

# Peri-urban Agriculture in Ubon Ratchathani City: Pressure and Persistence<sup>1</sup>

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## Abstract

This article argues that peri-urban agriculture (PUA) has persisted as fading pockets of resistance are now supporting it because of the new economic opportunities it presents, as well as for its contribution to personal well-being or as part of a planned multi-functional landscape. Qualitative data were drawn from fieldwork in 2015 and 2017 in a peri-urban community, Tha Wang Hin in Muang district of Ubon Ratchathani province. The article addresses tensions around changes in land use and livelihoods that have accompanied urbanization. The findings show that PUA has long been practiced in the community as a food source for urban people, and has helped to maintain good incomes for the producers and good relationships between them and urban dwellers. The article also identifies the social and economic values held by aging peri-urban farmers who have practiced PUA, and the ways in which they are able to maintain a strong sense of place and personal well-being in the midst of rapid change in the physical and socio-economic landscape.

**Keywords:** peri-urban agriculture, urbanization, land use

## บทคัดย่อ

บทความนี้ถกเถียงว่าเกษตรรอบเมืองดำรงอยู่ในท่ามกลางแรงเสียดทานระหว่างการขยายตัวของเมืองกับการผลิตอาหารให้กับลูกค้าเฉพาะ โอกาสใหม่ๆ ของการทำกิจกรรมทางเศรษฐกิจอื่นๆ บนที่ดิน และการรักษาสุขภาพของเกษตรกร ซึ่งพบว่าที่ดินในพื้นที่รอบเมืองได้นำมาใช้เพื่อตอบสนองความต้องการที่หลากหลายและเข้มข้นมากยิ่งขึ้น บทความนี้ใช้ข้อมูลการศึกษาวัยเกษียณคุณภาพในปี 2558 และปี 2560 ในชุมชนท่าวังหิน อำเภอเมือง จังหวัดอุบลราชธานี ประเด็นสำคัญที่นำเสนอในบทความคือ การใช้ที่ดิน

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ในพื้นที่รอบเมืองมีความเข้มข้นจนเกิดภาวะความกดดันของวิถีชีวิตของผู้ใช้ที่ดินอันเป็นผลมาจากกระบวนการกลายเป็นเมือง โดยที่เกษตรกรรมรอบเมืองเป็นกิจกรรมที่คนในชุมชนปฏิบัติมายาวนานเพื่อเป็นแหล่งอาหารของคนเมือง สร้างรายได้แก่ผู้ผลิต และรักษาความสัมพันธ์ระหว่างคนในครอบครัว รักษาความสัมพันธ์ที่แนบแน่นระหว่างพวกเขา กับพื้นที่และสร้างสุขภาวะที่ดีท่ามกลางการแข่งขันของการใช้ที่ดินเพื่อวัตถุประสงค์การพัฒนาทางกายภาพ สังคมและเศรษฐกิจอย่างเข้มข้นในปัจจุบัน

**คำสำคัญ:** เกษตรกรรมรอบเมือง กระบวนการกลายเป็นเมือง การใช้ที่ดิน

## **Introduction**

This article investigates the pressures on peri-urban agriculture practiced in the growing city of Ubon Ratchathani by adopting peri-urban perspectives to analyze it. It discusses the impacts of urban development on peri-urban agriculture in Tha Wang Hin village in Ubon Ratchathani city.<sup>2</sup> The city's expansion and economic growth have been driven by the influx of new residents from rural areas, infrastructure development, and construction of schools, housing and city malls, which all add to the city's growth. New rural migrants and the urban middle-class contribute to the existing pressures on the peri-urban areas by competing for land with PUA farmers. The following section discusses concepts of peri-urban, peri-urban agriculture, peri-urban perspectives, and urbanization and peri-urban agriculture in Thailand.

## **Peri-urban**

Piorr et al. (2011) define peri-urban as a transitional zone between rural and urban areas. These zones typically have a higher population density than rural areas, as well as limited agricultural land and less infrastructural development than the town or city they are adjacent to. Much literature has argued that peri-urban areas are increasingly important for both consumption and production activities. Bourne et al. (2003) explain that the peri-urban area is defined by resource scarcity and contestations

<sup>2</sup> Village and community are used interchangeably in this article.

resulting from economic growth, competition, and multiple forms of resettlement and resource-seeking. All these characteristics make peri-urban areas valuable and competitive for many groups of people who want to use them for different purposes.

For example, citing the suburbs of Chiang Mai in Thailand, Tubtim (2012) argues that the peri-urban area includes flows of middle-class people who are attracted to the peri-urban area due to good infrastructure, cheaper land prices than in the city, and good resources, facilities and environment. The new residents of the peri-urban area have brought with them their own lifestyles, values and expectations of peri-urban areas (*ibid.*). Her argument is based on work on the same issue by Marsden et al. (1993) and Rigg (1994), who found that PUA is a predominant activity in the context of the post-agrarian society. Many long-term residents in the peri-urban area already have highly diverse livelihoods, with traditional agriculture gradually giving way to diversification and intensive farming. New middle-class residents moving from the cities are consuming the countryside through new kinds of land use activities, such as forestation for leisure and recreation which add to water resource pressures, and creating demand for the construction of modern-style houses, townhouses, shops and restaurants (Tubtim, 2012).

Hence, peri-urban areas constitute multi-functional land use patterns. Land in these areas is cheaper than in urban zones (Allen and Davila, 2002). Thus, in the context of highly mobile populations, goods, capital, information, technology and culture, the connections between rural and peri-urban areas are more attractive than in the past for people who want to live and do business in the area (Hirsch, 2009 and Rigg, 2006). This high mobility can create conflict between key activities in these areas, such as between agriculture and non-farming activities competing with each other in the peri-urban area for land and water, thereby creating transformations and tensions between farmers and non-farmers (Pezzini and Wojan, 2001; Allen and Davila, 2002; Komirenko and Hoermann, 2008). Many scholars have discussed the position of the peri-urban area in the context of post-agrarian societies.

Hall et al., (2011) identify peri-urban as a site of interaction between rural and urban people in some Southeast Asian countries. They have found that the peri-urban area is characterized by high population mobility, the conversion of farmland to non-farm usage, infrastructure provision by government, and the growth of inequality and uneven development between disparate groups of people.

### **Peri-urban Agriculture (PUA)**

PUA takes place at the urban periphery (van Veenhuizen, 2007; Moustier and Danso, 2006). People practicing PUA normally use plots situated in their backyards (Komirenko and Hoermann 2008). PUA has been practiced on varying land sizes, and is generally focused more on productive crops and intensive farming practices (van Veenhuizen, 2007; Smit et al., 2001). Some urban people have vegetable gardens in common areas, not simply for food production, but also as a healthy and creative activity (Flachs, 2010). Mougeot (2000) adds that PUA is often practiced on fertile soil, as these soils historically supported most of the urban population. Nowadays in some places, PUA provides beyond the urban population it used to support, as well as for rural and even global consumption. In addition, Heimlich (1989) points out that PUA helps develop livelihoods of people within the peri-urban area, contributing to their education, food supply and employment.

Currently, however, PUA faces challenges from the competitive land uses and changes caused by constant urban expansion and growth (Robinson, 2004; Gant et al. 2011), resulting in the peri-urban area becoming a fading patch of resistance to the new multiple land uses. Now, many scholars are paying attention to land uses close to the city, or at the fringes of growing cities. Komirenko and Hoermann (2008) mention the challenges that PUA faces, putting it in danger of disappearing in many world cities where populations are increasing, land prices are rising and multiple land uses are emerging. These challenges affect the size of plots, types of commercial crops, and the number of producers involved in PUA. However, some researchers have

found that PUA is gaining popularity in many cities as a food source for urban residents, a business strategy, and a contributor to economic development, job training and health education (Goldern 2013).

The agricultural countryside is not only contested by many competing economic, social and cultural pressures, it also faces competition from further landscape activities (Zasada, 2011; Shoard, 2002; Robinson, 2004). Peri-urban farmers have to compete with land market and commercial activities within the context of a vast array of heterogeneous consumption-oriented land uses (Shoard, 2002). Urban dwellers and rural migrants add to the existing land use competition, pushing the price of land higher, encouraging land speculation and resulting in new land rights arrangements between non-farming landowners and common land tenure producers (Robinson, 2004; Zasada, 2011).

### **Urbanization and Peri-urban Agriculture in Thailand**

The Thai government has encouraged urbanization by promoting the growth of Thailand's secondary cities, resulting in peri-urban areas experiencing extensive economic, socio-cultural, environmental and political adjustments (Gullette and Singto, 2015). The government has adopted the concept of 'growth poles' to develop regional cities by promoting major regional cities to become industrial and service hubs (Glassman and Sneddon, 2003). This policy has had many significant impacts on the region, both within the cities and on their fringes. Such changes include patterns of land use, economic and infrastructure development and environmental conditions (Phuttharak and Dhiravisit, 2014).

Over the past few decades, the rapid development of Thailand's major cities has resulted in their expansion into the countryside (Tubtim, 2012). A new middle class has emerged in towns, cities and peri-urban areas, while new factories, malls, high-rise condominiums and townhouses have been built at the juncture between the urban and rural zones (Hirsch, 2009). In the Northeast, private investment increased by

49 percent from 2011 to 2012. Meanwhile, the region's 40 percent rise in monthly household income in the same period was the highest in the country (Carsten and Tempchairojana, 2013). Improvement in urban facilities, economic motivation, aspiration for better lives and employment opportunities have resulted in increasing numbers of people emigrating from rural to peri-urban and urban areas. Sajor and Oongsakul (2007) found that the concentration of primary, secondary and tertiary economic sectors in the same location has contributed to environmental resource tensions and competition at the urban fringes of Bangkok.

The Thai government has supported peri-urban agriculture to promote self-sufficient living and sustainable consumption, with ongoing urban farming projects established in Bangkok and other large cities. For example, the Thai City Farm was founded and supported by the Sustainable Agriculture Foundation Thailand.<sup>3</sup> The Thai City Farm works closely with the Urban Foundation Thailand and the urban farming learning center, Veggie Prince, to promote urban farming projects.<sup>4</sup> There are several farmers' markets in Bangkok, such as the Bangkok Farmers' Market, which aims to create and support sustainable agriculture and improve urban quality of life.<sup>5</sup>

In their study of food and land systems for sustainable peri-urban agriculture in the Bangkok Metropolitan Region, Tsuchiya et al. (2015) found that in Bangkok, the government has designated numerous agricultural areas to support an expansion of supermarkets and traditional wet markets for consumers to buy fruit and vegetables. The wet markets spread across Bangkok have become a hub for traditional food, and provide support for Bangkok's increased population. However, challenges exist for peri-urban agriculture in Bangkok; for example, there is limited communication between farmers and consumers. Tsuchiya et al. (2015) suggest that improved communication between these two sides would enhance local food systems' governance and the conservation of peri-urban farmland in the long term. Krul (2015) has studied Bang Krachao, a peripheral extension of Bangkok's urban

<sup>3</sup> For more information go to: [www.sathai.org](http://www.sathai.org)

<sup>4</sup> For more information go to: [www.thaicityfarm.com](http://www.thaicityfarm.com), [www.facebook.com/thaicityfarm](https://www.facebook.com/thaicityfarm)

<sup>5</sup> For more information go to: [www.bkkfm.com](http://www.bkkfm.com)

sprawl, which is one of the largest remaining green areas in the proximity of Bangkok, where numerous vegetation types, mangrove forests, and agricultural plots are still present. Bang Krachao, like many other green areas, is under constant pressure and threats resulting from the influx of new residents and demands for housing. Hundreds of kilometers away, in the Northeast, the municipal government of Ubon Ratchathani has sought to promote multi-purpose intensive land uses in the peri-urban area, (Ubon Ratchathani Municipality, 2016: 3), which has had an impact on peri-urban agriculture.

### **Data Collection Methods**

The data presented in this article derives from qualitative data collection techniques conducted from January to April 2015, as part of an independent study on transformation of the countryside which was the focus of the second author. Later, the first author did additional interviews and observation between February and March 2017 on peri-urban agriculture. The research employed purposive sampling of selected key informants. We used in-depth interviews with all five remaining peri-urban farmers, two fishermen and two vegetable traders. Twenty purposively selected residents and five officers were asked to be interviewed, using semi-structured interview guidelines, a list of questions, and topics that the authors brought up during the conversation with key informants. Promthong, the article's co-author, comes from the study village, and observed the villagers' daily lives and activities on their farms, in their houses and at the market. The research used both primary and secondary data, covering the history of the research area and current data about the community.

### **Tha Wang Hin Community and its Transformation, History and Changes**

Before people began growing vegetables in Tha Wang Hin, the village was considered a fishing community. Vegetables were grown only after the arrival of Vietnamese refugees. There are fewer than five families

that continue to catch fish in the Mun Noi and Mun rivers for income or home consumption. This activity has declined in importance, with the number of people fishing falling by 80 percent over the past 30 years as a consequence of decreasing fish stocks, low water levels in the Mun Noi river, and an increase in fishing equipment costs and competition. Those still fishing sell their catch at the community market in the evening. An interview with a fisherman informed us that those still fishing are generally middle- or old-aged. Tha Wang Hin community is located to the west of Ubon Ratchathani city, along the left bank of the Mun Noi river, a tributary of the Mun river. Prior to 1900, wetlands covered large areas near the Mun Noi river, making the area suitable for fishing. During that period, the area was three kilometers from the center of Ubon Ratchathani city. In the early 20th century people from the neighboring Sawang and Tha Sala communities also came to fish in the Mun Noi river, as an elderly interviewee informed us about the village's history.

“In the past, people from Sawang, Tha Sala and other communities located on the other side of Ubon Ratchathani city always came here to fish. They came in the morning and returned to their community in the evening.” (Nok [Pseudonyms], 2016)<sup>6</sup>

Ten years after the first settlers arrived, more individuals and their families gradually began to move into the area, with the village growing to around 70 families. In 1923 the area was officially designated a village and a temple was built. During this period, the villagers' livelihoods centered largely on fishing, home gardening, cattle raising, and collecting aquatic animals and non-timber forest products. However, rice cultivation was not pursued because the mostly low-lying wetlands were prone to flooding and therefore unsuitable.

The total area of the Tha Wang Hin community currently covers approximately 350 hectares, and is now considered a peri-urban community governed by the Ubon Ratchathani Municipality Administration. The community contains 186 households, with 374 males and 405 females. Livelihoods are diverse and include trading;

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<sup>6</sup> The authors use pseudonyms for all the interviewees.

employment in shops, restaurants, and the government; shop-keeping; self-employment; fishing; pig slaughtering; services such as hotel staff and vegetable farming. Trading and off-farm work are the predominant economic activities. A community market was set up where residents and outsiders come and trade for most of the day. Infrastructure developments include the provision and supply of electricity and water and the construction of paved roads.



**Figure 1** The Tha Wang Hin community, Mun Noi river and urban land uses of Ubon Ratchathani city (Source: Google Maps, 2017)

## **Vietnamese Refugees and Peri-urban Farming in the Village**

Vietnamese refugees, fleeing the Indochinese war, arrived at the Thai-Lao border between 1943 and 1964. The Thai government assigned residential areas for the refugees in many cities. In Ubon Ratchathani they were assigned an area on the eastern side of Tha Wang Hin village, in an area locally called Nikhom Khon Yuan (“Khon Yuan” meaning Vietnamese people). After the end of the Indochinese war, the Thai government sent most of the Vietnamese refugees back to Vietnam between 1976 and 1980. Some, however, decided to stay in their communities along the Mekong river in Ubon Ratchathani and in other provinces in the Northeast, such as Mukdahan and Nakhon Phanom.

Most interviewees told us that many villagers had bought land from the Vietnamese. Around 90 percent of the families continue to

grow the same high-value perishable vegetables that the Vietnamese produced to provide a decent and quick income. Allocated land was approximately 0.5-1.2 hectares per family.

### **Peri-urban Agriculture in Tha Wang Hin Village**

To date, about 15 families continue to practice peri-urban agriculture in Tha Wang Hin village, with five families growing vegetables, while eight families fish and a few raise poultry. Three of the five families that grow vegetables are related to each other, and live in adjacent houses. These families have a medium household income, and their children and grandchildren are either government officers or traders. The other two unrelated families also have medium household income levels, and their grandchildren work for private companies. Most of the fishers are poorer than the vegetable growers, and they fish for food and generate a modest income, while their children work in the provincial capital and other cities in Thailand.

Vegetable growing is undertaken only by middle-aged and elderly people, while younger people are not interested in growing vegetables because it doesn't provide a good enough income for them, as one interviewee informed us.

“My parents did it and passed it down to the current generation. I am now 48 years old. My kids, the new generation, are not interested in growing vegetables, as the benefits are very low compared with other, better paying jobs or activities. I think in the future my children will not grow vegetables. They will use our land to build a house or an apartment on. We have already allocated part of our backyard to build rooms that we can rent out.” (Pipit [Pseudonyms], 2017)

A 65 year-old man who has grown garden vegetables his entire life told us that all three of his children are working in Bangkok. He and his wife wanted to lease their land as they are getting old and weaker, with his wife telling us,

“I would like to sell my land as my husband and I are getting old. We’ve had enough of growing vegetables. We’ve done that for more than 40 years.” (Boon [Pseudonyms], 2017)

However, the study found that some vegetable growers continue to see gardening positively for their personal well-being, general health and for nostalgic reasons. A 48 year-old woman who was interviewed explained that she and her family have to keep growing vegetables to make a living. She referred to farming as a traditional occupation that has been practiced in the family for the past 50 years.

“My parent’s generation does home gardening but my children’s generation is working in town. I still grow vegetables because I can do it during my leisure time and I have free time to take care of my parents who are 75 and 80 years old. Growing vegetables helps to make my parents healthy. If they had nothing to do, they will be sick and unhealthy. Vegetable growing is their traditional job and good for exercise, and that is why we still grow vegetables.” (Dee [Pseudonyms], 2017)



**Figure 2** Vegetable plots and dormitory (Photographed by Kanokwan Manorom)

Plots of vegetables make up parts of the families’ backyards, with each family allocating approximately 0.16 hectares to vegetable growing. One family has allocated 0.20 hectares of their vegetable plot area to build a dormitory (see photo above).

With the expansion of urbanization into the Tha Wang Hin community, it is difficult to see the vegetable plots because the houses

are built along the main road, blocking the view. There are only very small alleys and paths from the main road that provide access to the vegetable plots. The high-value vegetables planted by the five remaining growers include Chinese broccoli, flowering white cabbage, lettuce, Chinese spinach and date palm. With the exception of the wet season (July to September), all of these vegetables are grown throughout the year in four planting periods. Boiled rice and rice congee restaurant owners are the main customers for these vegetables. Retail vegetable traders sell the vegetables bought from the Tha Wang Hin villagers and other farmers to supply the restaurants.

In the past, many vegetables were also sold to the Provincial Central Prison and the city's main hospitals and markets. There was high demand from townspeople in Ubon Ratchathani for vegetables from the Tha Wang Hin community because it was the only nearby community that grew vegetables commercially. There were no other peri-urban areas growing vegetables near the city. Fifteen years ago, a large wholesale market called Charoensri Market was set up in the district of Warin Chamrap. The market continues to be popular, with many farmers and traders coming from other provinces to sell their vegetables, creating new competition for the vegetable producers in Tha Wang Hin. However, the vegetables from the village continue to be in high demand as townspeople like their appearance and quality.

While interviewing a vegetable retailer at Thalad Yai market, we were told that she was very happy with the quality of vegetables from Tha Wang Hin community. Vegetable growers use both chemical fertilizer and animal manure to improve their vegetable productivity. There are no water shortages in the area, allowing the farmers to make use of electrically pumped groundwater to supply each vegetable plot. The growers use family labor for all stages of the vegetable growing process-preparing the land with a hoe and spade, sowing the seeds, applying fertilizer and pesticides, harvesting, washing and cleaning, and packaging and preparing the vegetables for sale at the market or from their backyard.

## **Pressure on PUA in the Tha Wang Hin Community**

Three main factors have put pressure on the current practice of PUA in Tha Wang Hin. These include the expansion of the urban area, competition with non-farming economic activities and opportunities, and land ownership disputes.

## **Expansion of Urban Areas**

Three major public schools surround the Tha Wang Hin community, including Benjama Maharat School with 4,177 students,<sup>7</sup> Narinukun School with 4,249 students,<sup>8</sup> and a medium-sized school called Tessaban 3 Samakkee Witayakran with 312 students.<sup>9</sup> These schools provide education for students residing in Ubon Ratchathani city, as well as those from rural areas in neighboring districts and provinces. A large number of rented rooms, apartments and rented houses near the schools are available for the students. In addition, there are two main government offices in the city, namely Ubon Ratchathani Central Prison and the Social Security Office. These two government offices create additional land use pressures on agriculture.

To accommodate these institutions, a considerable amount of land inside the community has been converted into buildings for commercial purposes. There are numerous food, clothing, coffee and convenience shops in front of and near the schools, offices and private tutorial schools. Land prices, even for ‘official land’ or ‘Ratchaphatsadu land’ - have risen over the past 20 years, with 0.4 rai (1 rai = 0.395 hectares) selling for more than 4-5 million baht. One interviewee told us,

“I bought a piece of land from someone who set aside part of her vegetable yard to sell to me 10 years ago. I bought about 0.15 hectares. I paid almost a million baht. I built a dormitory with 10 rooms to rent. Later, more people in the community

<sup>7</sup> For more information go to: [http://data.bopp-obec.info/emis/schooldata-view\\_techer.php?School\\_ID=1034711095&Area\\_CODE=101729](http://data.bopp-obec.info/emis/schooldata-view_techer.php?School_ID=1034711095&Area_CODE=101729)

<sup>8</sup> For more information go to: [http://www.narinukun.ac.th/data\\_24972](http://www.narinukun.ac.th/data_24972)

<sup>9</sup> For more information go to: [http://www.t3samakkee.ac.th/data\\_9781](http://www.t3samakkee.ac.th/data_9781)

converted their vegetable gardens into rented apartment buildings. It's a very good business as they can make more money and get it quickly. The rooms are not too expensive for students or someone whose salary is a bit low. I offer a rental rate of 1000-1500 THB per month. It is very cheap and convenient for students studying at schools nearby and people who are working at the mall or many material shops as well as superstores nearby such as Big C, Lotus, or government offices.” (Somkiat [Pseudonyms], 2016)

### **Competition from Other Economic Opportunities**

The arrival of Central Plaza has increased pressure on land use. The plaza was constructed on the city's ring-road in 2013 at a cost of over 2.75 billion baht.<sup>10</sup> It is situated about 0.7 kilometers from Tha Wang Hin community, and is surrounded by a private university, government offices, tourist attractions and a sports stadium. The mall was constructed to maximize profits, and it adds to Ubon Ratchathani province's strategy for economic development and for the construction industry and travel connections as a gateway to the Mekong countries of Laos, Cambodia and Vietnam. (Central Plaza, Ubon Ratchathani, 2017).

The establishment of Central Plaza has inevitably expanded the city's urbanized development into the Tha Wang Hin community. Other department stores and shops followed soon the plaza's opening, providing new employment opportunities and attracting migrants from elsewhere in the province and the region. Migrants work in the mall and in many wholesale and retail shops, warehouses, the construction industry, and in drug, food and automobile shops, as well as in hair salons and private universities. This influx of migrants has contributed to increasing demands for affordable housing.

The mall has had a significant impact on land prices as the demand for commercial land has grown in the area. Our interviews with

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<sup>10</sup> For more information, go to: [http://www.cpn.co.th/property\\_detail.aspx?menu=Plaza\\_Landing&id=33](http://www.cpn.co.th/property_detail.aspx?menu=Plaza_Landing&id=33)

people from the community suggest that there have been changes both inside and near the community. Land prices have increased with the rising housing demand and the construction of housing and apartments. Higher land prices in turn, have affected the cost of leasing land for farming. In addition, some people sold land without having the full title deed to it (details of this will be explained later). One lady who owns one rai of land (0.4 hectares) told us,

“I wanted to sell or lease this land for about 5.5 million baht. Before the mall was built, my land would sell for around 2-3 million baht. I think this price is OK for me, as land with official land title deeds or land papers would be double the price of my land. For the same amount of land I own, the price with a land certificate would be more than 10 million baht.” (Junta [Pseudonyms], 2017)

Some people without deeds sold or leased their land unofficially to outsiders who sought to build shops, townhouses and commercial buildings as the official price was significantly higher. Many decided to convert their vegetable plots to food shops, as one interviewee said,

“There is a person who converted his vegetable plot to a BBQ buffet shop that is very popular in Ubon Ratchathani now. Their children got money from the bank. They thought they would get more money than from growing vegetables. Their business is doing very well.” (Thong [Pseudonyms], 2017)

The Central Plaza development, which covers 60 hectares, was built on land that was raised in height by six meters to make it higher than the surrounding area. This has contributed to longer flooding periods during the rainy season, leading many in the community to complain. One respondent said that the development has added to other environmental problems, including noise, water pollution and garbage. The increased number of people going to the area to access the development has also resulted in higher rates of crime, congestion and traffic accidents.

## Land Ownership Disputes

Our discussions with key informants indicate that land ownership is a pressing issue in the community, and is coupled with new kinds of competing land uses that have developed in the area over the past 15 years. The arrival of Vietnamese refugees triggered conflicts over land rights between the people in Tha Wang Hin village and the government. The Treasury Department claimed most of the village's land-870 rai (843, 971 hectares)-as official land for the refugees to settle on.<sup>11</sup> Villagers who migrated to settle in the area assert that in 1955 they were granted pre-emption certificates (not a full title-deed), which provided them occupier possessory rights over the land. Thus, the villagers have opposed the announcement made by the Treasury Department, and claim that they settled in the community long before the land was declared to be Ratchapatsadu land.

The Treasury Department legally requires all residents in the Tha Wang Hin community to rent the land from the department. Some people have complied with the order, particularly newcomers who sought land to run businesses in the area, while some villagers avoided and disobeyed the order by unofficially leasing their land to other people before leaving the area. However, most villagers have refused to follow the order as they continue to claim their official ownership of the land based on the pre-emption certificate granted in 1955, and their residence in the area prior to the Treasury Department's announcement in 1964. Tha Wang Hin residents are seeking official land papers for two main reasons. First, they want to secure their livelihoods and the future of their children. Second, since the price of land is now very high, many want to use their land as collateral to borrow money from banks for further investment in other commercial activities, or to sell the land at its market price.

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<sup>11</sup> The Treasury Department is the government body responsible for governing, overseeing and maintaining state property. State property is mainly set aside for government use while the rest is leased to the private sector to generate revenue for the government. For more information, go to: [http://asean.treasury.go.th/index.php?option=com\\_k2&view=item&layout=item&id=85&lang=en](http://asean.treasury.go.th/index.php?option=com_k2&view=item&layout=item&id=85&lang=en)

Back in 1967, around 100 village residents collectively presented a petition to the royal palace asking for help in contesting the ‘land-grab’ by the Treasury Department. The group was led by a nationally known, local Isan folk singer who was affected by the policy. The community’s residents also organized a number of protests, and sought help from Ubon Ratchathani’s parliamentary representatives. Finally, in 2003, after 50 years of struggle, the central government ordered the provincial governor to set up a committee to review the problem. The committee was instructed to determine whether the villagers had actually been granted pre-emption certificates and whether they occupied the land. If both were proven with clear evidence, the government claimed it would investigate the Treasury’s ownership of the land. However, after 14 years the case is still under investigation by the court.

## **Discussion and Conclusion**

This article has taken a peri-urban perspective in arguing that the peri-urban area where Tha Wang Hin community is located has become a multi-functional landscape. While PUA continues to play a significant role in the urban food supply and in the economic livelihoods of the five remaining producers in the community, it faces a complex situation and pressures from local government development policy. Although the peri-urban transformation provides off-farm job opportunities for old and new residents alike, PUA, as a key traditional activity, faces numerous threats and struggles for survival as rival land uses infiltrate the peri-urban area and rapidly encroach upon the peri-urban area (Buxton et al., 2016; Spencer, 2016). In some areas, PUA has expanded in areas where irrigated water is provided to nearby urban areas (Thebo et al., 2014).

Land prices in the community have risen significantly through the expansion of Ubon Ratchathani’s urbanized areas. These price increases have been driven by an influx of migrants for employment in a range of industries and the construction of accommodations and shops

to cater to these new residents. Most of the land that was once used to grow vegetables has been converted into large malls, new housing projects, apartments, dormitories, restaurants, shops and modern two-story houses. The vegetable growing areas have been reduced in size and location. PUA growers have not sought to find new locations in other peri-urban areas to grow vegetables because of the poor economic potential.

The new middle-class residents see the peri-urban area as a living space and seek good facilities, while businesses see investment opportunities thanks to lower land prices (Tubtim, 2012). PUA therefore has to compete with a variety of land uses resulting from urban expansion and the urbanization of peri-urban and rural areas (Robinson, 2004; Gant et al., 2011). The case of PUA in Tha Wang Hin community is in line with these issues. Nevertheless, many people enjoy the off-farm income opportunities provided by urban expansion into the village.

The community's contemporary population is economically more diverse than before, with newly-settled migrants, students, workers, officers, shopkeepers, teachers, and food and coffee shop workers. This influx has encouraged vegetable producers to move away from farming, changing the land use of their garden plots to more profitable enterprises, such as renting houses, shops and rooms for the new residents. As discussed by Komirenko and Hoermann (2008) and Krul (2015), PUA faces many challenges because of the influence of the increased population, high land prices and the emergence of multiple land uses. These pressures have resulted in a reduction in the size of vegetable plots, the types of crops grown and the number of producers. Consequently, there are now only five families in the Tha Wang Hin community who continue to grow perishable vegetables for the city market.

The remaining PUA in the Tha Wang Hin community is challenged by high population mobility, the conversion of farmland to non-farm usage and development of infrastructure. These changes indicate that PUA is not the dominant livelihood activity it once was. Likewise, Marsden et al. (1993) and Rigg (1994) have maintained that

in the context of a post-agrarian society, the peri-urban area is now a place of diverse livelihoods. With PUA being replaced by intensive methods, the countryside has become an aesthetic, recreational and biological resource, which has attracted middle-class groups to move into the peri-urban area and bring consumption to the countryside (Tubtim, 2012).

For young people, growing vegetables in the peri-urban areas is not worth the effort when compared with other income-generating activities. Nowadays, most people of the younger generation are distancing themselves from farming and the land, with many instead seeking wealth through non-farming opportunities elsewhere (Rigg and Nattapoolwat, 2001; Rigg, 2006). However, those who continue to farm see it positively for their personal well-being and general health as well as for nostalgic reasons. A 48 year-old woman who was interviewed explained that she and her family have to keep growing vegetables for a living as farming is a traditional occupation that has been practiced in the family during the past 50 years.

These remaining five PUA farmers still practicing agricultural activities have been able to maintain a strong sense of place and personal well-being amidst the rapidly changing physical and socio-economic landscape. Likewise, Tuan (1980) has argued that the connection between people and place evolves through emotional and physical connection, meaning, and understanding of a specific place and its features.

Furthermore, livelihood strategies are underlined and guided by the economic, natural, physical and human assets available. In addition, social assets are equally as important as material assets (Ellis, 2000). Social assets in the form of the farmer's networks, sense of place, and social attachment to place and people, while immaterial, are very important as they give meaning to the farmers' lives beyond material objects (Bebbington, 1999). Thus, the agricultural values that the remaining farming households in Tha Wang Hin community continue to hold have shaped the ways in which they use their resources and livelihood activities to continue farming.

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