



Local Markets: How the Ordinary Public Places Can Support Urban Sustainable Development

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ABSTRACT

This paper aims to rediscover the roles of local markets in city development at the time of drastic change when a climate change issue is globally pressing and an emergence of COVID-19 pandemic is very sudden and has worldwide impacts on living. The markets have long been recognized as the vital public places of the cities. They are the ordinary public venues, mostly without the special or grand appearances, but they become parts of people's everyday life. Owing to their social and economic functions, the markets play significant roles in shaping the cities and those who live within. This study is based on a literature review about the public markets, their various roles in people's life, and how they can contribute to the sustainable development to confront the critical global issues like climate change and COVID-19 pandemic. To broaden knowledge about markets and urban sustainable development, this study also adds in a perspective from Asian context by showing a case of local market in Thailand. The study shows that markets continue their important socio-economic roles in the cities and they are key components that can be transformed and then shape the cities towards a sustainable development.

1. INTRODUCTION

Markets have been recognized as the heart of the city life and the vital components and driving forces in urban growth. Their economic roles are apparent as the sites for selling and buying. Since the markets center on fresh food and produce, they are the ordinary public venues that become parts of people's everyday life. Apart from being central settings where people can buy groceries, markets are also social spaces where various groups of people interact, mingle together, and become familiar with social norms. Therefore, the markets significantly provide community members opportunities for social interaction and social inclusion [1]-[4]. Although markets and their food retailing functions have been regarded as fundamental elements for developing compact and liveable cities, their economic and social impact has often been underestimated [2].

Furthermore, the cities worldwide have undergone the homogenous development in the form of supermarkets and hypermarkets and, consequently, have confronted the loss of local food markets [5, 6]. This automobile-dependent development has resulted in commercial sprawl and, hence, a lack of improvement and preservation of the conventional public markets [2]. Moreover, it critically changes the urban food system. Although the global commercial system makes a radical shift in local and conventional food system

and lets to a decline of marketplaces, the local markets survives and some of which transforms.

In the field of planning, there is a recent attempt amongst scholars and practitioners to gain more attention to the urban food system and bring food issues back into focus [7-9]. This trend coordinates with an increasing awareness of sustainable development to cope with the global threat of climate change. The 2030 Agenda for Sustainable Development, global objectives for guiding community actions during a period of 15 years (2015-2030), indicates the 17 Sustainable Development Goals (SDGs) that represent a shift in the world's approach to development [10]. According to the Agenda, sustainability is essentially founded on an integration of the three dimensions of sustainable development—economic, social and environmental. The 2030 Agenda proposes a vision for food and agriculture as key to achieve sustainable development. Food and agriculture are placed at the heart of the Agenda, seeking to end poverty, hunger, and malnutrition, while sustainably manage natural resources to counteract climate change.

FAO, IFAD, UNICEF, WFP and WHO point out two hidden costs of people's dietary choices and food systems—health and climate-change [11]. They report that, with current dietary consumption patterns, more than half of the amount (57 percent) of the projected health costs in

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2030 are direct healthcare costs related to expenses for treating the various diet-related diseases, while the other section (43 percent) are indirect costs engaging with informal care (32 percent) and losses in labor productivity (11 percent).

As for hidden climate-change costs, food and how it is produced also affects the global state of environment and climate change. According to the report, the food system buttressing the world's current dietary consumption patterns is accountable for 21-27 percent of total anthropogenic greenhouse gas emissions. This percentage shows the green house gas emissions resulting from human activities and discloses how food and people's consumption patterns have serious impacts on and become a main driver of climate change. However, the information displayed above has not yet included other environmental problems related to food system [11], e.g. a land-use change and a biodiversity loss [12]. The challenge of climate and environmental changes is one of the main food challenges faced by an urbanizing world and food systems could play a critical part in tackling this challenge [13]. Generally speaking, changing in world's food consumption patterns could potentially and extensively reduce the green house gas emissions, and, thus, a reduction of hidden environmental cost. Making more awareness of the food-impact issues and changing in consumption patterns are then urgently required, from individual to global levels, to tackle with the climate change.

While the global climate change has been pressing issue, the whole world has to undergo another crisis of the outbreak of the coronavirus (COVID-19). According to FAO, the disruptions occurred from the COVID-19 crisis cause many challenges to the current food system [12]. The challenges include the accessibility to safe, nutritious, and affordable food when markets are closed and acts of traveling are restricted, as well as, the insecurity of workforce across the food system in terms of their health and income [12]. The COVID-19 crisis also discloses how vulnerable the society is when it highly depends on imports of food and agricultural products [11]. This realization stimulates a review of establishing shorter value chains to make markets more adaptable and predictable, as well as, to prevent producers' losses [12].

To deal with the COVID-19 pandemic, FAO COVID-19 Response and Recovery Programme points toward the food systems transformation and also indicates the regional and country focus, offering the region-based evidence for government recovery programs to recreate resilient food systems. As for Asia and the Pacific region, the recreation of resilient food systems has to deal with the whole supply chain, which could be divided into three sectors: upstream, midstream, and downstream.

The upstream operations are to reinforce diversified agriculture, to apply digital technologies to improve product input and make efficient use of water resource, to utilize information services, and to develop data-systematized farming (smart farming) to make better connectivity along the supply chain. At midstream, the

operations are to reinforce investments in infrastructure to increase the capacity for disrupted food product movement, to develop digital platforms to support market connections, as well as, to improve the processes in relation to food safety enhancement, food waste reduction, and inclusion of small-scale farmers to value chains. At downstream, the operations are to reconstruct the food market infrastructure, including applying digital platforms to create rural-urban linkages and redesigning urban fresh food markets to increase food safety, and to develop urban food system governance to make safe and nutritious food accessible for all [12]. At the downstream of whole supply chain is where the local food markets are underlined and could play a main role in food systems transformation regarding the FAO COVID-19 Response and Recovery Programme.

The urgent global threats, i.e. climate change and COVID-19 pandemic, become major challenges for the cities and the city planners worldwide. Being urban public places, the local food markets are ones of key components that can be transformed and then shape the cities toward a sustainable development. In addition, being ordinary public places where urban dwellers have their daily experiences, the local markets can gradually form people's ways of thinking and living.

However, as ordinary public places, local markets have not been taken into a focus of mainstream research in urban development. Furthermore, with the current threat of climate change and the emergence of COVID-19 crisis, it seems worthwhile to review and reconsider local markets from broader perspectives. Presenting a case of local market in Thailand, this study also exemplifies the situations and characteristics of local markets in non-Western context, and particularly, in the Southeast Asian region.

2. METHODOLOGY

Following the FAO's vision on sustainable development with food and agriculture at the heart of the Agenda and their COVID-19 Response and Recovery Programme focusing on food systems transformation, this study attempts to show how local markets with their roles of public places centering on food could contribute to the urban sustainable development and could take part in the COVID-19 Response and Recovery Programme. Founded on qualitative research method, the study follows the case-study approach and applies observation, document study, and critical evaluation as the research methods. The data used in the study are primarily gathered from literature, field observation, and photo documentation.

3. MARKETS AS THE ORDINARY PUBLIC PLACES

3.1. Markets in Asian Cities

Socially and culturally constructed, markets in each city are differently developed because each city has its own demographic, economic, social, and cultural conditions. Considering the contextual differences, it seems

inappropriate to study Asian cities by depending entirely on the perspectives from the ground of Western countries.

As for public spaces in contemporary Asian cities, [14] studies the common characteristics of Asian cities and then divides the cities' public spaces into three groups: large-scale public spaces representing contemporary development; preserved historic public places; and public spaces that serve people's everyday needs. The examples of public spaces in the first group include Modern-designed plazas and large green areas. For the second group, the preserved historic public places could be in the forms of distinctive shopping streets in old towns. The last group, in which markets are parts of, includes the everyday public spaces like local shopping streets and community spaces. These public spaces that serve everyday needs of local residents are very typical to Asian cities and authentically characterize contemporary Asian urban life [14].

3.2. *Talad Tai: A Local Market in Phitsanulok, Thailand*

To explore how local markets work as key components to achieve urban sustainable development and their roles in response to the COVID-19 crisis, this study investigates a local market in Phitsanulok's city center as an ordinary public space in Thailand, one of the countries in the Greater Mekong Subregion (GMS). Although the common characteristics of public spaces could be found amongst Asian cities as mentioned earlier, there are also great variations in accordance with their local context. *Talad Tai*, literally meaning 'southern market', is an old market in the city center of Phitsanulok, one of the major cities in Lower Northern Thailand. Operated by Phitsanulok Municipality and officially named Municipal Market 1, *Talad Tai* is a locally well-known morning 'wet' market that supplies fresh agricultural products, as well as, freshly prepared food. Apart from 'wet' products, there are also sections for clothing and household goods. According to these various supplies, the market can serve people's everyday needs.

The market building and its spatial arrangement is simple and flexible. It is an open-plan market, roofed but has few internal dividing walls, and accommodates the so-called permanent market stalls. However, the market space of *Talad Tai* as publicly known is not only limited to the commercial area within the building, but also the streets bordering the market building. In early mornings, the most active hours of the market, the streets are mostly occupied by sellers, each of which has to pay to get a small space (about 1-2 square meters) and assemble their self-constructed, removable stalls for their business. The traders running these non-permanent stalls on the streets mostly come from rural areas or nearby towns. They sell a variety of products, but chiefly the seasonal and home-grown or community-grown agricultural products (Figure 1). The sellers occupying the streets typically remove all of their stalls before 9 a.m., probably because of hotter weather and less customers, while the so-called permanent stalls in the market buildings still open throughout the day.



Fig.1. Temporary market stalls on the street selling local and seasonal agricultural products from rural areas.

On the market site, the customers select the products, sometimes ask the sellers about the products, probably negotiate, pay, and receive what they want. These are the face-to-face trading practices that typically take place in all actual market sites. Along with its commercial roles, the market also performs its social functions because it is where people from different groups gather and have various social interactions (for details of social interactions, see [3]). Therefore, the market serves people's everyday needs of food and at the same time provides a place of daily socialization.

4. LOCAL MARKETS AND URBAN SUSTAINABLE DEVELOPMENT

Local markets provide public access to quality food and fresh produce. They offer opportunities for farmers and producers to sell their products and for local workers to be employed (Figure 2). They also create urban-rural linkages and prolong community economic development. As they are public places, the local markets are the gathering places where all can mingle together with various purposes. Accordingly, they perform the significant function of communities' social inclusion spaces. The markets are vivid public places owing to people's face-to-face trading activities in the settings, the activities that give richer and more authentic experiences than other forms [2]. Thus, they are major settings in the cities that possess the unique senses of life [1], the urban quality appealing both to local dwellers and tourists [15]. These senses of urban life further contribute to the cities' identities, the important components in developing the livable cities.

The local market in Thailand shown in this study exemplifies the socio-economic roles of the market since community members mingle freely and perform their social interactions of buying, selling, socializing, and even recreating [3]. It also illustrates that the market is a commercial site where locally grown produce are supplied from nearby rural areas, as a result of which a rural-urban

markets linkage is developed (Figure 1).

Regarding environmental impacts mentioned earlier, current food systems considerably contribute to greenhouse gas emissions and other environmental problems, and, consequently, the food systems are affected by climate change [12]. Accordingly, the roles of local markets involving sustainable food in short supply chain should be more emphasized. Locally produced food is considered more environment-friendly because it goes through shorter process from production to consumption [2]. Thus, it tends to use less energy for store and distribution. For consumers, they can have fresh, nutritious food at affordable prices, while help support local economy when buying locally grown produce [4]. Moreover, face-to-face trading gives buyers opportunities to directly communicate with the sellers, to learn more about the produce they are buying, and to have more concern on local consumption.



Fig.2. The local drivers and their three wheel motor cart waiting for customers near the market.



Fig. 3. Face-to-face trading activities providing opportunities for buyers to learn directly from producers about the products.

As shown in this study, the local market in Thailand exemplifies the urban setting where consumers buy directly from local producers and, therefore, make a minimal process from production to consumption. Moreover, the buyers can learn more about their food directly from the producers (Figure 3).

In short, local markets with their major roles in food systems and their socio-economic importance could then be a significant component contributing to three-dimensional sustainable development-economic, social, and environmental.

5. LOCAL MARKETS AND THE FAO'S COVID-19 RESPONSE AND RECOVERY PROGRAMME

To confront with the climate change and COVID-19 crisis, there are urgent calls worldwide for more resilient economic system and sustainable communities. The outbreak of the COVID-19 makes serious disruptions in economic system in both global and local levels. It then convincingly urges for an immediate transformation. As mentioned earlier, the FAO's COVID-19 Response and Recovery Programme focuses on food systems transformation, the downstream operations of which refer to a reconstruction of the food market infrastructure, including a development of digital platforms to create rural-urban linkage, a redesign of urban fresh food markets to increase food safety, and an improvement of urban food system governance to make safe and nutritious food accessible for all. It is here at the downstream of whole supply chain that local food markets could play a main role in food systems transformation.



Fig.4. Removable stalls occupying the streets surrounding the market building.

As shown in this study of the local market in Thailand, *Talad Tai's* market site reveals its spatial flexibility that can compromise the future redesign for resilient environment. The market's most obvious flexibility is the time-sharing use of the streets, daily occupied by lines of

removable stalls set up in the early morning and detached hours later (for details on street market, see [3]) (Figures 4 and 5). In addition to the temporary street market, the open-plan configuration of the market building makes it more adaptable to future redesign or development (Figure 6).



Fig.5. The street next to the market building without the temporary market stalls.



Fig.6. Inside the open-plan market building.

Regarding the improvement of urban food system governance to make safe and nutritious food accessible for all, *Talad Tai* market is run by the local municipality and thus can directly respond to and receive supports from other government sections. The local municipality can apply new and related policies to the actual sites under their control. Although the recent policy launched in dealing with the COVID-19 crisis is to set new health safety practices in the market site (i.e. registering before entering and leaving the market venue, wearing facial masks and cleaning hands, and making social distance), the local municipality with their direct governance power can actually promote wider and more conclusive policies in response to the crisis, apart from the existing health risks

control. For example, they could launch local policies that promote organic farming, the agricultural movement that benefits health safety and provides security for both farmers and the environment [16]. In fact, the organic movement has long been established in Thailand, but not widely supported [16].

On the subject of the digital platforms development to create rural-urban linkage, [17]'s study in 2015 about the e-commerce competencies among community enterprises in the Northeastern region of Thailand revealed that most of the community enterprises barely had experienced in the e-commerce business. Although [17]'s study was taken in a particular region, it broadly illustrates the commercial circumstances in regional parts of Thailand, excluding the capital city. As for *Talad Tai*, the face-to-face trade has long been the major form of commerce in the market and has continued even at the time of COVID-19 crisis. *Talad Tai* is a local market, in which many sellers are the farmers from nearby rural areas who bring their own products to sell. It then holds a conventional form of rural-urban linkage and this could be a starting point to add in any digital technology support for further development.

6. CONCLUSION

Local markets are ordinary public spaces that can be found in the cities worldwide. They make quality and fresh food accessible for all, while give opportunities for farmers and producers to sell their products and for local employees to earn their living. Being the urban sites for selling and buying products supplied from rural areas, the markets create urban-rural linkages and then prolong community economic development. While the local markets serve people's needs for food, they at the same time become the key places for daily socialization, the places where people from different groups mingle together and have social interactions. The local markets then apparently serve as the communities' social inclusion spaces.

Considering the global environmental impacts, the food systems have considerable effects on climate change and vice versa. The local markets play their roles in short supply chain leading to sustainable food and environment.

The acknowledged socio-economic importance and key roles in short supply chain of food products demonstrate that the local markets could be significant components contributing to all three dimensions of sustainable development-economic, social, and environmental.

Following the FAO's COVID-19 Response and Recovery Programme, the downstream operations of food systems transformation have a focus on an improvement of the food market infrastructure and, therefore, the local markets are considered ones of the key components in the operations.

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