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Citation

DONALDSON, John A., & MOORE, Joel D.. (2017). Going green in Thailand: Upgrading in global organic value chains. Paper presented at the International Studies Association annual conference, Baltimore, US, 2017 February 22-25, Baltimore, US.

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Going Green in Thailand: Upgrading in Global Organic Value Chains

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Paper prepared for presentation at the World Bank Malaysia Working Paper Series.

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INTRODUCTION

Under what conditions are small-scale farmers able to overcome significant barriers to shift into producing organic rice? In a global context, the answers are vital. Rice - as with other staple goods - in many areas of the developing world has become dependent on chemical fertilizers, causing rapid deterioration in the natural environment. Rice grown with chemical fertilizers is less safe to consume. While the global environmental imperative justifies conversion (or in most cases, reconversion) to the production of organic (or at least safer) rice, the local impact of the overuse of chemical fertilizers is just as crucial. Chemical fertilizers create lasting effects on the health of local farmers, both in terms of the direct effects from the fertilizer's application, and in terms of the indirect effects the fertilizer has on local drinking water. While chemical fertilizers when first introduced can rapidly increase rice yields, farmers often find those gains diminishing over time (e.g., Tilman et al, 2002). Thus, many farmers experience a vicious cycle – reduced yields cause increased chemical fertilizer use. This cycle also causes many farmers to fall into debt, as the cost of chemical fertilizers can be high, while both the yields and the price of rice tend to fall. Meanwhile, organic rice has a strong international certification system and enjoys a price premium. Demand for organic rice is stronger and growing. Therefore, the imperatives for shifting into the production of organic rice are mounting.

Yet, even as the forces behind the global movement towards organic rice are mounting, the barriers to shifting to its production are also high. These include numerous technical challenges in producing organic rice, difficulties in accessing far-flung domestic and international markets, and market risks. What is more, as discussed below, certification agencies have established extensive and dizzyingly complex application procedures, and demand that farms must be chemical free for a number of years before they are certified as organic. This means that once a farmer overcomes these numerous technical and financial challenges, she must wait several (between two to four, depending on the agency) seasons before the shift can pay off. Moreover, such farmers often find themselves at the mercy of middlemen in order to link to more lucrative markets.

Thus, to address this overall puzzle, we compare the puzzling patterns we find in the attempts to increase the production of organic rice in five similar provinces in the fertile heartland of northeastern Thailand. Like subsistence farmers elsewhere in the developing world, small-scale farmers in remote Thai provinces are highly reluctant to shift to organic production. Yet, despite the fact that they face similar natural, social and political conditions, farmers in some provinces have been markedly more successful in making such a shift. Could provincial governments or policy alone be responsible? This is unlikely since Thailand is a highly centralized, unitary state, with provincial governors appointed by and beholden to the center; tenures tend to be short. Yet in some Thai provinces, such as Surin and Yasothon, small-holding farmers have been remarkably successful in upgrading into more profitable certified organic production for national and global agricultural markets. They receive larger market premiums, are exposed to less risk from fluctuating global market prices, and are less dependent on exploitative, informal credit markets. In other Thai provinces, like Ubon Ratchathani (which neighbors Yasothon) and Sri Saket (which neighbors Surin), farmers remain locked in commodity pricing, dependent on informal credit to secure chemical pesticide and fertilizer inputs and exposed to wild price fluctuations. Further, a fifth province, Amnat Charoen, which borders Ubon Ratchathani and Yasothon, occupies a middle position, enjoying a moderate although sporadic pattern of organic rice adoption (see Table 1).

Such variation is especially puzzling given the provinces' similarities. Each are located in Isan, the agrarian, traditionally poor region in Thailand's northeast. The provinces' geographic, demographic and environmental conditions are all similar. Could the level of economic development be a factor, with wealthier provinces having more wherewithal to shift production to organic rice? Unlikely: the GPP per capita (PPP) of all five provinces is nearly identical, and the two most successful in organic rice production have lower per capita GDP compared to the least successful two. Further, between 2000-2010 (to take a relevant period), neither the provinces' rates of economic growth nor their rates of poverty decline are associated with their degrees of success, although the two most successful provinces had the highest rate of poverty in 2000, and the fastest percentage point decline in poverty rates. Why do we observe such inter-provincial variation in a unitary state where agricultural policy is decided by the center? What factors help or hinder farmers that wish to upgrade into higher value-added alternative global value chains?

	GPP PER CAPITA (PPP) 2013 ¹	POVERTY RATE IN 2000	POVERTY RATE IN 2010	GDP GROWTH RATE 2000-2010 (ANNUAL)	RELATIVE DEGREE OF SUCCESS IN ORGANIC RICE
SURIN	5,259	57.8	8.2	10.9	High
YASOTHON	4,744	46	10.1	10.6	High
AMNAT CHAROEN	5,067	40.6	8.1	8.6	Medium
UBON RATCHAHANI	5,306	25.9	8.2	10.2	Low
SI-SAKET	5,301	40.7	36.1	12.6	Low

¹ Applies World Bank conversion factor for 2013

We attempt to answer these questions by evaluating the ways in which local government and civil society (at the local, national, and international levels) can support rice farmers in overcoming collective action problems and other major barriers associated with upgrading into organic production. Relevant secondary literature in any language on these provinces is scant, but we reviewed what there was. We examined newspaper reports and other relevant documents from government offices, as well as international organizations and national and international nongovernment organizations. We spent several days in each of the five provinces, interviewing provincial and local government officials, farmers, NGOs, academics, and other relevant actors. This allowed us to cross-check our sources and triangulate our conclusions.

We believe our results will make important contributions to the academic and policy domains. The existing literature that analyzes successful upgrading by farmers focuses on the capacities offered by state agencies. We add to this literature by investigating the coordinating resources provided by local government and local, national, and international non-governmental organizations. While helpful to our analysis, the literature comparing global 'alternative' value chains and traditional commodity chains only broadly identifies the differences between the two. This project's signal contribution is in detailing the unique opportunities and challenges associated with these value chains – and critically, the role of civil society and local government in fostering successful upgrading. Finally, by identifying ways that groups of small farmers can move into more environmentally sustainable, higher-value added, less risky segments of production, we can help policy makers and civil society organizations to maintain social cohesion, reduce poverty, and increase quality of life in rural communities.

THEORY

UPGRADING IN GLOBAL VALUE CHAINS

Moving from chemical to organic agricultural production is a shift to a higher value activity that is characterized by more taxing production processes and quality standards. Individual farms often lack the ability to make this shift. The literature on industrial upgrading notes that, in some circumstances, groups of producers will work together and pool their resources in order to overcome key bottlenecks in the upgrading process. Such collective action is, of course, also challenging. Indeed, if such shifts were easy, the premiums associated with organic production would soon disappear.

Global Value Chain analysis has provided a useful framework for conceptualizing the role of specific producers within a larger system of production. This general approach differentiates between types of value chains (traditionally between buyer-driven and producer-driven) and modes of intra-chain governance. Gereffi (2005) specifies five modes of governance: market, modular, relational, captive, and hierarchy. Upgrading in the context of global value chains takes the form of shifting from lower value to higher value segments of the chain.

The organic agriculture value chain is described by Raynolds (2004) as a commodity 'network' because of the "complex web of material and non-material relationships connecting the social political and economic actors" (Raynolds 2004, 728) involved in the activity. In particular, Raynolds notes that, though the standards certification

and auditing systems embedded in organic agriculture are decidedly market-based, the consumer and producer movements that spawned those systems have non-market roots.

Concerns about environmental sustainability, food safety, and the lives and livelihoods of farmers inform not only the groups that purchase organic foods at a market premium. In addition, they also fuel an interconnecting system of local, national, and international non-governmental organizations that run parallel to these market systems. These networks provide material and information support to producers and expand the consumer base for organic products. Any analysis of farmers' attempts to upgrade and incorporate themselves into the organic segment of the agriculture value chain would be incomplete without due consideration of this parallel network structure. Raynolds, however, only addresses this network in broad strokes. It is not clear what roles these organizations perform and what real impact they have (if any) upon farmers' upgrading efforts. Analyses of upgrading within traditional global value chains provide some theoretical structure for considering the impact of these social networks.

Building on the New Institutional Economics literature, Doner (2009) provides a framework for analyzing the nature of collective challenges associated with specific upgrading tasks. Tasks are considered more challenging when they feature strong distributional consequences, high information requirements, and substantial breadth of participation. This offers a useful way of conceptualizing the some of the collective challenges associated with upgrading into organic rice production.

Drawing heavily on the development literature, Doner's analysis is primarily focused on the relative capacity of the state to help producers overcome these collective challenges. In particular, Doner highlights the ability of the state to facilitate credible commitments, monitoring, and consultation among groups of producers. Although Doner's framework doesn't explicitly consider the ability of local, national, or global nongovernmental organizations to facilitate collective action, his conceptual categories can be applied to these groups as well.

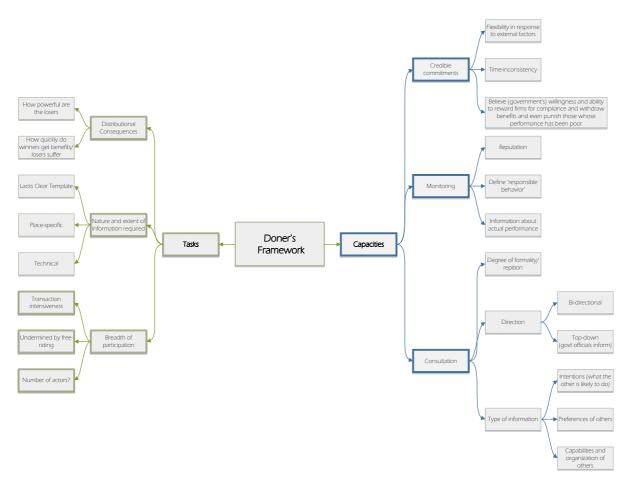


Figure 1: A graphical illustration of Doner's framework, adapted from (Doner 2009)

Evans (1996) also considers the potential role of civil society in facilitating positive developmental outcomes like upgrading. For Evans, strong personal and community ties are to be found throughout the developing world. What makes some regions more successful at achieving positive outcomes is that some crucial ingredient helped scale up this underlying social capital to a level that is efficacious for development (Evans 1996, 1125).

Like Doner, Evans identifies government as a possible key player in facilitating collective action. But here, it needn't be a coordinated response from a cohesive state organization. "Robust, sophisticated public institutions are an advantage both in the formation of local social capital and in the pursuit of developmental ends, not because they are instruments of centralization but because they are capable of formulating more nuanced ways of distributing power and therefore of supporting decentralization and openness to local self-organization" (Evans 1996, 1126). Local government can, independently or in concert with the center, provide support that will help community organizations to scale up.

In combination, these conclusions form a framework useful for analyzing a) the challenges associated with upgrading into organic agricultural production; b) the potential role of community, provincial, national, and international nongovernmental organizations in helping to meet these challenges; and c) the potential role of local government in helping community organizations to scale up in order to connect with international organizations. This paper contributes to this literature by applying this

framework to our puzzling patterns of results concerning the attempts to increase organic rice production in five very similar provinces in rural Thailand.

UPGRADING TASKS IN THE ORGANIC RICE VALUE CHAIN

On the surface, shifting into organic rice production should be fairly straight forward. After all, the natural conditions for organic rice production are present in Isan, and farmers there have been successfully producing rice in that region for an unusually long period of time. Such farmers have a tradition of producing "organically" at least in some form – that is, producing rice before the systematic introduction of chemical fertilizer, although nearly everywhere in Isan those traditions were interrupted with the rapid increase in chemical fertilizer use. What is more, rice from Isan has an international reputation for its high quality. Shouldn't shifting to organic rice be as simple a matter as shifting into any other form of crop? In practice, however, farmers attempting to shift into organic rice face a dizzying number of hurdles.

Building Domestic Markets

While many small farmers in the developing world produce for their own consumption or for the domestic market, demand for organic crops tends to be limited domestically. One strategy for upgrading within the organic rice value chain is to make an effort to expand domestic demand for their products. As with any industry, such a vertical move within a value chain requires the development of substantial new capacities. Market research, advertising, branding, advanced quality control, and customer service are all capacities that may be quite foreign to farmers who are used to delivering unprocessed agricultural commodities to middlemen. It is an effort that is typically beyond the resources of individual farms and even small groups of farms.

To be successful in moving downstream, a large number farms can band together and pool their resources. Particularly if they are geographically concentrated or have some other clearly distinguishing feature, they can benefit from the development of a common reputation. Such a strategy, of course, comes with a number of collective action problems.

The **breadth of cooperation** in such an endeavor is substantial. In order to scale sufficiently to justify expanding their capacity in these areas, large numbers of small farmers will be required. Further, whether they are developing a domestic market for organic production generally or some sort of regional/group reputation, there will be an incentive for free-riding. All organic firms will benefit from an expanded market, regardless of whether any individual firm contributes to the expansion of that market. For regional/group reputation a similar incentive exists, unless the group develops the ability to exclude firms that fail to either contribute or keep sufficient quality. **Distributional conflicts** are less acute with this upgrading task. Losers are primarily those producers that invest in expanding the domestic market while their competitors free-ride on their efforts. As noted above, the **informational requirements** of this task are quite high given the capacities of typical small farmers.

Finding International Buyers

Demand for organic agriculture is strongest in developed countries. Though there is a considerable market premium to be had for farmers that grow organic produce, the highest value segments of this value chain are held downstream. Individual farmers, lacking the scale or capacity to contract directly with global organic buyers, still face

a situation where they must accept commodity pricing. Here again, groups of farmers can join together to negotiate and fill orders for larger international buyers.

The **breadth of participation** here is less extensive than the expansion of domestic markets. The grouping only need be sufficiently broad to guarantee the ability to fill larger orders by the big buyers. Since this assumes that minimal standards certifications have already been met, there is little reason to free-ride here. **Distributional conflicts** are moderate. Group members must be able to resolve potential conflicts on priority for filling specific contracts and what happens if a member is unable to fill their portion of an order. The **informational requirements** are again moderate. Firms must be keep abreast of the changing demands of global buyers and identify possible future buyers. This may mean international travel and communication/negotiation in foreign languages.

Funding Certification and Transition Period

The standards certification process is costly for small farmers. While the upfront cost can be more than made up for if the transition is successful because of the higher premiums on organic produce, many simply do not have access to funds to cover the initial fee. Likewise, there is a two to four year transition process that farmers must go through in order to become certified. During that period, they will not receive the market premium associated with organic rice and likely have lower productivity as their soil and farming techniques adjust to the new methods. As such, they will likely face real financial losses in that period. Both of these problems are made all the worse because of the lack formal credit markets at this scale in rural areas.

Waldner (1999) describes capital accumulation problems such as these as extensive, Gershenkronian upgrading tasks, and they can be quite challenging for rural farmers. The **breadth of participation** need not be large for this task; groups must only have sufficient scale to reduce the individual farm contribution sufficiently to make it affordable. The **distributional conflicts** associated with this task are high. The biggest risk is if the group subsidizes potential members for the certification fees, auditing training, and transition process but those members fail to meet or continue to comply with the standards. At a minimum, this would mean a loss of the cost of the intra group subsidy and at worst it could mean the loss of certification status for the group as a whole. The **informational requirements** here are significant because of the mismatch between the auditing compliance capacities required to become certified and the capabilities of farmers with low levels of formal education and little exposure to such processes (Raynolds 2004). Moreover, even the ability to understand and fill in the form can be a challenge for subsistence farmers.

Milling Capacity

Within rice production there is a significant distributional conflict between rice growers and millers. Those engaged in the more capital-intensive milling process have traditionally been able to use market power to pressure individual farmers into accepting lower prices for their outputs. Since certified organic auditing processes require dedicated milling of organic rice, millers have even more potential power to demand a larger portion of the organic production surplus, leading to less incentive for individual farms to shift into organic production. As with funding for certification, this is largely a financial problem, but the distributional conflicts may be higher if existing millers try to exert political or financial pressure on groups who are looking to invest in dedicated organic milling capacity.

UPGRADING TASK	INFORMATION REQUIRED	BREADTH OF PARTICIPATION	DISTRIBUTIONAL CONFLICTS
COST OF TRANSITION & CERTIFICATION	High - codified but technical relative to prior education	Moderate -	High – consequences for failure
GLOBAL BUYERS	Low – cost of identifying global buyers, language, demonstrating quality	Moderate – too expensive for individual cooperatives, even groups of cooperatives	Moderate – potential for middle men attitudes
BUILDING DOMESTIC BRAND	High – new skillsets	High – establish local/provincial/national reputation requires quality control	Moderate
MILLS	Low	Moderate – requires multiple groups to achieve scale	High
SKILL TRANSFER - ORGANIC FARMING	Moderate - Place specific	Moderate – requires multiple groups to achieve scale	Low

Table 2: Barriers to each upgrading task

CASES

The five provinces were chosen based on the dependent variable: the varying degree to which they produce organic rice. As noted in Table 1, among the provinces in Isan, Yasothon and Surin are unusually successful in shifting to organic rice, Ubon Ratchathani and Sri Saket are stand-out failures, while Amnat Charoen occupies a space in the middle.

YASOTHON

Yasothon's success in increasing organic rice production was undergirded by farmers groups – about half of which were formed in the 1970s. When national-level NGOs tried to promote organic rice, they found in these farmers groups fertile and pre-tilled soil on which to build. In other places, activists are compelled to talk to farmers on an individual basis; in Yasothon, their effort was more effective. Farmers groups already had some strengths and capabilities, to which such NGOs could complement and supplement. This combination of NGO + farmer group effort helped to spur organic rice, an initiative that reached a plateau until an activist CEO governor added his efforts to the movement.

Currently there are 10 active farmer groups focusing on organic rice. Each of these has substantially different stories, but eight of the ten share two common characteristics: they started as informal farmer groupings that formed as farmers sought to reduce exploitation and avoid middleman, and they received substantial support from Thai NGOs. The remaining two were formed as offshoots of the original groups, splitting into two as they grew too large.

Farmers Group A

In the mid-1970s, farmers from several neighboring farms became alarmed as they faced high chemical costs, declining land productivity due to the intensive use of chemical fertilizers, and declining global rice prices. Moreover, farmers selling rice individually were dependent on middlemen and rice millers and subject to exploitation. These external factors meant that, despite consistent hard work, more and more farmers were going into debt. Facing these deteriorating conditions, these neighboring farms joined together in Farmers Group A to pool their resources and meet these challenges head on.

Local civic leaders took the lead to coordinate their efforts and give the group direction. They first freed themselves from exploitative middlemen by joint selling their (chemically produced) rice in order to secure better terms. By the mid-1990s, the group had expanded in size. With help from the district-level department of agriculture, they arranged funds to purchase a "Community Rice Mill," that would allow farmers to command even higher prices. As a cooperative, all profits would be split amongst the members, or in one year, used to expand the mill's capacity. This group eventually became the province's largest One Tambon One Product (OTOP) producer.²

Farmer Group A's long history of cohesion and cooperation helped them to develop the capacity to shift into organic rice production. They were aided in this effort by GreenNet, a national-level environmental NGO. GreenNet helped farmers prepare for and achieve different levels of national and international organic rice certification. GreenNet provided invaluable technical advice and training, and was the key market to most of these groups. For instance, in 1995, GreenNet brought 100 percent of one group's organic rice production, providing for farmers an unusually stable market. Representatives of this farmer group applaud the efforts of GreenNet and other national NGOs for helping them to connect farmers with larger external markets. This cooperative remains a combination of organic and non-organic rice farmers, and among those rice farmers, different ones have levels of certification. However, the mill is able to handle both kinds of rice, and all the farmers still cooperate effectively. While the cooperative continues to practice group sales and procurement, it has stopped procuring chemical fertilizers on behalf of its members. Yet not is all smooth for this Farmer Group, which like others in Yasothon, faces many challenges. Competition is increasingly fierce, and group leaders struggle to adjust. Although farmers within the farmer group share in the profits, they are free to use any mill they want; the mill owned by the farmers group must constantly attract their farmers to use their mills so they can keep up with orders.

Farmer Group B

In Farmer Group B, farmers and local community groups worked together to form the farmers' cooperative under the direction of local civic leaders. They built on a close relationship with a national farmer support NGO, the Love Nature club. Cooperative B leaders underscore two key ways that Love Nature contributed to the effort to shift into organic rice. First, the NGO provided a deep level of technical services, including testing and experimentation, comparing experiences in other provinces, sharing

² OTOP is a program to promote local entrepreneurship in sectors that make use of traditional knowledge and local inputs so as to encourage rural capital formation, community integrity, and less outmigration.

knowledge among local farmers, and inviting technical experts from overseas. Second, they helped with the auditing for certification, including technical advice, and providing payment for the certification application. Furthermore, LoveNature helped with production, packaging and marketing of the organic rice. By the 1980s, Farmer Group B had established its own organic rice mill.

Farmer Group C

Organic rice production was part of a larger, religious-based initiative to produce "moral rice" for Farmer Group C. The standards for joining this group far transcends "merely" adhering to the exacting technical requirements of growing organic rice. To become a member, a farmer must live an upstanding life, closely adhering to the doctrines of Buddhism, foregoing alcohol and meat, speaking truthfully, and refraining from gambling. The certification standards for group membership were inspired by a Buddhist monk, who acted as spiritual leader. With its own certification process, Farmer Group C has created a system through which members in the earlier stages of shifting to organic rice production – those who have not yet qualified for official certification – can nevertheless command some form of premium for their rice, smoothing the way for farmers to make that transition. Moral rice has the potential to serve as a further point of market differentiation for their group, particularly domestically. Group members interviewed indicate that they were able to secure a premium on top of the overall organic market premium.

Farmer Group C was exceptional in not working with national NGOs – other groups found such involvement essential to the process of shifting to organic rice production. This points to a further question: how did groups like GreenNet and LoveNature get involved in the first place? GreenNet understood Yasothon's reputation for growing high quality (non-organic) Jasmine rice, so they chose the province as fertile ground in their efforts to expand organic rice. These pre-established farmers group greatly facilitated GreenNet's ability to help Yasothon expand into organic rice production. While they did not work with national NGOs, Farmer Group C did work closely with other organic cooperatives in Yasothon, helping one another to fill large orders and consult with provincial and municipal government to relate the specific needs of organic agriculture in the area.

Other Cooperatives in Yasothon

In this way, by 1987, 4 or 5 such groups of approximately 50 farmers each had been established, which served as a foundation for a shift into organic rice. Farmers, NGOs and even government officials all agree that the initial impetuous towards organic rice was from these farmer groups (with the assistance of a Thai NGO), and the initial role of provincial or national government was minimal. Interviewers also agree that one key characteristic was that the groups were well connected with each other – if one group had a problem, other groups would provide advice and support. They had sufficient resources to bring in outside technical experts to help with problem solving. While most farmer groups in Yasothon consist of both organic and nonorganic rice producers, the non-organic rice producers tend to use less chemical fertilizers compared to other rice farmers.

Even though this constellation of actors – farmers working with NGOs – had succeeded in forming a number of groups, organic rice production in Yasothon had reached a plateau. Like farmers in most other provinces in Isan (Amnat Charoen is an exception), Yasothon rice farmers in the province outside these groups had long been using chemical fertilizer and were thus resistant to producing organic rice. Other farmers were not organizing together as those in the initial groups had. And without such groups to work with, outside NGOs had difficulty finding partners to support.

Role of Provincial Government

However, 16 years after these groups' initial formation, the Yasothon provincial government started to take a major role. Empowered by Thaksin's CEO governor model and passionate about organic rice (the account regarding the governor differs – at least one farmer group leader suggested that he was pushed by civil society to support organic rice production), Governor Sutinabun was key to further promoting organic rice production. Since some of these groups had already been operating for 16 years, and had already had support of national-level NGOs, the governor was advantaged by having a thick network of civil society with which to work. Thus, his goal was two-fold: to use the resources and power of government to nurture and expand these groups, and to spread these groups to other areas of Yasothon. He used financial resources to increase the number of members, provide deeds and bring in outside technical advisors. He secured funding for a small mill for at least one of the groups.

Governor Sutinabun also implemented an innovative policy that helped overcome the problem related to the delay between organic rice production and certification. For farmers that were unwilling or unable to meet the strict standards needed for certification, the governor created a middle category – 'safe agriculture' – for which farmers hoping to reduce the use of chemical fertilizers could aspire. If chemical fertilizers could not be eliminated everywhere, more farmers could be persuaded and supported to use less chemical fertilizer and use it more effectively – applying it at precisely the right time and with the right procedures to maximize its impact. This allowed the government to establish a large group of 'safe farmers' who could, over time, eventually shift into full organic farming. Although safe farming practices did not come with the certification needed to command the higher prices fetched by organic rice, the material benefits drawn by using less chemicals and achieving greater yields were nevertheless an incentive. Although his tenure in Yasothon only lasted a few years, Governor Sutinabun still served longer than most governors in Thailand. Moreover, he was able to work with a well-established set of passionate and experienced farmers, which made his efforts much more efficient. The pre-existing groups were deeply involved in the government-sponsored campaign to show other farmers how to produce organic rice. Through these efforts, the number of safe and organic farmers increased markedly. The number of groups of organic farmers increased to 10, involving 2,000 total members and 40,000 rai of farmland.

While the number of both safe and organic farmers increased markedly over the Sutinabun administration, he was replaced by governors who, government officials emphatically suggested, 'watched organic rice from a distance.' During this period, the number of groups and organic rice farmers once again plateaued, and these groups were once again challenged by the barriers to expanding without government assistance. However, in 2015, with the central initiative to producing organic rice, the present provincial government is once again serious about organic rice. The Yasothon government has played a number of roles in this regard: it has provided financial support for expanding the number of organic rice producers and increasing the land on which organic rice is produced. According to government officials, whereas the 2015 goal was to expand production by 4,500 rai, the have already exceeded that

goal, expanding production by 8,000 rai. These farmer groups willingly worked with the government – for instance, they used experienced members of groups to teach and otherwise support new groups. Moreover, Bangkok has established Yasothon as the singular role model for organic rice production for all other provinces desiring to expand organic rice production. The provincial government's current plan is even more ambitious: to add 100,000 rai, and 450 new members each year. The government also hopes to use the national and international marketing linkages established through organic rice production to produce other forms of organic agriculture. Meanwhile, many farmer groups are encouraging farmers to expand from organic rice to producing other organic goods.

SURIN

Surin farmers have been singularly successful in shifting into organic rice. According to data from the Ministry of Commerce's Organic Marketing Intelligence Center (n.d.), Surin province accounts for two-thirds of all Isan farmers engaged in cultivating "Hom Mali" certified organic rice (by far the most common form of Thai organic rice). The province also accounts for half of the total area planted and just over half the total production area in the region. With so many producers directly engaged in organic farming and more employed in supporting industries including food processing, this represents a major boon to smallholder farmers in the province. Through producers' efforts, Surin Hom Mali Organic Jasmine Rice has emerged as a globally known brand of quality organic rice. A 2006 Asian Development Bank study found that certified organic farmers in Surin, Ubon Ratchathani, and Yasothon provinces sold their rice at nearly double the price of conventional rice producers (Setboonsarng, Leung, and Cai 2006). Other studies have found similar premiums associated with certified organic production (Morawetz, Wongprawmas, and Haas 2007), particularly for farms involved in the Fair Trade Network (Becchetti, Conzo, and Gianfreda 2012).

Role of provincial civil society

As with Yasothon, Surin's success in developing organic rice was caused by a combination of a strong, local farmers associations linked with national and international non-government organizations, and the role of a governor who was unusually vigorous and committed to promoting organic rice. Over the last twenty years, Surin has developed a vibrant civil society that interacted dynamically with the provincial government to help micro-developmental initiatives succeed by facilitating collective action among farmers and entrepreneurs. Whereas in Yasothon's case, the initiative came from farmers groups, in Surin's case, the impetus can be traced to the many Thailand's university students who traveled upcountry to conduct experiential fieldwork on the living conditions of rural Thais. The 1976 massacre at Thammasat University and subsequent crackdowns by the Thanin government further drove large numbers of these communitarian-minded students to take refuge with the Communist Party of Thailand in remote jungle areas. The Cambodian border near Surin and Si-Saket became one of the key areas for these groups (Girling 1985; Keyes 1995). Even after the government granted an amnesty in the 1980s, many of these former student leaders remained upcountry and initiated locally oriented development projects (Parnwell 2007; Phatharathananunt 2002). Around the same time, large numbers of refugees from Cambodia fled to Surin, where international and non-government organizations placed them into organized camps. The area became a hub for local and international NGOs providing services for the refugees. Many of these NGOs also provided services to locals and continued operating after the camps were closed down (Shigetomi 2009).

This combination of committed, locally embedded leaders with substantial experience and networks of local, national, and international contacts resulted in a vibrant civil society throughout Surin province. Not only did these activists establish and manage local initiatives to fight poverty and foster community solidarity, some were influential in the evolution of the "community culture" neolocalist movement. Even in a region characterized by NGO activism, Surin's rich networks of NGOs were remarkable. As one scholar concluded, "compared with other provinces, Surin had ample NGO resources," (Shigetomi 2009, 66). One NGO director in Si-Saket put it even more emphatically, remarking that Surin became the "NGO capital of Isan" (Interview 14).

Political events in the early 1990s caused NGOs to become even more closely networked in Surin. In 1990, the military instituted Khor Jor Kor, a forestry program designed to reorganize land use in the country's national forest reserves. The policy, which would have displaced thousands of families to make room for commercial plantations, garnered widespread opposition among people in Isan and motivated communitarian NGOs to mobilize and coordinate their activities to protect farmers' interests. A civil disobedience campaign emerged and grew steadily until mass demonstrations led to the cancelation of the program in 1992. This campaign coincided with protests to eject General Suchinda from the premiership in 1992 (Shigetomi 2009). Both had a lasting impact on this network of rural community activists.

In Surin, a senior activist created the Surin Forum as a space for members of civil society—including NGO staff, farmers, teachers, and even business people—to meet and exchange ideas about public issues (Shigetomi 2009). Over the course of the 1990s, this group of professionals and activists gradually formed a semi-formal network that often worked directly with government and international institutions to promote community development in Surin. Its capacity improved gradually as it developed administrative capabilities and a professional staff.

The groups that had formed in the 1980s helped encourage and facilitate the shift to growing organic rice in a number of key ways. First, they provided important training and education. Smallholder farmers began exploring the possibility of transitioning to organic agriculture in the early 1990s. Concerned about illness related to pesticides, fluctuating market prices, and indebtedness, farmers in Surin formed the Natural Agriculture Group (NAG) in 1992, with the assistance of NGOs like Surin Farmer Support (SFS). These organizations help farmers to identify and begin to disseminate a set of best practices for organic farming. Over the next 20 years a wide array of nongovernmental organizations developed to assist smallholder farmers engaged in organic agriculture. Organizations such as SFS and the Organic Rice Fund in Surin trained farmers in the use of organic farming processes and organic fertilizers (Woranoot 2009).

Second, these organizations helped to solve distributional conflicts between distributors, processors, middlemen, and farmers have the potential to develop between upstream and downstream segments of the agricultural supply chain. For example, conflicts between sugar cane producers and millers over the costs of resolving bottlenecks and the equitable distribution of profits presented a major challenge to that sector throughout the 1980s (Doner 2009). Many rice farmers had substantial experience with a middleman system which limited the agency of farmers (Sukpanich 2003). The NAG was established specifically to counter the power that traders and mill owners had over the prices paid to farmers (Chamontri 2009, 32). Many collective organic farmers groups in Surin, such as the NAG, the Prasart Cooperative, and Bua Kok organic Hom Mali rice producer, helped to overcome upstream-downstream conflicts by purchasing and operating their own mills (Chamontri 2009, 32). Third, this dense network of NGOs helped connect smallholder farmers to the international market. For instance, they have reached out to international NGOs to market their organic products, which helped them sell Fair Trade rice to Europe and the United States (Bangkok Post 2005). These organizations also helped farmers comply with the standards certification bodies such as the Organic Agriculture Certification of Thailand and the Surin Province Organic Certification. NGO leaders suggested that this training was especially important because compliance with strict international certification auditing procedures is particularly onerous for farmers with little formal education (Interview 30).

Role of provincial government

These efforts began attracting official support. As early as 2000, Surin provincial governor Kasemsak Sanpote made it clear that the facilitation of Surin organic rice was among his top priorities. He stressed the important role of local civil society in fostering the development of organic agriculture, "The work has been established on a large scale. . . There are quite a number of persons in Surin who are highly respected for their long advocacy of alternative and organic farming. Some have networks in foreign countries where they sell their produce. The farmers only need the knowledge and the belief." (Sukpanich, 2003). Indeed, prior to becoming governor, Kasemsak had been influenced by "local wisdom" leader and integrated farming advocate Maha Yoo Soonthornchai, as well as integrated farming community organizer Eiad Depoon (Interviews 19, 25).

Governor Kasemsak's championing of the organic agriculture cause brought official state recognition and support to the dense network of civil society organizations. Provincial agencies helped to coordinate the activities of organized civil society. These, in turn, were especially proactive. Even as local NGOs developed a training curriculum based on Thai and international experience, the provincial government helped secure funds to build capacity and provided training centers at local schools. Meanwhile, local "development monks," led by Surin's Abbot Nan, spread the word about the moral and material benefits of the practices and helped secure additional training at local temples (Interviews 19, 25). 5 His efforts also reinforced many of the NGO's initiatives, including helping them extend their reach into the international market place. For instance, the governor held brand-marketing workshops to gather ideas from operators of rice mills, agriculture cooperatives, farmers groups, and related state bodies (Thai News Service 2005). PM Thaksin lauded the scale of the provincial administration's efforts, noting, "Surin provincial authorities taught 34,000 farmers about organic farming with a budget of over 10 million Baht from Tambon administration organizations" (Bangkok Post. 2001). In this way, Governor Kasemsak was able to serve as the bridge between the locally led development approach that had flourished among civil society groups in Surin and the national government. Moreover, Kasemsek also worked directly with NGOs, sitting on the board, for

example, of Surin Net Foundation, one of the largest community development NGOs in the province (Interviews 19, 25, 33).

AMNAT CHAROEN

In contrast to the experiences of Yasothon and Surin, the expansion of organic rice production in the province of Amnat Charoen has been driven almost single-handedly by farmers cooperatives or other provincial-level farmers groups. As relayed by farmers and others involved in this effort, in the past, organic rice farmers were easily exploited because they were compelled to sell their rice to middlemen in other provinces or to agribusinesses. Farmers enjoyed few protections if the buyers suddenly chose to change the price or otherwise used their market power to exploit the farmer. The effort to organize ways to circumvent this form of exploitation also started later than the efforts seen in Yasothon and Surin.

One of four main networks of organic farmers groups in Amnat Charoen, the "Truth Rice" network is seeking new, technology-enabled means of expanding the domestic demand base for organic rice. Working closely with NGOs in Bangkok, they directly connect the farmer to the buyer. The groups tried to link farmers together, eventually linking 27 cooperatives involving 400 farmers and 7,000 rai. Each of these cooperatives operate in somewhat different ways, but all try to circumvent the middlemen. Yet even as local groups can help farmers eliminate the middleman in marketing, these small scale farmers have been challenged with securing milling services. Nowadays, however, each of the 27 cooperatives has its own mills - most are small or medium scale, although one large mill owner allows organic rice farmers to use his mill, as well as space to store their grain, which he sees as a part of his corporate social responsibility. Thus, organic rice production in Amnat Charoen was much more bottom up than any other province. But the fact that such farmers had little support from outside NGOs or the government limited the spread of organic rice. Farmers and farmers cooperatives were left to overcome obstacles to producing organic rice successfully – including finding their own markets outside the province.

For example, one local farmer group within the "Truth Rice" network was established by an organic rice farmer who was passionate about improving rice quality with the aim of getting IFOAM certification for Amnat Charoen farmers. Moreover, he contacts end users directly, making contacts with large hotel chains or MNC restaurants that are willing to support farmers, and at least initially willing to try to make direct purchases. Farmers face many difficulties in coming into compliance with the strict exacting standards needed for IFOAM certification. However, by connecting with Thaibased end consumers, this farmer-led provincial-level NGO is able to provide its own monitoring and certification services to reassure these companies that the rice they are purchasing have reached some standard of organic production. This ability to earn more money sooner from producing organic rice encourages more farmers to want to participate.

These efforts were greatly facilitated by a cultural aspect of Amnat Charoen's farmers. According to local farmers and NGOs, farmers in Amnat Charoen have not lost the knowledge of some forms of chemical-free rice production. One provincial community organization, led by former members of the communist movement in the region, have long prioritized traditional, non-chemical agricultural activities -even if they have not, until recently labeled them as organic. This organization, with deep penetration into villages throughout the province, has made 'nature agriculture' one of several pillars of community development.

Moreover, whereas other provinces in Isaan – even successful organic rice producing provinces such as Yasothon – were inundated with chemical fertilizer, Amnat Charoen farmers resisted. Given the costs for chemical fertilizer and its impact on health and the environment, the typical Amnat Charoen farmer concluded that the use of chemical fertilizer was not worth the cost. This logic undergirded a culturally traditional form of rice production that did not depend on the overuse of chemical fertilizers. In turn, it facilitated efforts of farmers cooperatives to support farmers who want to produce organic rice. Whereas organic rice production in Surin and Yasothon were greatly facilitated by hands-on "CEO governors" who served during the Thaksin administration, Amnat Charoen had no such advantage. As one activist underscored the point: Amnat Charoen's farmers cultural attitudes put them into a position to respond directly to Thaksin's calls to shift to organic rice – or at least safer forms of rice production – even though that encouragement was mainly from a distance.

The role of the provincial government in Amnat Charoen has not been completely absent. For instance, NGOs note that in recent years, the provincial government noticed that many of the groups were scattered and thus had trouble supporting each other. They tried to organize meetings between these groups to allow them to exchange ideas and information. The government provided venues for these talks. Farmers here also exchange ideas with neighboring Yasothoni farmers. Even more recently, starting in 2015, the government has started providing funds to pay for the certification process. Yet, compared to the government in Yasothon and Surin, the role of the government in Amnat Charoen has been relatively passive, as even government officials readily acknowledge.

SI-SAKET

Many farmers in Si-Saket have also moved into organic farming; though the province's organic output is significantly lower than that of Surin province, it is nevertheless one of Thailand's top producers of organic rice. What distinguishes Sisaket however is that little of the organic rice production is certified, despite the province's larger overall agricultural sector. The director of one NGO in Si-Saket indicated that some communities have local markets for "green" agriculture but these are unconnected, feature no systematic certification process, and tend to be for local consumption (Interview 46). To the extent that large-scale organic production does occur in Si-Saket, it is undertaken by members of the Santi Asoke religious group. This Buddhist sect maintains the entire value chain, from fertilizer to cultivation to milling to packaging to sales. The group is not market oriented and uses (uncertified) organic production methods because they are in line with their beliefs rather than to gain the market premium associated with organic agriculture (Ellis and Panyakul 2006; Alexander H. Kaufman 2012). Thus, although comparative analyses of organic agriculture in Thailand often make note of the Asoke group in Si-Saket (Chamontri, 2009; Ellis et al., 2006; Patrawart, 2009), its impact on local poverty is largely limited to members of the religious group, and even that impact is muted.

Civil society in Si-Saket, by comparison, remained fragmented and had little connection with the development of organic rice in the province. Though many local

organizations exist at the village and municipality level in Si-Saket, we found no province-wide organizations that coordinated activities and provided organic certification training and capacity building to farmers. No community organizers or academics that we interviewed in the region could identify any NGOs performing these functions (e.g., interviews 15, 21, 33, 39). Santi Asoke does provide some training in working without pesticides and chemical fertilizers and manages the value-chain for those that choose to produce for their network, including rice mills. Yet, because the organization does not seek to profit from their operations and so do not seek to certify or sell to global markets, Santi Asoke has limited impact (Chamontri 2009; Alexander Harrow Kaufman and Mock 2014) just as is the case in Ubon Ratchathani. Governor Thanom Songserm did attempt to promote organic agriculture in the province in 2003 (Dayley 2011), but his efforts proved short-lived since he served less than two years in office and he had scant interlocutors in civil society.

UBON RATCHATHANI

While Ubon Ratchathani farmers are prolific producers of Jasmine rice, it has been unsuccessful in spurring organic rice production. So far, the attempts to shift ordinary farmers into organic rice production have been relatively recent, sporadic, and uncoordinated, and the results have been disappointing. Based on our research, efforts to expand organic rice production have emerged from three isolated sources:

Asoke

Like Si-Saket, a leading producer of organic rice in Ubon Ratchathani is Asoke, the Buddhist sect dedicated to living based on their interpretation of Buddhism. Sect members maintain an austere and principled lifestyle, including following strictly the principals of organic farming – using no chemical fertilizers or pesticides. Since 1994, seven or eight Asoke groups have conducted farming in Ubon Ratchathani in this way. Interviews with Asoke members in one of the larger Asoke bases in the province revealed that farmers there are growing exclusively and strictly organic agriculture in several commodities. Of their total area of 700 rai, some 400 farmers, divided into production teams focusing on different organic products, farm on around half the total area. Not all Asoke devotees live inside an organized community – many members are farmers outside the base, but must live in accord with Asoke's principals. Although Asoke leaders will enforce these principals on its members, it is rare for people to be disbanded from the group, since most truly intend to follow.

Thus, Asoke is a major actor in the production of organic rice in Ubon Ratchathani. Yet despite its single-minded devotion to organic agriculture and its goal of proselytizing people into their particular interpretation of Buddhism, the group does not aspire to spread organic agriculture per se outside its community. Like their counterparts in Si-Saket, interaction between the sect and the outside world is minimal. Indeed, self-sufficiency is one of their primary goals; they do not seek any form of organic certification, and sell organic products to the outside only on an *ad hoc* basis.

Thai military

In the late 1990s, a commander in the Thai military began to worry that farmers in the areas bordering Laos were not conducting farming in what he saw as the correct way. This unusually dedicated military leader taught Japanese composting and organic fertilizer practices to these farmers, helping them shift into organic rice production. The result was successful. After five years of production, this "No Chemical Cooperative" of farmers has been certified as organic producers. Within the network, farmers give each other advice and knowledge. However, the effects of this was limited to this narrow group, and few attempts were made to expand this base of organic rice production.

Local activists

Compared to other provinces we studied, there are relatively few NGOs who are active in the area. One key characteristic of non-government efforts to expand organic rice production is that it appears to be primarily driven not by farmers but by urbanbased activists. In Surin, Yasothon and Amnat Charoen, farmers themselves had formed groups – largely to reduce exploitation from middlemen – with which NGOs could subsequently work to promote organic rice production. By contrast, NGOs in Ubon Ratchathani, while passionate, are small in number, and struggle to convince individual farmers about the merits of organic rice production, let alone to organize farmers groups. The ability of outside NGOs to promote organic rice production in Ubon Ratchathani is similarly constrained.

For example, one of the leading lights promoting organic rice production in Ubon Ratchathani is an energetic journalist/activist. Five years ago, she launched a popular TV show, loosely translated as "Eat Without Worry," which promotes healthier diets and lifestyles. The program has become popular, and is viewed widely on YouTube. Through the television program, she also sought to work with the government, consumers and the private sector to promote organic agriculture. To this end, in 2015 she approached a shopping mall to obtain space to establish a Green Market. Open once a week, the green market is open to any farmer with organic produce. In order to circumvent the problems related to the lengthy approvals period for organic certification, this activist has established her own certification system based on her own inspections, essentially using her own credibility as an activist and celebrity to reassure consumers that these farmers are using organic methods of farming.

Her group has also worked closely with her counterparts in the two leading lights for organic rice production, Surin and Yasothon, to learn from these pioneering provinces their best practices regarding establishing a Green Market and promoting organic rice. However, she finds that Ubon Ratchathani's relatively comparatively large geographic area makes spreading organic production difficult. Albeit newly launched, a visit revealed a disappointingly small scale - with about a dozen farmers selling organic products of various kinds. Although we visited during the weekend in the early afternoon, the customer base appeared small.

A second such activist is a professor at Ubon Ratchathani University who in 2013 secured a four-year grant from an EU-based fund that aimed to increase organic food

production and reduce climate change. This academic subsequently worked diligently to convince farmers to shift into organic farming. Preliminary research concluded two trends justified increasing organic rice production: first, changes in rainfall pattern has reduced production of rice, and second, government policy has put downward pressure on the price of rice. The goal of the program was to help farmers through the process of shifting to organic rice production, and helping them obtain iFOAM certification. Despite toiling for the past three years to reach out to farmers, the results have been disappointing. These visits are extremely labor-intensive and convincing farmers to shift to organic rice has been quite challenging. Farmers had become accustomed to using chemical fertilizer and had forgotten or neglected the traditional practices that are necessary for organic pest control. A second barrier was the lack of a distribution channel - the academic identified this as her main challenge. Moreover, because her initiative is not linked a rice mill, her farmers could only command a modestly higher price - they were unable to obtain the added value that comes from processing their own rice. Subsequently the academic purchased a small mill in order to cut out the middleman.

Now with the end of her grant approaching, although she has worked intensely with approximately 400 farmers, her cooperative contains a modest 80 farming families growing organic rice on about 1600 rai. While she describes her organization as a cooperative, the organization's form does not resemble that of a traditional cooperative. These farmers are spread across eight districts, far from each other, and thus are not able to support each other as well as neighbors might. The distance between farmers reduces their ability to transmit knowledge, and engage in joint purchase of inputs and sales of product difficult. Moreover, the cooperative is designed to engender trust and mutual support between farmers, which is much more difficult when farmers live so far apart from each other. The cooperative's ability to empower farmers is thus limited. Meanwhile, the organization faces a number of dilemmas. In 2014, the organization faced a serious cash flow problem - farmers want to be paid immediately, whereas customers want to pay after delivery. Thus in 2015, the organization found customers who were willing to pay for organic rice in advance. Yet, unfortunately, the cooperatives total production that year was much less than anticipated, disappointing the customers who were expecting – and had already paid for – a greater volume of rice. These setbacks rendered convincing more farmers to join the cooperative even more challenging. Moreover, now that her grant has ended (though it was extended by six months), the academic worries that cooperative leaders may not yet be prepared to sacrifice their own time to provide leadership and other public goods for the cooperative or possess sufficiently honed skills needed manage the organization on their own.

As noted, these activists have just begun the process of promoting organic rice in Ubon Ratchathani. Moreover, there efforts, although from civil society, appear to be more or less top-down, with little initiative from farmers. In Amnat Charoen, Yasothon and Surin provinces, much of the success has been from farmer-initiated groups – either pre-formed groups that outside NGOs and government could work with, or groups of farmers themselves who help to promote organic farming. In Ubon Ratchathani case, these urban activists seem to be doing most of the initiating. While some farmers are receptive to shifting into organic rice, significant barriers remain. Convincing farming appears to be quite labor intensive, and given the prevalence in use of chemical fertilizers, this is an uphill fight. Although the two main players we met with do help with technical assistance, provide funds for the certification process, and even have schemes through which farmers can make money before they are fully certified, there are many barriers that they do not appear capable of surmounting.

The (lack of a) role of the provincial government

In Surin and Yasothon, the provincial government has stepped in to play some muchneeded roles. However, far from being a mechanism to support farmers shifting to organic rice, the role of the government in Ubon Ratchathani has been largely passive until recently. First, like Si-Saket, Ubon Ratchathani governors have been frequently switched in and out of the province. Until 2016, none have taken up the mantle of promoting organic rice. Officials in the provincial agricultural ministry responsible for promoting organic rice have said their efforts remained sporadic until this past year due to a severe lack of funding – their budget limited his office to reach out to a few dozen farmers annually. While the scale of the government's efforts has been small, activists say that elements of the government have nevertheless provided a few supportive services. For instance, as the journalist aspired to open a green market, the provincial-level grassroots department helped introduce her to counterparts in Surin and Yasothon provinces.

The provincial government's passive role seems to be changing. In 2014, the provincial annual meeting focused on the deteriorating health of farmers. A gathering of health care professionals, hospitals and others both in the government and non-government section concluded that the overuse of chemical fertilizers was to blame. The government has since intensified its role in promoting organic rice production by organizing fieldtrips for farmers to study from neighboring farmers, helping support the production of organic fertilizers and equipment used in organic farming, and assisting farmers through the certification requirement. They help connect farmers with external markets. In spite of this shift, the first three years were under-funded. Now that Bangkok is promoting the production of organic rice, the official finally received enough budget to play a role, reaching out to farmers and promoting the development of organic rice. The budget of the provincial office responsible for promoting organic rice suddenly ballooned to Baht 10 million.

The overall goal remains quite modest – Ubon Ratchathani is playing catch up and thus aiming to increase the land coverage of organic rice to one percent, or 58,000 rai.³ Despite the past few years of effort, the goal is only halfway fulfilled. Even as farmers remain uncertain about the prospects for organic rice production, the premium price for organic rice is narrowing. Meanwhile, the government is scrambling to connect organic rice farmers with external markets.

Conclusions

While these initiatives should be applauded, these promotors face an uphill battle. One of the major barriers cited by activists is that, decades ago, the government promoted the production of cassava, a plant used to make tapioca. Now in Ubon Ratchathani, some 200,000 rai of land is used for both rice and cassava. Farmers and government officials both argue that cassava is highly dependent on the use of chemical fertilizers. Because Cassava and rice are grown in the same field, the use of

 $^{^3}$ 1 rai = 0.16 hectares

chemical fertilizers quickly spread to the production of rice, such that now the use of chemicals in farming is nearly 99 percent. Moreover, the introduction of cassava introduced new pests that consumed rice, requiring the increase use of chemical pesticides. Moreover, government established shops aggressively promote the use of chemical fertilizers, and uses chemical fertilizers as a primary response to natural disasters – the government sends chemical fertilizer as a way to help farmers suffering from floods or pest epidemics. One interviewee suggested that farmers generally must first be personally affected by problems related to using chemical fertilizer – such as deteriorating health or water contamination – before they would be willing to consider producing organic rice.

The initiatives of those promoting organic rice in Ubon Ratchathani seem set to continue and intensify. However, they face an uphill battle. Despite trying in recent years, little headway has been made. Organic rice farmers remain few in number and are disperse. Unlike the most successful cases of Surin and Yasothon, there is little involvement of outside NGOs and the government has been passive until recently. Moreover, Ubon Ratchathani lacks the foundation of bottom-up organized farmers groups. To be sure, the experience province of Amnat Charoen has shown that positive results can result despite the lack of these factors. However, unlike the efforts of non-government actors Amnat Charoen, the activities in Ubon Ratchathani are rarely spurred by farmers themselves, and appear to be largely top-down and elite lead.

CONCLUSIONS

In this study, we have investigated factors that may have helped small farms upgrade into organic rice production in Northeastern Thailand. We identified several upgrading challenges embedded in a shift into higher value portions of this alternative global value chain and explored the potential roles of local, regional, national, and international NGOs in helping farmers to overcome these challenges. In doing so, we paid special attention to the possible role of local government in serving as a catalyst for 'scaling up' the assistance that community groups and NGOs can provide to farmers seeking to upgrade.

GROUP	YASOTHON	SURIN	AMNAT CHOERN	UBON RACHATHANI	SISAKET
LOCAL GOVERNMENT	x	х	(not until recently)		
FARMERS GROUPS	x	х	x		
COMMUNITY NGOS	x	х	х	x	х
PROVINCIAL NGOS	X	х	х		
NATIONAL NGOS	x	х			
INTERNATIONAL NGOS	х	х			

Table 3: Key actors in each province

For Yasothon and Surin, it is clear that local governors, untethered via Thaksin's CEO Governor program from the restrictions of working within a unitary state, gave local community groups and farmers groups important forms of support, facilitating the increase in the production of organic rice. This has led to tremendous success not only in producing organic rice, but also processing the rice, building relationships with international buyers, and developing their own brands and standards. In Amnat Charoen, local networks of producers have more recently pursued upgrading into organic production but that they have done so with minimal engagement with either national green NGOs or, until the last two years, provincial government. In Ubon Ratchathani and Si-Saket, any social capital that exists at the community level has not been effectively scaled up outside of the Santi Asoke network. With few local organizations to engage, the efforts of the provincial government, provincial NGOs, or national NGOs to mobilize organic rice production have been largely ineffective. Going forward, more detailed matching of local, provincial, and national NGO capacities on to the collective challenges of particular upgrading tasks in the organic value chain is necessary.

	YASOTHON	SURIN	AMNAT CHAROEN	UBON RACHATHANI	SISAKET
KEY ACTORS	Domestic NGOs; local civil society; provincial leaders	Domestic NGOs; local civil society; provincial leaders	Local civil society	Small number of local actors; Buddhist sect	Small number of local actors; Buddhist sect
COST OF TRANSITION	Community Subsidies	National NGOs	Local farmers' groups	Local activists	Organic rice traditionally practiced by members of Buddhist Sect
COST OF CERTIFICATION	Groups of Cooperatives Green Net	Alternative Agriculture Network Green Net	Groups (Gov more recently)	Nascent NGOs	Main actors do not seek certification
GLOBAL BUYERS	Green Net	Green Net Groups of Cooperatives	No initiative	No initiative	No initiative
BUILDING DOMESTIC BRAND	National NGOs with farmers' groups	National NGOs with farmers' groups	Groups of No initia Cooperatives	tive	No initiative
MILLING PROVISION	Government Provincial Network	Surin Rice Fund & Assembly of the Poor Groups of Cooperatives	Local Farmers Groups	Local activists	No initiative
SKILL TRANSFER - FARMING	Provincial Network Temples Local Government	Local Government Temples Provincial Network	Groups of Cooperatives	Contract Farming Small NGOs	Passed down via sect members, both within sect farms and across provinces
SKILL TRANSFER - AUDITING	Groups of Cooperatives Green Net	Surin Rice Fund	Provincial Network Local Government		No formal auditing

Table 4: Key actors in each province for each upgrading task

While the results of this research have implications for the theoretical literature regarding both development/agrarian change and collective action, it also makes two contributions to debates within the study of Thai politics. First, despite the fact that Thailand is a unitary state, governors seem to have played a major role. This is all the more important since scholars are skeptical that even the Thaksin-era efforts to decentralize power to "CEO governors" had much positive effect (e.g., Mutebi 2004; Haque 2010). While these results do not contradict those general conclusions, we have documented a few cases in which provincial governors made a significant difference, especially during the Thaksin administration. Second, many Thai scholars argue that attempts to support agriculture in Thailand retards the overall modernization of the economy. Such politically-motivated efforts delay the transition of farmers to industrial farm workers. This in turn causes them to be trapped in lowincome, low-productivity agrarian activities (e.g., Walker 2012; Ricks 2016). Our findings would suggest, by contrast, that certain forms of promoting agriculture such as shifting to organic rice production - can help Thai farmers increase their incomes and modernize agriculture in a way that allows Thai farmers to benefit.

WORKS CITED

Bangkok Post. 2005. "Freedom Farmers Rediscover Food Security."

- Bangkok Post. 2001. "Pilot Project Tapping into Growing Market."
- Becchetti, Leonardo, Pierluigi Conzo, and Giuseppina Gianfreda. 2012. "Market Access, Organic Farming and Productivity: The Effects of Fair Trade Affiliation on Thai Farmer Producer Groups." *Australian Journal of Agricultural and Resource Economics* 56 (1): 117–40. doi:10.1111/j.1467-8489.2011.00574.x.
- Chamontri, Surachet. 2009. "Improvement of Service to Organic Rice Farmers in Thailand."
- Dayley, R. 2011. "Thailand's Agrarian Myth and Its Proponents." *Journal of Asian and African Studies* 46 (4): 342–60. doi:10.1177/0021909611400547.
- Doner, R F. 2009. The Politics of Uneven Development: Thailand's Economic Growth in Comparative Perspective. Cambridge University Press. doi:10.1080/00472336.2011.553054.
- Ellis, Wyn, and Vitoon Panyakul. 2006. "Strengthening the Export Capacity of Thailand's Organic Agriculture." ... : International Trade Centre.
- Evans, Peter. 1996. "Government Action, Social Capital and Development: Reviewing the Evidence on Synergy." *World Development* 24 (6): 1119–32. doi:10.1016/0305-750X(96)00021-6.
- Gereffi Humphrey, j., Sturgeon, T., G. 2005. "The Governance of Global Value Chains." *Review of International Political Economy* 12 (1): 78–104. doi:10.1080/09692290500049805.
- Girling, John. 1985. Thailand: Society and Politics. Cornell University Press.
- Haque, M. Shamsul. 2010. "Decentralizing Local Governance in Thailand: Contemporary Trends and Challenges." *International Journal of Public Administration* 33: 673–88.
- Hewison, Kevin. 1993. "Nongovernmental Organizations and the Cultural Development Perspective in Thailand: A Comment on Rigg (1991)." World Development 21 (10): 1699–1708. doi:10.1016/0305-750X(93)90103-G.
- Kaufman, Alexander H. 2012. "Organic Farmers' Connectedness with Nature: Exploring Thailand's Alternative Agriculture Network." Worldviews: Global Religions, Culture, and Ecology 16 (2): 154–78. doi:10.1163/156853512X640851.

- Kaufman, Alexander Harrow, and Jeremiah Mock. 2014. "Cultivating Greater Well-Being: The Benefits Thai Organic Farmers Experience from Adopting Buddhist Eco-Spirituality." *Journal of Agricultural and Environmental Ethics*. doi:10.1007/s10806-014-9500-4.
- Keyes, Charles F. 1995. "Hegemony and Resistance in Northeastern Thailand." Regions and National Integration in Thailand 1892-1992, 154–82.
- Morawetz, Ulrich B, Rungsaran Wongprawmas, and Rainer Haas. 2007. "Potential Income Gains for Rural Households in North Eastern Thailand through Trade with Organic Products Potential Income Gains for Rural Households in North Eastern Thailand through Trade with Organic Products."
- Mutebi, A.M. (2004). Recentralising while Decentralising: Centre-Local Relations and 'CEO' Governors in Thailand. Asia Pacific Journal of Public Administration, 26(1), 33–53.
- Parnwell, Michael J G. 2007. "Neolocalism and Renascent Social Capital in Northeast Thailand." *Environment and Planning D: Society and Space* 25 (6): 990–1014. doi:10.1068/d451t.
- Phatharathananunt, Somchai. 2002. "The Politics of the NGO Movement in Northeasten Thailand." In Asian Review 2002.
- Raynolds, Laura T. 2004. "The Globalization of Organic Agro-Food Networks." *World Development* 32 (5): 725–43. doi:10.1016/j.worlddev.2003.11.008.
- Setboonsarng, Sununtar, Pingsun & Leung, and Junning Cai. 2006. "Contract Farming and Poverty Reduction: The Case of Organic Rice Contract Farming in Thailand." *ADB Institute Discussion Paper No. 49*. http://books.google.com.my/books?hl=en&lr=&id=ZFVW0Brf6u4C&oi=fnd&pg=P A266&dq=thailand+poverty&ots=3Kykv41S2y&sig=9_swb1qzf_FsUsxshBGTeyyZa
- 1o.
 Shigetomi, Shinichi. 2009. "Institutional Readiness and Resource Dependence of Social Movements: The Case of Provincial Development Forums in Thailand." ...) Protest and Social Movements in the Developing ..., no. Scott 2001. http://books.google.com/books?hl=en&lr=&id=Ui2RI9ICbAkC&oi=fnd&pg=PA51 &dq=Institutional+readiness+and+resource+dependence+of+social+movements+: +the+case+of+provincial+development+forums+in+Thailand&ots=byaC11XcT5&si g=qzhI2zuf1L_ZZAb5C3gaYsSe0nM.
- Sukpanich, Tunya. 2003. "Organic Farming." Bangkok Post.
- *Thai News Service*. 2005. "Thailand: Surin to Hold Workshop on Surin Hom Mali Rice Brand Marketing."
- Unger, Danny. 2009. "Sufficiency Economy and the Bourgeois Virtues." Asian Affairs: An American Review 36 (3): 139–56. doi:10.1080/00927670903259897.
- Waldner, D. 1999. *State Building and Late Development. State Building and Late Development.* Cornell University Press.
- Woranoot, I. 2009. Implications of Organic Farming in Development: Experiences from Organic Rice Farms in Northeastern Thailand. http://thesis.eur.nl/pub/6582/RP_draft_2_subsistence_econ_analysis.pdf.

Tilman, David, Kenneth G. Cassman, Pamela A. Matson, Rosamond Naylor, and Stephen Polasky. "Agricultural Sustainability and Intensive Production Practices." *Nature* 418 (2002): 671-7.