Van Quan new town in Hanoi and its socio-economic impacts on the four surrounding villages - towards a more sustainable urban development

Quang Minh Nguyen\textsuperscript{1}, The Trung Doan\textsuperscript{1}, Minh Tung Tran\textsuperscript{1}, Manh Tri Nguyen\textsuperscript{1} and Quynh Hoa Ta\textsuperscript{1}

\textsuperscript{1}National University of Civil Engineering, 55 Giai Phong road, Hanoi, Vietnam

Abstract. Developed by Housing and Urban Development Corporation (HUD) over a decade ago as one of the pioneering and modelling urban housing projects in Hanoi, Van Quan new town can be regarded as a fairly successful scheme, because it provides people with a better living quality than most of the other new residential quarters planned and built at the same time, and even afterwards. However, the success would be greater, if the project developer paid due attention to some socio-economic aspects of mass housing construction - such as income, education, healthcare and social interaction as well as communication - in one of the city’s fastest-growing and most typical areas characterised with the presence of traditional old villages where a rich rural culture can still be found and should be conserved in the rapid urbanisation and modernisation. Van Quan makes an even more remarkable case study, because there are four villages connected to the site with both similar and different features, rather than the other new towns with only one or two villages nearby. The research results drawn and the lessons learnt from Van Quan will be useful for other projects, as far as a harmony and a sustainable development between the old and the new factors are concerned.

1. Introduction

“New town” has been a different living concept in major cities in Vietnam from all the past models, even the closest one widely known as “socialist collective housing area” in the 1960’s and 1970’s (in the north) and in the 1980’s (across the country) until the Renovation Policy came in late 1986. The most notable difference could be seen in the policy-making and the management system, as new town projects are run in the market economy where housing is recognised as an official market shared by both state and private providers, instead of only by state companies before. Another bold step is noted in the change of housing development from “plan-based” into “project-based”. Developed by Housing and Urban Development Corporation (HUD), Linh Dam new town started in 1997 as the pilot project in Hanoi. Looking back at the 20 years of new town development, it is possible to confirm the advantages of this new living concept: shaping a brand-new image for a city, creating a better living environment, supplying a large number of housing units within a short time and offering good services to the residents. In general, new town is still a popular option for many people in cities today, despite of the fact that not every new town project is positively assessed. It seems that urban development managers in Vietnam have succeeded in trying to incorporate housing fabrication into complete and complex projects in view of function. This intention is even demonstrated with the effort of putting modernisation into universalisation by means of stakeholders (i. e. real estate corporations) in place of spontaneously building houses on a small scale (self-built houses) which can be difficult to control.
In order to support the development of a brand-new living concept, the National Assembly and state-owned agencies made a series of laws and policies in the 1990’s and the 2000’s, such as Housing Act passed in 1991, Land Law adopted in 1993, adjusted in 1998 and supplemented in 2001, Housing Law promulgated in 2005 and modified in 2009 and New Town Regulation enforced in 1996. In addition, the private housing ownership and then the transfer in land-use and real-estate rights have been accepted.

A broader context of new towns in Hanoi and the establishment of Van Quan as one of hundreds of new towns can be illustrated in Figure 1.

**Figure 1.** Diagram of new town development in Hanoi over the past 20 years. [1]
In terms of spatial planning, new towns have been constructed on the basis of synchronisation of the following three key factors: 1. Technical infrastructure, 2. Social infrastructure and 3. Housing units. One typical new town may be identified with four fundamental characteristics: 1. New elements in spatial urban design, 2. Relative independence of the city in terms of daily activities, 3. Systematic planning of infrastructure and 4. Specific structure of urban space [2]. Thus, theoretically, one new town can be regarded as a complete settlement that has its own lifestyle and is relatively independent of the city as well as its neighbouring residential areas. This independence enables that new town to self-provide everyday life services for local residents to a certain extent. Nevertheless, it may bring about an interruption in the relationship between that new town and some (or all) of the old villages nearby. Consequently, “break points” in both space and lifestyle are likely to happen. In order to attract a greater number of home buyers, that project developer has heavily invested in advertisement programmes. In the current project management system, the developer is merely responsible for internal affairs and not interested in anything else outside the boundary of such a project. As a result, just a simple mixture of living quarters or housing patterns has been created and that may not meet the needs of the inhabitants. A city developed this way lacks connection and communication. A symbiosis of old and new elements as a higher requirement seems to be out of reach.

Initially, in order to acquire land for new towns, the city authority decided to transform farmland in peri-urban areas into living quarters around existing urban cores. On the one hand, this initiative helps reduce the land price as an input of the subsequent urban development process. On the other hand, it may accelerate the urbanisation rate by enlarging the urban living space and hereby strengthening the attraction of new towns through physical aspects, such as size and population with some modern facilities. Most of the new towns have been located in peri-urban areas and surrounded by traditional villages where people still live on farming or handicrafts. A profound change in the fabric and land use within and around a project site can be clearly seen. Paddy fields and vegetable farms have been replaced by new urban housing blocks with a high building density and busy commercial streets. In other words, in the same territory, two seemingly opposite lifestyles coexist: new towns represent a modern and civilised lifestyle while traditional villages stand for a so-called “self-transformation” from old to new models under the strong impacts of urbanisation in general, and directly from the adjacent new towns in particular.

2. Looking back at the beginning of new towns for a better understanding

In 2016, the research team helped Assoc. Prof. Dr. Danielle Labbé from the University of Montréal as a member of a Canadian - Vietnamese new town research network conduct intensive interviews with six experts and professionals who were directly involved in the preparation for the planning and building of new towns in the early 1990’s to understand much better the beginning of an important decision that would reshape the landscape of urban housing development in Hanoi. The main interview contents are summarised in Box 1 to Box 5.

| Box 1. Interview with Mr. Ngoc Chinh Tran and Dr. Thu Thanh Ngo - Vietnam Association of Urban Planning and Development. [3] |
|---|

In the pre-1986 period (commonly known as subsidised economy planned and centrally directed by the government), urban housing was entirely constructed, allocated and managed by the state on the basis of norm-based distribution. The shift in the policy towards an open market economy in which the private sector was officially accepted for the first time paved the way for a revolution in mind set and viewpoint regarding the investment and development in housing for city inhabitants whose housing demand had been held back for decades - before, during and after the war.

In 1996, Ciputra became the first joint-venture project in partnership with one Indonesian corporation ever approved by the city authority. From Ciputra project, there were some lessons learnt: providing decent housing for middle-class to high-income residents was considered an advantage while the shortcomings in operation, land rental mechanism and land-use right could not be ignored.
Box 2. Interview with Mr. Ngoc Nghiem Dao - Chief Architect of Hanoi City. [3]

The First National Congress on Urban Planning and Development in 1990 proposed a number of new requirements for a radical change in urban planning orientation, city construction and housing development management for city inhabitants.

In 1991, the state promulgated a Housing Act in which housing ownership would be recognised and legally protected. In addition, the participation of individuals and private organisations in housing development was encouraged. Thus, 1991 Housing Act made a significant re-direction in urban housing development policy, for instance the socialisation of housing development could be supported. Enterprises were allowed to invest in new living quarters designed in new town concepts for city inhabitants. This change in policy making came from reality and complied with the rules in social development.

The reform of Land Law in 1993 also resulted in a new housing policy. The 1993 Land Law began to separate urban land-use management rural land-use management which were both controlled by the Ministry of Agriculture. In this watershed law, land should be divided into two categories: farmland and urban land. One crucial adjustment in 1993 Land Law was that urban land would be discretely managed. One year later, the Prime Minister approved of the management in building investment whereby urban management, especially in urban planning, could be clearly determined.

The Second National Congress on Urban Planning and Development in 1995 adopted important changes in the orientation for urban planning and management. The national network of towns and cities expanded quickly in both land coverage and population size on account of an improved economy. The Prime Minister approved of the orientation for planning all the cities and towns nationwide and the adjustment in planning of Hanoi and Ho Chi Minh city. A variety of management and development policies for cities and towns has been quite comprehensively drafted and issued to attract more investment capital sources for building (including housing) projects. Another remarkable trend in urban planning was the changing role of stakeholders in the establishment, approval and implementation of planning projects in which the importance of private sectors would be emphasised. Also, the term “new urban area” or “new town” was used for the first time in 1995, when Hanoi began to realise the reverse side of the massive and spontaneous development of row-houses that spoilt the cityscape. The definition of “new urban area” or “new town” became officially endorsed with Decree No. 52/1999/ND-CP dated on July 8th 1999. According to this decree, “new urban area” or “new town” is a project-based new living quarter constructed as planned with a complete infrastructure system and connected with an existing city or town.

Box 3. Interview with Prof. Dr. Dinh Viet Pham - National University of Civil Engineering. [3]

The Master Plan for Hanoi re-adjusted in 1998 took some revisions in both orientation and strategy: the city development should be based on both sides of the Red River with some industrial parks in the suburbs. In traffic planning, there would be three city ring roads while urban housing development was put to the forefront of the city development.

With regard to living concepts, most of the new housing projects between 1992 and 1998 were small in size (less than two hectares, primarily constructed for state officers, using the capitals from both the state and state-owned agencies, with a partial contribution from the public) and those new housing projects failed to go in line with social/technical infrastructure systems. The following shortcomings of this kind of development might be noted: low-rise row houses made up an overwhelming part of all urban housing programmes up to that point of time, with inefficient land-use factor and consequently no balance between social and technical infrastructure could ever be achieved.

Box 4. Interview with Mr. Trung Hieu Tran - Housing and Urban Development Corporation. [3]

Before 1998, the construction of new urban areas in Hanoi was rather limited to mini-projects as an exploration of the public demand. Typical new urban areas in that period, such as Linh Dam, Dinh
Cong, Trung Yen, Dai Kim, Nghia Do, etc. started to be planned and built on a small scale in terms of investment and with a mix of row-rise and high-rise housing types. Enterprises just focused on the investment in housing construction while the city authority was responsible for technical infrastructure development. Therefore, the city authority insisted that all housing developers should invest properly in technical infrastructure systems in accordance with housing quality to ensure a high living standard for all city inhabitants.

Box 5. Interview with Dr. Huu Phe Hoang - VINACONEX Corporation. [3]

From 1998 to 2001: this period started with Decision No. 108/1998/QD-TTg dated June 20th 1998 by the Prime Minister and ended up with Decision No. 123/2001/QD-UBND dated December 6th 2001 by Hanoi City People’s Committee on the promulgation of the principles in investment and development of new urban areas, as well as housing renovation and improvement in Hanoi. These official documents determined the sharing of land for housing construction: approximately 60% for high-rise apartment buildings and 40% for villas and garden houses. The construction of new tube houses was not permitted.

The years 2001 to 2008: After Decision No. 123/2001/QD-TTg took effect, new urban areas were developed on the basis of the aforementioned land-use sharing. The planning of technical and social infrastructure systems as well as facilities for users in consideration of population size in each new urban area would be carried out, for instance in Trung Van (Tu Liem district in 2003), Sai Dong (Long Bien district in 2004), Nghia Do (Cau Giay district in 2004) and other areas from 2005 onwards. In typical projects, such as Linh Dam, South Thang Long, Trung Hoa - Nhan Chinh, Cau Giay, Me Tri, Viet Hung, etc., new building technologies were applied for high-rise apartment building construction. These new towns were regarded as modelling examples in terms of modern and comfortable living environment, in sharp contrast to poor housing quality in old collective residential quarters (in Kim Lien, Trung Tu and Giang Vo) or overcrowded and chaotic with low-rise self-built houses. Decree No.2/2006/ND-CP dated on January 5th 2006 was enacted and the regulations specifically for new towns were drawn up. A new town project was defined as "an investment project in the construction of a well-planned urban area with both technical and social infrastructure systems that will serve living quarters and public service buildings. It may be a continuity of an existing urban area or an independent part of a city with its own boundary and function determined in accordance with the city planning approved by a competent state agency”.

From 2008 to date: Based on the Overall City Development Planning for Hanoi approved by the Prime Minister with Decision No. 1259/QD-TTg dated July 26th 2011, the zoning plan for urban districts (scale 1:2000) and for rural districts (scale 1:5000) previously approved in the 2000 - 2006 period referred to the size of a new urban area (from 20 to 200 ha) and the location (usually along main city roads). Other aspects included land-use planning, landscape architecture and technical/social infrastructure planning.

3. An in-depth view of Van Quan new town

Located in the southwest of Hanoi, 11 km from the city centre and just 2 km from Ha Dong district centre, Van Quan new town is accessible by car, by motorbike and by taxi from National Highway No. 6 (Nguyen Trai street) on the northwest side and from Provincial Road No. 70A (Phung Hung road) on the southwest side. Nguyen Trai street is noted for its heavy traffic flow and as one of the busiest bus routes in Hanoi with nine bus lines (No. 1, 2, 19, 21, 22, 27, 37, 39 and 57) and three bus stops near Van Quan new town. Along Nguyen Trai road, a sky train project is still under construction. So in the near future, it will be possible to go to Van Quan by tram.

Van Quan belongs to the second generation of new urban area development in Hanoi established a few years before 2006 - the year marked with the promulgation of development regulations applicable to new towns. That was a boiling period for all real estate enterprises and housing providers in the market as they had to cope with huge challenges caused by such a major change in policy making. Many companies embarked on developing new urban areas without any preparation or experience.
As a leading corporation, HUD eventually selected Van Quan - a new ward of Ha Dong town, which used to be an administrative centre of the former province of Ha Tay (currently becoming Ha Dong district of Hanoi city) - for a large modern housing project to begin a new phase of housing development. This location is actually quite strategic and realistic, because it is not so far from Hanoi city centre (for an effective management) and close enough (for easy access). In fact, Van Quan was the first site in Ha Dong district to be chosen and regarded as one of the kick-off projects for warming up the housing market in the southwest of Hanoi. Started in 2003, Van Quan today covers an area of 61 ha and provides home to approximately 14,000 inhabitants. Along with 1,412 row-houses and villas, there are three high-rise apartment buildings (over 25 storeys) and ten multi-storey residential blocks (11 to 21 storeys), providing 1,229 apartments. The total housing floor area exceeds 450,000 m² (32 m² per person) [5].

Over the last 15 years, Van Quan new town has been developed step-by-step and major changes can be found in some places: the boundary and total land area have been modified several times due to the difficulty in farmland acquisition for new town building purpose and for other reasons, part of the central public park has been used for restaurants and clubs, two six-storey apartment buildings have eventually become 27 and 30 storeys, some land plots initially planned for public buildings have been transformed into high-density housing areas, etc. As of 2017, it was still difficult to identify the final physical boundary of Van Quan new town, because the adjustments have not yet been updated on the map, and in reality, the boundary takes five different forms as follows:

- **Road only:** Normally, this is the edge of a village with a narrow road running parallel with that edge. When a new town is constructed, this road is turned into a clear boundary without buildings between an old village and a new town;
- **Road with houses (usually row-houses):** This is often an area planned for resettlement or relocation in a depopulation plan. This road will soon become a new street with shop-houses on both sides built with a certain number of housing patterns approved. As a result, an architecturally nice street can be designed in a good harmony with the surrounding areas;

**Figure 2.** Van Quan new town and the four adjacent old villages. [4]
- Houses only (row-houses in most cases): There is sometimes a conflict in functions, leading to the lack of activities along this edge;
- Public buildings (often the back façades/sides of the buildings): The boundary will then play the role of an enclosure wall, hereby creating no connection at all;
- Open places (possibly pagodas or public spaces with precincts in old villages, or grassland): This kind of boundary is quite flexible in enlarging or prolongating the space, and therefore highly applicable to fixing the boundary.

Surrounded by four villages (Trieu Khuc, Yen Xa, Yen Phuc and Van Quan), Van Quan new town makes a special case study and promises to give an interesting example of how a new town will interact with many adjacent villages at the same time. Both spatial and social transformations can be seen here and interpreted in an interdisciplinary approach. After almost 20 years, Van Quan has now become a populous and busy residential quarter, denoting that the project developer has succeeded in shaping a new concept for attractive living environment in a period when a majority of city inhabitants turned their back on high-rise housing because of errors in the management system. But the counter-effect cannot be ignored and thus it will require a thorough investigation. Land use, handicrafts, traditional rural lifestyles and customs, landscape, vernacular architecture and culture have either considerably or dramatically changed within a short time as a consequence of the rapid urbanisation reaching the area.

![Van Quan new town and the four adjacent villages over the years](image)

**Figure 3.** Transformation of Van Quan new town and the four adjacent villages over the years. [6]

### 4. Urban development in view of rural residents

The success of a new town project can be best measured in the level of satisfaction of its residents. However, the opinions of those living in the neighbouring area are also important and will be included in the evaluation of a new town development. In total, there are five categories related to the socio-economic development and facilities to investigate (Economy, education, healthcare, commerce and entertainment), and 308 inhabitants participated in the interviews (93 in Trieu Khuc village, 89 in Van Quan village, 75 in Yen Phuc village and 51 in Yen Xa village).
Table 1. Public opinions in four old villages under the impact of Van Quan new town. [7]

| Category | Quan Village | Economy | Education | Healthcare | Commerce | Entertainment |
|----------|--------------|---------|-----------|------------|----------|---------------|
|          | + | 0 | - | + | 0 | - | + | 0 | - | + | 0 | - |
| Trieu Khuc | % | 53.8 | 33.3 | 12.9 | 83.8 | 10.8 | 5.4 | 62.4 | 23.6 | 14.0 | 72.0 | 18.3 | 9.7 | 60.3 | 15.0 | 24.7 |
| Van Quan | % | 64.0 | 30.4 | 5.6 | 84.3 | 11.2 | 4.5 | 74.2 | 24.7 | 1.1 | 82.0 | 12.4 | 5.6 | 78.7 | 11.2 | 10.1 |
| Yen Phuc | % | 69.4 | 29.3 | 1.3 | 88.0 | 10.7 | 1.3 | 84.0 | 16.0 | 0.0 | 88.0 | 8.0 | 4.0 | 74.7 | 9.3 | 16.0 |
| Yen Xa | % | 74.5 | 23.5 | 2.0 | 80.4 | 17.6 | 2.0 | 76.5 | 19.6 | 3.9 | 64.7 | 25.5 | 9.8 | 62.8 | 33.3 | 3.9 |
| Total | % | 64.0 | 29.9 | 6.1 | 84.4 | 12.0 | 3.6 | 73.4 | 21.3 | 31.3 | 77.6 | 15.3 | 7.1 | 69.5 | 15.6 | 14.9 |

Note: (+) better than before (0) unchanged, the same as before (−) worse than before

Figure 4. Graphic presentation of interview data. [8]

4.1. Economy
According to the statistics, 64% of the interviewed local residents in the four villages say that their income has been higher since the inauguration of Van Quan new town (Group 1) while 29.9% assume that their income stays the same (Group 2) and only 6.1% complain that they earn less money than they did before (Group 3).

Most of the people in Group 3 live in Trieu Khuc village (12 out of 19) and Van Quan village (5 out of 19). It is apparent that villagers in Yen Phuc and Yen Xa have gained more benefits from Van Quan new town project than those in the other two villages. Further studies reveal that most people in Group 1 are over 50 years old whose farmland has been entirely or partially confiscated for the
construction of Van Quan new town. The remaining farmland area is too small, segmented, no longer fertile and even polluted by waste, therefore inappropriate for agriculture. Furthermore, watering is insufficient as the local irrigation systems do not work. Crops, if still cultivated, would be frequently destroyed by a larger number of rats in the field. In this circumstance, some farmers who still have farmland decided to stop cultivating and used the land for another purpose, such as car parking or temporary keeping building materials for the construction site. Those aged farmers are not as dynamic or versatile as the adolescents in finding new jobs when they no longer work in agriculture. Over 68\% of the young people between 20 and 40 years old are satisfied with their higher income and the rest (approximately 32\%) belong to Group 2, denoting that young people can adapt themselves quickly and more easily to major changes when their villages are urbanised. They are ready to attend professional training courses and meet the requirement in qualifications. In terms of occupation, workers and state officers are not so much affected by the establishment and development of Van Quan new town while farmers are among the underprivileged group in the course of urbanisation. After their farmland was confiscated, the farmers invested all or part of the compensation in certain kinds of small daily service, for example opening greengrocery shops and selling miscellaneous goods, which do not require a large initial capital investment. Some of their customers come from Van Quan new town and the others are their neighbours. Many villagers realised that building houses for rent would be highly profitable. Only by spending a modest amount of money from the compensation they have received before can they win a real fortune. The demand is always high, because the area is close to several universities and factories which attract many migrant students and workers. With a large garden area, about 300 m\(^2\), a family in Yen Phuc village kept 100 m\(^2\) in the middle for the family use and built ten rooms for rent (16 m\(^2\) per room) in the front part of the garden. The landlord can monthly earn 15 million VND (660 USD) from rental fees and regain the initial investment in less than two years [9].

4.2. Education

Education is a great concern in Vietnam today, particularly in major cities. Parents always emphasise the importance of education and would like their children to graduate from university as the minimum requirement of qualification for a future well-paid job. Before Van Quan new town was built, there were some village schools in the area which did not offer children good facilities due to the limit of budget. Village teachers might not be as well qualified as those in central districts. Therefore, the quality of education was somehow influenced. However, a village school outperforms a city school in terms of having a larger playground with more trees. As a modelling project, Van Quan new town provides a better schooling even for village children. The survey shows that people in all four villages are content with the education opportunity that Van Quan new town has brought to them.

Out of 308 villagers, 260 (84.4\%) agreed that the impact in education is positive, with better facilities, higher qualification of teachers and more beautiful school architecture. Their children or grandchildren have been accepted into new town schools. Those who continue to go to village schools are happy about the improvement in both quality and equipment. Most people have found that the roads to schools are upgraded for easy access. The ground floor has been elevated to avoid flooding, and new drainage systems have also been constructed in some streets and alleys. The levels of public satisfaction of schools in Trieu Khuc, Van Quan, Yen Phuc and Yen Xa are 83.8\%, 84.3\%, 88.0\% and 80.4\% respectively. The differences among the four villages in this case are minor [9].

There are 11 interviewees (3.6\%) saying that the conditions for education become worse, most notably in Trieu Khuc village and Van Quan village (9 out of 11 cases). The main reasons for this negative conclusion are that they have to go a longer way to bring their children to school and pick them up again from school. The traffic congestions as they often encounter on the way make them feel inconvenient. School fees increase while they earn less money than they did before. These people come from a marginalised group (low-income farmers whose farmland has been confiscated). They received an amount of compensation from the project developer via the local authority without any assistance in shifting for their future jobs as well as for their earning. The neutral group consists of 37 residents (12\%) and distribute quite evenly among the four villages: Trieu Khuc (10), Van Quan (10), Yen Phuc (8) and Yen Xa (8). In their opinion, the advantages and the disadvantages weigh equally, and basically there is no change [9].
4.3. Healthcare

Generally speaking, most of villagers in Trieu Khuc, Van Quan, Yen Phuc and Yen Xa are satisfied with the healthcare service today, as clearly reflected in the statistics. The highest level of satisfaction is noted in the case of Yen Phuc village (84.0%). Nobody feels that the local healthcare system and service quality at present are worse than in the past. In Yen Xa village, Van Quan village and Trieu Khuc village, the feedback is quite positive, 76.5%, 74.2% and 62.4% respectively. In healthcare sector, it seems that Van Quan new town has a good impact on the neighbouring villages, just like in terms of education [9].

New and modern medical centres recently built in and next to the villages together with the open treatment/health check-up policy explain why village people feel pleased with the service quality. Another convincing reason is the accessibility of the medical centres. However, when compared the locations of the medical centres within the area, it may suggest a new outlook. The investigation into the hospitals and clinics within 3 km from Van Quan lake proves that there are only two private clinics in Van Quan new town whereas ten are located in the four old villages. The others are built outside Van Quan new town. In other words, it looks as if the number of new medical centres and the access roads did not depend on the establishment and development of Van Quan new town. Moreover, taking into consideration of the dissatisfaction rate of service users, Yen Phuc village and Van Quan village are the lowest, 0.0% and 1.1% respectively. On the map, it is possible to see that these two villages are located along two main roads: Nguyen Trai road and Phung Hung road (70A road) which were constructed and/or upgraded in the early 2000’s, thus not largely depending on the development of Van Quan new town. In the surrounding area, some of the most important hospitals can be found, for instance 103 Hospital (Army Hospital), National Institute of Burns and Hospital of Cancer No. 2. The dissatisfaction percentage in Trieu Khuc village is much higher - 14%, focusing on expensive hospital costs. This is only a question of income, and for some villagers the level of income has considerably decreased since 2007, when Van Quan new town welcomed its first inhabitants. This might be seen as an indirect consequence of Van Quan new town for the neighbouring villages [9].

4.4. Commerce

Residents may argue about the options or hesitate to give an answer to a question in other social aspects, but in commerce there is a remarkable convergence of opinions. The statistics show that an overwhelming majority of inhabitants appreciates commercial amenities and relies on the service quality, especially in Yen Phuc (88.0%) and Van Quan (82.0%). This can be demonstrated in the busy commercial activities, not only in each living quarter, but also in the bordering areas of Van Quan new town and adjacent old villages. In the other two villages - Trieu Khuc and Yen Xa - some people think that a supermarket stands for a modern and civilised city life and they like to go there, but they can hardly buy anything, because the prices are much higher than their spending power. Van Quan new town seems like a different world to them. Hence, it is understandable that only 64.7% of the surveyed people in Yen Xa village and 72.0% in Trieu Khuc village feel happy about the change. The rate of critical thinking is approximately 10% in each case [9].

The existing markets are often planned in the heart or along some main roads of a village, providing all kinds of goods for villagers. A wholesale market called “Van Quan night market for agricultural products” has taken place since 2008 in an open-air area (8,000 m²) amid Trieu Khuc village, Yen Xa village and Van Quan new town. Over 300 households do their business there. Although it is named a “night market”, it is also open at day as a residential market, serving local people and other residents from other settlements. With a strategic location and a large area, including parking lots and unloading areas, selling many kinds of goods as diverse as vegetables, meat, sea food, clothes and household wares, the market has always been busy and even become an “informal gate” for many residents [9].

This “informal gate” can be seen in the way people make a shortcut from their villages to the market. The previous paths between paddy fields made of rammed earth have been concreted, joining the villages to the market and connecting two villages together. Such a spontaneous development is nevertheless quite realistic, offering local people a much more convenient approach to the regional market where low-income people can buy popular food and household items at cheap prices.
A big Vinmart within the podium of a high-rise apartment building in Van Quan new town provides both the townsmen and the villagers with a perfect choice for high-quality commodities and modern products. That is why there is no need to build any other supermarket in the area. But mini-markets and convenience stores in street houses have been widely developed in the new town and in the villages as well which provide more shopping options. They often specialise in some certain kinds of goods, for example kid toys, candies and confections, fashion and garment, etc. In the villages, most of the convenience stores can be found along the village main roads.

It is apparent that Van Quan new town helps accelerate the delivery of various urban services, for example gastronomy, café, beauty salon, fitness training and English learning, etc. Sometimes, these services are concentrated in one street or one quarter, forming a complex of service buildings. Some other services are also available, for instance banking, office for rent and DNA testing centre. Normally, these services are “integrated” into the podium of a tower, the front room of a street house or even an entire ground floor of a villa in Van Quan new town.

In the bordering areas of Van Quan new town and the four surrounding villages, there are many agri-land plots transferred into urban housing land but still left unused. Urban farming concept shall not be applied. Instead, people are making full use of these land plots for certain purposes, for example car parking, car repair and washing, selling of building materials and growing flowers or ornamental trees. A few land plots are temporarily used as warehouses and handicraft workshops.

With convenience and quality, all the above-mentioned daily life services account for the satisfaction of villagers as beneficiaries. In addition to providing services and gaining benefits, the communication between sellers and buyers, particularly between townsmen and villagers, can be maximised. By means of social contact, they will be able to better understand each other’s needs, preferences and lifestyles. This is important to achieve social sustainability.

4.5. Entertainment

A recent sociological survey reveals that villagers have had better access to public entertainment since Van Quan new town was built. In fact, 69.5% of the villagers agree with this. But the rate of satisfaction varies from village to village. Once again, Van Quan and Yen Phuc came first and second, with 78.7% and 74.7% respectively. The main reason is that some new clubs and entertainment centres have been in use over the past ten years. In Van Quan new town, one swimming pool, two tennis courts and one fitness centre have been built. Villagers can come, but not many of them are ready or happy to join, as they do not find the “sharing” in behaviour of townsmen or feel hesitant about the membership fees. This rate is lower, just 62.8% in Yen Xa and 60.3% in Trieu Khuc. If the current problems in traffic connections and social contact are solved, most notably in Trieu Khuc village, more local people, especially those living in the core, will take advantage of the development [9].

Most of the 14.9% of the villagers who suppose that they have fewer opportunities to gain access to entertainment services prefer that such services should be also available in their villages, not only in Van Quan new town. Public places in all four villages fail to meet the local people’s needs, with only one simple and small cultural house in the middle of each village. If constructed, these new public places require a much better design, more modern facilities and an effective management system to ensure that the activities will be attractive and frequently organised [9].

Traditional villages symbolise the great cultural values of the Vietnamese coming down from generation to generation. In terms of culture, villages can be regarded as a miniature of the Vietnamese rural society and noted for having created a sustainable living environment in which spatial planning and social systems are closely connected. In one typical village, there are always public places for the local people to meet and to take part in many festivals throughout the year. A nice community house in the middle of a large yard with beautiful landscape is the most outstanding space in the village. Additionally, the villagers have a number of religious buildings, such as pagodas, shrines and temples for ceremonies and activities. The other special features include a village gate, a village market, a village water well, a village pond, a river boat harbour, etc. In all four villages - Trieu Khuc, Yen Xa, Yen Phuc and Van Quan - many of these symbolic buildings and sites still remain today. The communal buildings and activities have made a significant contribution to the conservation and promotion of the village culture, apart from meeting the needs of the local people for entertainment.
However, in the rapid urbanisation and the dynamic market economy, these heritage assets are threatened. Public places in all the four villages have been illegally occupied for various purposes. This negative trend, together with the non-original conservation or restoration of old public buildings, has led to the fading of cultural values and communal activities.

5. Conclusion: Looking forward to a more sustainable future development

The past ten years (2007 - 2017) should be considered Phase One of a multi-episode story about Van Quan new town as a special case study of new town development in Hanoi. The challenges between the old villages and the new town have been quite clearly reflected so far in a wide range of issues: land acquisition/confiscation/compensation, conflict of interests between social groups, farmers’ adaptation capacity to major socio-economic changes, physical connection and social communication, loss of cultural identify, etc. Such problems need to be solved in order to secure a stronger social structure and to achieve a more sustainable urban development.

A new town does bring opportunities to adjacent old villages, as analysed in Section 3 from five perspectives: economy (with new jobs and income), education (with the offering of modelling schools and standard programmes), healthcare (with a better service quality), commerce (with more shopping options) and entertainment (with a broader range of activities). The crucial point is that some villagers have not yet been able to gain benefits from the urban development. Therefore, the first and foremost task for Phase Two - in the next ten years for Van Quan - is paying more attention to all the underprivileged/marginalised groups and then assuring equality. “Balance” and “harmony” will be two key words for a long-awaited social sustainability in the city where old and new factors are mixed and different minds/interests co-exist. The interrelationship between old villages and new town should be established and consolidated over the years, on the basis of a mutual understanding and a core value sharing among people from all walks of life. Some aspects as discussed and highlighted in the initial findings of this academic paper have already suggested interesting issues for further investigations.

Acknowledgements

The site survey with interviews was conducted by final-year students of seven classes at the Faculty of Architecture and Planning (the National University of Civil Engineering): 58KD1 and 58KD2 (Yen Phuc village), 58KD3 and 58KD4 (Trieu Khuc village), 58KDF (Yen Xa village), 58QH1 and 58QH2 (Van Quan village). The authors would like to thank all the students for their efforts and assistance.

Special thanks also go to the National University of Civil Engineering (NUCE), where the authors currently work, for the support and financial aid from the University’s funding for prioritised research project (project code 193-2018/KHxD-TD).

References

[1] Nguyen Q M 2018 Research graphic work
[2] Tran M T 2016 New urban areas in Hanoi, looking back at one living concept after two decades (Hanoi: Construction Publisher) p 51
[3] Labbé D 2016 Intensive interviews with experts
[4] Tran M T 2017 Research graphic work with background map by Google Earth
[5] Housing and Urban Development Corporation 2017 Van Quan New Town Project Data Weblink http://www.hud.com.vn/content/du-khu-do-thi-noi-van-quan-yen-phuc-ha-dong-ha-noi
[6] Tran M T 2018 Research graphic work with background map by Google Earth
[7] Nguyen Q M, Tran M T, Doan T T, Nguyen M T and Ta Q H 2017 Data collection from surveys in the four villages of Trieu Khuc, Van Quan, Yen Phuc and Yen Xa (Hanoi, Vietnam)
[8] Nguyen Q M 2018 Research graphic work
[9] Nguyen Q M, Tran M T, Doan T T, Nguyen M T and Ta Q H 2017 Data analysis from surveys in the four villages of Trieu Khuc, Van Quan, Yen Phuc and Yen Xa (Hanoi, Vietnam)