

ADAPTATION STRATEGIES USED BY LOW-INCOME RESIDENTS AFFECTED BY LAND USE CHANGES IN HANOI, VIETNAM

Aaron Vansintjan^{a,*}, Nguyen Hong Van^b, Le Quynh Chi^c, Nguyen Thanh Tu^c

^a*Birkbeck - University of London, United Kingdom*

^b*Independent researcher*

^c*Faculty of Architecture and Planning, National University of Civil Engineering,
55 Giai Phong road, Hai Ba Trung district, Hanoi, Vietnam*

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Abstract

Since Vietnam shifted to a market-economy in the 1980s, Hanoi has seen rapid urban expansion similar to that of other South East Asian cities – involving megaprojects, luxury developments, rural-to-urban migration, informal housing construction, and escalating speculation. Researchers have considered how unemployment and the disruption of community life followed the urbanization of rural areas. However, little has been said about how people adjusted their everyday life to cope with the changes. Through in-depth interviews, focus groups, participatory observation, oral histories, and surveys, this research investigated the adaptation strategies of low-income residents in the face of land use changes that are beyond their control. The main research site is Tay Ho district – previously a conglomeration of agricultural villages that has, in the past 20 years, witnessed rapid transformation through large-scale infrastructures, luxury housing, and smaller lodgings built individually for migrant workers. Four main adaptation strategies used by residents have been identified. First, people turn to food as a safety net. Running small street stalls, selling goods in local markets, and delivering to restaurants are common. Second, as farms transform into roads and buildings, people take advantage of public space to garden and socialize with neighbours. Third, gender division is significant as women are often excluded from the male-dominated land inheritance system and the formal economy, so they turn to informal trade, which offers autonomy and helps to develop social connections. Fourth, as land is confiscated and compensated by a lump sum of cash, people build social capital to persevere. This paper suggests that, in the context of rising globalization, the urbanization of the countryside, and the need to ensure the sustainability and inclusivity of cities, urban planners and policy-makers should take into account the way by which low-income residents continue to rely on environmental and social capital to adapt to changes.

Keywords: urbanization; informality; adaptation; resilience; environmental capital; social capital; privatization.

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1. Background

In the coming decades, municipal governments seeking to ensure resilient, sustainable, and accessible cities will face with three key challenges: increasing food insecurity in cities due to volatile food prices and climate change [1], urban population growth and migration [2], and rapid urban development, often negatively affecting low-income communities [3, 4]. These problems are especially urgent in Southeast Asia, where climate change is reported to have large impacts on urban areas and traditional agriculture [5], food systems are changing rapidly [6], rural-to-urban migration continues to lead to unchecked urban sprawl and unsafe housing conditions [7, 8]; while governments are

*Corresponding author. E-mail address: avansintjan@gmail.com (Aaron, V.)

increasingly seeking to attract foreign direct investments [9, 10] often to fund high-end residential development projects, displacing low-income communities and stripping them of their livelihoods [11]. These problems are inter-related and will present a significant challenge in the next decades.

Urban low-income communities, especially those in developing countries, often rely heavily on resilience strategies such as urban subsistence agriculture, social networks, accessible community spaces, informal economies, and alternative food systems [12, 13]; However, governments usually undermine these strategies by regulation and criminalization, seeking to ‘modernize’ and ‘clean up’ urban areas and thereby encourage foreign investment in development projects [14]. The risk is that, bereft of the communal, environmental, and public resources which low-income communities rely on, cities are becoming more inaccessible and less resilient to shocks [15]. While governments and cities are increasingly interested in ‘green’ and ‘smart’ cities, there is also a need for more ‘just cities’, where urban development is accessible to all, rather than a vehicle for exclusion and growing inequality [16, 17]. Considering the challenges highlighted above, it will be imperative to better understand the strategies that low-income populations use in the face of urbanization, if people are to ensure more sustainable and accessible cities in the future.

There is a significant body of literature exploring the connections between urbanization, globalization, and increased speculation on real estate [18, 19]. Researchers have long explored how patterns of urban development differ in South East Asia from those in the rest of the world. Researchers have also considered how unemployment and the disruption of community life happened as a consequence of urbanization in rural areas [20]. However, there is little research that investigates how the combined effects of real estate speculation, large-scale infrastructure development, and loss of farmland – all dominant patterns in urban development in the South East Asian region today – impact disadvantaged groups, and what strategies they should use to confront these changes. A better understanding of these dynamics would help in identifying policies and urban planning models that can safeguard at-risk populations in the face of urbanization.

Given this need, Vietnam presents a useful site of study. Since the country shifted to a market-economy in the 1980s, Hanoi has seen rapid urban expansion similar to that of other South East Asian cities – involving megaprojects, rural-to-urban migration, informal housing construction, and escalating speculation. Researchers have noted how Vietnam’s turn to a more socialist-oriented market economy in the 1980s has led it to pursue urban development in ways similar to those of other South East Asian countries, in effect ‘catching up’ with its neighbors. However, others note how Vietnam’s unique history and political economy has also motivated it to pursue other kinds of development, distinct from both Chinese market communism and other South East Asian models [21]. Vietnam’s slow pace of economic development and integration into the world market is in part due to its border war with China in 1979 and its relatively greater degree of resistance to international partners. Relations between the US only became normalized by 2000, and the country joined the WTO as late as 2007. Further, Vietnam’s production of urban space is considered to be different from that of China [22]. In China, the state is the leading actor of development, while in Vietnam, the state and society are in continuous process of negotiation, resistance, and compromise [23, 24]. In contrast to China, urban space production in Vietnam has been characterized as people-led and “self-organizing” [25]. Its persistence of subsistence livelihoods, strong kinship networks, a thriving informal economy, and accelerating – albeit incomplete – urbanization offer an opportunity to study the role that social and environmental resources can play in people’s adaptation to urbanization.

In addition, Vietnamese cities are facing increased speculation following the formalization of real estate since the liberalization of its economy. In particular, the Land Law of 1993 accelerated the

process of real estate speculation. Under the centralized planning system, housing development in Vietnam was following the orthodox socialist housing system, in which housing is a social service provided equally to people by the state. In 1990 the Congress of the Vietnamese Communist Party recognized housing “as a commodity”, which was finally formalized into the Housing Act 118-TTg, which covered the five rights of real estate. Thus, a focus on Vietnam provides an opportunity to observe how people respond to these changes and whether they do, indeed, benefit everyone equally.

This paper describes a case study of Tay Ho, a rapidly urbanizing district in Hanoi, Vietnam, to better understand how low-income people are responding to the diminution of farmland, the increase in real estate prices, and the integration of former villages into urban space. Through in-depth interviews, focus groups, participatory observation, oral histories, and surveys, our research investigated adaptation strategies of low-income residents in the face of land use changes that beyond their control. Tay Ho was previously dominated by farmland, but has seen in increased development and speculation in the area, with a recent property bubble and boom in luxury housing, facilitated by the development of public infrastructure. However, many villagers continue to live there, and there is a persistent population of relatively low-income residents who were unable to take advantage of the real estate fever. As such, the area presents a pertinent case study site to study the combined effects of urbanization, speculation, and loss of farmland on disadvantaged residents, and which policies can better support more equitable urban development, taking the needs and enquiries of these residents into account.

Consequently, this research is concerned with the following question: “How do low-income and/or systematically disadvantaged urban residents respond to urbanization in their daily life?” Within the scope of this paper, ‘urbanization’ refers to the process of combined real estate value increase, infrastructure development, formalization of land use planning and management, and the general transformation of the environment to become integrated into the wider urban, and global system [26]. As such, urbanization can be regarded as both a material and social process [27]. Correspondingly, the research approach considers cultural, social, material, and economic responses; that is, it is essential to know that residents navigated these changes both through shaping their environment and responding to through existing cultural and social norms. By taking this broad approach to urbanization, it is possible to add to an emergent body of literature that is seeking to understand the effects of different typologies of urbanization, as well as the literature on ‘just cities’ that take into account the material and social needs of diverse social groups [28].

2. Introduction of study area

This study took place from October 2016 to March 2017 in Hanoi, Vietnam. Hanoi is the capital city with a population of seven million and a growing middle-class with disposable income. Like many other urban centers in developing countries, this city is undergoing rapid urbanization. The research site is Tay Ho – a district in Hanoi specialized in ornamental plants, most famous for its peach blossoms and kumquat trees that are displayed in living rooms of most families during New Year celebration. The district takes its name from the lake in the center of the district (Ho Tay or West Lake), which holds significant spiritual importance in Vietnamese traditions and culture. About 20 years ago, this district was still largely dominated by farmland. However, in recent years, this area has witnessed drastic land use changes. In 1995, Tay Ho became an administrative urban district, embedding it institutionally within the city of Hanoi. Following this, the development of one of the first New Urban Areas in Hanoi, “Ciputra West Lake City”, with its main target of attracting foreign residents, started operating in 2004. Lac Long Quan road that encircles West Lake was built in 2005 to prevent encroachment of development onto the lake, and thereby also increased the house price in

the area. As the area increasingly attracts targeted housing buyers, many land owners invested to build luxury apartments for rent. These investors can earn more than 1,000 USD per month, up to 4,000 USD in many cases. Original villagers are normally persuaded by investors who can offer to buy their property. As a result, the district has quickly transformed into an enclave for foreigners and high-income residents, this trend is evident through numerous restaurants offering Western dishes, new supermarkets and convenience stores, luxury hotels, and bi-lingual kindergartens catering to English-speaking families. Finally, the Japanese-funded Nhat Tan bridge, completed in 2015, connecting this area to the airport, further increased the attractiveness of the district for investment. At the same time, it is still feasible to find rows after rows of lush green vegetable beds, massive blossoming peach gardens, and people who refer to themselves as ‘villagers’ and reminisce about good old days when there were no walls or fences and the roads full of guava flowers. Table 1 shows that within a five-year period (2005 to 2010), a total of 84.45 hectares of land was converted from agricultural use to non-agricultural use.

Table 1. Changes in land use in Tay Ho district 2005-2010 [29]

No.	Type of land	Area		Change from 2005-2010
		2010	2005	
	Total area of natural land	2400.81	2400.81	
1	Agricultural land	848.84	933.28	−84.44
1.1	Land for agricultural production	280.57	346.85	−66.28
1.1.1	Land for annual crops	277.27	343.55	−66.28
1.1.1.2	Land for rice crop	51.40	61.90	−10.50
1.1.1.3	Land for other types of annual crops	225.87	281.65	−55.78
1.1.2	Land for perennial trees	3.30	3.30	0
1.	Land for aquaculture	568.26	586.44	−18.18
2.	Non-agricultural land	1423.82	1338.18	+85.64
2.1	Residential land	414.63	409.32	+5.31
2.1.1	Residential land in rural area			
2.1.2	Residential land in urban area	414.63	409.32	+5.31

Unit: ha.

A major factor contributing to land conversion is development projects that require land to be built on. Table 2 demonstrates a sharp increase in the number of projects in the same period, from 374 projects in 2005 to 1,350 projects in 2010. Consequently, the total area of land needed for these projects also skyrocketed from 2,340 hectares to 11059 hectares.

Ministry of Finance stipulates that vocational training should be offered to people who have lost farmland, in reality, none of the projects in Tay Ho carried out vocational training [29]. Instead, a small amount of cash, which is meant for vocational training, is included as a part of the compensation package. This amount used to be fixed at 13,200 VND per square meter (0.58 USD), later it was increased to 35,000 VND per square meter (1.54 USD). If one family lost 300-1,000 m² they will receive 10,500,000–30,000,000 VND (463–1,322 USD) for vocational training for one to four earners in the family. This amount is often insufficient, considering that on average, a household can earn 50,000,000–100,000,000 VND per year from selling peach trees grown on their land. Furthermore,

Table 2. Total projects that require land clearance (2005-2010) [30]

Year	Number of projects	Area of land (ha)		Households that have already received compensation		Total households resettled
	Total	Total area of land that needs to be cleared	Total area of land already expropriated	Total number	Total amount of monetary support and compensation (million dong)	
2005	374	2,340	927	28,718	2,769,826	2,170
2006	395	1,628	599	20,708	3,804,640	3,266
2007	415	1,505	394	15,704	1,752,158	1,026
2008	1,005	13,526	1,538	49,602	2,916,653	2,133
2009	1,170	13,484	1,987	39,671	5,911,630	2,681
2010	1,350	11,059	1,421	51,255	8,923,859	2,153
Total		43,542	6,866	181,862	26,078,766	13,429

the research of [31] has noted that compensation is often not enough to train farmers for a new job.

This site is ideal for studying adaptation strategies exercised by former farmers after they lost their agricultural land for three reasons. First, unlike some peri-urban areas where large-scale development projects wipe out existing villages, the process of urbanization in Tay Ho is more gradual and on-going, thus local residents tend to adapt over time rather than becoming disoriented as a result of abrupt changes. Second, despite the changes in landscape and certain segments of the population, there are still pockets of strong communities. Annual village festivals are anticipated with great excitement and attended by not only the villagers, but also distant relatives and women who move out after getting married. This makes it easier to observe the power of social capital and collective ties that may not be visible in places where the old way of life has been disrupted. Lastly, although increasing development is displacing subsistence agriculture, a significant portion of the local population either still practices farming or have done so for the most part of their lives. Therefore, loss of farmland due to land use changes clearly leaves a tremendous impact on their everyday life, and compelled them to adjust their livelihood by using their available resources.

3. Research methods

This research makes use of several different qualitative methods. At first, the research team interviewed stakeholders from different backgrounds and social positions including residents, migrants, local authorities, urban planners, researchers, NGO workers and real estate agents to get a wider picture of development processes and local histories. Later, 80 in-depth interviews and 60 semi-structured questionnaires were conducted, along with two focus group discussions, data from oral history and participatory mapping, and more than 2000 photographs. For in-depth interviews, the recruitment strategies varied. Most of the time, people on the street were asked if they wished to participate in the interview. By means of a snowball interview [32], people could introduce someone else that they knew well to the research team. For professionals, a more formal introduction was applied; usually the first contact was made through email, which would be followed by the arrangement of a meeting. Personal networks and referrals could also be employed. Selection criteria of interviewees followed the

“grounded theory” approach [33], where the team members followed up with interviews if some gaps the effort of understanding of local dynamics might be found. The 60 semi-structured questionnaires were undertaken by a group of 12 students at the National University of Civil Engineering. Those students were supervised by NUCE researchers. The semi-structured questionnaires were developed in English and then translated into Vietnamese. Since this is a qualitative study, the students were given flexibility and encouraged to improvise and rephrase the questions as long as they explored the most important themes. The participants were recruited with the help of a hamlet leader.

4. Results and discussion

4.1. Food-based social safety net

Tay Ho district is ranked as one of the top three most expensive areas in Hanoi [34]. In recent years, real estate value in this area has skyrocketed. This motivates many local families to convert agricultural land to residential land and then sell a part of their land for a huge lump sum of cash [35]. Endogenous development (that is, by villagers) is different from exogenous development (through state appropriation or high-value developments by developers) as it is largely kinship-based. The quick influx of capital has changed the façade of neighborhoods through enabling many parents to build large houses for their adult children. Depending on a family’s prior access to capital or permits to build, a farming family might sell off a part of their land to finance the construction of a house on another part, build rows of one-storey apartments for rent to rural migrants or, if they have more capital, to foreigners, or sell all their land and move further to the periphery of the city. The increased property value has meant that, in large part, farmers with access to land have become wealthy and renovated their homes to show off their wealth. Furthermore, many high-ranking government employees have bought homes in the area, as they want to demonstrate their high status and power. This has created a general impression that Tay Ho belongs to the rich. In fact, many well-meaning intellectuals expressed their surprise at the intention to choose ‘low-income’ residents as the target group in this area.

However, this flashy appearance does not tell the whole story. A large group of people did not benefit from the rise in land price. Some do not have much land to start with. Just three decades ago, factory workers (i.e. state employees) were highly respected in the local community and enjoyed many privileges that came with the centrally-planned economy and rationing system. As a result of their occupations, local cooperatives often did not allocate farmland to these individuals. After the country transformed towards a market-economy in the 1980s, these people not only lost their jobs due to the close-down of state enterprises, but also found themselves among the landless inhabitants. Rural migrants who moved to the city for economic reasons are also unable to participate in the formalized culture and access basic services. Moreover, farmers who have cultivated crops for generations were also deprived of their land with little compensation to give way to government-funded infrastructure (e.g. schools, bridges, administrative offices) and private development projects (high-end gated communities). With little education and practical skills, and often reaching middle to older age, those who are left behind in the urbanization process have few options to support themselves and bring up their families. It is not surprising that they frequently return to the one thing they are most familiar with and skilled at: food. Making food, growing food, selling food (from their front space, in local markets and vending on the street), and delivering to restaurants are common. For example, in one focus group discussion, we talked to farmers who were being forced to move from the last piece of farmland in the village. When the interviewers asked what they planned to do after the land is expropriated, their

answer was to sell sticky rice, mostly as street vendors. One woman noted, “We will see how things go, it is impossible to plan. Some might go sell sticky rice, some do other things.”

In the research, the team met many older people who used to grow vegetables and flowers all their lives, and now pickle cabbage and eggplants to sell in their alleyways. Making such a simple side dish is something they know and do well. Apart from providing a meager income, actively engaging in an economic activity, no matter how small it may be, it gives them a sense of independence and self-confidence. Younger people tend to run slightly bigger business by operating a market stall that requires more work and longer hours. One younger woman, Ms. Hoa, who had previously worked in an office, started selling sticky rice when she gave birth to her first child, because it gave her more flexibility to take care of her children. Another woman who sold vegetables at the market struggled to provide a source of income for her family. Her hometown was in a rural area but she currently lives with her mother-in-law, and they could not raise the capital to build an extension to their house or rent it to foreigners. In short, food is a safety net for those who have insufficient livelihood to rely on. By taking advantage of the loosely organized food system in Hanoi, former farmers can directly enter the food markets as food makers, sellers, or middle men.

4.2. Public space for alternative socialization and urban agriculture

Livelihood is not the only loss. Economic set-back is certainly a grave concern, but there are other problems resulting from land use changes. As farms transform into roads and buildings, people have lost their traditional space for meeting others and socializing with neighbors where they used to spend time working outdoor together and laughing at each other’s jokes.

The unsightly scene of wire fences and locked gates amidst open fields testifies the process of urbanization and privatization, as if to say that only certain people with money and class status have the right to enter. The second adaptation strategy to be observed is the use of public space for gardening, be it a thin strip of soil on the brink of a pond, a small plot intended to be a public park but has been left unattended for years, an area designed to be collective yard, temporary construction sites, a drained lake waiting for a new embankment, even on sidewalk and in holes created by the bricks that are used to pave sidewalks. People grow all types of vegetables and herbs in movable Styrofoam boxes, ceramic pots, but wherever appropriate, some invest significant amount of time, money and efforts to build sophisticated system of beds, rows and layers, several of which even resemble a miniature of terraced field. In this space, they socialize with neighbors and take great pride in this activity.

The stories of two interviewees highlight the role of the use of public space and gardening for building community spirit. One 62 year-old hamlet leader in a new apartment building spent much of her time gardening, and the rest of her day giving people advice on how to garden. More than 10 years ago, she moved here from her hometown to take care of her grandchildren. Now both of the grandchildren go to primary school and she no longer has to take care of them all the time. Still, despite having devoted her whole life to be with her family, she seems happy, and her expertise is in high demand. Even though she moved here very late, it has been very easy for her to get used to her new role. A big part of her social contacts is that she makes friends through gardening. Everyone in the “Gardening Club” knows one other and they frequently give their friends vegetables, either from their own gardens or from their hometowns. In another example, we met a woman who was growing vegetables in the bed of a drained lake. As a peach tree farmer, she had decided to start growing vegetables again between her peach trees, because her neighbors had been giving her vegetables and she felt that she needed to give them something back. As a way to express thanks to the researchers who helped her pluck her peach trees, she gave us a bag of corn cobs grown by her family across

the river. Later, she served us lotus tea that her deceased husband had made from locally-grown lotus flowers. As seen in both examples, gardening, made possible by the use of public space, gives people a strong sense of belonging and nourishes community spirit. The first woman used her vegetables to contribute to a gift economy that helped to maintain connections with her neighbors and family and, indeed, to build relationships with strangers and new residents. As farmland becomes obsolete, local residents utilize any space available to grow something, despite the looming threat that their gardens may be expropriated anytime. Although not officially recognized by the authorities and often not consented to have great importance by the residents themselves, the continuance of gardening in spite of shrinking in quantity of farmland plays a major role in maintaining social ties and connections among original and new residents.

Another strategy that helps the local people to enhance social relationships and preserve neighborhood values are new uses and perception of public spaces, discussed by [36]. The paper showed that while traditional public places such as a commune house, a village's public pond and even farmland gradually lost their importance to the local population, traffic network including internal roads and alleys have become alternative locations. In such public spaces, activities such as meeting and talking, buying/selling groceries, vegetable/food exchange and donation, game playing, and so on take place daily, helping help villagers of all ages to maintain social connections and updating news.

4.3. Exclusion of women and the role of informal trade

It is impossible to study land in Vietnam without considering the impact of gender division. According to custom, daughters are integrated into their husbands' families after marriage and thus are not entitled to land belonging to their natal family. Not only are women often excluded from the male-dominated land inheritance system, but in our research we found that they are subjected to multiple barriers that prevent them from entering and staying in the formal economy, mostly due to their roles and responsibilities as mothers and caregivers. When we focused on low-income residents who struggle to re-organize their lives after losing farmland, the effects of this gender dynamic became even more pronounced.

The stories of two interviewees highlights this pattern. One elderly interviewee had had a stroke five months ago. Yet, she was constantly moving around, carefully cutting morning glory with practiced fingers. Her oldest son, who inherited the house, gambled away much of their land, and now they have very little left. People liked to buy from her because they knew her vegetables were clean. Her children told her to stop gardening, but she refused: it kept her healthy, and it provided for some extra income. She gardened, not just for food or money, but because it gives her a sense of autonomy, a sense of purpose in her old age. In another example, we met a woman in her early 30s selling sticky rice from 6 a.m. to 9 a.m. every day. She held a university qualification and used to hold an office job as an accountant. But after giving birth to her son, she found it too difficult to work full-time and take care of her baby at the same time. Both her mother and mother-in-law had been sticky-rice sellers all their lives, so she learned the business experience and skills from them and gains benefits from their support. She told us that a contracted job with a fixed salary was still more desirable than selling on the street, but she could not compete with younger people who are willing to work overtime. Both women, as well as many other women who participated in the interviews, old and young, resorted to the informal trade to make up for their lack of access to land and opportunities in the formal economy. In the first case, her family's highly valuable land was passed down to her oldest son. In a typical Vietnamese family, by inheriting land, the oldest son must take the responsibility to take care of old parents and worshipping ancestors. Because her adult son failed to fulfill his duty, she suffered from

a double disadvantage: she neither owns land nor receives support in her old age. By gardening in a piece of public land whose ownership is rather ambiguous, and selling her own products to acquaintances, she was able to maintain an independent source of income and keep herself active and present in the community. These two women sold food and used public space as strategies to overcome obstacles resulting from their gendered position in response to a changing economy and the increase in monetary value of urban land.

4.4. Increased importance of social cohesion

We also noticed that despite more than two decades of deep integration into the urban fabric, residents still referred to themselves as ‘villagers’, and took great pride in maintaining traditional way of life and a strong sense of community. This was emphasized during one focus group interview, when we asked the interviewees what they liked most about their area. One woman told us, “In this rural area, villagers are very close to each other, gathering together is always very fun.” Another remarked, “There is a saying: selling distant siblings to buy close neighbors”, meaning that a good neighbor is more helpful than a blood relative who lives far away. She continued, “We have been living together for a long time, we really understand one another, we share every little thing... In the city you close your door, isn’t it?. For example, you close your door, we don’t know if you go out or you come back. Here we go over to one another for tea in the evening.”

When land, the most valuable capital to farmers, is confiscated and compensated by a lump sum of cash with little or no longer-term support, people build social capital to persevere their lives. This is manifested in several ways. First, as mentioned many times during the focus group, village festivals and communal events are anticipated with excitement, well attended and is an example of local identity. Secondly, among those who still grow vegetables or have fruit-trees, gift-giving is regularly practiced, like the star fruits one lady brought to share with research team members when we gathered for the focus group. Thirdly, although officially no individual has land ownership, only land use rights, and transfer of this right requires appropriate legal paperwork, many people whom the researchers talked to asked for permission from their neighbors and friends to cultivate a piece of farmland the owners are not using, with virtually no payment. In other words, people bypass the formal land management system to arrange land use informally among themselves, mostly relying on trust and social capital. Lastly, while gambling and drug use seem to be prevalent in communities where the sudden conversion of land to cash turns certain families wealthy beyond their capacity to effectively manage the money, these problems are better controlled in villages with close-knit networks of extended families and a strong sense of responsibility among villagers to watch out for each other.

5. Conclusions and recommendations

In the context of rapid urbanization, large areas of farmland have been converted to public infrastructure, private housing development, luxury hotels, or individual non-agricultural use. While this process is generally believed to bring about benefits to the general public through improved urban landscape and housing conditions and influx of capital, it also causes the loss of livelihood and sources of income to a majority of the population, especially older groups with little professional skills and formal education. Disruption of community bonds and collective life is a real threat. Additionally, although monetary compensation meant for vocational training is included in a lump sum payment when land is expropriated, farmers often consider this amount to be insufficient. Many former farmers remain unable to gain employment after their land is gone, and others have difficulty managing these large lumps of cash sustainably.

In this paper, four strategies that people use to adapt to their post-agricultural life have been identified. Food, public space, the informal economy, and social capital are common elements which they look to in order to find stability amidst abrupt changes. As people are excluded from formal decision-making processes, they work around the official system, such as by arranging temporary land use among neighbors and friends or growing vegetables on public land. To comprehend the social and economical impacts of urbanization on local residents of this peri-urban village, it is essential to take a deeper look on those strategies in terms of relating factors, causes – effects and interrelation(s) among them. The authors plan to explore this angle deeper in a coming paper with further findings and results extracted from the study at second stage.

The initial findings also suggest that, in the context of rising global speculation, the urbanization of the countryside, and the need to ensure the sustainability and inclusivity of cities, urban planners and policy-makers must take into account the way by which low-income residents continue to rely on environmental and social capital to adapt to changes. Lastly, urban development should attribute appropriate importance to cultural and community values, as well as access to environmental resources and public space. As the Southeast Asian region is seeing untrammelled urbanization, planners and politicians must take into account how these values are crucial for the development of happy, sustainable, and accessible cities.

References

- [1] Schmidhuber, J., Tubiello, F. N. (2007). Global food security under climate change. *Proceedings of the National Academy of Sciences*, 104(50):19703–19708.
- [2] United Nations (2014). *Revision of world urbanization prospects*. United Nations Department of Economic and Social Affairs.
- [3] Bulkeley, H., Carmin, J., Broto, V. C., Edwards, G. A. S., Fuller, S. (2013). [Climate justice and global cities: Mapping the emerging discourses](#). *Global Environmental Change*, 23(5):914–925.
- [4] Lankao, P. R., Qin, H. (2011). [Conceptualizing urban vulnerability to global climate and environmental change](#). *Current Opinion in Environmental Sustainability*, 3(3):142–149.
- [5] Intergovernmental Panel on Climate Change (2014). *Climate Change 2014–Impacts, Adaptation and Vulnerability: Regional Aspects*. Cambridge University Press, Cambridge.
- [6] Pingali, P. (2007). [Westernization of Asian diets and the transformation of food systems: Implications for research and policy](#). *Food Policy*, 32(3):281–298.
- [7] Rakodi, C., Jones, T. T. (2002). *Urban livelihoods: A people-centred approach to reducing poverty*. Routledge.
- [8] Douglass, M. (2000). [Mega-urban regions and world city formation: Globalisation, the economic crisis and urban policy issues in Pacific Asia](#). *Urban Studies*, 37(12):2315–2335.
- [9] Friedmann, J. (1986). [The world city hypothesis](#). *Development and Change*, 17(1):69–83.
- [10] Sassen, S. (2018). *Cities in a world economy*. Sage Publications.
- [11] Harvey, D. (2012). *Rebel cities: from the right to the city to the urban revolution*. Verso Books.
- [12] Gibson-Graham, J. K. (2008). [Diverse economies: performative practices for other worlds](#). *Progress in Human Geography*, 32(5):613–632.
- [13] De Zeeuw, H., Van Veenhuizen, R., Dubbeling, M. (2011). [The role of urban agriculture in building resilient cities in developing countries](#). *The Journal of Agricultural Science*, 149(S1):153–163.
- [14] Roy, A., AlSayyad, N. (2004). *Urban informality: Transnational perspectives from the middle East, latin America, and south Asia*. Lexington Books.
- [15] Marcuse, P., Connolly, J., Novy, J., Olivo, I., Potter, C., Steil, J. (2009). *Searching for the just city: debates in urban theory and practice*. Routledge.
- [16] Campbell, S. (1996). [Green cities, growing cities, just cities?: Urban planning and the contradictions of sustainable development](#). *Journal of the American Planning Association*, 62(3):296–312.

- [17] Fainstein, S. S. (2010). *The just city*. Cornell University Press.
- [18] McFarlane, C. (2011). [The city as a machine for learning](#). *Transactions of the Institute of British Geographers*, 36(3):360–376.
- [19] Roy, A., Ong, A. (2011). *Worlding cities: Asian experiments and the art of being global*, volume 42. John Wiley & Sons.
- [20] Labbé, D. (2016). [Critical reflections on land appropriation and alternative urbanization trajectories in periurban Vietnam](#). *Cities*, 53:150–155.
- [21] Gainsborough, M. (2013). *Vietnam: Rethinking the state*. Zed Books Ltd.
- [22] McGee, T. G. (2009). [Interrogating the production of urban space in China and Vietnam under market socialism](#). *Asia Pacific Viewpoint*, 50(2):228–246.
- [23] Kerkvliet, B. J. T. (2003). Authorities and the people: an analysis of state-society relations in Vietnam. *Postwar Vietnam: Dynamics of a transforming society*, (16):27.
- [24] Koh, D. W. H. (2006). *Wards of Hanoi*. Institute of Southeast Asian Studies.
- [25] Geertman, S. (2007). *The self-organizing city in Vietnam: processes of change and transformation in housing in Hanoi*. Technische Universiteit Eindhoven.
- [26] Brenner, N. (2013). [Theses on urbanization](#). *Public Culture*, 25(1 (69)):85–114.
- [27] Heynen, N. C., Kaika, M., Swyngedouw, E. (2006). *In the nature of cities: Urban political ecology and the politics of urban metabolism*. Taylor & Francis.
- [28] Fainstein, S. S. (2014). [The just city](#). *International Journal of Urban Sciences*, 18(1):1–18.
- [29] Ngo, T. H. (2011). Assessment of environmental impact due to land expropriation in Tay Ho District, Hanoi. Master's thesis, University of Natural Sciences, Hanoi.
- [30] (2016). *Committee of land clearance and compensation Tay Ho District*. Collected by authors during research stages.
- [31] Nguyen, V. S. (2009). [Agricultural land conversion and its effects on farmers in contemporary Vietnam](#). *Focaal*, 2009(54):106–113.
- [32] Biernacki, P., Waldorf, D. (1981). [Snowball sampling: Problems and techniques of chain referral sampling](#). *Sociological Methods & Research*, 10(2):141–163.
- [33] Charmaz, K. (2014). *Constructing grounded theory*. Sage Publications.
- [34] Comber, A., Harris, P., Quan, N., Chi, K., Hung, T., Phe, H. H. (2016). Local variation in hedonic house price, Hanoi: a spatial analysis of SQTO theory. In *International Conference on GIScience: Short paper proceedings*, volume 1, GIScience, 54–59.
- [35] DiGregorio, M. (2011). [Into the land rush: Facing the urban transition in Hanoi's western suburbs](#). *International Development Planning Review*, 33(3):293–319.
- [36] Chi, L. Q., Tu, N. T., Nga, T. Q., Aaron, V., Nam, D. H. (2017). Transformations of public space in Hanoi's Peri-urban traditional village, Vietnam. *R & D Congress on Sustainable Urbanization in the Course of ASEAN Economic Integration: Short paper proceedings*, 1(1).