmsuk, 2007). The guiding objectives of this food safety program are to maintain consumer confidence, ensure safety for growers, and minimize adverse impact on the environment through public support of good agricultural practices. Among these objectives, the primary goal as stated by the government has been to ensure consumer confidence in food safety in the increasingly interdependent global agro-food context. Like other emerging GAP standards in the ASEAN (the Association of South-East Asian Nations) countries, however, it places significant weight on assisting the access of small-scale farmers to mainstream markets, whether domestic or foreign, through good agricultural practices. This is clearly different from the case of private GAP standards that give a financial edge to resourceful

large-scale producers over the entry of resource-poor smallholders to those markets (Graffham and MacGregor, 2007; Graffham, Karehu, and MacGregor, 2007).

The structure of governance this ongoing program is based on is thus 'markets,' for which technology transfer, audit, and certification for food safety and sustainable agricultural production comprise the key incentive measures. Under this program, the Department of Agriculture (DOA) acts as a certification body, and the National Bureau of Agricultural Commodity and Food Standards (ACFS) serves as an accreditation body for providing Q certification (Surmsuk, 2007) for 29 crops.⁵

At the operational level of policy implementation, the Q-system is administered through the following assistance by the government. Officers from a district DOAE office provide technical assistance for farmers to optimize the use of agrochemicals. Such assistance involves technology transfer of integrated pest management (IPM), integrated crop management (ICM), various types of organic compost, among others, along with offering training seminars about the concept of GAP. Such assistance provides technical basis for interested farmers to apply for certifying their farm in terms of a selected crop in question.

As for certification, official GAP inspectors from the provincial office of the DOA administer recertification every 2 years. At times of inspection, professional DOA inspectors visit the fields with a number of trained volunteers, observe the farm conditions, and interview farmers. They use a prescribed checklist on eight production aspects: water systems, farm conditions, agrochemical use, product storage and shipping, record keeping, product safety, farm management, and harvest and post-harvest practices. In the version used at the time of the research (March to April, 2008), the checklist covered, regardless of crop types, 84 total control points, with 51% of compliance required for certification. The inspectors also take samples of the live growing crops and the soils from visited farms, and ship them to the regional DOA office for laboratory inquiries into pesticide residue conditions. In addition, farms are scrutinized regarding whether only legally licensed pesticides have been used. To obtain certification (or to be recertified), applicant farmers are required to undergo this inspection process at least three times throughout a year, without advance notification of the inspection date and time. All audit and certification services are provided for farmers for free — a departure from the case of private GAP programs in which the required audit and certification fees can often exceed farmers' solvency (Graffham and MacGregor, 2007; Graffham, Karehu, and MacGregor, 2007).

At the organizational level, extension officers from the DOAE are responsible for issues such as grouping farmers for certification and related advisory services. To be Q-GAP certified, farmers who are considered smallholders (those with a target crop's land scale not exceeding 5 rai or

approximately 12 acres) are obliged to be a member of some type of a farmer group related to the promotion of the crop. Such a rule obviously makes technical assistance more effective and efficient from the administrative point of view. There are cases of communities, nonetheless, where the number of existing groups is inadequate or where no group exists for a certain crop variety that people wish to certify. For these cases, extension officers open up public seminars through which they promote the creation of 'farmer field schools' (FFS) under a target crop. Such a grouping typically consists of twenty members, and an FFS becomes a legally valid organizational basis for interested farmers to receive assistance for required GAP practices and certification. In addition to collectively receiving training services from officers, FFS members are expected to undergo mutual learning in a field school setting in order to improve their on-farm application of GAP principles. Furthermore, the DOAE and the DOA cooperatively hold training seminars for farmer group (or FFS group) leaders in a provincial capital before they train group members in communities about the concepts and practices of good agricultural practices.

At the process level, officers from a regional DOA office play important roles for monitoring the changing situation regarding Q-GAP policy implementation. In relation to Chaiyaphum Province, officials from the regional DOA office in Khon Kaen Province periodically visit several selected sites of every province in the northeastern region through the guidance of local DOAE officers. Based on the information gained through these visits, they are able to advise the central DOA office in Bangkok on national-level policy processes. Through these multi-layered efforts, between 2003 and 2007, a total of 224,334 farmer households have been Q-GAP certified for crops nationwide (Personal communication with DOA in August 2008).

The Case of the BAAC: Promotion of Organic Agricultural Practices under the Farmers' Debt Repayment Suspension Program

Since November 1966 when the BAAC was established under the Ministry of Finance, it has become the major formal credit institution for agriculturalists in Thailand. In 1987, small-scale farmers became the first target clients for the BAAC loans (Akagi, 1996). This expansion absorbed more than 5.1 million households or 91% of the small-scale farmer population in Thailand by 2003 (The BAAC, 2004). The opened access of small-scale farmers to the BAAC credits have provided them with the improved working capital for agricultural inputs and machinery, with the interest rates attached to the loans much lower than private creditors and commercial banks.⁶ Nor did they have to mortgage their property to secure their loans, as other villagers could support them or by members of a farmers group they were encouraged to create (Seri and Hewison, 1990).

Despite these publicly financed incentives, the BAAC credits became a new source of rural problems. The following features of goods (credits), services (loaning), associated rules, and actors involved drove the problems. First, the received credits were often tied to the purchase of expensive modern agricultural technologies, such as hybrid seeds, synthetic pesticides, chemical fertilizers, irrigation systems, and tractors, thereby leading to various social, economic, and environmental costs described above. Second, the loaning rules concerning the due repayment at harvest forced all indebted farmers to sell their crops in chorus, thereby resulting in a sharp fall in the market price. Third, small-scale farmers, the vast majority of the poor population in Thailand, often found themselves unable to repay BAAC in due time, as rising living costs for modern consumption goods and children's education eroded the financial basis of households. In extreme cases, defaulters were advised by BAAC officers to borrow money from private creditors with the monthly interest rates of as high as 10%, thus forcing them into total bankruptcy.

As debt problems became noticeably serious, the government decided to assign the BAAC to operate the 'Farmer Debt Suspension and Debt Burden Reduction Program' for the 3-year period between April 2001 and March 2004. This program was part of the broader government agenda of alleviating poverty by enabling small-scale farmers to recover from debt and rehabilitating their occupations in order to improve their income and quality of life. The Thai King's 'Philosophy of Sufficiency Economy' has also been upheld as the most general principle in every realm of the BAAC policy implementation, with self-reliance in production and self-restraint in consumption regarded as steering virtues for farmer clients.⁷ Along with these guiding principles, the BAAC had a more implicit operational goal of generating a full payback of defaulted loans from their clients through debt moratorium. To be eligible to join the program, applicant farmers were required to be the clients of the BAAC or the members of the Agricultural Cooperative who have borrowed directly from the Bank or the credit guarantors or heirs of the client prior to April 1, 2001. Moreover, they must be the defaulters who owed to the BAAC no more than 100,000 Baht before April 1, 2001 due to an inescapable cause and in good faith, except where they had been sued as debtors by the BAAC (The BAAC, 2004).

The overall governance structure of this policy was based on 'command-and-control' approaches where the government exercised authority and direction over the financial decisions and arrangements of farmer defaulters by taking such incentive measures as moratoria and interest reduction under the following conditions: suspension of debt repayment and waiver of payment for interest that had accrued between April 1, 2001 and March 31, 2004 were authorized for those who swore to repay loan principal and interest after that period in line with the original conditions specified prior to joining the program (The BAAC, 2004).⁸

In addition, the Debt Suspension Program involved organizational incentives of information provision and price control through advisory and marketing incentives for eligible farmers. The advisory services were related to the career development support administered through the career rehabilitation program of the MOAC. Activities under the program included technical training for career development and technology transfer through seminars and advisory support by technicians. Defaulter farmers joining the Debt Suspension Program were not obliged to participate in these seminars, though strongly recommended by the BAAC for meeting both sides' ends.

It was the seminar series called the 'True Life Curriculum' (*laksu sattchatham chiwit*) that suggested the BAAC's institutional relevance to sustainable agriculture. In cooperation with the National Network for Elimination of Agrochemicals, a voluntary civil society association in Thailand, the BAAC incorporated into this curriculum three working concepts: first, 'mentality' (*jittphap*) referred to the goal of spiritual and livelihood empowerment by following key norms of self-reliant livelihoods, such as abstaining from smoking, alcoholism, buying lottery, or gambling, while keeping regular habits of household accounting.⁹ Second, 'physicality' (*kaiphap*) referred to the technical adoption and mastery of various organic production methods such as organic compost, IPM, and integrated production. When the seminars were held, participant farmers were provided free pamphlets about the details of these organic production methods. Whenever seminar participants have queries or concerns about the production methods after each seminar, they were encouraged to contact the BAAC or the MOAC for further technical advices for free. Third, 'potentiality' (*sakkayaphap*) referred to the formation and development of producers' groups of organic farming. The BAAC officials believed that organic production methods are available for solving rural indebtedness in three terms: first, they would reduce production expenses through reduction or elimination of agrochemicals. Second, they would improve production levels through improving the degraded soils. Finally, reduced production expenses and increased incomes from improved production should result in increased savings. They considered creation and development of organic producer groups as a critical channel for indebted farmers to empower their production and marketing initiatives as well as minimize indebtedness.

In addition to seminar dissemination of organic production methods, the BAAC also undertook several marketing initiatives for defaulter farmers. In a joint venture with local agricultural cooperatives, the BAAC established daily markets for organic and pesticide-free produce in all provincial capitals in Thailand. Farmers who continued to utilize the credit services without defaults with the BAAC were allowed access to such marketing opportunities, whereas those without a credit membership were not. In addition to direct sales, the market accepted orders from distant locations where customers have difficulty in accessing certain kinds of crops, such as rice

in upland areas. On the other hand, the BAAC helped to establish and coordinate community markets for organic and pesticide-free produce. In Chaiphaphum City, this type of community market was held once in every month.¹⁰ Any producers, including those without a BAAC membership and those from nearby school gardens, are allowed to sell their produce at that market through the market prices coordinated by the BAAC.

At the process level, provincial BAAC branches regularly reported the outcomes from the implementation of these policies to the BAAC headquarter in Bangkok with advisory notions on the policy process. In the three years between April 2001 and March 2004, a total of more than 2.3 million small-scale farmer households, with a combined debt of 94 billion Baht, joined the Debt Suspension Program. This meant that 89% of participant defaulters became capable of repaying debts. Among the total of more than 1.9 million farm families who received some form of assistance in career rehabilitation, 271,207 people joined the True Life Curriculum that BAAC was operating (The BAAC, 2004). Consequently, policy makers of the central government, including the then Prime Minister Thaksin Sinawatra, recognized that the Debt Suspension Program ended as a definitive success, and determined that sustainable agricultural education and training for small-scale farmers, such as those offered in the True Life Curriculum, along with related marketing initiatives, should continue as part of the ongoing career rehabilitation program even after the completion of the Debt Suspension Program.

The Case of the SAO: Industrial Organic Agriculture as Part of Democratic Local Governance

Social movement components of sustainable agriculture in Thailand have been increasingly subsumed within the realm of technocratic officialdom through decentralization of local development agencies. Wangthong SAO in Phakdi Chumpon District offers a salient case study of such a transformation. The early situation went as follows. In 1992, leading local villagers in Wangthong subdistrict (in which there are 13 villages) initiated a small organic vegetable operation through collaborative efforts by a Japanese NGO. The organic vegetables produced included 23 varieties, such as green cabbage, kidney bean, rape blossoms, radish, in addition to a number of native crops in Thailand. They were grown on local farmers' small gardens (which typically do not exceed two acres) using the techniques of crop rotation, animal manure, and botanical pest management practices using local herbs. The rules of the operation were related to the business model of community-supported agriculture (CSA) imported from Japan, whereby producers directly market produce to consumers without intermediaries. In this organic vegetable CSA, the products were given year-round fixed prices

with premiums to minimize growers' financial burdens for reduced production, with the average prices of the vegetables found about 2.5 times those sold in the local district market of Phak Di Chumpon District. Unlike the common practices of CSA in the West and Japan, however, most customers under subscription contract were not local residents but a group of Japanese housewives living in Bangkok with a road distance of about 180 miles from Wangthong Subdistrict. Consumers' 'trust' on local farmers' organic production process was nourished by their periodical farm visits, and thus no formal certification procedures were involved for maintaining their bonds.

This operation paved a steady growth until early 1996, when there were around 50 producer households under direct sale contract for more than 100 Japanese customer households. At this peak period, the project went into a sudden collapse. Without established regulative mechanisms to control the supply and demand, the oversupply due to the ever increasingly opportunistic entry of producers eventually resulted in a marginalization of sales and income for participant producers, leading to a provisional business breakdown followed by a revocation of on-site assistance by the Japanese NGO. Then, the local farmers and their representatives turned to rely on the Thai government to provide financial support for renewing the project. In April 1996, the producer organization was reestablished as an official agricultural cooperative with regulatory mechanisms to control membership and production.¹¹

With cumulative experiences from managing the small organic vegetable CSA operation, the former chairman of the CSA project was elected as the head of Wangthong SAO in 1999. Originally a small-scale organic farmer, the SAO head designed and implemented a new project of industrial processing of organically produced fruits into sweet chips under the OTOP program. A guiding principle of this project, which was in line with the national-level agenda of rural industrialization, was to spur local economic growth through industrialization of organic agriculture in order to establish a more self-sufficient local revenue and tax base. In addition, the project had the more specific operational goal of promoting organic agriculture in the subdistrict to maintain resource and environmental-conserving production systems while overcoming the persisting scale constraints inherent in the CSA operation.

Reflecting the democratic decentralization of local governance in Thailand, the general governance mode in which SAO operates is 'collective decision-making.' Two representatives from each village within a subdistrict, elected by villagers every 4 years, make up the SAO council. They are supposed to engage in cooperative incentives of norm-building, i.e., establishing operational rules, rules on decision-making, and enforcement mechanisms over the allocation of limited local resources. As it relates to the industrial agriculture project of Wangthong SAO, information on cost-benefit analysis of inter-village allocation of resources, externalities related to the prior use

of agrochemicals, and types and processes of technology transfer comprised key substantive incentives for their collective decision-making.

The operational progression of the industrial organic agriculture program went as follows. In response to the SAO head's proposal, in 2001 the government subsidies of 1 million Baht (approximately US\$30,000) were granted for building factories for organic fertilizer production and food processing, coupled with supplying various production and processing technologies. Construction of factories was completed by 2003, and the project implementation began in early 2004. Two important technological equipments employed for organic production were botanical insecticide sprinklers filled with herbal liquid and special organic compost called 'Bokashi,' originating from Japan and made up of various types of animal manure, rice, wheat husks, EM (Effective Microorganisms), liquidized sugarcane, and water.¹² With these technologies, 6 fruit crop varieties were grown by 69 farmers participating as employed labor, including longan, pummelo, sweet tamarind, banana, mango, and orange, on a total public land of about 160 hectares scattered over the subdistrict.

To enforce these operational assets at the organizational level, multi-tiered divisions of labor and decision-making were employed. Each village in the subdistrict specialized in specific crop varieties for production and processing, while selling the chip products at local retail stores within the subdistrict, as well as other markets within the province through middlemen brokerage. The SAO council formally discussed emerging issues and problems about the project management regularly twice a month.¹³ As the board of the project, this council determined the basic guidelines and rules for production, processing, and marketing of organic fruit products. They were also responsible for inspecting whether participating producers deliberately avoided the use of synthetic pesticides, chemical fertilizers, or other kinds of prohibited substance onto the fields in accordance with the official criteria.¹⁴ In addition, each village had a committee of five to seven participant grower members involved in the project, including a leader and two growers responsible for marketing. While they were supposed to strictly follow the decisions made and rules set by the SAO council on fruit production, they were given self-discretion over the marketing management in their village.

Despite all the dedicated efforts to operate the entrepreneurial project, it did not last even until the head of the SAO was compelled to retire in July 2005 due to a defeat in the SAO head election.¹⁵ The project came to a halt for a critical management problem: the machines the SAO had purchased for fruit processing turned out not to have sufficient efficiency to turn the project's balance from deficit to surplus. Worse, before the funds to replace them with new machinery could be budgeted from the central government to improve processing efficiency, the SAO head and most of his staff who were leading the program were all removed from the SAO office after the

election. Instead, the new SAO head, winning in the SAO election in mid-2005, was an affluent oil business trader whose main policy interests lay in promoting construction projects within the subdistrict rather than agricultural development. Consequently, the industrial organic agriculture project was terminated as a failure.

DISCUSSION AND CONCLUSIONS

The concept of sustainable agriculture has evolved since the early 1980s in response to a host of ecological and equity problems posed by the adoption of modern industrial agriculture. By employing the systems approach, it aims to minimize an array of drawbacks and externalities associated with the practices of conventional agriculture (Ikerd, 1992). In the developing world since the introduction of structural adjustment programs (SAPs), sustainable agricultural practices have been increasingly adopted and disseminated by local NGOs to empower small-scale farmers based on application of agroecological principles and on bottom-up, participatory approaches (Altieri, 2002). In Thailand, sustainable agriculture has drawn both popular and official attention well before the economic crisis occurred in 1997. However, the full-blown official implementation of sustainable agriculture in Thailand began only after Buch-Hansen undertook the first comprehensive feasibility analysis nearly a decade ago. No serious feasibility study has been produced since then that examines the political and institutional development up to the present.

This study has attempted to examine the development of the past decade by looking at the cases of three institutions, namely the MOAC, the BAAC, and the SAO, from sustainable governance perspectives. In the following analytical discussion of the research, findings and conclusions are presented.

First, the incentive structure of sustainable agriculture in Thailand is summed up from a broad governance perspective. As mentioned, Thailand's 8th Development Plan defined sustainable agriculture as encompassing four alternative production methods: natural farming, organic farming, integrated farming, and agroforestry. From the 9th Plan, the official technical emphasis on sustainable agriculture appears to have changed to one that makes the dichotomy between conventional and alternative agriculture ever more blurred. The official adoption of Q-GAP at the national level is consistent with this interpretation. Reduction and control rather than elimination of the use of agrochemicals, and combination or complementation of rather than replacement by alternative production methods, are underscored therein.

A backdrop for this shift may be the official realization that enforcing farmers' conversion to the above four production methods is a very difficult and costly process. Perhaps more important is the recognized ease

and returns in connecting the official aspirations for making Thai agriculture more globally competitive with the persisting sustainability concerns in the small farm sector. The broader technical conception of sustainable agriculture adopted in Q-GAP does not contradict the promotion of Thai agriculture in mainstream markets nor exclude the more distinctly alternative forms of agriculture that could better respond to resource-poor farmers' needs and concerns.

It is also important to look at the incentive structure that has been driving Thai farmers to adopt sustainable agriculture. It is true that the majority of small-scale farmers in Thailand have been increasingly conscious of the potential benefits from sustainable agricultural practices through both government campaigns and their own problematic experiences in conventional farming. Currently, however, the main incentive for them is related not so much to environmental or social as to economic criteria with regard to minimizing the production costs that have skyrocketed in recent years via the influence of rising world oil prices. Ten years ago, for instance, prices of chemical fertilizers used to be about 200–300 Baht (about US\$6–9) per sack (50 kg). The rapid price increase in the past 3 years has reached the current prices in the range of 700–1,000 Baht (approximately US\$21–30). A similar trend, though less dramatic, applies to pesticides and gasoline. Such price increases have become significant financial burdens for many farmers, let alone resource-poor farmers. Hence, the official appeal to reduce farmers' own financial burdens through sustainable agricultural practices is no longer vacuous rhetoric appropriated by the BAAC but has become serious persuasion by all the relevant official institutions, including the MOAC and the SAO. In this sense, the overriding incentive structure of sustainable agriculture has become ingrained in global forces on both the government and farmers' sides.

Second, the operational feasibility of sustainable agriculture is assessed as follows. The major operational strength of the official programs discussed above is related to the publicity in the sense that goods and services related to extension, audit, certification, and career rehabilitation are provided by the government for free. Farmers in Thailand have not received agricultural subsidies such as those available in the industrialized nations. However, they are still situated in a more privileged position than are the mass of those living in other parts of the developing world where government extension has been completely dismantled through the introduction of SAPs, as well as where access to GAP certification or other similar opportunities is confined to resource-rich farmers. Meanwhile, the operational limitation mirrors the very strength in that the accessibility resource-poor farmers have to those public goods and services is compromised by their lower quality. By way of illustration, the level of required compliance in Q-GAP is significantly lower than that in GLOBALGAP—the most prestigious GAP standard established by a consortium of major retailers in Europe in the late 1990s. For vegetable

and fruit farmers to get certified, for instance, while Q-GAP requires 51% of compliance for 84 total control points, GLOBALGAP requires 100% of compliance for 74 points and 90% for 125 points, with the total required control points of 236 (including 37 recommended points) (GLOBALGAP, 2007a; 2007b; 2007c). Such a conspicuous divergence between Q-GAP and GLOBALGAP necessarily leads to unequal credibility and treatment of certified products in import markets and by sensitive consumers.

Third, the organizational dimension is illuminated as follows. Unlike the agrarian orthodoxy to claim sustainable agriculture as grounded in participatory approaches (Bruges and Smith, 2008; Matterson, 1996), extension and organizing approaches of these institutions basically remain within the conventional confines of the transfer of technology (TOT) paradigm. Official promotion of GAP through DOAE's organizing of FFS groups may sound appealing from the standpoint of civic sector engagement in sustainable agriculture in the guise of farmer-to-farmer extension. Whatever official rhetoric of farmer participation exists, however, a massive creation of FFS groups on the national scale is literally a top-down process. Field observations suggest that even an existing farmer group might be encouraged to form FFS groups in itself, in spite of the reality that such internal capsulation accrues only administrative significance. It is questionable on what degree members of an officially established FFS group could set out their own agenda and advance it on the self-reliant and self-referential basis—the true sense of participation. The similar cautions may hold with organizing approaches by the SAO because the leadership, whatever their rhetoric of local participation and empowerment, is taken by the officially elected figures rather than farmers themselves.

Finally, process-level and society-wide dimensions of governance draw the following conclusions. Sustainable agriculture in Thailand, such as that currently conceptualized in the Thai version of good agricultural practices, is indeed a critical way to assist small-scale farmers to approach privileged markets through official certification and extended channels in marketing. As indicated, this suggests a significant departure from the case of private GAP standards that cater to the economic capacity and scope of larger, more resource-rich farmers. Yet, where there are winners, there are often many losers. For many crops in Thailand, especially fresh fruits and vegetables, the overall pie is limited by saturated domestic markets, coupled with competitive situations of oversea markets. Although a public GAP standard such as Q-GAP can serve the needs of small-scale farmers, this may be more in the sense of bolstering the *status quo* of a more competitive cohort of small-scale farmers to remain in the mainstream markets, rather than encouraging less competitive groups to newly enter the markets and empower their livelihoods.

The society-wide policy impact also needs to be assessed from the perspective of scale. In the MOAC's Q-GAP program, during the 5 years

since the Q-GAP program was initiated in 2003, only around 4 percent of the estimated 5.6 million small-scale farmer households in Thailand have been certified. A similar percentage of the estimated population has joined the BAAC's career rehabilitation program related to dissemination of organic farming practices. Given that not all participants' agricultural practices were affected by joining these programs, the society-wide impact of these dissemination efforts still remains modest at best. In addition, there is no internal process-level follow-up mechanism in the BAAC to evaluate the real impact of sustainable agriculture extension through a career rehabilitation program on farmers' adoption. The scale impact of the SAOs may be even more limited, concerning the absence of centralization effects to multiply sustainable agriculture enterprises as well as the lack of the process-level impact on the higher administrative levels. Further, as illustrated by the case study, institutional sustainability of the SAOs remains fragile due to the very process of democratic decentralization that has given local people devolved power and capability. Periodical elections could result in a rapid abandonment of a development approach that has been adhered by a former SAO council team.

These conclusions, though seemingly supportive of some concerns Buch-Hansen (2001) raised about the feasibility of sustainable agriculture in Thailand, remain yet tentative, since they are derived from the outcomes of the last decade or even shorter, whilst the process is still ongoing.

NOTES

1. Pummelo (*citrus maxima*) is a citrus fruit, colored pale green to yellow when ripe and native to Southeast Asia.

2. In modern-day Thailand, five administrative levels have been in place, ranging from the Ministry of Interior in Bangkok down to province (*changwat*) to district (*amphoe*) to subdistrict (*tambon*) and to village (*muu*). By tradition, the Ministry of Interior exercised centralization by taking provincial and district offices as the field agency to oversee the entire national territory. Meanwhile, of the five administrative units, subdistrict alone did not retain substantial administrative functions despite the existence of such nominal apparatuses as 'Subdistrict Councils' (Akagi, 1999). Since early 1996 when legislation laid down that each of the nation's 7,000 Subdistrict Councils be replaced by the 'Subdistrict Administrative Organizations' (SAOs, *ongkan boriban suan tambon* or OBT), administrative and fiscal power has been devolved from the Ministry of Interior to the locally elected representatives at the subdistrict level. This democratic decentralization has allowed the SAOs legal status to execute development projects at their disposal without lobbying to the district office for either grants or approval (Arghiros, 2002).

3. Thaksin designed this rural industrialization scheme during 2001–2006 by drawing inspirations from the successful *One Village One Product* program in Oita prefecture, Japan. This program aimed to foster local entrepreneurship within village communities so as to come up with the best quality local product in the subdistrict to be branded for marketing promotion at the local, national, and international levels. After the military junta overthrew Thaksin's Thai Rak Thai administration in September 2005, OTOP was once revoked but then revived with minor changes in the name of *Local and Community Products*.

4. These four departments include the Department of Cooperatives Promotion, the Department of Cooperative Auditing, the Department of Irrigation, and the Land Development Department (MOAC, 2008).

5. The main export crops include longan, durian, mangosteen, mango, asparagus, okra, baby corn, pummelo, lychee, tamarind, ginger, and chili. The other targets are rice, pineapple, young coconut, longkong, rambutan, coffee, peanut, soybean, orange, cabbage groups, beans, chili groups, melon groups, herbs, sweet corn, onion and banana. Major importing destinations include EU, China, Hong Kong, Singapore, Japan, USA, and Malaysia (Bureau of Agriculture and Fisheries Product Standards, 2006).

6. Usually in Thailand, rural farmers are allowed to borrow agricultural credits in the amount of 10,000–50,000 baht (approximately US \$300 to \$1,500) from the BAAC a year, depending on their investment capacity and needs. At present, there are five stages of annual interest rates: 7.5%, 8.25%, 9.0%, 9.75%, and 10.5%, each given a rated credit status of AAA+, AAA, AA, A, and B. Beginning farmers will start with the B status for the annual interest rate of 10.5%, and as they repay the loans without default, their status will rise one by one every year up to the status of AAA+ in four years. If client farmers cannot repay them for a year in case of any unavoidable conditionality such as natural disaster, they will start with the B status again. On the other hand, unless such conditionality accredited, farmers are imposed the interest rate of 13.5% in the following year. If they continue not to repay, 3% interest rate is to be added to the cumulated rate. Under such circumstances, they will not be allowed to borrow any further credits, and will eventually be deprived of the BAAC credit membership.

7. This Philosophy was bestowed by the King Bhumibol Adulyadej after the economic crisis hit Thailand in 1997. It was then used as an overarching guideline in formulating the 9th and 10th Development Plans. The Philosophy stresses discursively the importance to take a 'middle path' for all the societal levels of the nation in pursuing a balanced economic development by modernizing the nation in line with the forces of globalization while safeguarding it from the shocks and excesses that arise. To achieve this goal, a balanced application of Buddhist spiritual virtues such as honesty, forbearance, diligence, self-awareness, intelligence, attentiveness, among others, is emphasized.

8. During the debt suspension period, the defaulters were prohibited from borrowing further credits but were guaranteed 1% increase in annual interests for their deposits not exceeding 50,000 Baht for the 3-year period. Those farmers who could clear their defaults in full prior to the end of the program were promoted to a higher client class (BAAC, 2004).

9. Such a combination of controlling 'bad habits' and building self-awareness about household finance was relevant to not only improving their work ethics but changing their whole attitudes of life, thus making BAAC officials' persuasion of cost-benefit valuation relatively meaningless. Hence, on occasions Buddhist monks were invited at the seminars to preach the Buddhist virtues of 'true life.'

10. When the author visited the city in 2004, the market was held in the BAAC office site on the 10th of every month, while at the time of his visit in 2007, it was held in the local market sites on the first Wednesday of every month.

11. This organic vegetable farming project ended in 2004, and the cooperative business shifted to organic banana production and marketing at the farmers' market in Chaiyaphum City. The reasons for the Cooperative's retreat from the vegetable CSA operation included: (1) consumers in Bangkok became unsatisfied with the amount of vegetables supplied, especially in the driest season (March–April) when the productivity tends to be the lowest of a year, (2) they found it difficult to seek new customers in Bangkok due to the increased substitutability of organic products in large metropolitan supermarkets, (3) organic bananas were considered much easier to produce and gain profits through selling to nearer markets than was the case of organic vegetables.

12. EM is made up of fruit, vegetables and/or food residues fermented with water, alcohol, sugar, and possibly something else, to produce enzymes by the working of microorganisms.

13. There was a significant gender bias in the council membership, with all the 26 village representatives comprised of men.

14. In case a grower was found to use agrochemicals twice albeit the warning of the first time, the council could deprive his/her rights to join the program.

15. He lost the election with the vote count of 1,874 against 2,002.

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