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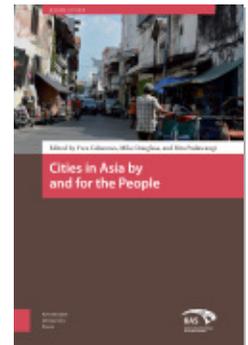
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## 4 Collaborative Urban Farming Networks in Bangkok

Promoting Collective Gardens and Alternative Markets as  
Theatres of Social Action

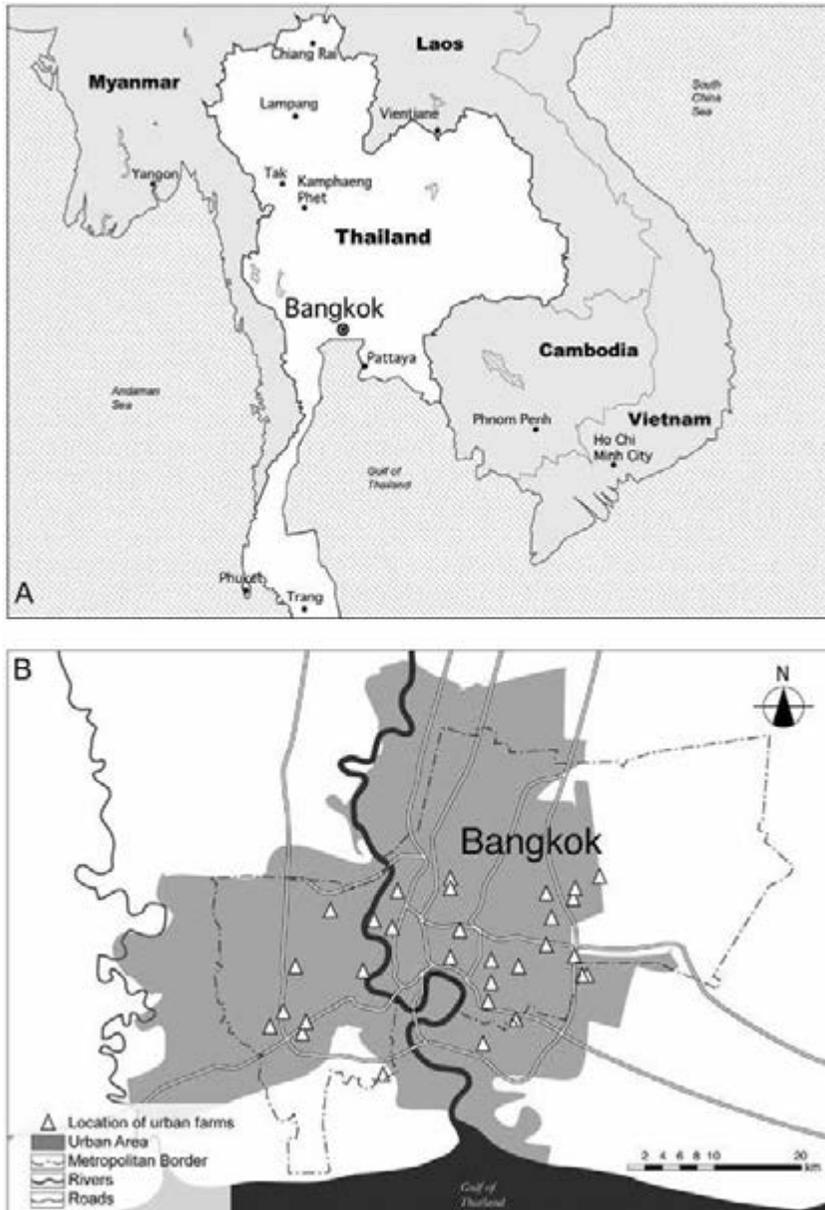
*Piyapong Boossabong*

### Abstract

Asian cities are recognized as places where food is abundant. This is also true of Bangkok, the capital of an agriculturally fertile country. However, most vegetables that are consumed within the city are transported from remote rural areas and contaminated with chemicals. Governmental policies have failed to control this chemical use, while simultaneously benefitting the monopolistic food corporations that constrain the sustainability of local food systems. This chapter sheds light on the collaboration of the urban farming networks in Bangkok that aim to produce alternative food sources within the city and create alternative markets. I argue that these networks can construct alternative urban spaces that act as theatres of social action. I also argue that it is useful to bring in the concepts of social capital, incentive structures, and communicative action when generating ideas about cities by and for the people. Social capital brings urban heterogeneities together as social agents of change in the city. It is a resource for collaborative actions. Local governments and quasi-autonomous national government organizations (QUANGOs) have been progressive in adopting forms of governance that create incentive structures and communicative forums that support grassroots initiatives.

**Keywords:** urban farming, community gardening, commons, social capital, right to the city, Bangkok

**Figure 4.1** Maps of (a) Thailand and (b) Bangkok and urban farms



Source: Ariel Shepherd

## 1 Introduction

Asian food is well known throughout the world, including Thai food. Asian cities are also recognised as places where food is abundant. This is also true of Bangkok, the capital of Thailand, but like many other Asian (and other) cities, Bangkok's mainstream food system is shaped by monopolistic food corporations who own 232 discount and convenience stores throughout the city. Of these, the 25 largest stores are built on a total land area of 1,157 acres, which is more than the total land used for the 25 largest public parks in Bangkok (Thai Climate Justice 2012, 13). The mainstream food system also depends on the transportation of produce from remote rural areas. A survey exploring the impact of food miles on Bangkok's ecological footprint found that city dwellers consume 240 g of vegetables on average per day, but only 30 per cent of all vegetables consumed in Bangkok are produced within 100 km of the city (Suteethorn 2011, 81, 83). In the largest central market, Talat Thai, 50 per cent of vegetables are produced more than 200 km away (Suteethorn 2011, 85). Every day, roughly US\$ 24,048 is spent on vegetable transportation by trucks from rural Thailand to the central city markets in Bangkok (Suteethorn 2011, 87).

In this chapter, I discuss the attempt to develop an alternative food system by and for the people of Bangkok. I argue that promoting collective gardens and alternative markets through collaborative urban farming networks provide an alternative way to construct Asian cities as theatres of social action in the way that an urban space is perceived as an interactive and inclusive social space where collective activities are regularly organized. Within such space, each participant plays a particular role which allows them to exchange ideas and learn to enhance their performance. The lessons from collaborative urban gardening in Bangkok are raised to illustrate this claim. This collaboration has been facilitated by a public programme entitled 'City Farm' that was initiated by non-governmental organizations (NGOs) and community-based organizations (CBOs), and has been supported since 2010 by a quasi-autonomous national government organization (QUANGO) and local governments. The information for this chapter was gained through observations of collective action, interviews, and focus group discussions. Some information was also gained from the review of relevant grey literature, including the analysis of legal frameworks, policy documents, project proposals, organizational and group profiles, meeting reports, progress reports, databases, websites, and Facebook pages.

This chapter starts with a discussion of the theoretical framework linking related topics such as the commons, right to the city, collaborative

governance, and social capital. Subsequently, I analyse possible alternative ways to construct urban spaces as theatres of social action through a case study of collaborative urban farming networks in Bangkok. In particular, I focus on how these networks are governed and the potential of collective gardens and alternative markets to create the commons in an urban setting. The analysis also explores the networks' capacity to provide a way to build the right to the city. I then propose the concepts of social capital, incentive structures, and communicative action as the theoretical basis for new ideas about cities by and for the people. As an example, I examine the progressive forms of governance adopted by local governments and QUANGOs to create incentive structures and communicative forums that can support grassroots initiatives for sustainable forms of alternative development. Finally, I discuss the workable scale and the position of different sectors in creating and maintaining collaborations.

## **2 The Commons, Right to the City, Collaborative Governance, and Social Capital: The Theoretical Framework**

### **2.1 Claiming the Commons as a Way to Claim the Right to the City**

'The commons' refers to common-pool resources or common property. According to Nives Dolsak and Elinor Ostrom (2003), commons can include not only local resources like community forests and lakes, but also resources shared in a larger scale, such as international rivers, oceans, air, sky, energy, cross-boundary forests, historical heritage, and regional climates. Commons can be small, like microcredit, and large, like the global atmosphere. They can be mobile (e.g., water and wildlife) or stable (e.g., forests, parks, public car parks, and even landing strips for airplanes). In relation to the issue of food, Chang (2013) proposes that advocates frame the alternative food regime and system as a commons. Like Chang, this chapter defines collective gardens and alternative markets as an urban commons. These commons can be also framed as theatres of social action where various stakeholders exercise their right to the city. In other words, creating and engaging with these commons are ways to exercise the right to the city.

Many Neo-Marxists have argued that all city dwellers, whether rich or poor, should be able to access the public facilities of a city. As argued by Edward Soja (2010), this right has a geography. To guarantee people's right to the city is to ensure the equitable distribution of resources, services, and access.

The more radical side of this argument states that resistance and revolution are necessary to enhance the public's right to the city. For example, David Harvey (2008, 23) argues that the right to the city entails far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. This is also a common rather than individual right, since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization. Harvey also argues that the freedom to make and remake both ourselves and the city we live in is one of the most precious, yet most neglected, of our human rights.

By conceptualizing the city as space in the tradition of Henri Lefebvre (1995, 2003), this chapter recognizes the right to the city as the right to economic, social, cultural, and even leisure spaces. Apart from that, I propose that the right to food in the city is one of the concrete forms of the right to the city. Advocacy for the right to food is a fundamental part of the food sovereignty movement (Wittman, Desmarais, and Wiebe 2010). As argued by Christopher Yap (2003, 12), the food sovereignty movement understands food as one aspect of a set of human rights, and therefore advocates for the rights of vulnerable and marginalized groups in society. The role of local organizations and their networks is essential for sustaining local food systems, livelihoods, and the environment—all of which generate the right to food—by fighting for the right of the people to access land for the self-production of food (Pimbert 2009). Urban farming contributes to the enhancement of the right to food in many ways. For example, urban farming can create an alternative food system by which the poor and marginalized obtain better access. It also proposes using urban land to improve both the livelihoods of city dwellers and the environment. In addition, it enhances economic, social, and environmental justice, particularly in times of crisis (Allen and Frediani 2013; Boossabong 2017).

Moreover, the idea of the right to food in the city allows us to think differently about cities. In general, we tend to think that farming is out of place in the city. This alienation of farming from the modern city has been constructed through the logic of capitalism. As argued by Jane Jacobs (1969), agriculture originated in cities; in the ancient world (around 9000 BCE), the cultivation of plants and animals was only city work. Outside of cities, wild food and other things were hunted and gathered. For this reason, agricultural cities emerged before agricultural villages, which were transformed from small and simple hunting settlements. Productive agriculture has recently been reinvented through innovations from the cities (e.g., farming knowledge, chemical fertilizers, tractors, sprinklers, pumps) (Jacobs 1969, 31). Lefebvre (2003, 4) also noted that ancient civilizations

created both urban and agricultural life. Farming should therefore not be seen as an alienation of the city. In other words, the promotion of urban farming brings farming back to the city (or recognizes it as part of the 'urban fabric'). In the same way, claiming the commons through urban farming should also be recognized as a way to claim the right to the city.

## **2.2 Governing the Commons Collaboratively to Exercise the Right to the City**

Learning how to govern the commons collaboratively is important for exercising the right to the city (through the right to food in the city). As argued by Derek Armitage (2008), governing the commons is crucially dependent on the collaboration of multiple social actors across different levels and scales of organization. The notion of collaborative governance is used to capture the collaboration of cross-sectoral multi-actors, including both governmental and non-governmental bodies (Ansell and Gash 2007; Chhotray and Stoker 2010; Donahue 2004). As argued by Christ Ansell and Alison Gash (2007, 543), collaborative governance is usually adopted for sector-specific governance issues and is regularly implemented at small scales, such as community health partnerships, natural resource co-management, and, as in this case, urban farming network governance. In this section, I give a brief overview of the literature on collaborative governance so as to frame the understanding of commons governance I refer to in the rest of this chapter.

Elinor Ostrom and her followers have developed an approach to understanding the collaborative governance of the commons, which is called polycentric or multi-layered governance. Ostrom (1990, 2010) emphasizes the importance of overcoming the dilemmas involved in collective action, particularly the problems of repeated cooperation. Influenced by the Institutional Rational Choice Theory, Ostrom and her followers assume that without effective incentive structures each actor will tend to be a free rider (i.e., not cooperate but take the offered benefits) because their decision will be based on self-interest. They will not invest time and effort in cooperation that is not expected to make a satisfactory return. According to James March and Johan Olson (1989), incentive structures are a way to reward and sanction certain behaviours, and thereby make a change to them. Ostrom (1990) clarifies that incentive structures could support a new set of rules and ensure credible commitments to follow the rules, which, in turn, helps to obtain long-term collective benefits and support for mutual monitoring.

Ostrom's approach has been critiqued for conveying a highly reductionist view of social actors, who actually act through both instrumental and

psychologically complex sets of motives such as, love, jealousy, and other emotions shaped by cultural factors (Green and Shapiro 1994). Ostrom's approach also reduces the significance of belief systems, ideologies, altruism, mutual learning, negotiation, and bargaining in influencing behaviour, and is usually a biased account of politics as a market mechanism although it pretends to be politically neutral (John 2012). Besides, for Yvonne Rydin (2003, 45), 'deliberation' and the 'discursive dimension' are largely missing from such a perspective. So, Ostrom's Institutional Rational Choice Theory should be complementary to Habermas's Communicative Action Theory which concerns more on such missing. This approach emphasizes the role of communication in enhancing collaboration by building a mutual understanding and consensus to handle cooperation and conflicts (Fischer and Forrester 1993; Fischer and Gottweis 2012; Habermas 1987; Hajer and Wagenaar 2003; Healey 2006). This suggestion becomes an alternative way to overcome the problems that arise among collaborative stakeholders, as highlighted by Ostrom's Institutional Rational Choice Theory. The next question is: What are the conditions required to develop effective incentive structures and good quality communication? Both the Ostromian Institutional Rational Choice Theory and Habermas's Communicative Action Theory give credit to social capital.

### 2.3 The Role of Social Capital in Governing the Commons

When examining the concept of social capital, it should first be noted that there has been extensive discussion about social capital in the literature that has generated several contrasting conceptualizations. However, the common understanding is that social capital is a resource that can be invested and expected to make returns in similar ways as financial and physical capital (Bourdieu 1986; Lin 2010). If this is so, what does this resource look like? James Coleman (1990), Nan Lin (2010), and Michael Woolcock (1998) have described it as a strong tie that brings together plural actors. Robert Putnam (2002) adds that this strong tie might be constituted by 'bond' or 'bridge' relations. While 'bonding' refers to ties between homogeneous members, 'bridging' represents ties among heterogeneous members (e.g., across communities and between cultural or ethnical groups). Therefore, a social tie is the minimum standard for social capital.

What kinds of social capital can glue plural actors together to develop a collaborative governance system? According to Nick Gallent and Steve Robinson (2012), a study of social capital should be scoped by particular theories and fields of study as different theories and fields perceive forms of

social capital differently. In this chapter, I capture different forms of social capital by engaging with both Institutional Rational Choice Theory and Communicative Action Theory; together, these two map out the different forms of social capital by distinguishing between rational and normative commitments (Warren 1999). Institutional Rational Choice Theory emphasizes rational commitment based on predictable and concrete strings-attached relationships, such as shared rules, a reputation for trustworthiness, and predictive trust. The theory assumes that these forms of social capital can support the effectiveness of incentive structures by reducing transaction costs and increasing relational benefits, which in turn affect the decision making of each collaborative stakeholder to collaborate in collective actions (Ahn and Ostrom 2010; Ostrom 1994, 1995). Communicative Action Theory focuses more on normative commitments based on unpredictable and abstract strings-attached relationships, such as shared norms, altruistic trust, and moral obligations. This theory posits that these forms of social capital can create public spheres for interactions to take place and facilitate good quality communication that achieves mutual understanding and consensus, which in turn enhances collaboration (Healey 2006; Innes and Booher 2003, 2010; Pennington and Rydin 1999). These two theories make different assumptions; combining them could provide analytical insights for understanding cities by and for the people.

### **3 Collaboration of Urban Farming Networks: A Possible Alternative Way to Construct the City as a Theatre of Social Action?**

As farming is part of the cultural identity of Thailand, many Thai people who are not full-time farmers, including many inhabitants of inner-city Bangkok, attempt to grow their own food in their backyard and in collective gardens. The city has the capacity for farming, as it is usually teased by the proverb 'Use the best land for farming to build the worst city.' This proverb means the geology of the Bangkok area is proper for farming the most, but this area is instead used for building the most densely populated and polluted city of the country. Lack of water is also not generally a problem, as people can use water from the 1,165 rivers that gave Bangkok the name 'River City' or 'Venice of the East' (Bell 2003, 77). Most city dwellers farm for their own consumption, but some also grow vegetables to supply restaurants. Others sell surplus products in local markets or to their neighbours, or even join a vegetable box delivery scheme under the community-supported

agriculture system supported by the Green Market Network. Some have also developed farming (and gardening) training centres and sell basic inputs such as ready-for-use soil, organic fertilizers, farming instruments, and food-growing containers. These people also form or engage in various natural networks created through informal relationships developed along food production chains.

Even though inner-city farming is small-scale and could not replace the mainstream food system shaped by large-scale monocropping and the monopoly of large food corporations, it is able to play an important role for the urban poor including slum dwellers and informal labourers, who need to reduce their food spending in order to exercise their right to food and to live in the city. It is also significant for vulnerable groups, such as hospital patients and school children, who require a secure intake of food as hospitals and schools are the main target groups of public programmes aiming to support urban gardening. Inner-city farming has also become a choice for other city dwellers who want to escape from the unjust and irresponsible mainstream food system, particularly members of the middle and upper classes. They distrust food from the markets and realize that healthy food must be either home-grown or grown by producers they know. Their farming practices are different from the mainstream, as they usually do not use mono-cropping or chemicals. Therefore, inner-city farming can promote an alternative food system for the city.

The most up-to-date and collaborative forms of support for urban farming are the actions by plural actors under the umbrella of the City Farm Programme, which began in 2010. This programme was proposed and managed by many non-governmental bodies, led by the Sustainable Agriculture Foundation, the Media Centre for Development, the Working Group on Food for Change, and the City Farm Association, and funded by the Health Promotion Foundation. The programme later combined many projects under its umbrella and supported many networks of organizations and groups. Those networks include full-time farmers on the city's fringes who engage with the community-supported agriculture (CSA) system, part-time farmers that develop their household and community gardens within the inner city, social and green enterprises, active online green customers, community-based organizations, non-governmental organizations, and public organizations that have developed their institutional gardens as learning centres. These policy networks were driven by collective gardens—which were almost all located within the inner city of Bangkok (as shown in Figure 1)—, green markets, and the community-supported agriculture system. A survey of twenty-seven community garden projects

(50 per cent) by the City Farm programme's coordinator in the first nine months of the programme found that each project can create edible green spaces in an average space of 2,202 m<sup>2</sup> and re-use city waste by composting roughly 4,179.5 kg (City Farm Programme 2011, 46).

The City Farm programme develops collaborations between the existing urban farming networks through campaigns, competitions, and other creative collective events that open spaces for raising awareness, inspiring newcomers, and sharing and learning across networks. These spaces in turn could be alternative ways to construct the city as theatres of social action as such spaces facilitate intensive interactions among different individuals, organizations, and groups from different networks. Their interactions also develop collaborative action plans to deal with food shortages during disasters (Boossabong 2012, 2014). In this chapter, I highlight the role of the constituent networks in promoting collective gardens and alternative markets as a commons, and how these commons construct the city as theatres of social action.

### **3.1 Collective Gardens and Alternative Markets as the Commons in an Urban Setting**

The constituent networks under the umbrella of the City Farm Programme promote collective gardens, including community gardens and institutional gardens (e.g., gardens of schools, hospitals and governmental offices) that adopt low-input innovations for producing food in limited areas, such as rooftop, vertical, and floating gardens. They also organize alternative markets, including farmers' markets and support community agriculture. Additionally, they support green restaurants and city farming training and learning centres. Following Yves Cabannes (2004, 2012), I categorize urban farming practices into three different types, and analyse how each type can be a commons that functions as a theatre of social action. The first type is subsistence-oriented urban farming practices. This type emphasizes subsistence livelihoods and crisis mitigation and links to the enhancement of food security and social inclusion. The second type focusses on leisure and recreational activities related to farming. This type links farming to education, culture, and health. It also captures the role of urban farming practices as a strategy for maintaining the link between urban citizens and nature, raising awareness of environmental issues, and allowing urban children to understand the cycles of life and food. The third type consists of market production enterprises, which are related to market-oriented activities and linked with economic development. Mixed types, such as

subsistence-oriented practices that are also leisure and recreation activities, are also possible (Cabannes 2012, 8–9). All real-life practices are in fact mixed types; here, I have highlighted the primary type and its contribution to the construction of spaces for social action.

a. *Subsistence-oriented urban farming practices: Building community gardens as edible social space*

The urban farming networks under the umbrella of the City Farm Programme have played a crucial role in the promotion of community gardens as self-sufficient economic practices among community members. The lessons from the On-nut Sibsee Rai and Keha-Tung Songhong community gardens are illustrated here. The On-nut Sibsee Rai slum community consisted of seventy-three households that once lived under bridges located in various places in Bangkok. Almost all of them worked as collectors of household waste, which they then sold to recycling industries. The leader of the community was also one of the leaders of the slum movement which has been fighting for housing rights since the 1980s. This community first developed a community garden in 2002 and has since helped other slum communities do the same. The leader said that after they had received their own house, they needed to have their own food (Group leader, interview by the author, 20 February 2012). The community garden plays a main role in producing food for the community members for the whole year. The members help each other take care of the garden. They can take any vegetable and catch as many catfish as they want, but in return they are expected to donate by leaving some money in the box at the gate for garden maintenance purposes. Some of the community members even cook and eat together. The community leader mentioned that each member was usually worried about taking too much food from the garden; they would consider whether there was enough left for others before gathering food for themselves. They also felt obliged to help care for the garden after taking some food from it. The garden also became a public space for community members to work, meet, chat, and share with others; for children, the garden was their playground. In 2010, the community was supported with US\$ 1590 by the City Farm Programme to raise catfish in its garden. This programme supported the integration of farming and organic waste management in this community. The City Farm Programme also organized a tour of the garden in 2011 to facilitate learning and share sustainable farming practices among the urban farming networks that engaged with the programme. It became a model for slum community

development recognized by the public sector, and proved that building community food security is possible.

Keha-Tung Songhong community garden was developed by a group of 104 informal workers. Almost all members of this group were women (only seven were men) who worked at home as subcontractors for the garment industry. The group played an active role in the activities organized by the network of home workers called 'Homenet' since 1992. The group leader had even criticized the Minister of Labour about his ignorance of informal labour rights during their social movement for pushing the informal labour right bill in 2008 (Group leader, interview by the author, 12 February 2012). Their community garden helped them reduce food costs. The City Farm Programme supported the group by providing inputs and know-how. During the dramatic flooding of Bangkok in 2011–2012, the group demonstrated that small-scale farming in the inner city could be a safety net for a vulnerable group, and supported crisis mitigation by providing valuable emergency food. Their garden has also become a place for meeting and sharing, including organizing social movements. It has inspired other groups of informal workers that work from home to build their own gardens.

b. *Leisure- and recreation-oriented practices: Creating community and institutional gardens as healthy and enjoyable learning spaces*

Many community and institutional gardens do not contribute in terms of food volume to feeding all members of the community or institution, but instead contribute to the construction of spaces that facilitate learning and support good health and enjoyment. The first example is the community garden of Tarareanake Go Green Condominium. This organic vegetable garden was developed on the rooftop of a modern condominium where high-income Bangkok dwellers lived. Initiated by the condominium committee, it was decided by a vote that the common space should be used to create a rooftop garden. The City Farm programme provided know-how and sent a mentor to train and support food growing and garden maintenance. This garden then became a learning space for the condominium dwellers, who were not familiar with non-urban lifestyles. They learned how to grow and take care of different vegetables together, following the suggestions of the mentor. After the mentor left, they needed to do it on their own (do-it-yourself – DIY – practice). This community garden was a space for them to learn by doing, and gardening became an activity for both exercise and relaxation. It also gave them the opportunity to meet and chat with other dwellers of the condominium at the garden, which had hardly

happened before. The members of Tarareanake Condominium became the next generation mentors for the gardens of nearby condominiums. In this practice, knowledge can also be understood as a commons, as it was shared and transferred across groups and spaces.

The second example is Organic Way's learning garden. The garden was developed by the green restaurant 'Health Me Organic Deliver', which used organic vegetables and supported local food production. The restaurant created its own vegetable garden in an area of roughly 100 m<sup>2</sup> in its backyard. Apart from using the produce in the restaurant (which uses merely 25–30 percent of the produce), the garden became the new playground and learning centre for urban children. Since 2012, the garden has become the learning centre for the City Farm Programme. It aims to enhance family relations and facilitate an environment where city children can learn about nature, growing food, and insects. Roughly five to ten groups of people and schools visit the garden each month. Two cases of institutional gardens, on the rooftops of the Health Promotion Foundation and Laksi District Administration Office's buildings, demonstrate how organizations, and even the government, can construct spaces for social action that promotes healthy and enjoyable learning processes. The institutional gardens of the Health Promotion Foundation (the funder of the City Farm Programme) were created as a learning centre to show that the organization took urban farming promotion seriously (i.e., 'show-case' gardens, for viewing rather than for producing food to eat). Like its name, this organization focussed on the integration of farming (and gardening) and the promotion of healthy living. The garden also became the meeting place for the members of the City Farm Programme, particularly for sharing lessons from previous activities, discussing current issues related to the urban farming movement, and brainstorming shared strategies for the next step.

The rooftop garden of the Laksi District Administration Office (a local government office) was the first rooftop garden of any public organization in the country. It was built as a city farm learning centre in 1998, and has become a training and learning centre of the City Farm Programme since 2010. The garden supports household gardening through knowledge transfers and providing some inputs (e.g., seeds and fertilizer). It has also become the model for building rooftop gardens, and has been visited by individuals, organizations, and groups from all over the country. Its success has inspired many other public organizations to build institutional gardens as learning centres; 14 of 50 District Administration Offices in Bangkok currently have rooftop gardens.

**Figure 4.2 City farm training programme**

Source: author

c. *Market-oriented practices: Promoting alternative markets as spaces for reciprocal exchange*

Since 2010, the City Farm Programme has promoted social enterprises. In particular, the programme supports social enterprises that organize city farm training programme ('know-how') markets and organic farmers markets. The support aims to promote reciprocal relationships among social enterprises and producers, and between producers and customers. For example, the programme has developed reciprocal relations among the social enterprises that organize training programmes by opening a space for them to share information, knowledge, techniques, ideas, and innovations through a magazine titled 'Natural Agriculture Magazine'. The programme also attempted to diversify the training programmes (see Figure 2): for example, one enterprise would focus on inspiring the next generation, while another focussed on setting up activities for childhood development. The programme also facilitated mutually beneficial exchanges: for instance, each enterprise could borrow the gardening handbooks and trainers of others', and help each other publicize events designed for different target groups. Enterprises also sell gardening

products developed by other groups, such as ready-to-use soil bags. The variety of training programmes provided by various enterprises has created a new type of market, a 'know-how' market, in which city dwellers can 'shop' for skills that they would like to develop.

The new producers who met during the training sessions organized an online social network called 'City Farms, City Friends' through Facebook. They shared problems, obstacles, and photos of their products online. They also organized a monthly meeting called 'Eating and Sharing in the Garden', during which they shared food made from their own produce and discussed particular issues related to food, the environment, and the city. The City Farm Programme later supported this monthly meeting by facilitating the discussion. At the time of writing this chapter (late April 2018), there were 51,900 members in this online group and about 13,650 photos had been shared.

The development of reciprocal relationships between producers and customers is reflected in the attempt of the City Farm Programme to promote each green market as a *Metra* market, which means a market based on mutual benefits rather than profits. The Green Market Network was formed and facilitated learning across markets. In cooperation with the City Farm Programme, this network aimed to develop more trustworthy organic food sources compared to the organic foods sold in modern trade supermarkets, which are randomly tested to determine any chemical contamination. They also developed a CSA system to create a direct link between organic producers and green customers by establishing a contract that would allow customers to buy vegetables directly from farmers and pre-pay them. The vegetable box delivery method was also adopted. The CSA system enhanced producer–customer relationships by promoting mutual responsibility: the producers were obliged to produce real organic vegetables, while the customers were expected to take risks with the producers when produce was lost as a consequence of the changing climate. Mutual understanding was also developed through the customers' understanding that they might not be able to get certain vegetables, as the producers may not be able to produce them; at the same time, the producers needed to adapt by learning to grow some of the vegetables requested by the customers and to be open-minded about the feedback they received. The Green Market Network in cooperation with the City Farm Programme also organized farm visits that took groups of customers to visit their producers. These customers also took part in the process of monitoring farming practices according to the adoption of the participatory guarantee system (PGS) that allows active customers to be the

members of the committee for guaranteeing the quality of farmers' produce. Social spaces for the enhancement of producer-customer relationships were also made through an annual meeting called 'Green Fair' and the information exchanges provided through the Green Market Facebook page and magazine.

### 3.2 The Capacity to Provide a Way to Build the Right to the City

The collaboration of urban farming networks through the City Farm Programme has not only allowed those networks to be recognized, but also empowered them to negotiate and bargain with the formal power of urban governance mechanisms. As a consequence, the people involved in them can claim their right to the city as agents of change. They did that through exercising their right to (better) food in the city. I have already addressed in 3.1 how urban farming networks could provide the opportunity for people to exercise the right to food through the creation of an alternative local food system. This section highlights the impact of the collaboration of urban farming networks for advocating pro-poor urban agriculture. In particular, the focus is on how these networks have encouraged and supported slum dwellers and informal labourers to gain access to land and create their community gardens.

Accessing land for living and growing food is a difficulty commonly faced by slum dwellers. Most slum communities have realized that it has been rendered 'illegal' to live and grow food on public land, leading to many conflicts with public organizations. For example, before establishing the 'On-nut' Sibsee Rai slum community, members lived under bridges in inner-city of Bangkok and survived by collecting garbage and selling it for recycling. In the 1980s, the police forced them to move out, making them fight for their right to housing since then. In September 2000, the government provided land owned by the State Railway of Thailand for them to establish a community but demanded rent for 30 years that increased every year. They could not pay this rent, so finally, the government attempted to force them to leave. The situation has improved since 2004, when the government endorsed the public policy of *Baan Mankong* ('Secure Housing') in cooperation with a quasi-governmental body called the Community Organizations Development Institute. However, only 361 communities in 50 districts of Bangkok have been involved with this programme (Community Organizations Development Institute 2008; Rapeepat 2009), while there are still many slum communities left behind—including 'On-nut' Sibsee Rai slum community and many other communities engaged in the City Farm Programme.

In Thailand, groups of informal workers have a long history of fighting both corporations and the government for labour rights and welfare. For example, the 'Solidarity' group leader described how his group members had all been laid off from the same factory that closed down in 1992 without a pension scheme (Group leader, interview by the author, 11 February 2012). They started by learning about labour laws and demanding their right to get a pension from the factory owner, but the owner refused to pay. Then they demanded that the Minister of Labour help them, but were ignored. As a result, roughly 900 laid-off labourers protested in front of the Ministry of Labour. This protest had no effect: the government took no action and the owner of the factory went back to Texas. Subsequently, the workers formed their own small factory to sew and screen-print T-shirts with the support of NGOs. As this group could not provide welfare to their members, they developed a collective vegetable garden around the factory to produce food for the workers.

The urban farming networks engaged in the City Farm Programme promote pro-poor urban agriculture for slum dwellers and informal labourers by coordinating with the owners of vacant lands to create contracts allowing the poor to produce food in their land for three to five years (see Figure 3). Some of the owners asked for rent (1000–2000 Baht per year), while the rest allowed the use of their land without rent as they wanted to avoid taxes, clear their untidy land, help the poor, and access the organic vegetables grown in the new gardens. The role of District Administration Offices as witnesses and mediators to these contracts was essential, as it gave the land owners confidence in the agreement. The coordinator of the Laksi District Administration Office, for example, noted that there was more demand from the owners for the poor to use vacant land to grow food than there was from the poor themselves. The reasons are that most of the vacant lands lacked the basic facilities such as water and were located far from the places that either slum dwellers or informal labourers lived and worked (Urban agriculture trainer, interview by the author, 23 March 2012).

The urban farming networks also played a role in negotiating with the National Housing Organization to allow the use of firebreak blocks (vacant lots within a housing project used for preventing fire from spreading and destroying all the homes) to grow food. For example, they were able to negotiate the building of a community garden in the firebreak block at Nugeela national housing community. The District Administration Office and the City Farm Programme jointly brought the backhoe to the land and helped clear and plough the soil (Interviews with community leaders by author, 24 June 2012). The urban farming networks under the umbrella of

**Figure 4.3 Community gardens developed on vacant land**



Source: author

the City Farm Programme also pushed the On-nut Hoksibhok community to develop a community garden under an electric line and a Muslim community to create a community garden under the airport rail link. They negotiated with the Thai Railway Organization to allow the urban poor to develop community gardens along railway lanes at Bangkoknoi. The networks backed up workers' demands to build a collective garden within the grounds of a cement company. If there was limited available land, the networks promoted the creation of floating gardens (i.e., the river was used as a space for food production), such as in the Bang Bour slum community that was settled informally along the river in the inner city.

#### **4 Articulating Social Capital, Incentive Structures, and Communicative Action: The Theoretical Bases for Generating 'Cities by and for the People'?**

The previous section addressed how the urban farming networks under the umbrella of the City Farm Programme construct alternative spaces of social action through promoting collective gardening and alternative markets. This

section analyses how different actors could be engaged collaboratively as members of the networks. I argue that to understand collaborative urban governance is to understand the possible mechanisms that can construct cities (as urban spaces) by and for the people, because collaborative governance recognizes the role of people's organizations and informal groups as change agents and partners for development. This chapter analyses the idea that collaboratively generating ideas about spaces by and for the people requires the articulation of social capital, incentives, and communication. It was found from the aforementioned case studies that social capital brought different actors together as agents of social change in the city by acting as a resource for collaborative actions.

There were multiple forms of social capital actively holding urban farming networks together: shared rules, reputations, trust, reciprocity, moral obligations, shared norms, and shared knowledge. For example, shared CSA rules facilitated the collaboration of CSA members and related organizations, groups, and networks. The reputation of training centres supported their role in developing and extending networks of trainees. Public trust in local governments and QUANGOs allowed them to organize meaningful collective actions that a lot of people participated in. Reciprocity among city farmers, green enterprises, and green customers strengthened their networks and cooperation. Moral obligations based on kindness and an altruistic mind-set promoted mutual aid among members of urban farming networks, particularly in times of crisis. Shared norms that were in favour of local food systems (anti-monopolistic food corporations) and organic farming (anti-chemical food production) brought many actors closer and in support of one another. Last but not least, people who shared knowledge usually liked to share and learn from each other, which in turn facilitated collaboration. These forms of social capital can both support and obstruct each other. For example, reputations support the development of trust, while shared rules of financial provision (grant management) as a rational commitment based on self-interest can obstruct the development of moral obligations as normative commitments based on an altruistic mind-set.

The power of social capital alone could not make a sustainable change, as social capital (like financial and natural capital) can increase or decrease over time. Instead, sustainability required the activation of good incentive structures. For instance, social enterprises collaborated with urban farming networks engaged in the City Farm Programme as a result of the expected benefits of doing so, such as getting more future customers (e.g., trainees, members, buyers, etc.), reducing costs by exchanging resources with other enterprises (e.g., staff and know-how), and receiving funding

**Figure 4.4 Communicative forum for urban farming networks to deliberate**

(Source: author)

support from the City Farm Programme for the organization of training. These examples support the assumptions of Institutional Rational Choice Theory. However, creating sustainable change also required the stimulation of social capital through regular interactions. For instance, NGOs and CBOs chose to collaborate with the urban farming networks engaged in the City Farm Programme because they agreed with the pro-poor approach and strategies to strengthen the local food system advocated by the networks in repeated discussions in various communicative forums. These examples also support the theoretical assumptions of Communicative Action Theory.

However, sometimes it was hard to identify why some individuals, organizations, groups, and networks decided to collaborate, as it depended on the particular situation. For example, some enterprises might expect benefits from certain situations, such as the expectation of receiving funding from the City Farm Programme, while did not think about benefits in different situations, such as during training to new coming producers and joining green markets as in these situations they could contribute to their ideology (e.g., dream of 'green society'). Some of them decided to collaborate because they would gain specific expectable returns while easing their conscience at the same time. For example, 'Health Me Organic Delivery' collaborated with

urban farming networks to both expand its circle of restaurant and home delivery customers and provide a source of learning for urban children. This example demonstrates that it is essential to take both of these theoretical assumptions into account for a comprehensive analysis.

Last but not least, the case study indicates that local governments (District Administration Offices) and QUANGO (Health Promotion Foundation) have been progressive in developing collaborative forms of governance through the creation of effective incentive structures and communicative forums. They have adopted a collaborative governance approach by recognizing NGOs, CBOs, laymen, and their social networks as development partners and supporting grassroots initiatives for sustainable alternative development. For example, they have incentivized enhancements in the collaboration of urban farming networks by providing funding, rewards, free training, free inputs, and free consultants under the condition that each organization should initiate and participate in collective events. They have also enhanced collaboration by organizing communicative forums that individuals, organizations, and informal groups engaged in any kind of urban farming network could participate in to share their knowledge, ideas, and experiences. For example, they organized a meeting focussed on formulating the visions, missions, and strategies of the City Farm Programme; an exhibition meant to share food innovations; and a monthly event called 'Eating and Sharing in the Garden' that involves a discussion on current issues related to food and the city.

## **5 Workable Scales and the Positions of Different Sectors in Creating and Maintaining Collaboration**

Another important topic to mention is workable scales and the position of different sectors—the state, the private corporate sectors, and the people—in collaborative urban farming. The place making practices of collaborative urban farming networks in Bangkok involve several scales: the individual community, the whole city, and the country. Enhancing food security and social cohesion is most possible at the community scale, because the community creates and maintains the collective garden together. Such contributions are also possible at larger scales, such as the whole city, but they are limited and depend on the specific situation. For example, vegetables collected from the community gardens were shared with other communities within Bangkok during severe flooding in 2011 (Boossabong 2014). Some collective gardens have also opened opportunities for volunteers from elsewhere to join in the gardening. This has helped to

develop social cohesion among both community members and outsiders. The monthly event called 'Eating and Sharing in the Park', where people across communities within Bangkok cooked their own produce and shared with others in a public park, developed social cohesion.

It is clear that reciprocal exchanges have been enhanced at the whole-city scale, as there were a lot of alternative markets scattered both within the inner city and at the fringe of the city (e.g., green markets and delivery food boxes under community supported agriculture schemes). So, people from different parts of Bangkok could access nearby alternative markets. However, it should be noted that this contribution was mostly limited to rich and middle-class customers because the city's organic food programme promotion still failed to reduce the price gap between organic and non-organic food. The poor and a large portion of the middle class could not afford to buy organic food, which in turn excluded them from the alternative markets that advocated organic food. However, this does not mean that there was no place for the poor and marginalized in these alternative markets, as most of the farmers engaged in community supported agriculture schemes were poor. In fact, there were special events where these alternative markets provided food for the poor and marginalized for free or at a lower price; for example, the Green Market Network in cooperation with green restaurants often organized events aimed at providing free food to homeless people in Bangkok.

The impact on producing sharing, learning, and leisure spaces ranges from the local community scale to the national scale. This can be seen from the fact that people from every corner of the country have come to visit many collective and learning gardens. It is hard to deny that the vertical and rooftop gardens in Bangkok are the most innovative and productive when compared with practices in other cities in Thailand. These practices have also been promoted by the national media through television programmes, magazines, and newspapers. Many organizations, groups, and networks related to urban farming practices in Bangkok have their own websites and Facebook pages, and the online group called 'City Farm City Friends' comprises members from everywhere in Thailand. Although these media and online channels were limited to the Thai language—thereby having little reach outside of Thailand—the impact of sharing and learning have extended to wider regional and global scales as urban farming networks started developing connections with a number of international organizations and networks. These practices can act as concrete examples of an alternative food system, which can benefit anyone who realizes the problems of monopolized and irresponsible global and national food regimes. Although these individuals might not have a chance to engage closely in those practices, they can get

inspiration from them and try in turn to gradually transform themselves and claim their right to food (and to a better food regime).

The above scales are interrelated and affected by the collaboration of different sectors. As argued by Brandon Born and Mark Purcell (2006), the outcomes produced by a food system are contextual no matter what the scale. They depend on the actors (and agendas) that are empowered by the particular social relations in a given food system. At the national level, the City Farm Programme was endorsed by the central government and implemented using national taxes. Although the programme was limited to the boundaries of Bangkok, Thai people elsewhere could also develop their sense of belonging and even critique this programme and its successes and failures in Bangkok because they also paid taxes. In addition to the media and online channels, this role of the state (through QUANGO) has been partially responsible for the promotion of urban farming practices beyond Bangkok.

Although Bangkok farming practices would have remained fragmented without state intervention (granting), these networks would not be as strong without the local governments, NGOs, CBOs, social and green enterprises, green customers, and urban farmers functioning at the city and community scales. At these scales, cross-scale interactions were intensive, and the collaborative actors were also more interdependent. They built links to others at the same scale by developing bonding social capital, while collaboration across scales was made through bridging social capital. Hence, as argued by Dolsak and Ostrom (2003, 352), social capital plays a role in mediating and shaping multiple scales.

The last point about the scale of impacts and collaboration is the prospective challenge of urban farming practices (in particular the development of collective gardens and alternative markets) crossing formal political and governmental boundaries (similar to the phenomenon of the world-wide transition town movement<sup>1</sup>). This trend creates a 'blurred' scale and makes it harder to organize effective incentive structures and communicative forums. It is also harder to determine the appropriate positions of different sectors for creating and maintaining the collaboration. Without a clear centre, urban farming networks starting from Bangkok might need a more decentred governance approach in the future. Given this, the long-term prevalence of collaboration may not necessarily depend on scales.

1 It is a movement of laypeople who attempt to enhance their self-reliant capacity, especially on food and energy. They try to make changes to themselves and then scale up to their household, neighborhood, community and city. Nowadays, the transition town movement is everywhere and it develops its global network which facilitates sharing and learning across borders.

## 6 Conclusion

By analysing the impacts of the collaborative urban farming networks endorsed by the City Farm Programme, this chapter provides the example of the social construction of urban spaces as theatres of social action. In particular, the chapter illustrates that promoting community and institutional gardens and alternative markets can create alternative spaces by and for the people, and that a pro-poor urban agricultural approach could support the right to the city of the urban poor through exercising their right to food. I have provided numerous examples of how collaboration enhances the recognition and power of slum dwellers and informal labourers to bargain and negotiate support for gaining access to land for food self-production.

I also propose a theoretical framework that is useful for understanding collaborative governance for constructing cities by and for the people. These case studies indicate the benefits of theoretical assumptions about social capital, incentive structures, and communicative action for understanding how collaboration by and for the people works. This theoretical framework is developed from a combination of Institutional Rational Choice Theory and Communicative Action Theory. As these two theories have contrasting assumptions (as a consequence of their ontological and epistemological differences), previous studies have usually only used one at a time. In contrast to this perspective, I argue that it is useful to take both of them into account to create a more comprehensive approach. The case studies also indicate that the local governments and QUANGO have been progressive in adopting a collaborative form of governance by promoting social capital, developing effective incentives, and organizing inclusive spaces for communication. The role of power relations in shaping networks and collaboration is a subject for further studies.

### Works Cited

- Allen, Adriana, and Alexandre Apsan Frediani. 2013. 'Farmers, Not Gardeners: The Making of Environmentally Just Spaces in Accra'. *City* 17(3): 365–81.
- Ahn, Theodor K. and Elinor Ostrom. 2010. 'Social Capital and Collective Action'. In *The Handbook of Social Capital*, edited by Dario Castiglione, Jan W. van Deth, and Guglielmo Wolleb, 70–100. Oxford: Oxford University Press.
- Armitage, Derek. 2008. 'Governance and the Commons in a Multi-level World'. *International Journal of the Commons* 2(1): 7–32.

- Ansell, Chris and Alison Gash. 2007. 'Collaborative Governance in Theory and Practice'. *Journal of Public Administration Research and Theory* 18(4): 543–71.
- Bell, Barry. 2003. *Bangkok: Angelic Allusions*. London: Reaktion Books.
- Born, Branden and Mark Purcell. 2006. 'Avoiding the Local Trap: Scale and Food Systems in Planning Research'. *Journal of Planning Education and Research* 26(2): 195–207.
- Boossabong, Piyapong. 2012. 'Collaborative Governance on Urban Food Agenda during Floods in Bangkok'. Paper presented at the RGS-IBG International Conference, Edinburgh, 3 July.
- Boossabong, Piyapong. 2014. 'Coping with Flooding in Bangkok: Urban Agriculture as a Climate Change and Disaster Risk Reduction Strategy'. *Urban Agriculture Magazine* 27(March): 27–29.
- Boossabong, Piyapong. 2017. 'Floods and Food in the City: Lessons from Collaborative Governance within the Policy Network on Urban Agriculture in Bangkok'. In *Environmental Justice, Urbanisation and Resilience*, edited by Adriana Allen, Liza Griffin, and Cassidy Johnson, 215–30. London: Palgrave Macmillan.
- Bourdieu, Pierre. 1986. 'The Forms of Capital'. In *Handbook of Theory and Research for the Sociology of Education*, edited by John G. Richardson, 241–58. New York: Greenwood.
- Cabannes, Yves. 2004. 'Public Financing and Investments for Urban Agriculture'. Paper prepared for the World Urban Forum 2004, Barcelona, Spain, 13–17 December.
- Cabannes, Yves. 2012. *Pro-poor Legal and Institutional Frameworks for Urban and Peri-urban Agriculture*. Rome: Food and Agriculture Organisation of the United Nations.
- Chang, Marina. 2013. 'Growing a Commons Food Regime: Theory and Practice'. PhD diss., University College London.
- Chhotray, Vasudha and Gerry Stoker. 2010. *Governance Theory and Practice: A Cross-disciplinary Approach*. New York: Palgrave Macmillan.
- City Farm Programme. 2011. *City Farm Programme Progress Report*. Bangkok: Sustainable Agriculture Foundation and Health Promotion Foundation.
- Coleman, James. 1990. *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Community Organisations Development Institute. 2008. *Security House Programme Evaluation 2003–2008*. Bangkok: Community Organisations Development Institute.
- Dolsak, Nives and Elinor Ostrom, eds. 2003. *The Commons in the New Millennium: Challenges and Adaptation*. Cambridge: MIT Press.
- Donahue, John D. 2004. 'On Collaborative Governance'. Working paper no. 2, John F. Kennedy School of Government, Harvard University, Cambridge.
- Fischer, Frank, and John Forrester, eds. 1993. *The Argumentative Turn in Policy Analysis and Planning*. Durham: Duke University Press.

- Fischer, Frank and Herbert Gottweis, eds. 2012. *Argumentative Turn Revisited: Public Policy as Communicative Practice*. Durham: Duke University Press.
- Gallent, Nick and Steve Robinson. 2013. *Neighborhood Planning: Communities, Networks and Governance*. Bristol: Policy Press.
- Green, Donald P. and Ian Shapiro. 1994. *Pathologies of Rational Choice Theory*. New Haven: Yale University Press.
- Habermas, Jurgen. 1987. *The Theory of Communicative Action: Reason and the Rationalisation of Society*. Translated by Timothy McCarthy. Cambridge: Polity.
- Hajer, Maarten A. and Hendrik Wagenaar, eds. 2003. *Deliberative Policy Analysis: Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.
- Harvey, David. 2008. 'The Right to the City'. *New Left Review* 53: 23–40.
- Healey, Patsy. 2006. *Collaborative Planning: Shaping Places in Fragmented Societies*. New York: Palgrave Macmillan.
- Innes, Judith E. and David E. Booher. 2003. 'Collaborative Policymaking: Governance through Dialogue'. In *Deliberative Policy Analysis: Understanding Governance in the Network Society*, edited by Maarten A. Hajer and Hendrik Wagenaar, 33–59. Cambridge: Cambridge University Press.
- Innes, Judith E. and David E. Booher. 2010. *Planning with Complexity: An Introduction to Collaborative Rationality for Public Policy*. New York: Routledge.
- Jacobs, Jane. 1969. *The Economy of Cities*. New York: Random House.
- John, Peter. 2012. *Analysing Public Policy*. London: Routledge.
- Lefebvre, Henri. 1995. *Writings on Cities*. Translated by Eleonore Kofman and Elizabeth Lebas. Oxford: Wiley-Blackwell.
- Lefebvre, Henri. 2003. *The Urban Revolution*. Translated by Robert Bononno. Minneapolis: University of Minnesota Press.
- Lin, Nan. 2010. 'A Network Theory of Social Capital'. In *The Handbook of Social Capital*, edited by Dario Castiglione, Jan W. van Deth, and Guglielmo Wolleb, 50–69. Oxford: Oxford University Press.
- March, James D. and Johan P. Olsen. 1989. *Rediscovering Institutions: The Organizational Basis of Politics*. New York: Free Press.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Ostrom, Elinor. 1994. 'Constituting Social Capital and Collective Action'. *Journal of Theoretical Politics* 6(4): 527–62.
- Ostrom, Elinor. 1995. 'Self-organization and Social Capital'. *Industrial and Corporate Change* 4(1): 131–59.
- Ostrom, Elinor. 2010. 'Beyond Markets and States: Polycentric Governance of Complex Economic Systems'. *American Economic Review* 100: 1–33.

- Pennington, Mark and Yvonne Rydin. 1999. 'Researching Social Capital in Local Environmental Policy Contexts'. *Policy and Politics* 28(2): 233–49.
- Pimbert, Michel. 2009. *Towards Food Sovereignty: Reclaiming Autonomous Food System*. London: IIED.
- Putnam, Robert D. 2002. *Democracies in Flux: The Evolution of Social Capital in Contemporary Society*. Oxford: Oxford University Press.
- Rapeepat, Akin. 2009. *Rural Population, City Dwellers, and Social Justice in Thailand*. Chai Mai: Wanida Publishing.
- Rydin, Yvonne. 2003. *Conflict, Consensus, and Rationality in Environmental Planning: An Institutional Discourse Approach*. Oxford: Oxford University Press.
- Soja, Edward W. 2010. *Seeking Spatial Justice*. Minneapolis: University of Minnesota Press.
- Suteethorn, Kanokwalee. 2011. 'The Impacts of Food Miles on the pattern of Footprint of Bangkok's Food Supply'. *NAJUA Architecture, Design and Built Environment* 26(1): 71–93.
- Thai Climate Justice. 2012. *Rethinking Urban Life*. Working Paper. Bangkok: Focus on the Global South.
- Warren, Mark E., ed. 1999. *Democracy and Trust*. Cambridge: Cambridge University Press.
- Wittman, Hannah, Annette Aurelie Desmarais, and Nettie Wiebe, eds. 2010. *Food Sovereignty: Reconnecting Food, Nature and Community*. Oxford: Pambazuka.
- Woolcock, Michael. 1998. 'Social Capital and Economic Development: Towards a Theoretical Synthesis and Policy Framework'. *Theory and Society* 27(2): 151–208.
- Yap, Christopher. 2013. *Urban Food Sovereignty: Food, Land and Democracy in Kampala*. Working Paper no.157. London: Development Planning Unit, UCL.

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