TOWARDS A SOCIALLY SUSTAINABLE CITY CONCEPT IN VIETNAM - INTERNATIONAL EXPERIENCE, LOCAL POLICY MAKING AND PREPARATORY STEPS

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Abstract

Sustainability is a holistic concept in development studies, including urban studies, encompassing natural, technical and social aspects, and has been regarded as an ultimate goal for every nation to strive for as well as for every community to achieve in the context of global climate change, environmental crisis and social instability caused by various socio-economic factors. In addition to theoretical investigation, going for social sustainability in practice requires a well prepared action programme which should begin with learning from international experience (especially when it comes to such a new and superior development concept as social sustainability), understanding both the strengths and the weaknesses, and finding new driving forces. Given that a neighbourhood is a miniature (and a complete unit) of a city, social sustainability may be considered and experimented at the local level first. This proves to be a simpler task to fulfil, a more practical approach to a rather complex issue and a wise option to make. The author aims to analyse some of the world's best examples before reviewing the current potentials and then comes up with a number of suggestions for the first cornerstones of the future society that will be mainly established on the basis of humanity with core social values and good individual opportunities offered to all citizens.

Keywords: social sustainability; sustainable city; neighbourhood.

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1. Introduction

1.1. Definitions

Sustainable development has officially defined as "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: The concept of "needs", in particular, refers to the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organisation on the environment's ability to meet present and future needs" [1]. Based on this definition, social sustainability is briefly (and similarly) interpreted as "the ability of a community to develop processes and structures which not only meet the needs of its current members but also support the ability of future generations to maintain a healthy community" [2]. According to the Western Australia Council of Social Services (WACOSS),

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"social sustainability occurs when the formal and informal processes, systems, structures and relationships actively support the capacity of current and future generations to create healthy and liveable communities. Socially sustainable communities are equitable, diverse, well connected and built on a democratic foundation and providing a good quality of life" [3]. Another definition has been developed in the United Kingdom by Social Life, a social enterprise specialising in place-based innovation which considers social sustainability "a process for creating sustainable and successful places that promote well-being by understanding what people need from the places where they live and work. Social sustainability combines design of the physical realm with design of the social world - infrastructure to support social and cultural life, social amenities and systems for citizen engagement and space for people and places to evolve" [4], while another UK research organisation - Oxford Institute for Sustainable Development - argues that "concerning how individuals, communities and societies live with one another and set out to achieve the objectives of development models which they have chosen for themselves, also taking into account the physical boundaries of their places and planet earth as a whole. At a more operational level, social sustainability stems from actions in key thematic areas, encompassing the social realm of individuals and societies, which ranges from capacity building and skills development to environmental and spatial inequalities. In this sense, social sustainability blends traditional social policy areas and principles, such as equity and health, with emerging issues concerning participation, needs, social capital, the economy, the environment, and more recently, with the notions of happiness, well-being and quality of life" [5].

Despite the differences in verbal expressions and points of view, as these organisations come from various domains, social sustainability is commonly described as a complex process in which spaces are designed and activities are organised in order to satisfy the people's needs and aim to provide best opportunities for individual development as well as to ensure prosperity for the community. In most cases, the success of a plan can be measured with the level of satisfaction among local residents as the direct beneficiaries of social sustainability.

1.2. Five key components of social sustainability

Based on the definition of social sustainability given by WACOSS, a number of core interrelated principles of social sustainability were developed by three scholars from the Australian National University who supposed that the principles to set up for any action programme towards social sustainability should also aim to capture the goals of socially sustainable communities. To this end, the guidelines are aspirational and visionary statements that focus specifically on what makes a community healthy and livable, both for now and in the future, as follows:

- Equity: the local community provides equitable opportunities and outcomes for all its members, particularly the poorest and most vulnerable/underprivileged groups of the community;
- Diversity: the local community promotes and encourages diversity, particularly cultural diversity;
- Interconnectivity: the local community provides processes, systems and structures that promote connectivity within and outside the community at the formal, informal and institutional levels;
- Quality of life: the local community ensures that the development will meet all the basic needs of residents and foster a good quality of life for all people. Healthcare, education, housing, employment, security and safety are among those fundamental requirements for such a socially sustainable community.

Democracy and effective governance: the local community supervises the project implementation process which is made open along with reliable governance [6].

1.3. Objectives and methodology

The objectives of this study are:

- To review the current urban development through the lens of global social sustainability and then to re-orientate the approach to such a destination;
- To integrate social sustainability which has been largely ignored so far in Vietnam into urban development, so that future sustainable development will be more comprehensively and successfully achieved;
- To enhance the quality of life in cities, especially in major cities where the great efforts in realising urban development plans have mostly been eclipsed by the consequences of rapid and unsustainable urbanisation.

The two main research methods to be used include:

- Analysis of some of the world's best examples in terms of planning to achieve social sustainability and study on what is applicable and what is not to Vietnamese cities, in consideration of the local contexts, as well as the potentials for development and the conditions for successful application;
- Case study investigation, by means of choosing two of the most outstanding urban development projects, one from a developed country and the other from a developing country.

2. International experience in developing social sustainability

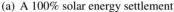
As a small town with just 200000 inhabitants living over an area of 153 km² in the southwest of Germany, Freiburg is one of the two pioneering German cities (together with Hanover) in terms of carrying out green city development concept. Vauban, which was initially planned in the early 1990s on a 40-hectare site of a former barracks of the French army and built a few years later for about 4800 inhabitants, became so successful that it has been included in almost every classic handbook on sustainable urban planning published in the past two decades. Technically, Vauban is the first solar living quarter in Germany, as well as in Europe, where the energy consumption in all households and public buildings is entirely supplied by solar energy with large photovoltaic panels installed on the roofs (Fig. 1(a)). All houses and buildings here were designed and constructed to low or ultra-low energy standards (passive house). Socially, Vauban is also known as the first car-free neighbourhood, not only in Germany but also in Europe. Inside Vauban, it is possible to get around either by bicycle or by walking (Fig. 1(b)). Today, 100% of the families in Vauban have no cars, compared to 70% in 2008. The local authority imposed a very high tax on cars: 18000 EUR per year as parking fee plus environmental charge. Those who chose car-sharing instead of car-owning had to pay 3500 EUR per year [7]. In the meantime, the City Council developed an excellent city-wide public transport system with buses and trams, and travelling by using this service costs an adult only 575 EUR per year. For children, students and the elderly, ticket prices will be reduced by 25% to 50% [8]. As a result, Vauban residents decided to sell their cars shortly after moving into this people-friendly residential area. Vauban is also well known as a multi-nationality settlement, with German, Dutch, and Czech, Greek, Polish, Russian and Romanian residents, where people are equally treated and respected. They decide how their living quarter would look like (Figs. 1(c) and 1(d)).

Social sustainability remains a core of the community development programme in Vauban, most notably appreciated in the following activities that need to be regularly organised or run:

- Protecting the environment: Keeping the whole living quarter green and clean throughout the year. This requires cooperation from all citizens;

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(b) A 100% car-free settlement



(c) Everything is designed and/or decided by people



(d) A multi-nationality settlement as indicated with flags

Figure 1. Vauban is a technically and socially sustainable living quarter in Freiburg, Baden Württemberg, Germany

- Ensuring traffic safety: Walking and cycling only within the area as a result of car-free policy. People have to make a strong commitment and become involved in the implementation;
- Sharing all the social/public facilities available, no matter who: While using these facilities, people can communicate with one another, especially between foreigners and Germans, as well as among foreigners of different nationalities, for a much better mutual understanding;
- Everything is designed and/or decided by people: From choosing housing concepts from the options made by architects and planting in the streets to designing playground for children with some artworks. People work closely and frequently together to make their living quarter a liveable place.

The second example comes from Brazil, with Curitiba as a world-class case study to be selected. Curitiba is a medium-size city in Latin America with almost 1.8 million inhabitants [9]. Just like Vauban - Freiburg (Germany), Curitiba has applied an integrated planning strategy to its urban development from the very beginning (in the early 1990's). In 1996, at the Habitat II Summit Conference of mayors and urban planners from all over the world, Curitiba was praised as the most innovative city in Brazil and ranked third in 2007 in the World's Top 15 Green Cities, impressively surpassing

Vancouver, Copenhagen and Sydney. Approximately 99% of the residents said that they were pleased and satisfied with what the city offered them [10]. The city is reported to succeed in developing public transport system, with 45% of the whole city population using the bus service to schools, offices and workshops, in collecting and sorting solid waste, with 70% of the whole city population participating in this long-term plan (Fig. 2(a)) and in revitalising/transforming brownfields into greenfields. Unlike Freiburg, Curitiba had to deal with slums as hundreds of thousands of migrants from the countryside came to the city in the 1970's and 1980's to seek better-paid jobs and to change their lives (Fig. 2(b)). In line with providing social housing for migrants, the city authority created about 200000 jobs within 20 years for the homeless and migrants [11]. These efforts have resulted in a better social integration.





(a) Solid waste collection in the community

(b) New social housing development for low-income people in the periphery

Figure 2. Implementation of socially sustainable development programmes in Curitiba - Brazil [12]

Social sustainability is clearly reflected in a variety of policies targeted at the most underprivileged communities. The lessons from Curitiba can be highlighted as follows:

- By providing decent and affordable housing to the lowest-income groups, it is possible to bridge the gap between the rich and the poor. The poor would then feel more self-confident and show their willingness to do some charitable and non-profit work in return for moving into new houses/apartments provided by the local authority;
- By launching and organising communal activities, the city authority can encourage the participation of different groups of Curitibans from all walks of life and mobilise major sources for a smarter development, such as conservation and revitalisation of heritage, collecting and sorting solid waste, improving landscape and upgrading sanitation conditions [13].

Table 1 also indicates six problems for Hanoi city authorities and communities to tackle. The first two are urgent and the other four are complicated. As time goes by and the city develops, old problems have not yet been solved while new challenges continue to arise as a consequence of going ahead without a long-term urban development strategy and lacking most of the pre-requisite conditions for sustainability in general, and for social sustainability in particular.

3. Starting with policy making

Policy making is probably the most important factor to be considered and the first thing to be done in urban planning and development in general. Once sustainability has been integrated in a development plan, policy making plays an even more significant role, because it will set up a framework

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Table 1. Summary of international experience with reference to current situation in Vietnam

Area	Action programmes in Freiburg	Action programmes in Curitiba	With reference to Hanoi
Environment	Protecting the living environment within the settlement for clean air, fresh water, tranquillity and beautiful landscape.	n/a	The environment (air and water) is seriously polluted, huge negative impact of the urban heat island effect and noise from the streets.
Traffic planning	Ensuring traffic safety: pedestrian zones are separated from motorised vehicle flows. Children feel safe to play and the elderly can walk around.	n/a	No separation between motorised and non-motorised traffic flows: high accident risk for children and the elderly.
Social integration	Sharing all the social/public facilities available with all people, including immigrants and communication for a better mutual understanding.	n/a	Social/public facilities are not well equipped in most living quarters, except in a few new town projects reserved for super high-income residents only.
Public participation	Everything is designed and/or decided by people Planning and design meet the demands and expectations of all (or almost all) the local people.	n/a	The community is generally not active. Everything is designed and/or decided by planners and architects who often do not understand so well the local people's needs.
Social housing	n/a	Providing decent and affordable housing to the lowest-income groups. Bridging the gap between the rich and the poor.	The quality and price of housing for the lowest-income groups remain big problems. The gap between the rich and the poor seems to be larger.
Common activities	n/a	Launching communal activities and organising events for all people throughout the year.	Communal activities are just organised a few times a year, not so attractive to the local people.

and pave the way for social sustainability to take root and to go on the right track from the very beginning. As a complex concept and an ultimate goal, social sustainability requires a combination of solutions, ranging from training well-qualified staff and building a strong administrative system to securing sufficient financial sources.

In reality, policy making outlines an orientation for the future development of a community, based on its own advantages and disadvantages. This orientation is highly characterised with local contexts and conditions, thus there is no one-size-fits-all concept for policy making among communities. Even for one community, as it develops, policy making will change from time to time. In Vauban, for example, for the first few years, policy making just focused on technical issues, such as construction of energy-efficient houses and installation of solar energy systems in every building. Then, the first social problem would be taken into account: how to deal with hundreds of cars towards a car-free neighbourhood. In recent years, helping foreigners successfully integrate into the German society has been emphasised when more and more residents come from abroad. In Hanoi, ten years after the geo-administrative expansion of the capital city, both parts - old Hanoi and new Hanoi - have to cope with geo-cultural challenges, but they are quite different: the impacts of urbanisation on rural identity in many villages of former Ha Tay province and the ruralisation of urban lifestyle in some wards of Hanoi historic centre, after an influx of new residents from Ha Tay came and settled down there. This situation should have been prioritised in the local policy making.

In all cases, policy making is expected to be a more flexible, effective and comprehensive process by scrutinising both sub-processes: from authority to community and vice versa, with other participants and stakeholders, including domestic experts from universities and institutes, and even foreign experts from international organisations. Their roles, relationships and contributions are suggested in Table 2 and presented in Fig. 3.

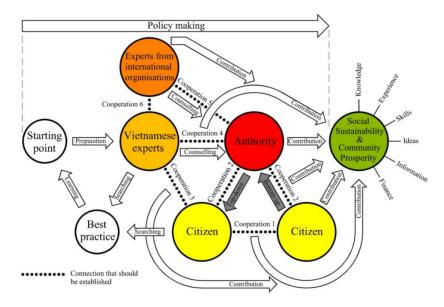


Figure 3. Starting to achieve social sustainability with policy making and contributions of participants

4. Suggestions for the future development in urban social sustainability

The first step to take in establishing social sustainability is helping the underprivileged residents to fully integrate into the society, by enabling the handicapped enter every building with sloped ramps (1:10 to 1:12 slope), specific lifts and toilettes for wheelchair users, or by taking care of the homeless in social protection centres and offering them job training courses. Those people can also feel free to take part in every event without any assistance from anybody. Meanwhile, low-income groups will

Table 2. Policy making towards social sustainability in a neighbourhood

	Role					
Phase	Leading role: Top-down direction (from authority to community)	Supporting role: Bottom-up direction (from community to authority)				
Pre- planning	Broadening and deepening knowledge of social sustainability among leaders and officers;	Raising the awareness of the community of social sustainability;				
	Understanding the expectations, needs and wishes of local residents;	Showing experience and wisdom, telling what the community needs and wishes for the future;				
	Asking people to fill in paper-based or on-line questionnaires and attend indepth interviews;	Providing all the information requested through questionnaires and in-depth interviews;				
	Enhancing management capacity among leaders and officers;	Strengthening the abilities to participate in the planning and management of a project;				
	Drafting a long-term strategy and making a policy for sustainable community development.	Giving opinions and feedback to decision makers and policy makers.				
Planning	Finding out all the problems and choosing what to deal with first: parking, housing, etc.;	Confirming which problems should be dealt with first (normally the most urgent ones);				
	Inviting experts to develop a specific concept for the community; Discussing with experts, proposing ideas and selecting solutions;	Organising several charrettes (brainstorming workshops) to improve the concept. Attending all the charrettes (brainstorming workshops) to improve the concept;				
Post- planning	Implementing the development plan approved and adjusting the policy, if necessary;	Working closely with the authority and helping the authority refine the policy, if necessary;				
	Co-supervising or co-monitoring the management; Power-sharing, subject to the negotiation be	project implementation process, coetween the local authority and community.				

be exempted from paying a membership fee or eligible for a reduction to join a club they like or to practise their favourite kind of sports in the sports fields.

The next steps to include into the local action programme towards social sustainability may differ from neighbourhood to neighbourhood, depending on the real contexts and the needs of the residents there. In all cases, the planning and design of public spaces will go in parallel with the organisation of activities. The following activities are regarded as "appropriate" for most of living quarters today in Hanoi and other major cities in Vietnam:

Maximising city farming in every neighbourhood: The greening rate in Hanoi is extremely low, particularly in nine central districts (below 2 m² per capita). That is why this greening indicator is

proposed to have increased 8 m² to 10 m² per capita by the year 2020 [14]. As part of city greening, city farming is becoming popular again in Hanoi and other cities today. The excessive use of pesticides, preservatives and chemicals in agriculture has risen up the public concern about food safety. That is the reason why more and more city residents have nowadays decided to grow vegetables and several kinds of fruit trees at homes. They have made full use of every square metre available in and around their homes for this purpose: pavements, corridors, loggias, balconies, courtyards and backyards as mini or medium-sized gardens. Some people living in high-rise apartment buildings even share the terraces and roofs for this purpose. The city greening and city farming should be intensively developed. The experience from Singapore with co-farming and shared garden can be useful (Fig. 4).

Creating an open museum of nature/bio-sphere within a neighbourhood: A green-and-blue network is actually the interconnection of a green system (parks, mini-parks and flower gardens with tree rows) and a blue system (ponds and lakes that store rain water and an amount of grey water after treatment). Entirely located in the tropical zone, Hanoi can make full use of abundant flora and fauna, both terrestrial and aquatic eco-system and a high rainfall to enrich the local bio-diversity, just a few metres away from homes. Apart from regulating the micro-climate, storing rain water and improving the landscape, this network plays a much more essential role as a mini bio-sphere in the city and strengthening social contact as well as cooperation, because this system requires regular maintenance of local residents. This open museum can be planned in every living quarter, showing children how beautiful nature is, allowing them to discover eco-systems and educating them what to do to protect their living environment. Award-winning project of Saint Ouen Park from Paris is very successful in terms of offering local people a real flavour of nature within a short walk from homes (Fig. 5).



Figure 4. Shared garden in Singapore - Co-farming among the elderly and newly retired state officers

[15]



Figure 5. Saint Ouen Park in Paris (France) offers both terrestrial and aquatic eco-systems to residents to discover [16]

Bringing pop-arts into every neighbourhood: Public arts are very important in urban design world-wide but they are largely ignored in Vietnam. In fact, these artworks can be seen everywhere: in a park, in a square, along a river, in a lake, on a building façade, at a street corner and even in the air, enhancing the quality of spatial planning and landscape, becoming cultural symbols, reflecting the spirit of place, helping people identify that place in a city and bringing people together. Today, the requirements for public arts are much higher: unique and impressive. Flexibility and interactivity are two new elements to explore in design, encouraging people to discuss and work together for a more



Figure 6. Public arts (wall painting) in a living quarter in Milwaukee (USA), attracting people from six to sixty [17]



Figure 7. The Mayor of the City of Milwaukee joined the residents in wall painting [18]

attractive public place within their living quarter. Public arts are an immense field for people to try their creativity and show their "hidden" talents. This idea can be demonstrated with a pop-art project in Milwaukee (USA) where all external walls of the residential buildings have become colourful and beautiful artworks painted by local people themselves (Figs. 6 and 7).

Establishing a thriving society in every neighbourhood by organising common activities and social programmes: A citizen should be educated at a very early age that he or she lives within a community, has certain abilities, background and a place in the society. Thus, each person should be responsible to contribute to the prosperity of the community and gain benefit from that. Similarly, he or she needs to help the others and receive in return their assistance. The best slogan for this principle is "one for all - all for one". In a thriving society, there are so many activities, not just arts performances, cultural festivals and sports events, but also common action programmes in daily life with various themes: for our children, for our environment, towards a more open-minded community, etc. that will take place throughout the year and can be called "cement" or "glue" in terms of bringing all people together. For many years, Nationwide Clean Up Day in Australia has attracted annually a large number of international students along with local residents in cleaning and protecting the environment (Fig. 8).

Internet-based networking in every neighbourhood: In the modern society, urban sociologists warn that people communicate with one another more in the cybernet than in the real life. Even family relationships are fading in the era of digitalisation, artificial intelligence and the 4.0 revolution. However, the positive aspect of technology must be promoted. It helps establish more forums and social networks to connect people with the same (or opposite) interests, hobbies, viewpoints, etc., where they can discuss topical issues, learn new things and have more friends. All members can log on, send information and feedback, exchange ideas and share experience, as well as give opinions of how to make their living quarter a much better place, if a meeting cannot be held for various reasons. Networking, in this sense, is closely linked with establishing a thriving society aforementioned. Ecopark forum is one of the very first social networks that could have a strong influence on building a new lifestyle (Fig. 9).

The potentials of the five initial solutions can be summarised and further analysed in Table 3 and Fig. 10.

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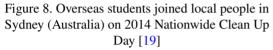




Figure 9. Forum of Eco-park residents sharing various topics of daily life with one another [20]

Table 3. Policy making and social sustainability in a neighbourhood

	Suggestions for solutions				
Five key components of social sustainability as presented in subsection 1.2	1. Maximising city farming	2. Creating an open museum of nature	3. Bringing pop-arts into neighbourhood	4. Organising more common activities	5. Encouraging local networking
1. Equity	++	+++	+++	++++	++++
2. Diversity (cultural diversity)	+	+	++++	++++	++
3. Interconnectivity	+++	+++	+++	++++	++++
4. Quality of life	++++	++++	++++	++++	+++
5. Democracy and effective governance	+	++	+++	+++	++++

Level of contribution: + limited (or not clearly reflected), ++ relatively high, +++ high, ++++ very high

Among the above-mentioned suggestions, solutions 1a, 2, 4 and 5b within one neighbourhood may be further developed into regional systems or networks by connecting with the same elements or components from surrounding neighbourhoods. More specifically:

- City greening: Mini-parks in one neighbourhood can be connected with those in an adjacent neighbourhood with rows of trees along streets;
- Creating an open museum of nature and bio-diversity near home: Connected in the same way for green areas. For water bodies, lakes, ponds and rivers are often interlinked with canals;
- Organising more frequently common activities: One event organised in one neighbourhood will attract people from another neighbourhood if it is interesting enough. Similarly, some activities can be co-organised by two or more communities and take place in an alternating manner;
- Wider networking: This is often established for and maintained by people living in different living quarters, even in different cities and/or in different countries but having the same characteristics (such as coming from the same town or village, graduating in the same year from a school/university, etc.) or sharing the same interests (fan club members of a world famous sports team, athlete and/or artist).

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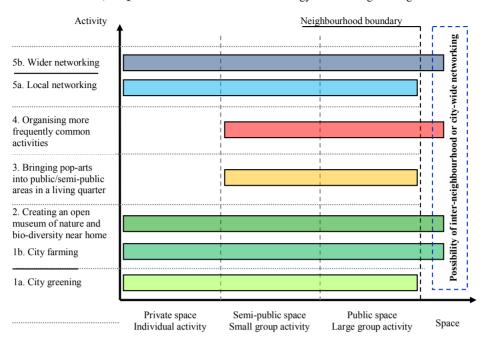


Figure 10. Possibility for interconnection of neighbourhoods in achieving social sustainability

5. Discussion

The set of criteria for the Annual National Green Architecture Awards proposed by Vietnam Association of Architects is the only rating system in Vietnam (and in Asia as well) that considers social sustainability and humanity seriously as the fifth criterion, along with site selection, energy efficiency, water, building materials, thermal comfort, etc. which are commonly used in every green building assessment tool in the world. Social sustainability and humanity are comprehensively evaluated on the basis of three crucial factors: social integration, public satisfaction and stability considered in all three pillars of sustainability (environment, economy and society) as broken down in Table 4. Quantitatively, given 15 out of 100 points, the criterion of Social Sustainability and Humanity is regarded as important as Sustainable Site (15 points), Indoor Air Quality and Environment Quality (13 points) and Advanced Architecture with Identity (17 points). Only Energy, in combination with Natural Resources, outweighs.

The importance of social sustainability should not only be reflected in a rating system, no matter how influential it may be, but also demonstrated in everyday life within a neighbourhood. Social sustainability requires public activities in which all people can participate, regardless of age, gender, profession, religion or income. In this regard, traditional/cultural festivals, sports days and arts shows shall take place as often as possible. A businessman and a construction worker can play football with (or against) each other at the weekend. A superstar actress and a housewife can meet once or twice a week to talk about bonsai or origami in a local club. Sometimes, strangers become familiar as their sons/daughters are classmates and/or members of the same hobby group. In Europe, a flea market is a cultural activity, rather than a commercial one, where people communicate with one another, talking about the history of a century-old hand-made wooden clock for half an hour or how a fossil could be formed and found. They are happy, even when they do not sell or buy any items. Football fans can watch a World Cup final match at home, but they prefer to go to a Fanzone where they can feel a

Table 4. Criteria for rating green architecture in Vietnam [21]

Criteria/Sub-criteria	Score	
1. Sustainable site		
2. Efficient use of natural resources and energy		
3. Indoor air quality and environmental quality in urban/rural areas		
4. Advanced architecture with identity		
5. Social sustainability and humanity		
5.1 Ensuring integration into local traditions in culture, history, religion and customs, etc.	5	
5.2 Meeting the demands of material, cultural and spiritual life for individuals, communities and nations		
5.2.1 Enhancing the quality of life for handicapped people	3	
5.2.2 Not resulting in conflicts of interest and supporting social integration		
5.3 Ensuring stability in environment, economy and society		
5.3.1 Creating more job opportunities and contributing to the local socio-economic development	2	
5.3.2 Respecting and encouraging the public participation in the design process, investment in construction, and operation of buildings as well as of the area to be planned	2	
Total	100	

very special crowd atmosphere and share the joy of winning a match with everyone. In fact, there are many other activities that will unite people, because they are important or meaningful to them, such as campaigns for environment. People will not have to wait until the 5th of June - World Environment Day - but keep the street clean every day, take good care of the park and the lake and tell everyone how to sort out waste materials properly in each category: bio-waste, paper, carton, plastic, glass, metal, etc. City farming is another good chance for residents to come together, and harvesting day turns out to be a real festival for them, especially for children.

Socially sustainable development does not only deal with economic prosperity, but will also depend (and focus) on the social structure with well-protected value systems coming down from generation to generation and firmly-established guiding principles. As a prominent thinking and slogan, "one for all - all for one" has already demonstrated its timeless quality and great importance in planning and building a living quarter as a complete research unit of urban ecology and sustainability. Communal activities, when frequently organised, could broaden and consolidate social relations and facilitate interactions among different population groups. This is a never-too-old lesson to learn from the past, in both urban and peri-urban communities, and to put into practice today, when the city grows faster and faster.

In the modern society, many problems remain unsolved and challenges keep on arising, hindering the economic growth and making the city an unsafe place to live. In this circumstance, social sustainability should be proposed, highlighted and integrated into daily life. The implementation can begin with the most practical solutions in response to the most topical issues that the neighbourhood encounters. In any case, social sustainability will always be primarily based on public participation, common interest and multi-lateral cooperation of all parties involved, firstly the local community as the beneficiary and simultaneously the local authority as the policy maker and project co-manager.

This advanced concept is however flexible enough to be widely applied. A mega-city like Hanoi cannot wait for a smaller city to be successful, although that smaller city makes a very good case study. Theoretically, a small city with just a few problems should be selected first as a pioneering project. Hanoi may choose, either by starting with a new community where high-standard social facilities have been offered but the residents need several years to know one another well enough, or by starting with an existing community that has been already established on the strong local social network, and upgrading the current social facilities will not be so difficult in view of mobilising different sources in the society. In both circumstances, how to make social sustainability work in each particular place promises to be a fascinating research arena.

Among the five potential solutions to the enhancement of social solidarity and sustainability as recommended in Section 4, creating an open museum of bio-diversity and corner of nature in every neighbourhood is a new dimension of both natural sustainability (in terms of maintaining part of nature in the built environment) and social sustainability (as cooperation and participation of the public are required as a pre-requisite condition), especially in major cities where green areas are either illegally occupied or rated "poor". A small area of several hundred square metres in a populous city with a high building density like central Hanoi, if well designed, can be sufficient for such a museum, with one mini-park and one retention pond in the middle.

Along the long pathway to social sustainability, just like the winding road to technical sustainability, the contributions of international and non-governmental organisations should be appreciated and emphasised, because experts from those organisations can share their experience with Vietnamese colleagues, give advice to the authorities in making and/or modifying social development policies and even help secure funding for community-based and sustainability-oriented projects. Over the past two decades, international organisations such as JICA (Japan), Healthbridge (Canada), GIZ (Germany), World Bank, Asian Development Bank, etc. have been working actively with local authorities in sponsoring and running various social welfare programmes which strengthen social sustainability to a certain extent, for example village school and children playground building in Northern mountainous provinces, wall painting and tourism promoting in Tam Ky city, offering new job skill training courses as alternative livelihood for ex-farmers in the former province of Ha Tay after their land has been confiscated and transformed into industrial or urban areas, etc. In the future, this trend will be going on vigorously, in accordance with the international cooperation in the era of globalisation, and Vietnam must make the most of these opportunities.

6. Conclusion

Social sustainability is obviously not easy but interesting enough for every community to try its utmost and to realise with concrete action programmes, primarily based on its advantages, relevant sources and real demands of the local community. Even the simplest activities, such as daily waste sorting, weekly cleaning up the street, planting new trees in the spring and helping the disabled people and/or immigrants integrate into the local community can make sense. The participation of both the authority and the community is a key factor to success of every urban project. A 50 - 50 power-sharing concept between the authority and the community will provide an ideal formula and a strong foundation for the implementation of social sustainability. With this in mind, further investigations into different shades of social sustainability will need to be undertaken in the forthcoming years.

References

- [1] World Commission on Environment and Development (1987). Our common future (Brundtland report).
- [2] Web Finance Corporation (2018). Business dictionary for social sustainability.
- [3] McKenzie, S. (2004). Social sustainability: towards some definitions. *Working paper series No. 27. Hawke Research Institute, Australia*, 18.
- [4] Social Life (2011). Definition of social sustainability.
- [5] Colantonio, A., Dixon, T., Ganser, R., Carpenter, J., Ngombe, A. (2009). *Measuring socially sustainable urban regeneration in Europe*. Oxford Brookes University and Oxford Institute for Sustainable Development (OISD).
- [6] Martin, D., Hondros, J., Scambary, B. (2002). Enhancing Indigenous social sustainability through agreements with resource developers. *Report of Australian Research Council Linkage project "Indigenous community organisations and miners: Partnering sustainable development?"*, ANU Press, Canberra, 2.
- [7] Vauban Project Management Board (2008). Vauban guidebook. 25–27.
- [8] Freiburger Verkehr AG (2018). Fahrscheinkategorien.
- [9] World Capital Institute (2017). Curitiba population.
- [10] Grist (2017). World's 15 greenest cities.
- [11] Suzuki, H., Dustur, A., Moffatt, S., Yabuki, N., Maruyama, H. (2000). Eco² cities. *World Bank report*, 159–169.
- [12] Instituto de Pesquisa et Planemenjo Urbano de Curitiba (2012). Pictures of Curitiba green city project.
- [13] Gustafsson, H. R., Kelly, E. (2012). Urban innovations in Curitiba: A case study. Eugene & Carol Ludwig Centre for Community and Economic Development, Yale Law School, USA, 24–25.
- [14] Government of Vietnam, Prime Minister (2012). Approval of the national urban development programme in the period 2012 2020, Decision No. 1659/2012/QD-TTg.
- [15] Shared garden (Singapore).
- [16] Agence Ter Landezine Landscape Magazine (France).
- [17] Public wall painting in Milwaukee (USA).
- [18] Public wall painting in Milwaukee (USA).
- [19] Sydney Olympic Parks 2014 Clean Up Day (Australia).
- [20] Eco-park Residents' Forum (Vietnam).
- [21] Vietnam Association of Architects (2014). Press release National Green Architecture Awards.