

# The Role of Civil Society Networks in Promoting Organic Food as A Path to Food Security in Chiang Mai, Thailand

---

Siya Uthai<sup>1\*</sup> and Chomchuan Boonrahong<sup>2</sup>

<sup>1</sup> Faculty of Social Sciences, Chiang Mai University, Thailand

<sup>2</sup> Institute for Sustainable agriculture community (ISAC), Thailand

\* Siya Uthai, corresponding author. Email: siya.uth@cmu.ac.th

Submitted: 3 November 2021. Accepted: 28 November 2022. Published: 12 January 2023

Volume 31, 2023. pp. 417-434. <http://doi.org/10.25133/JPSSv312023.024>

---

## Abstract

Food security is an important topic involving people's everyday lives. In recent decades, organic food consumption has been touted as a path to food security. As such, civil society networks in Chiang Mai have been working to support the movement toward organic food. Organic food networks linking producers and consumers are critical to building food security. This research article aims to understand civil society networks' roles and working styles on organic food issues in Chiang Mai province, Thailand. The working styles and outcomes of the civil society network (CSN) are analyzed as the intermediary between food producers to urban consumers in the food system. Four CSNs in Chiang Mai were selected as the case studies and compared with Chiang Mai's Young Farmer Group. This study, based on observation techniques and in-depth interviews with key informants, investigates the working styles of CSNs and networks of food producers. The questionnaires were distributed to consumers to study consumer knowledge and perceptions of food security issues. The focus group meetings were organized to obtain feedback from food producers, consumers, and CSN's staff. The authors found that each CSN linked with food producer networks according to the working styles of the CSN's staff and that the key actors in each CSN knew each other personally. CSNs can introduce organic farming to local communities. However, many CSNs are struggling to connect with urban consumers.

## Keywords

Civil society networks; food security; organic food; Thailand

---

## Introduction

Food security is an oft-cited indicator of human security and well-being, reflected in various food-related policies enacted by the Thai government. Organic farming is one approach to promoting food security in that it can protect against chemical contamination, which affects both producers and consumers. In Chiang Mai province, Thailand, the provincial administration attempts to support organic farming and organic products by providing marketing platforms to link with organic food production units (Committee of National Organic Farming Development, 2017). Moreover, civil society organizations (CSOs) connect producers and consumers in the food system. Chiang Mai province is a suitable case to study the food system in Thailand through organic food networks because it has a high-density population in the urban area and extensive rural farmlands. These conditions motivate CSOs in Chiang Mai to position themselves as a link in the food system, which rarely is found in Southeast Asian countries. Therefore, the food networks can link producers and consumers within the province. Developing an organic product marketing plan can motivate urban consumers (Ministry of Commerce, 2017) and create farmer networks through which they can exchange knowledge and technical expertise in both formal and informal settings. Exchanging resources and data over such community's networks can increase more extensive networks outside their community in Chiang Mai (Sitthisuntikul et al., 2018).

Farmers' markets are a way to bring healthy food to consumers in the community, but it is not easy to make this connection (Hesterman, 2011). The roles of civil society through organic food networks can fill the gap in linking organic food products from local farmers to offer urban consumers. However, a lack of CSOs in Southeast Asian countries to work in linking both sides into the same networks prompted the aim of this research to explore CSOs' working models in Chiang Mai via organic food network distribution. Hence, the term "civil society networks (CSNs)" was used according to their work relationships. This study examines the roles and working styles of CSNs attempting to create food security through organic food production in various areas in Chiang Mai province. This article analyzes how CSNs work to expand organic food networks from local producers to urban consumers and the outcomes of CSNs' working for food security in the food system. Using a purposive sampling method to study the work on organic food issues from local producers to urban consumers, four CSNs representing the districts of Mae Rim, Mae Thang, Mae On, and Mae Wang, including Chiang Mai's Young Farmer Group were selected. Each network works in a way specific to the social context in which it is situated.

Qualitative and quantitative methods were used in this research to better understand the role of CSNs in building organic food networks and examine their possible role in enhancing food security. Qualitative data comprised vital informant interviews and observations that focused on understanding the working style and strategies of how CSNs, link food producers with urban consumers. For the quantitative aspect, a questionnaire was designed to collect consumer data. In this way, we could examine the networking processes regarding organic farming and food security.

## Concepts and literature review

### Food security

The emergence of civil society is a crucial actor of social units to fill the gap with the state's distribution. Civil societies are spaces of openness and accessibility for different projects (Chandhoke, 2007). Many civil society organizations work on food issues, particularly food security. The World Food Summit in 1996 represented the role of civil society delegates as a part of the action plan's reflection (Koc & MacRae, 2001). A later study referred to civil society's functions in engaging, sustainable food policy (Koc et al., 2008). The term "food security," first used in 1970, has been used in various ways and garnered mainstream recognition when its importance was emphasized by the Food and Agriculture Organization (FAO) at the 1974 World Food Summit (Chan-on, 2014). Food security involves the capability to distribute a sufficient amount of food sustainably. As the global population increases, so does food consumption, necessitating action to reduce prices and production instability in the food system (Food and Agriculture Organization of the United Nations, 2003). At the 1997 World Food Summit, the Rome Declaration on World Food Security and World Food Summit Plan of Action were announced, which contended that food security could only be achieved when all people have adequate access to safe and nutritious food, both in terms of physical and economical means of procurement (Food and Agriculture Organization of the United Nations, 2011).

However, food security concepts are debated on various points. The United States Department of Agriculture (USDA) refers to food security as all members' access to enough for an active and healthy life (cited in Ackerman-Leist, 2013). Ackerman-Leist (2013) extended this condition to state that community food security requires all community residents to have safe, appropriate food nutrition from the sustainable food system to promote self-reliance and social justice. To this end, CSOs in America and Europe attempt to link the sustainable food system to the consumption side to promote social justice (Koc et al., 2008; Parekh & Klintman, 2021). Food justice is another term for the food security concept in the world food system that civil society groups have promoted. The Food Trust organization's definition of food justice is the condition that "communities exercising their right to grow, sell, and eat healthy food. Healthy food is fresh, nutritious, affordable, culturally appropriate, and grows locally with care for the well-being of land, workers, and animals" (Ackerman-Leist, 2013, p. 107). Therefore, healthy food is not only for consumers' food security, but land, workers, and animals must be included to fill the gap in the food system.

In 1996, La Vía Campesina (Thivet, 2014) promoted the term food sovereignty as a precondition of the food security concept that brings food producers and consumers together and puts them at the center of the food system (Ackerman-Leist, 2013). This term highlighted people's right to healthy food and the right of farmers to define their food and farming system, including the right of each nation to develop its food production based on cultural and productive diversity (Thivet, 2014). In Indonesia, the food sovereignty concept is influencing local communities and farmer movements, but the urban farming movement by urban consumers has been constructed differently from the term food sovereignty (Nasution, 2015). While the food system is extended in Vietnam through the food distribution system concept as small-scale farmer choices, it has occurred without the role of CSOs in linking to consumers (Ngo, 2021). Moreover, Booth and Coveney (2015) raised the point of food democracy to transform the consumer into the food citizen in the food system, whereby democracy and

social movements can build the active citizen to participate and design their food system rather than being passive consumers controlled by state policy and big food companies.

## **Organic farming**

Organic farming is a critical way to achieve food security. Scialabba and Hattam (2002) first referred to organic farming, which involved using eco-friendly processes from primary production to consumer distribution. According to the Codex Alimentarius Guidelines, organic farming refers to a holistic method of food production that enhances ecological systems and human health and encompasses the whole international food and farming system (World Health Organization & Food, & Agriculture Organization of the United Nations, 2007). This process includes biological cycling, as organic farming attempts to reduce the use of chemicals, such as fertilizers, pesticides, and herbicides, in the production system. Although organic farming cannot completely negate the threat of natural contaminants, it can reduce dangerous elements introduced through food production, logistics, and retail. All processes within the food system should be guided by standard procedures concerning organic products. Organic farming aims to support human health and sustainable community food production accompanied by environmental conservation.

Opposite to organic farming, pesticide usages are the pattern of conventional farming. Harrison (2017) studied the sustainable agriculture movement that attempted to build alternatives to traditional farming and food systems. Organic farming has become the primary way to address the problem of pesticide usage. Demands and organic price premiums can be the way to convince farmers to reduce pesticide usage (Guthman, 2008). Consumers' increasing demand for organic food has encouraged farmers to convert to organic farming. Food activists also promoted local food platforms such as farmers' markets.

In contrast, direct contracts between organic farms and local restaurants, schools, and other institutions aim to eliminate pesticides that cause illness in farmers and consumers (Mie et al., 2017). China had the policy to promote "green food consumption" that emphasizes organic food as safe, healthy, and eco-friendly, and Chinese CSOs supported the policy in building consumption networks (Leggett, 2020). Regarding China's case, CSOs have limited actions but could support state voids in consumer trust and small-scale farming via social media platforms. Differently, the studies in Thailand focused on consumer behaviors and attitudes toward organic food consumption rather than the role of CSOs (Wongprasert & Chueboon, 2018).

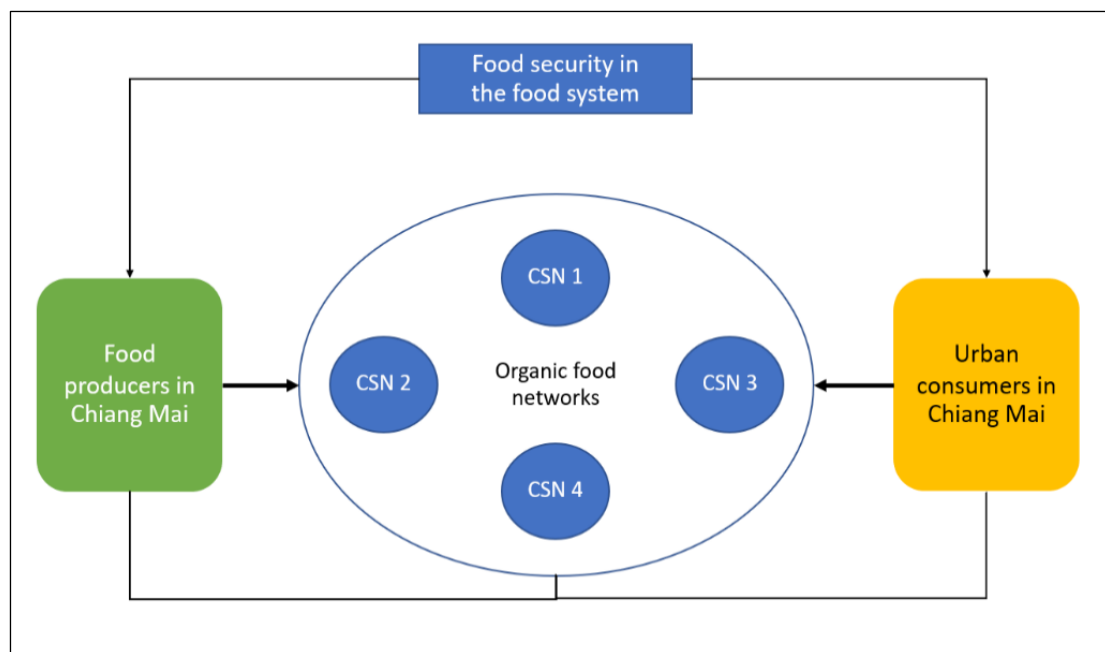
## **Social networks**

Many civil society organizations in Chiang Mai have emerged to work with local communities, particularly local groups of farmers whose situations have been worsened by current development policies. Civil society networks (CSNs) involved in organic food also focus on working with local farmers to adopt organic farming to reduce their dependence on large-scale corporations. Many of these networks are run by locals, who are attuned to the specific problems in their community. These CSNs have created more extensive organic food social networks to exchange their knowledge and experience. Wipawin (2015) defined a social network as a social system that links each unit in society through interpersonal relationships. The nodes in these networks consist of individual and social groups. They are connected by

interpersonal relationships (Wasserman & Faust, 1994) and create trust in the networks (Cuéllar-Padilla & Calle-Collado, 2011).

The work of Lo and Koenig (2017) looked at the networking of food workers and consumers for food justice in the food system. The workers in food factories are hidden from consumers who want to know where their food comes from and have limited knowledge of the farmer's market. The non-profit organization, Brandworkers (<https://brandworkers.org>) trains workers in food processing to realize and lead the campaign for justice at their workplaces. The networks between workers from different industries in the food system create solidarity among food workers. Workers' campaigns also called for consumers, activists, students, and citizens to rise to the challenge against exploitation because the consumer's commitment led to higher-impact actions. To show the relationship in our research between food producers and urban communities in Chiang Mai province, please refer to the conceptual framework in Figure 1 below.

**Figure 1:** The Roles of CSNs in Linking Food Producers to Urban Consumers via Organic Food Networks



In Figure 1, civil society networks bring food producers and urban consumers in Chiang Mai into organic food networks. The CSNs coordinate with consumers and producers to promote organic food to create community food security in the province. This article analyzed CSNs' roles within organic food networks regarding food security. The CNSs link local food producers and urban consumers in Chiang Mai to improve food security. The CSNs that support logistics provide knowledge and technical training for local farmers in communities outside Chiang Mai concerning organic farming. They also organize product distribution channels in Chiang Mai as a marketing platform for direct interaction between consumers and producers.

## Research method

Chiang Mai province was selected as the area of study because of key actors in the food system; local farmers, distributors, urban consumers, and civil society networks (CSNs) of food issues are available within the province. Using purposive sampling, representatives from four CSNs in Mae Rim, Mae Thang, Mae On, and Mae Wang districts of Chiang Mai and Chiang Mai's Young Farmer Group were selected as participants. The Young Farmer Group comprises local producers who created their network to link directly with urban consumers. The four districts were selected as they are each relevant to the CSN networks that aim to link local farmers in their districts with consumers in the city of Chiang Mai.

Between September 2019 to March 2020, in-depth key informant interviews with CSN staff were conducted, together with observation of CSN staff in their work with local producers and consumers. The staff's opinions of organic food concepts as the way to promote food security in Chiang Mai were collected via in-depth interviews and working styles. In contrast, the relationships between CSNs and local producers and the abilities of CSN staff in knowledge communication were collected via observation. Table 1 shows the key informants and pseudonyms used to maintain confidentiality.

**Table 1:** Participants in Key Informant Interviews

CSN	Pseudonym	Interview date
Mae Rim CSN	Nat	September 8 and October 4, 2019
Mae Thang CSN	Nun	September 28, 2019
	Ad	March 21, 2020
Mae On CSN	Pui	September 25, 2019
	Un	November 18, 2019
Mae Wang CSN	Kwi	September 29, 2019
	Oun	October 5, 2019
Chiang Mai's Young Farmer Group	Fai	September 24, 2019
	Pon	October 3, 2019

To gain an understanding of consumers' consumption behavior, attitudes, opinions, and knowledge of food security issues, as well as compare consumption trends in different areas, a questionnaire with many close-ended questions and five open-ended questions was distributed via convenience sampling to 100 consumers in Chiang Mai and another 100 outside the city in the four districts mentioned above to compare the consumption trends in different areas. Because of the limitation of time and cost, the sample cases in Chiang Mai were selected by inviting people who visited both organic and non-organic food markets in the city to be respondents. The other 100 sample cases were separated equally across the four districts. The selection method was similar to the sample cases in the city, but only the respondents who visited big markets in each district were chosen. After collecting the data, we arranged a focus group meeting in which stakeholders in the food system: local producers, urban consumers, and CSNs, could reflect, brainstorm and exchange opinions regarding establishing food security at the provincial level.

To interpret and evaluate the meaning within the applied concepts, interview transcripts, field notes of the focus group meeting, and open-ended questions were coded, categorized, and

analyzed by content analysis. Using SPSS, questionnaires were transformed for the quantitative data to analyze in the compare means, a procedure to summarize and compare differences in descriptive statistics.

This article is a part of the research project: CMUREC 62/057 was approved by Chiang Mai University Research Ethics Committee in August 2019.

## Findings

The research aimed to explain the roles and working styles of organic food civil society networks in Chiang Mai and their way of promoting food security via organic food networks from local producers to urban consumers. The findings have been divided into two categories: the roles and styles of Chiang Mai's organic food civil society networks and the food network expansion from local producers to urban consumers.

### The roles and styles of Chiang Mai's organic food civil society networks

Regarding this finding, the researchers interviewed staff at each of the CSNs and Chiang Mai's Young Farmer Group. Table 2 compares the characteristics and working models of four CSNs in Chiang Mai's Young Farmer Group, which directly linked food producers and urban consumers. Although CSNs worked mainly with food producers, they faced various challenges. Expanding to work with consumers may compound these challenges.

**Table 2:** Classification of CSNs' Working Style, Roles, and Challenges

Network	Working Style	Roles	Challenges
Chiang Mai's Young Farmer Group	- Loose networks for information sharing - Independent decision-makers	- Based on contexts of their own area/ community - Create online content on food and farming for online users	Difficulty in persuading older farmers in their community
Mae Rim CSN	- Focus on targets members of cow/buffalo banks - Linking the food producers through personal connections	- Organic farming training - Allocation of distribution space for farmers' market	- Lack of spontaneous staff - No experience in consumer side and marketing
Mae On CSN	- Focus on the community's demand to solve the poverty - Fostering local human resources	- Building the community's capabilities in organic farming - Seeking income from various sources	Communicating the relative safety of organic food outside the community
Mae Thang CSN	Organizational structure, dividing of staff by specific tasks; technical support for local producers and marketing communication	- Expanding the organic farming community through leadership training and technical support - Provide distribution platforms in the city, and	Lacking the skills necessary to communicate with urban consumers

Network	Working Style	Roles	Challenges
Mae Wang CSN	<ul style="list-style-type: none"> <li>- Focus on the need of local communities in natural resource management and sustainable agriculture</li> <li>- Working with a young generation</li> <li>- based on the strong connection with NGOs and local administration units</li> </ul>	<ul style="list-style-type: none"> <li>communication via social media</li> <li>- Coordination with other NGOs, academia, and media to work with local communities</li> <li>- Encouraging the young generation to establish themselves based on resources in their home communities</li> </ul>	<ul style="list-style-type: none"> <li>- Difficulty resisting mainstream market forces/ Capitalism</li> <li>- Seeking acceptance from community elders</li> </ul>

### Chiang Mai's young farmer group

This group comprises a young generation who have their hometown in various districts of Chiang Mai and mainly obtained their education and lifestyle in the city. After graduation, they sought a way to improve what their family already had in their agricultural sectors, "before turning to organic farming, I have got a suggestion from the Health Promotion Foundation about technical support and market provides. Therefore, I felt relief because I knew that my products already had the market, the buyer" (Fai, September 24, 2019). However, only the selected products were accepted. Thus, the young farmers had to find alternative markets in Chiang Mai to sell the rest.

This practice is when young farmers in Chiang Mai connected and sought the place they could open to sell organic products in Chiang Mai and Bangkok. In separate interviews with members of the Young Farmers Group, Pon (October 3, 2019) and Fai (September 24, 2019) shared information about marketplaces within their networks whereby members could each decide whether they would like to join those marketplaces or not. Anyone who agrees to join can go together. At the same time, many young farmers created online channels to link and deliver their goods directly to urban consumers.

### Mae Rim CSN

The Rural Development Network in Mae Rim works with farmer communities in many districts of Chiang Mai, beginning with a cow/buffalo bank project to provide agricultural livestock for poor farmers. The organic farming project, which provides farmers with training from CSN staff, emerged to promote alternative production methods in some of these communities. Our interviewee from this CSN, Nat (September 8, 2019), explained that the CSN in Mae Rim has also established a marketplace for organic food nearby the office as a way for farmers to distribute their products directly to consumers. As farmers from remote communities outside Mae Rim who used to work with one of CSN's staff faced high travel costs, CSN also provided support to cover these expenses. The reason for inviting farmers from remote communities is that only a few farmers from Mae Rim have joined. This CSN aimed to act as a social enterprise to aid farmer networks in selling their organic products through the network's social enterprise shop. However, this presents a challenge, as none of the CSN staff had experience in this business because they mainly worked with farmers.



## **Mae On CSN**

Mae Tha's network in Mae On emerged due to demand from their community. One of our interviewees, Pui (September 25, 2019), shared how their CSN began with a former community leader in the district working to solve poverty and indebtedness in the community, which consists mainly of farmers. They found support from NGO networks in Chiang Mai and shifted their focus to sustainable agriculture and organic products to increase locals' income. His success inspired others to engage in similar projects, and the subsequent generation of food producers received training in organic farming with an NGO in Bangkok.

After returning to Mae On, they found work as local staff of Bangkok-based NGOs in their community. The CSN began by reaching out to community members to better understand local needs and priorities. Un (November 18, 2019) further explained that they have no distribution center in Chiang Mai City, as the district's remoteness makes travel infeasible for most community members. Staff primarily focused on wholesale distribution to supermarkets, grocers, and restaurants in the city. However, the CSN did provide a space in the community for local villagers to sell their organic products to consumers from both within and outside the community. The staff has also established a learning center for sustainable agriculture. This learning center began when Mae On CSN, working with the local community, encouraged the local leader to develop the center, which is open to locals and visitors interested in learning ways to widely communicate sustainable agriculture and food security.

## **Mae Thang CSN**

Our interviewees in this CSN, Nun (September 28, 2019) and Ad (March 21, 2020), shared how the Sustainable Agriculture network that works with Mae Thang's farmer networks began with a project to provide knowledge and technical support for community leaders concerning organic farming and helped them to set up an organic farming network in their community. This CSN also works with other farmer networks in different districts and has provided a marketplace in Chiang Mai for an organic food market at which farmers of CSN's networks can sell organic products from their farms directly to urban consumers with high purchasing power. Farmers must pay for a rental booth per day, but the cost is offset by the income they receive from selling their products. Because CSN staff actively promoted their activities via Facebook frequently, the market is widely known in Chiang Mai City, even among those who were not organic food consumers.

## **Mae Wang CSN**

Northern Development's network works with Mae Wang's community network focusing on natural resource management. Our interviewee, Oun (October 5, 2019), shared how most of the district's residents are part of an ethnic group's community living in highland forest areas who have conflicted with the state over resource management policy for decades. The CSN has supported the community in negotiations with the government and has initiated a sustainable agriculture project with local farmer networks and the community. As part of this project, the CSN provided knowledge regarding organic farming as sustainable agriculture to support farmers' livelihoods based on their resources to support farmers' livelihoods and promote food security in the community. The CSN focused on working with younger members who have studied outside the community to implement projects in their home villages.

Kwi (September 29, 2019) shared how they have collaborated with another NGO and a local university to educate recent graduates on how they can apply their skills and knowledge in their home villages. As residents of Mae Wang district mostly rely on agriculture for their living, the youths trained by the CSN attempted to convince community members to become self-reliant rather than depending on large-scale corporations. However, it was difficult to convince the older generation of villagers, traditionally in positions of authority in the community. Also, this CSN and the young farmers must compete with contract farming trends from the agri-food companies in the community. Another role of Mae Wang's CSN was to coordinate with other regional networks to assist village youth in promoting the cultivation of organic products, particularly coffee, for wholesale and retail distribution in Chiang Mai and other provinces.

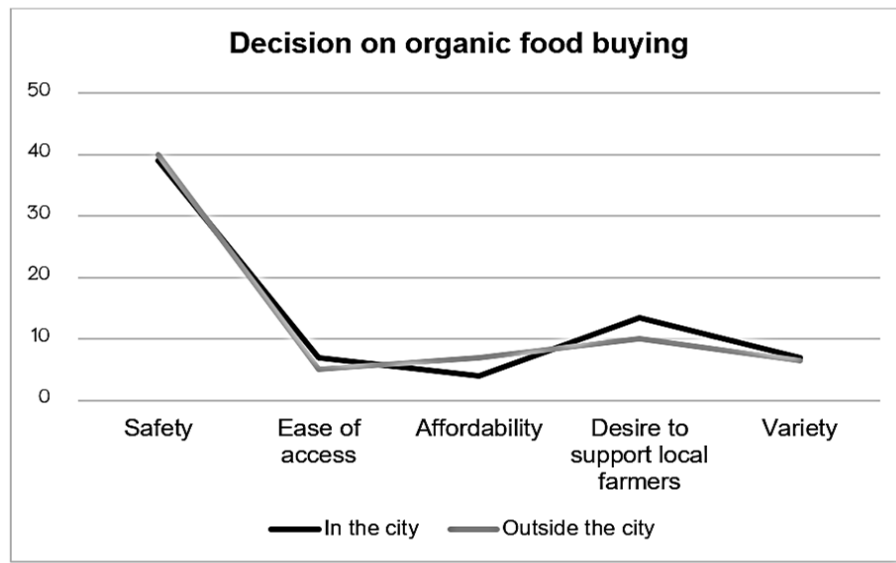
## **Food network expanding from local producers to urban consumers**

According to the roles and working styles of CSNs and the Young Farmer Group, the network of young farmers could seek marketplaces and consumers by their means because they were familiar with the area and urban lifestyle from their experiences. The network is the node of information sharing among members, and the decision-making to join or not to join events and markets depends on personal will. Instead of marketing skill training for local producers like organic farming training, CSNs sought out the space in town to distribute farmers' products as a common idea to link farmers from local communities to urban consumers. This finding supported Hesterman (2011), which stated, "the farmers' markets have served primarily families in the upscale city or suburban neighborhoods" (p. 57). This practice is the way that CSNs are filling the gap with farmers who are worried about how to sell their organic products. However, the roles of CSNs are not yet linked to consumers to be in the organic food networks because many CSNs are working only minimally with the consumer side. At the same time, they concentrated their work on farmers to gain knowledge and techniques of organic farming.

The surveys were conducted to examine the perception and knowledge regarding organic food between consumers within and outside of Chiang Mai City to seek the knowledge gap among consumers and the abilities of CSNs in public communication on organic food and food security issues. The surveys were collected from September to October 2020, after Thailand lifted its first COVID-19 lockdown measures.

There were 200 samples: 29.5% male, 70% female, and 0.5% non-binary. The highest age prevalence was 18–25 years at 28%, followed by over 55 years at 22.5%. Regarding occupation, those surveyed were merchants, wage laborers, unemployed/students, and civil servants (37.5%, 19.5%, 11.5%, and 11%, respectively). In terms of average monthly income, 37% of participants earned 6,000–12,00 THB (190–385 USD), 18% earned less than 6,000 THB ( $\leq$  190 USD), and 15.5% earned 12,000–18,000 THB (385–575 USD). Figure 2 shows consumers' decisions on organic food buying.

**Figure 2:** A Comparison of Reasons Consumers Within and Outside of The City Purchase Organic Food



In Figure 2, respondents had to choose the priority to buy organic food. Both within and outside the city, they were most likely to buy organic food because they perceived it as being safer than non-organic food (39% and 40%, respectively), suggesting that they were aware of the health benefits and had linked their knowledge of the organic food to food safety. The most stated reason was to support local farmers producing organic food (13% in the city and 10% outside).

**Figure 3:** Barriers to Purchasing Organic Food for Consumers Within and Outside of The City

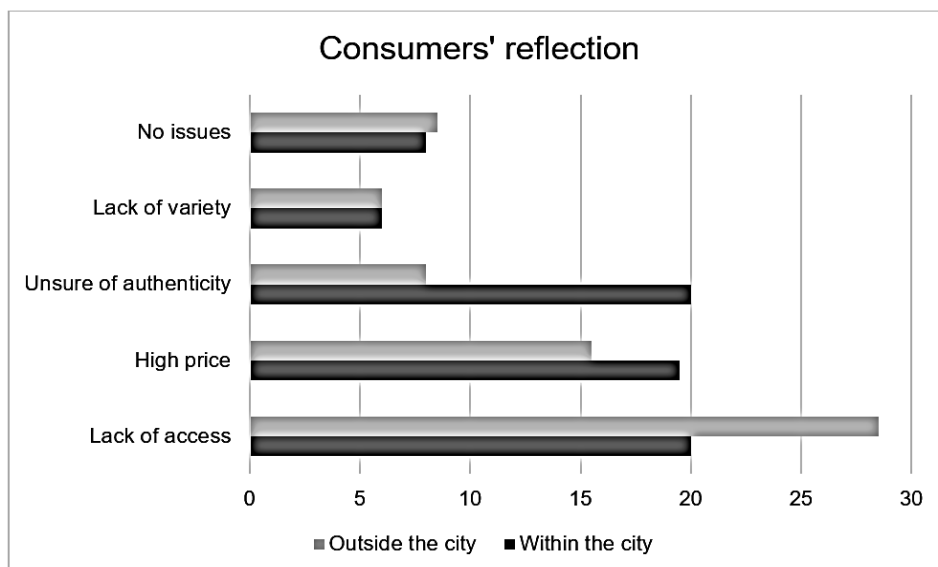


Figure 3 shows the barriers consumers face to buying organic food. The most common problem faced by consumers outside the city was difficulty accessing organic food, which was not generally available in most markets in Chiang Mai (28.5%). In addition, some respondents commented that they did not know which organic products and how to distinguish them from

general products. Those within the city, however, were equally likely to cite being unsure of whether products were authentic organic as having difficulty with access (20%). The high price of organic food was a barrier for both groups at a similar rate (19.5% in the city and 15.5% outside).

As urban consumers, they had neither area nor time to plant their food alone; the organic products were from elsewhere out of the city. These reasons caused some urban consumers to be doubtful. Another significant factor was the lack of knowledge of organic food standards and how to find the location to buy, which became the barrier for consumers to access organic food. Ad (March 21, 2020) referred to a price issue that was also cited as a barrier because many consumers in the city have learned that the availability of organic food in the supermarket is always higher than general products.

Regarding consumers' knowledge of organic food, many respondents realized that organic food is safer and of higher quality than general products. Some respondents explained the process of organic food, "organic food is produced naturally and concerned about chemical contamination to human's health, but general products are more concerned about production cost and the profits of capitalists."

Generally, the questionnaire respondents, inside and outside the city, understand the difference between organic and non-organic food. However, the respondents in the city were able to explain in more detail the differences that mainly related to safety and health. In contrast, some respondents outside the city referred to the high price and a lack of access. Respondents also indicated their opinions on the relationship between organic farming and food security, with both those in the city and outside agreeing that the former was relevant to the latter, "because organic farming does not use chemicals, it can reduce agricultural costs," "organic farming is a kind of self-sufficiency," and "if local farmers to stand by themselves, they will be confident in producing organic food and consumers will receive safer food. These factors will lead to food security for both consumers and producers." These opinions were compatible with food security because they involved self-reliant communities (BIOTHAI, 2014) and food safety and nutrition (Food and Agriculture Organization of the United Nations, 2011). Importantly, they related to the term food justice, which focuses on healthy food for consumers and the well-being of local producers or farmers (Ackerman-Leist, 2013).

The respondents also indicated the barriers they had experienced in organic food consumption in Chiang Mai city. Among these were "a lack of knowledge and information about organic food among urban consumers," "organic food production in Chiang Mai is a small scale, and organic certifications are expensive for local producers, making safe food less available to consumers," "a lack of communication both within the community and outside regarding the benefits of organic food leads to a lack of understanding among consumers," and "laws and regulations do not support the production of organic food by local farmers in terms of knowledge, technology, and training." In addition, many respondents outside the city commented about the difficulty of finding information and sources of organic products in their area. These comments are similar to those shared by Chiang Mai's Young Farmer Group, "now, local farmers gained knowledge and technical supports of organic farming from both governmental units and civil society networks because of the agricultural policy, but consumers had lack of information on what they eat every day" (Fai, September 24, 2019).

Thus, a lack of awareness of food security on the consumer side is an important gap in the food system. Relating to this, some survey participants provided their opinion on this lack, "no advertising, people do not know exact benefits of organic food consumption and where

to buy organic food,” and “The communication is needed thus, people will be aware of their food, this should be supported by the governmental sector.” Some respondents indicated that they considered the government to be a key facilitator, especially in terms of the promotion of organic food to create food security. Also, better communication is necessary to educate the public about organic food. This issue is significant for CSNs hoping to work with consumers to fill the gap in the food system.

**Table 3:** Sources of Consumer Information Regarding Organic Food Availability

Area	Sources of information								
	No answer/ do not know	Relatives	Friends	Local farmers/ food producers	Civil society organizations	Governmental organizations	Restaurants/ grocers	Internet/ social media	By chance/ others
Within the city	2.5	4.5	7.5	11.5	2.5	0	3.5	14.5	3.5
Outside the city	5.5	3.5	9	13.5	4	1.5	2.5	7.5	3
<b>Total</b>	<b>8</b>	<b>8</b>	<b>16.5</b>	<b>25</b>	<b>6.5</b>	<b>1.5</b>	<b>6</b>	<b>22</b>	<b>6.5</b>

Table 3 shows the sources through which consumers received information regarding where to purchase organic food in Chiang Mai. The most common source of information was local farmers and food producers (25% overall – 11.5% within the city, 13.5% outside the city). The second was social media at 22% (14.5% within the city, 7.5% outside the city), and the third was friends at 16.5% (7.5% within the city; 9% outside the city). The source from civil society organizations and government units was recorded as a low rate by the respondents in the city at 2.5% and 0%, respectively, with only a slight increase for those outside the city at 4% and 1.5%. Overall, 8% answered that they did not know where to buy organic food or declined to answer, with a higher rate in the samples from outside the city. At this point, local producers who can directly contact consumers have a key role in circulating information and knowledge. In contrast, social media has become a significant channel for urban consumers to receive information and knowledge of organic food, as shown in the highest rate from respondents.

The different responses between urban and non-urban consumers are essential in communicating information about organic food. As the area outside of Chiang Mai contains more farmland and agricultural regions, consumers had more direct access to farmers. In contrast, consumers in the city need to depend on distribution centers and the markets around the city for food access. The internet and social media are convenient platforms for people in urban areas to access this information, making these critical tools for food producers and CSNs looking to communicate with consumers in the city.

An important factor in building food security is the use of communication channels compatible with urban lifestyles to provide information to the consumers in the city regarding the importance of making conscientious food decisions. Because they cannot produce all food they consume, access to organic food sources can be particularly difficult for urban consumers. Based on the food security guidelines set by the Food and Agriculture Organization of the United Nations (2011), difficulty accessing safe and nutritious food can lead to food insecurity. Although urban consumers tend to have higher purchasing power than their rural counterparts, they are also at risk of food insecurity.

The findings show that few urban consumers recognized the role of civil society and government organizations in enhancing food security and promoting organic farming, despite the large budget allocated to government organizations following the national frameworks to promote organic food export (Desker et al., 2014). This outlook may be related to the fact that the CSNs we examined focus on local farmers and food producers rather than consumers. Booth and Coveney (2015) highlighted the role of consumers as the way to control food processes within a democratic society can serve as an essential guide for CSNs to close this knowledge gap to link consumer groups more effectively into organic food networks.

## **Discussion: Fostering food security in Chiang Mai**

Creating food security in Chiang Mai province is a stepping stone for doing so in other areas. Chiang Mai was suitable for this food security study because it has a large population (approximately 1.7 million) and large areas dedicated to agriculture. There is also a high consumption rate and various food production in the province—key components in the food system. Efforts toward food security in the province thus need to focus on both consumers and producers.

This article focuses on the roles of civil society networks in terms of the social network, which is the social system that links each unit through interpersonal relationships (Wipawin, 2015). Many staff members in Chiang Mai's organic food networks work through personal relationship development rather than in the name of their organizations. According to the CSN staff we interviewed, a more extensive organic food network that includes actors other than those involved in CSNs is required to promote food security and sustainable agriculture. Using social networks is one way to link individuals and organizations, which generates organic food networks in Chiang Mai from the work of CSNs. In addition to working with food producers in their area, CSN staff have developed their relationships and shared information, knowledge, and experience through events and activities related to sustainable agriculture and food security arranged by civil society, government, and other relevant organizations. The structures of these groups differed from the cases of organic farming networks in The Philippines and Indonesia (de Guzman et al., 2016; Pratiwi & Suzuki, 2017).

In Quezon, the Philippines, leaders of the network, which consists of farmer groups and local community representatives, gathered as the organic farming network and linked their network to other groups concerning technology and knowledge sharing (de Guzman et al., 2016). In Lampung Province, Sumatra, Indonesia, farmer networks are not based on personal relationships or community networks but formed through formal training sessions, where stakeholders can share specific knowledge and information (Pratiwi & Suzuki, 2017). The network members in The Philippines and Indonesia are similar in some ways to Chiang Mai's Young Farmer Group but different in roles and working styles. At the same time, some of the CSN staff in Chiang Mai have two roles, NGO workers and local producers. Therefore, relationship development to connect with local producers was often used rather than access to them on behalf of the organization.

As Scialabba and Hattam (2002) and Harrison (2017) emphasized, the pattern of conventional farming depending on pesticide use is a cause of illness to both local producers and consumers alike. In comparison, as promoted by the CSNs, organic farming and the Young Farmer Group interviewed in this study stress the importance of only organic-based products to promote food security. The organic food networks have expanded to link with CSNs in other

communities with whom they have become mutually reliant. The roles of CSNs in Chiang Mai primarily focused on food producers, as they are the primary actors in the food system. The CSNs linked local farmers and communities by introducing and supporting organic farming. Some CSNs also attempted to provide product distribution channels, as in organic food production. In this way, local farmer groups in Chiang Mai have become a part of organic food networks rather than building their networks as in Quezon. These CSNs in Chiang Mai coordinate and collaborate with other institutions to promote food security.

However, these networks often have difficulty connecting to another side of the food system, the consumers. They should thus endeavor to connect organic food producers with consumers, especially those in the city, where direct access to food sources is often infeasible. These CSNs have promoted organic farming as an alternative way to help local farmers who have struggled for decades with the low prices of farm products and high debts. Although organic farming can help achieve the goals of both individual health and community self-reliance (Scialabba & Hattam, 2002), it is not easy to curb the intensive farming patterns often demanded by the forces of market capitalism. Some CSNs have trained locals to work in their communities and established local organic farmer networks (for example, in Mae Thang and Mae On) with whom the CSNs work as coordinators and collaborators. As a result of the work of these CSNs, organic food networks have expanded in Chiang Mai's food production areas. CSN staff interviewed in all four areas informed that not all farmers joined the organic food network, as some could not be convinced of the goals of organic farming. However, Chiang Mai has networks of organic farming communities scattered across many sub-districts that the CSNs are continually working on incorporating.

Apart from Chiang Mai's Young Farmer Group, a network of food producers working to sell their products directly to urban consumers, few civil society networks have begun to turn their attention to consumer communication. High consumer demand for organic food encourages producers to turn to organic farming because the commitment from the consumer side has a strong impact (Lo & Koenig, 2017). Although consumers who live in a food production area might better understand various farming patterns, they often lack organic food sources in their communities.

Some urban consumers may have access to organic food in supermarket chains, but at a higher price than non-organic food. According to the focus group meeting, a local farmer shared how the price that they sold outside the supermarket chain was at a low rate, while a consumer who did not usually consume organic products commented that they did not know any place of organic food available in Chiang Mai, except in supermarkets and the distribution center that operated by Mae Thang CSN. This information is a gap between local producers and consumers that both organic food producers and CSNs need to consider. The consumer-based surveys highlighted knowledge, information, and source-sharing aspects of communication on organic food to the various groups of urban consumers. Regarding the focus group meeting, CSN staff, local farmers, and consumers agreed that communication is essential, mainly knowledge of organic food.

For public perception, one CSN suggested publishing more research and content relevant to food and health. Ackerman-Leist (2013) resonated with the same sentiment that if consumers realize the value of organic food, they will decide to consume organic food, which can motivate more local farmers to convert to organic farming and community self-reliance for social justice and sustainable food systems. Therefore, to achieve food security in Chiang Mai, CSNs should play a pivotal role in linking consumers to organic food networks in supporting local production.

Although many CSNs have attempted to create distribution centers, they still face the challenge of communicating knowledge and available sources to consumers in Chiang Mai. It is necessary for them to learn more about consumer behaviors of different groups to choose appropriate communication, both in the form of messages and tools to expand organic food networks on the consumer side. The distribution center of Mae Thang's CSN provides an excellent example for others to follow as it uses social media via its Facebook page as the primary tool of communication, which is suitable for urban lifestyles.

## Conclusion

This study examined the role of CSNs in Chiang Mai's organic food networks and their impact on food security in the province. Civil society networks contribute significantly to forming organic food networks by working with local farmers. Each CSN engaged in work specific to the local context in which it is situated, with all working with local farmers to foster community self-reliance and food security via organic farming.

However, the production relies on consumer demand, particularly from urban consumers who cannot produce their food and have high purchasing power. These urban consumers thus play a crucial role in supporting organic production by local farmers in Chiang Mai. However, we found that CSNs are focused primarily on producers and contribute less to the consumer side, with many staff members having no experience working with urban consumers and marketing.

Consumers who responded to the questionnaire also indicated various challenges they saw in expanding the role of organic production in the food system. Notably, they need to evaluate the roles of CSNs with the producer side while, at the same time, applying communication of knowledge and technical training to link with the consumer side. As urban consumers become more aware of the benefits of organic food in terms of individual and community health, they will be able to help raise the standards of living of local food producers and encourage them to engage in organic farming.

The CSNs in Chiang Mai has created organic food networks and positioned themselves as a linkage in the food system within the area. These are significant roles of CSNs to promote food security for all ASEAN countries. The achievement in Chiang Mai can potentially encourage them to fill the knowledge gap of CSNs' work, particularly on the consumer side. Civil society networks can contribute to sharing ideas, experiences, and working models among various stakeholders. Regarding the limited budget of civil society networks, they have the potential to collaborate with governmental units. Their innovative ideas and possible action plans can convince the governmental units to support them in working with consumers on food security. The achieved model will push forward the state's agenda.

## Acknowledgments

This article, as part of the research "Social networks and organic movement for community food security: A case study of civil society networks in Chiang Mai, Thailand," was supported by the Thailand Research Fund (TRF) and Office of the Higher Education Commission (OHEC) (MRG6280258).



## References

- Ackerman-Leist, P. (2013). *Rebuilding the foodshed: How to create local, sustainable and secure food systems*. Chelsea Green Publishing Company.
- BIOTHAI. (2014, August 26). ข้อเสนอยุทธศาสตร์เกษตรกรรมยั่งยืน เพื่อปฏิรูประบบเกษตรกรรมที่มั่นคงและยั่งยืน [The proposal for sustainable agriculture strategy in reforming agricultural system]. BIOTHAI Foundation. <https://biothai.net/economic-on-bio-resources/farmer-rights/1070>
- Booth S., & Coveney, J. (2015). *Food democracy: From consumer to food citizen*. Springer.
- Chandhoke, N. (2007). Global civil society and global justice. *Economic and Political Weekly*, 42(29), 3016–3022. <http://www.jstor.org/stable/4419813>
- Chan-on, N. (2014). ความมั่นคงทางอาหารของประเทศไทย [Thailand's food security]. *Journal of Academic Article*, Academic Department, The Secretariat of the Senate, 4(2), 1–35. [https://library.senate.go.th/document/Ext7091/7091777\\_0002.PDF](https://library.senate.go.th/document/Ext7091/7091777_0002.PDF)
- Committee of National Organic Farming Development. (2017). ยุทธศาสตร์การพัฒนเกษตรอินทรีย์แห่งชาติ พ.ศ. 2560 – 2564 [The national organic farming development strategy 2017–2021]. <http://planning.dld.go.th/th/images/stories/section-5/2560/strategy11.pdf>
- Cuéllar-Padilla, M., & Calle-Collado, A. (2011). Can we find solutions with people? Participatory action research with small organic producers in Andalusia. *Journal of Rural Studies*, 27(4), 372–383. <https://doi.org/10.1016/j.jrurstud.2011.08.004>
- de Guzman, R. P., Nelson, G. L., Abrigo, G. N. A., & Bacongus, R. DT. (2016). Promotion of organic agriculture through community-based organizations in Quezon Province, Philippines. *Journal of Human Ecology*, 5(1), 92–105. <https://ovcre.uplb.edu.ph/journals-uplb/index.php/JHE/article/view/403>
- Desker, B., Caballero-Anthony, M., & Teng, P. (2014). ASEAN food security: Towards a more comprehensive framework (No. 2014-03). Economic Research Institute for ASEAN and East Asia (ERIA). <https://www.eria.org/ERIA-PB-2014-03.pdf>
- Food and Agriculture Organization of the United Nations (FAO). (2003). *Trade reforms and food security: Conceptualizing the linkages*. <https://www.fao.org/3/y4671e/y4671e00.htm>
- Food and Agriculture Organization of the United Nations (FAO). (2011). *An introduction to the basic concepts of food Security*. <http://www.fao.org/docrep/013/al936e/al936e00.pdf>
- Guthman, J. (2008). Neoliberalism and the making of food politics in California. *Geoforum*, 39(3), 1171–1183. <https://doi.org/10.1016/j.geoforum.2006.09.002>
- Harrison, J. L. (2017). Taking a different tack: Pesticide regulatory-reform activism in California. In A. Alkon & J. Guthman (Eds.), *The new food activism: opposition, cooperation, and collective action* (pp. 31–54). University of California Press.
- Hesterman, O. B. (2011). *Fair food: Growing a healthy, sustainable food system for all*. Public Affairs/BBS.
- Koc, M., & MacRae, R. (Eds.). (2001). *Working together: Civil society working for food security in Canada*. The Media Studies Working Group. <https://id1-bnc-idrc.dspacedirect.org/bitstream/handle/10625/33686/118217.pdf>
- Koc, M., MacRae, R., Desjardins, E., & Roberts, W. (2008). Getting civil about food: The interaction between civil society and the state to advance sustainable food system in Canada. *Journal of Hunger & Environmental Nutrition*, 3(2-3), 122–144. <https://doi.org/10.1080/19320240802243175>
- Leggett, A. (2020). Bringing green food to the Chinese table: How civil society actors are changing consumer culture in China. *Journal of Consumer Culture*, 20(1), 83–101. <https://doi.org/10.1177/1469540517729009>
- Lo, J., & Koenig, B. (2017). Food workers and consumers organizing together for food justice. In A. Alkon & J. Guthman (Eds.), *The new food activism: opposition, cooperation, and collective* (pp. 133–156). University of California Press.
- Mie, A., Andersen, H. R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembialkowska, E., Quaglio, G., & Grandjean, P., (2017). Human health implications of organic food and organic agriculture: A comprehensive review. *Environmental Health*, 16, Article 111. <https://doi.org/10.1186/s12940-017-0315-4>

- Ministry of Commerce. (2017, June 14). พาณิชย์จับเคลื่อน “หมู่บ้านเกษตรอินทรีย์” ชูต้นแบบชัยภูมิ organic valley แห่งแรกในไทย [Ministry of Commerce geared up “an organic farming village” by first Thailand’s organic valley in Chaiyaphum Province]. [Status Update]. Facebook. <https://web.facebook.com/MOCThailand/photos/a.363893083821717/653768218167534>
- Nasution, Z. (2015). *Indonesian urban farming communities and food sovereignty*. [Master’s thesis, Erasmus University Rotterdam]. Erasmus University Thesis Repository. <http://hdl.handle.net/2105/33320>
- Ngo, C. T. (2021). The food distribution system in Vietnam: Nash equilibrium and channel choice of small-scale farmers. *Journal of Distribution Science*, 19(1), 61–73. <https://doi.org/10.15722/JDS.19.1.202101.61>
- Parekh, V., & Klintman, M. (2021). The practice approach in practice: Lesson for civil society organizations that work towards sustainable food consumption in Sweden. *Sustainable Product and Consumption*, 26, 480–492. <https://doi.org/10.1016/j.spc.2020.12.011>
- Pratiwi, A., & Suzuki, A (2017). Effects of farmer’s social network on knowledge acquisition: Lessons from agricultural training in rural Indonesia. *Journal of Economic Structures*, 6, Article 8. <https://doi.org/10.1186/s40008-017-0069-8>
- Scialabba, N., & Hattam, C. (Eds.). (2002). *Organic agriculture, environment and food security*. Food & Agriculture Organization. <http://www.fao.org/3/y4137e/y4137e00.htm>
- Sitthisuntikul, K., Satiemperakul, K., & Jolanun, B. (2018). แนวทางพัฒนาความมั่นคงทางอาหารในชุมชนเกษตรอินทรีย์ ตำบลวงเหนือ อำเภอดอยสะเก็ด จังหวัดเชียงใหม่ [Approaches to develop food security in the organic farming communities, Luang Nuea sub-district, Doi Saket district, Chiang Mai province]. *Journal of Agriculture Research & Extension*, 35(3), 64–73. <https://erp.mju.ac.th/openFile.aspx?id=MzEzMjU5>
- Thivet, D. (2014). Peasants’ transnational mobilization for food sovereignty in La Via Campesina. In C. Counihan & V. Siniscalchi. (Eds.), *Food Activism: Agency, democracy and economy* (pp. 193–210). Bloomsbury Publishing.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511815478>
- Wipawin, N. (2015). เครือข่ายสังคมในสังคมเครือข่าย [Social networks in the network society]. *Journal of Thai Library Association*, 8(2), 119–127. [https://so06.tci-thaijo.org/index.php/tla\\_research/article/view/48006](https://so06.tci-thaijo.org/index.php/tla_research/article/view/48006)
- Wongprasert, S., & Chueboon, W. (2018). ทักษะคิดต่อสินค้าอาหารอินทรีย์ของผู้บริโภคในเขตกรุงเทพมหานคร [The attitude toward organic food products of consumers in Bangkok]. *The Journal of Science and Technology*, 7(4), 399–407. <https://doi.org/10.14456/tjst.2018.37>
- World Health Organization & Food, & Agriculture Organization of the United Nations (FOA). (2007). *Codex Alimentarius Commission: Organically Produced Foods* (3rd ed.). <https://www.fao.org/3/a1385e/a1385e00.pdf>