Sustainability of community linkage in historic old quarters under urbanization: Case study on the neighborhood community in Gia Hoi area of Hue city, Central Vietnam

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Abstract
Though with slight ups and downs, Vietnamese economies have been flourishing for recent decades. Just like other remaining historical districts in Asia, those of Vietnam have been going through rapid urbanization and transformation. The rapid urbanization impacts on traditional living environment. This paper examines the impacts of rapid urbanization to traditional living environment and community linkage, illustrating a case study of the Gia Hoi area of the historic old district in the city of Hue in Central Vietnam. To identify the impacts, a comparative analysis is conducted between neighbors along a main street which were more impacted by urbanization and those along a small alley which were less impacted. Through the analysis of field and questionnaire surveys, it found out that socio-economic conditions, in particular, community linkage of households along main street and small alley varied significantly. It argues that in historical district, social capital is not well-spread, but rather concentrated along small allies; and small allies play an important role for sustainable community.

Keywords: community linkage, impact of urbanization, traditional living environment, historical city

1. Introduction

1.1. Background
Vietnam's economic growth has been dramatic since Doi Moi was introduced in 1987. The average annual GDP growth rate from 1994 to 2003 was about 7.4%. (World Bank 2006). In 2003 it was estimated that the urban population accounted for about 25 percent of the total population of Vietnam, and it has been forecasted that Vietnam's urban population will increase rapidly over the next 15 to 30 years - more than doubling by 2020 (World Bank 2006). The rapid urbanization has impacted on Vietnamese traditional living environment.

1.2. Research Objectives
This paper aims to examine impacts of rapid urbanization to traditional living environment in Vietnam and has conducted a case study survey in the Gia Hoi area which is an old historical district of Hue city in Central Vietnam. Through the survey, it found out that, in particular, rapid urbanization has impacted community linkage and traditional community activities have disappeared. Therefore this paper also explores sustainability of traditional community activities, illustrating a community facing on a small alley in the Gia Hoi area.

1.3. Research Methods
The case-study site is City blocks around Chi Lang st., Nguyen Du st., Hien Thanh st. and Huong River in historic old quarters of Hue city, located in the East of the Hue citadel. Chi Lang st., a main street, runs through the area. In the research site, interviews regarding basic information of living environment and measurement were conducted to 69 households from April to July 2009, and a workshop was held on 19th July 2009 ¹, in order to get more detailed residents’ opinions about living environment.

Communities there can be divided basically into the areas along the main street and small alleys. The communities along the main street, Chi Lang St., have

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been more impacted by urbanization. On the other hand, the communities along small alleys have been less urbanized. Therefore, the paper tries to identify impacts of urbanization on their living environment through comparative analysis between the communities.

2. Overview of living environment in the case-study area

2.1. Development process of the Gia Hoi area

Emigrated Chinese people arrived at Thanh Ha port and started to live in the Gia Hoi area of Hue in around 1794. After that, they developed business activities.

In 1836, eight kiosks named “Duyen Giang Bat Trang” were built. In between of these eight kiosks, new roads and commercial activities were developed rapidly. In 1838, the Ming Mang King ordered to build a new market namely Gia Hoi including 89 kiosks and 2-storey communal building of that market. In the street running perpendicularly to Cho Dinh St from Gia Hoi Bridge to Tran Binh Dai, 399 chambers of dwelling houses were built while resident volunteered to build 149 chambers. All columns were constructed by brick and each three chambers were separated by one brick wall. Row of handrail in the riverbank was also built of Dinh market moved from crossroads between Nguyen Du St and Chi Lang St, crossroads between Cao Ba Quat St and Chi Lang St to present place near by crossroads between Nguyen Gia Thieu St and Chi Lang St. In 1899, when Dong Gia market (Dong Ba at present) was moved to the present place from place within the Citadel near Dong Ba Bridge, and Truong Tien Bridge and Truong Tien Street (Tran Hung Dao at present) were established, the commercial center of Hue has been moved gradually from Gia Hoi Street to Tran Hung Dao Street as present seeing. Then, Gia Hoi is as the name of ancient quarter that is available within the new urban city. Even though the present name of the street is Chi Lang, every local people have still called the old name “Gia Hoi” because it makes people remember prosperous period of ancient Commercial Street in the past. Since the main markets were moved from Gia Hoi area to different areas, Gia Hoi area has been urbanized as not only a business area, but also a residential area.

The total population in Hue from 1998 to 2007 has gradually increased from 289,428 to 335,747, while the average density has increased from 4,077 persons per km² in 1998 to 4,729 persons per km² in 2007. In particular, urban population has increased and in 2007, population in urban areas is about six times higher than population in rural. The change of population structure implies rapid urbanization in Hue. Phu Cat ward, a part of Gia Hoi area and including the case-study area, is the most densely populated area in Hue, reaching 25,849 persons per km².

2.2. Basic Structure of the case-study area

Figure 2 is a map of the case-study area in the Gia Hoi area, and shows surveyed houses and a traditional community group “Xom”. Traditionally, each resident belongs to a local community, which is called “Xom”. Each “Xom” organizes community activities, such as Luna ceremony, worship called “Cung Xom”, visiting sick people, and providing learning opportunities for poor children.

The historical main street, Chi Lang St. runs through the area; and small alleys run in places. The area is divided by the main street, and characteristics of communities are different by street-layout. Communities along the main street have long history and have been impacted by urban development. Along the main street, 72 % of all buildings are shop-houses.

![Fig.1. Transformation of Gia Hoi area. (Adamson M. and Ejdeholm L.M. 1999)](image1)

![Fig.2. Map of the case-study area in Gia Hoi area and boundaries of local community “Xom.”](image2)
Regarding architectural style, Vietnamese traditional wooden houses and European-style buildings were built. At this moment, according to the field survey, 56% of the surveyed buildings are concrete modern housing, the wooden houses are 31%, and the European-style houses are 13%. In short, architectural style along the main street is mixed.

On the other hand, 86% of all buildings in small alleys are concrete modern housing, as these alleys were built newer, compared to housing along the main street (71% of housing along small alleys were built after 1945).

After the Vietnam War, especially after the Doi Moi policy started, many people moved into this site. In addition, after floods occurred in the 1980s, some people illegally settled behind housing along the main street. As one of the reasons, 81% of houses along the small alleys do not have a land certificate, which is called as “Red Book” in Vietnam.

Regarding income, average income among households along Chi Lang st. and small alleys varied much. Average income of households along Chi Lant st. is about 210 USD per month, average income of households along small alleys is about 110 USD per month whereby the gap is almost double.

In the last 10 years, more new residents, who came from outside Hue, moved in Chi Lang st. Moreover, new internet-cafes and shops for young people opened along Chi Lang st. As Chi Lang st. is more economically attractive, the area along Chi Lang st. is more urbanized.

Besides, the local government tries to redevelop the area along Huong River into parks or hotels, and to relocate residents living in the area to other places (“Emigration area” in Fig.2).

### 3. Urbanization Impacts on Living Environment

This section discusses the differences of living situations in Chi Lang st. and small alleys, and analyzes urbanization impacts in traditional living environment.

#### 3.1. Living Environment in a main street and small alleys

Figure 3 shows level of satisfaction with local living environment of between households along Chi Lang and small alleys. Residents along Chi Lang st. are satisfied with their houses and convenience for shopping, work, and education. However, they are not satisfied with open spaces for community relationship and playground for children.

On the other hand, residents along small alleys are satisfied with overall living environment, compared to residents along the main street. In particular, residents along small alleys are satisfied with communities and communication with neighbors.

#### 3.2. Impacting factors on Living Environment

Figure 4 shows responses to a question asking what impacts serious issues on living environment. According to the survey, the residents think increasing traffic volume, rapid urbanization and poor policies affect their living environment.

Remarkably, more residents along small alleys than those along the main street think that rapid urbanization causes serious issues on living environment. The area along small alleys is less urbanized than the area along the main street, and residents along small alleys have learnt negative impacts of urbanization from the area along the main street.

#### 3.3. Traditional community linkage

The area along the main street is more urbanized and the traditional community linkage along the main street is disappearing. Table 1 shows frequency of communication with neighbors of the residents. While most of residents in small alleys communicate with neighbors every day, at least once a month, some residents in Chi Lang st. do not communicate with neighbors at all. One of the reasons for lack of communication with neighbors in Chi Lang st. is lack of community spaces. As Figure 3 implies, there is not enough space for communication with neighbors in the main street. In addition, heavy traffic also affects residents’ communication environment.

As mentioned above, there are traditional cultural community activities in Hue, and each “Xom” organizes community activities, such as Luna...
ceremony and worshipping, called as “Cung Xom”. Cung Xom was originally introduced by Chinese people and Cung Xom has become one of the most important community activities for community linkage.

However, according to the survey\(^4\), 88% of residents in the main street no longer participate in Cung Xom. This is because that people who had come from outside for their business are not interested in traditional community activities, there is no community space for Cung Xom, and it is difficult organize it in the architectural style along the main street of tube house. Therefore, they only organize worshipping activity in their home by themselves. Accordingly, traditional community activities in Chi Lang St. seem to be disappearing.

Table 1. Frequency of communication with neighbors of the respondents on Chi Lang st. and small alleys.

<table>
<thead>
<tr>
<th>Frequency of Communication</th>
<th>Chi Lang St.</th>
<th>Small alleys</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than three times a day</td>
<td>20%</td>
<td>42%</td>
</tr>
<tr>
<td>A few times a day</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>A few times a week</td>
<td>27%</td>
<td>19%</td>
</tr>
<tr>
<td>A few times a month</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>A few times a year</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Zero</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>

4. Case-study of Sustainable Community Linkage in Xom 4

This section focuses on Xom 4, one of five Xom in the area and tries to explore sustainability of community linkage, illustrating transformation of Xom and ways of using spaces for community activities of Xom.

4.1. Historical Background and Transformation of Xom 4

Figure 6 shows transformation of Xom 4. The original owner of this land of Xom 4 is father of Mr. Ton That Buu Lieu. His family is descendent of royal family (Nguyen Dynasty). In 1934, the original owner built a private antenatal clinic. The building facing main street was 5-chambers building with function of each chamber. The middle chambers have remained as the gate of Xom 4 (Fig.5). In 1939, the original owner built a 2-storey house on the right side of the land and a kitchen next the house.

In 1975, the Vietnam War ended and Vietnam was unified. As most of the members of the original owner’s family belonged to the old government, it was hard for them to live there. In 1978, the present owner, Mr. Lieu, divided the land into 2 parts with a border line crossing on Plantae tree.

He donated the left part except one of garages facing Chi Lang st. to the government, while the right part and the garage was under his ownership. Even though the left part has belonged to the government since 1978, if someone wants to live in this land, it is necessary to ask for permission of Mr. Lieu.

At that time, the front 5-chambers building was destroyed, and the other buildings of the clinic became dwelling houses. In 1980s, several floods occurred and some people came to live there for preventing from the floods. All of the new residents used common kitchen and toilet near the Plantae tree. At that time, Mr. Lieu renovated the old kitchen next his house and built a house for his first-born son.

In the period of 1990s, the six daughter of Mr. Lieu got married and she built a house in a place of the garage for her new family. And then, she extended the house to the piece 7. Mr. Su Duy Be bought the piece 6 and built his house. Besides, the owner of dwelling house 1, Mrs. Dang Thi Phuoc extended to the piece 5 and rebuilt her house. Other persons bought the lands of the piece 8 and 9 for building their houses as well. In the late 1990s, the third daughter of Mr. Lieu, Mrs. Ton Nu Phuong Trang, went to live in the house of the piece 1, and the first son’s family went to live in another place.

In years of early 2000s, family of Mrs. Ton Nu Phuong Trang built and lived in a new house on the piece 2, and her younger brother (the eighth son of Mr. Lieu named Ton That Vinh Sang) went to lived in her old house on the piece 1. At that time, Mr. Lieu also sold piece 3 and 4 to other persons with cheap price.

In 2005, Mr. Le Tinh, who came from Nam Dong District, bought the piece of the old common toilet and also gave some money to Mr. Lieu for his permission. Mr. Le Tinh built his new 3-storey house, and Mr. Lieu used that money for constructing new private toilets for all residents in the land. At that time, Mrs. Ho Thi Luong came to buy and build new house for her family.

4.2. Function of Small Alleys for Community Activities

There are 15 households that live in Xom 4 community (Fig. 6 and Fig.7). In “Xom 4”, the width of the alley is small enough (less than 2m) to create a convenient space for community activities among residents. They share information, communicate with neighbors, and cooperate each other, when someone needs helps in Xom 4. The small alley among those households serves as multi-functions. The alley can be the place for children’s playground, recreation and exercise of residents, chatting, having meal, and small markets (Fig.8). The residents often sit in the small alleys, and it is almost like a big living room of the community.

As one of the most important community activities, the alley among Xom 4 is used a space for organizing “cung xom” activity two times per year\(^5\).
Fig. 6. Transformation of floor plan of Xom 4 from 1934 to 1978, and the floor plan in 2010.

Fig. 7. Façade of Xom 4 in 2010 (in relation to the floor plan in 2010).
Firstly, all households contribute money to the wife of Mr. Lieu every three months. Before the ceremony, the wife of Mr. Lieu and other wives together go to market and buy something for preparation. The place for happening ceremony is in the middle of the alley near by the Plantae tree. Mr. Lieu is the first person, who comes to pray for healthy, prosperous and so on. Then, other husbands gradually come to pray. After the offering, food is divided and offered to each household and representative of each household come to the house of Mr. Lieu for gathering, chatting, drinking, discussing and sharing their information related to the life, living condition, job and so on.

Fig.8. Xom 4 community’s use of the small alley for their community activities.

5. Conclusion

The Gia Hoi area, historic old quarters of Hue has been urbanized as economic commercial district. Independence of Vietnam and end of the war impacted the area. After the Doi Moi policy was introduced, Vietnam has been seeking to expand their economic activities more and more, which has impacted their traditional living environment even more.

Urbanization impacts traditional living environment, such as architectural style from wooden to concrete and community space; and causes economic gap and the socially vulnerable such us households without the Red Book and people who has to move for the government’s relocation policy. In particular, traditional community linkage has been impacted. Historically, there is a community group “Xom” and each Xom organizes community activities. However, as rapid urbanization has impacted and some people are only interested in economic activities, the traditional community activities and community linkage are disappearing.

One of the reasons is lack of community space. Transport volume has increased and occupied streets, and people try to build as many shops and houses as possible. As a result, open spaces for communication and community activities are decreasing. Earlier, people used to organize worships with neighbors, but they now tend to organize them in their house by themselves.

On the other hand, communities with small alleys still organize the community activities where the community linkage is sustained. This is because small alleys play an important role of community space.

Learned from the case of Xom 4, Xom consists of not only families and relatives, but also outsiders, and a leader of Xom manages his/her Xom’s activities. The small alley plays a very important role of the space for community activities, children’s playground and chatting with neighbors.

Community linkage is leading to cooperate each other, help the socially vulnerable, reduce damages of flooding and crime through community cooperation, and very important for sustainable development. However, through the survey, it is found that increased transport volume has occupied spaces for community activities, rapid urbanization and pursue of economic development has impacted declination of traditional community linkage in Vietnam. In order to sustain community linkage, it is necessary to secure community spaces including small alleys.

6. Notes

1) The field surveys, interviews and the workshop were conducted by a research team of Kyoto University and Hue University in a research project “Study on urban impacts to living environment in old historic quarters of Vietnam” under the Kyoto University GCOE Program “Global Center for Education and Research on Human Security Engineering for Asian Megacities”
2) Some people lost the Red Book during the war and flooding, other than people settled down illegally without Red Book.
3) Figure 3, Figure 4 and Table 1 are the survey results from 69 households of which 32 come from the main street community, 28 from the small alley, and the remaining 9 households did not answer the survey.
4) The survey about Cung Xom in Chi Lang St. was conducted to 24 households additionally in August 2010.
5) “Cung Xom” is worshipping the Heaven and the Earth and organized on 23th May and in welcoming Tet holidays

7. References

1) Adamson M. and Ejdeholm L.M. (1999), At the Heart of Hue: Assessment of the Public Spaces along the Son Huong, Department of Architecture, Lund Institute

Acknowledgement

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