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# Hanoi's Population Claims for More Public Parks!

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## ABSTRACT

The city of Hanoi is growing rapidly since dedicates. This development brought not only a messy appearance but also problems in environment and social health. Due to several beneficial functions urban green areas (UGAs) should play a central role in urban planning, particularly in the inner city. This paper aims to figure out main issues in current utilisation of parks and gardens in Hanoi's inner. Methodologically, it is a triangulation of counting, observations and user survey. About 1900 questionnaires have been done so far covering nearly all seasons since December, 2010. First findings show very intensive usages of the observed parks. Furthermore, the demand is varying regarding the hours of the day as well as over the course of the week. The activities people are doing in the parks show a broad diversity, also varying in the course of the day and week. The result notices that the low number of children in parks – even at weekends – can indicate on the one hand that they need (additionally) specific infrastructure. On the other hand it can be interpreted as a suggestion of a changing lifestyle of future generations. This topic has to be analysed more in detail in future. Due to the today insufficient supply with parks & gardens in the inner city of Hanoi and with regard to an expected growing demand based on the aging society an improved offer with UGAs is essential. A healthy & livable Hanoi needs more and better maintained parks and gardens.

## 1. INTRODUCTION

Hanoi, the capital of Vietnam, is the seventeenth largest city in the world (3324.92 km<sup>2</sup>) [8]. Since the administrative borders were expanded in 2008, Hanoi has ten inner-city districts, one town and eighteen outer-city districts. According to the National Census April 1, 2009, Hanoi's population was 6,448,837 inhabitants; the population density was 932 people/km<sup>2</sup> [6]. Hanoi fulfils the criteria (in terms of area, population, functions, infrastructure and so on) to be a Mega-city. On the one hand, those changes offer city planners great opportunities to improve ecological benefits, social qualities and economic chances through urban green areas (UGAs). On the other hand, the changes give city planners a high and challenging situation. Therefore, they need to deal with fast and complicated changing lifestyles, society, and the city's economic state.

*Economic changes.* 1991-1999: Vietnam's economy grew at a low rate: 3-4% (1989-1990). The rate

rose until 1996 (9%), then declined by 5% (1998) due to the economic crisis in 1997 [13]. Since the 21<sup>st</sup> century, Hanoi has been rising quickly, typified by a "hot growing economy" (over 8.2% in 2005-2007) [4].

Hanoi is also in a group of four cities expected to rise above 13% GDP in 2025 among 25 selected cities. It is also indicated that the GDP of Hanoi is projected to rise from number 116 (2008) to 82 (2025) ([11]: 33). Rapidly increasing demands for housing, basic infrastructure and services. In the period 2008-2025, Hanoi is predicted to be leading in the top 10 fastest growing cities (7% annual), followed by 4 cities from China and 3 cities from India. Based on the above PwC's estimations, it is easy to see that Hanoi city will be the fastest and strongest in terms of changing society and lifestyle.

*Environmental problems.* Due to pressure from outside (business, economic, demand for housing, immigration), generally the total area of parks and gardens will reduce. "While society enjoys the fruits of economic prosperity as well as improved access to

various services and opportunities, it is also bearing the brunt of many urban problems" [4].

According to the research of the Economist Intelligence Unit [12], Hanoi is below average in the Asian green city Index, which includes eight categories and is performed in five bands. While Hanoi's economy has been growing rapidly, the city has an area of vegetation cover in the top-down in the world. It is 0.9 m<sup>2</sup>/person in 9 inner-city districts. Especially, Ba Dinh district has just reached 0.65 m<sup>2</sup>/person [1]. It is too low compared with US's and EU cities (average: 25 m<sup>2</sup>/person). It is even lower than other developing Asian cities, such as Hong Kong (9 m<sup>2</sup>/person).

## 2. THEORY AND METHODOLOGY

### 2.1. Theory

#### 2.1.1. Parks' functions

Parks offer a large number of functions, for easier orientation they can be grouped into three dimensions of sustainability:

Ecological functions – improvement of the micro-climate, reduction of dust & noise, assurance of biodiversity, space for animals & plants, etc.

Economic functions - parks can raise property value, attract tourists and improve the city's image, they are also areas for „mini business“ of the local population, etc.

Social functions - areas for recreation, spaces for communication and physical health, reduction of crime, etc.

Beside these specific benefits that the three sustainability dimensions offer, there are also benefits which belong to two or even all three functions. For instance the ability of parks to reduce air pollution is primarily an ecological function. But as clean(er) air avoids health risks of the population it is also an economic function.

#### 2.1.2. Lifestyle

Lifestyle is the way people live in their own habitat. Understanding present lifestyle of a community is first step in studying lifestyle progress. And to understand this progress is necessary for city planners, parks' managers and city' authority. Lifestyle changes so quickly in developing cities. As sequence, diverse complex problems are tiring public bodies. Therefore, this paper interprets what is happening inside Hanoi parks in Vietnam, as a support from social science.

Lifestyle is known as a daily term, while it refers to all most all human being daily activities. Basically, Oxford dictionary explain that lifestyle is the way people live their own life.

It is also favourite word to entertainment communication parties. The more daily-life term it is, the more difficult it is, to define scientifically.

Term "lifestyle" was started to use since late 1970s in America. This term originally approaches marketing field. This term relates mostly to values, consuming market targets, demographics and psychological consumers [12]. Lifestyle is also mentioned by BOURDIEU [2]: 175): a "distinctive lifestyle," that is, "the system of distinctive features which cannot fail to be perceived as a systematic expression of a particular class of conditions of existence".

Influencing factors to lifestyle are so diverse. [5], a psychologist have written number of books about lifestyle. The most concerning book is "Lifestyle theory: past, present and future" (2006). He created some models of lifestyle. Once: 1), the factors include: conditions, choice and cognitions. And [9] summarized, lifestyle is production methods and living of individual, groups, and social community.

Approaching social and medical sciences, lifestyle was briefly described by three elements (physical activity, smocking, nutrition habits), [7]: 258). For DAVEY (2009), those elements are "income and expenditure, work and job, habitat arrangements, work and emotional relationships, time management" [3].

For this paper, lifestyle can be understood by what, when, where and how people act/ behave in parks. It characterised by time schedule, which activities of park users.

This paper focuses on local people's lifestyle in parks. Therefore, influencing factors are recognized by two main groups: stable and flexible factors. The former includes location, climate and divided by age structure and genders. The later includes society's statement, economic statement, technology support and individual. Location factor refers to where is a park. That is relative distance among the park and its community target. That also means how far from most park users' resident to the park. Location factor concerns to climate factor as well, for instance: in which climate zone a park is, how particular the park micro-climate is. Is it hot and humid or is it dry and windy, and so on. Climate and micro-climate affect to usage of neighbouring community. It is cooler in park in general. It depends on how strong the sunlight is, park users prefer to stay in the tree's shadow or stay directly in sunshine.

Different age groups use parks in different ways. Children often enjoy having fun in their playground, discovery nature and large space under the guiding of adult, for example. Adults do physical exercise, and elder enjoy communicating with friends in parks.

#### 2.1.3. City planning

City planning is of one the most important features for the sustainable development of cities. Beside clean and modern technical solutions, it requires master plans for the future. Indeed, planners need to

design their plans to face real future challenges. Therefore, they need to consult with multi-disciplined scientists. Commonly planners try to adapt lessons learned from experienced cities, developed countries and from the similar situations. At the beginning, it is necessary to know what might happen in the long run and what the influencing factors are. After deeply understanding the issues, they can offer more scenarios for the city's future.

Actually, in developing countries, especially fast growing cities like Hanoi (Vietnam), the matters are more complex and highly interactive. A high economic rate of growth implies huge flows of goods, finance and new technology. As a direct consequence, society and lifestyles will also change quickly.

Thus, planning adaptations require a deep and more complete understanding of the local situation itself. For that, society needs to be frequently monitored regarding its changing lifestyle. Try to avoid a detailed literature survey or a summary of the results.)

## 2.2. Empirical study

The following findings are based on empirical information which refers to four inner-city parks: Thong Nhat, Bach Thao, Ho Hoan Kiem and Le Nin. Common criteria for selection are: a park is located in an inner city area; it must be a public space; it must not be a leisure park with mainly entertainment equipment; and the parks must be in distinguishable sizes.

Thong Nhat and Bach Thao parks are nearby parks (with gates and fences). They are also two of the largest parks in Hanoi at this time. Thong Nhat park (482,450 square meter) has seven gates and many tracks, paths and two islands, which makes it more complicated to count and observe people. Bach Thao park is smaller (119,690 square meter) with two gates.

The others are two open green areas. Thus, there is no manual counting of how many people use the area per day. However, observation and surveys have also been done here to cover different type of public green areas in Hanoi.

*Methods.* This case study has been conducted based on multi-methods of empirical data collection, known as triangulation. Fundamentally, official statistical data is needed for selection and analysis. But it is always hard to access the data at such a small administrative level. Besides using official statistical data, the following methods have been used:

Systematical observations were made during the days, independent of the weather. A track has been drawn and in each, an outline of every park. They make sure that all the observations have nearly the same views and get almost all activities that happen at the time.

Park user countings were made on weekdays as well as weekends, all through the day (from 6 am to 6 pm).

Park user surveys are standardized questionnaires. About 1900 questionnaires were completed and analysed. These cover terms of frequency, accessibility, satisfaction and attitude of park users as well as some basic information about the interviewees. Empirical works have been undertaken by Le To Luong, consulted by Wilhelm Steingrube, assisted by Melanie Rademacher (a German master student) and other students from Hanoi universities. Within this paper, I analyze partly parks for the main paper purposes.

## 3. RESULTS AND DISCUSSION

### 3.1. Utilization in daily course

First, by viewing the background situation in Hanoi, a conclusion can be drawn that Hanoi is recently in a low level of green area. Second, an emergent question is: "How are Hanoi's citizens using their parks and gardens?" The answers will be a good support for the paper's hypothesis.

The numbers of park users, which are written into park plans, have the potential capacity to serve the population with green and free space to use. A first impression of the real use of a park can be evaluated by the number of daily users. The comparison of both values helps planners to balance between real demand and design capacity. It is one of the criteria for a sustainable plan.

The first count in Hanoi parks show that the larger park (Thong Nhat) has nearly twice the number of the small park (Bach Thao): 7,283 respectively 3,407 arrivals per day (on average).

As expected, the count data shows high users in the morning and late in the afternoon. Two peaks points were recorded from 6-7 am and 4-5 pm in the winter (December 2010).

The peaks are 5 to 6 times higher than the bottom points (at noon). Because of this, two points could be drawn up. First, the large gaps determine how overwhelmed the park is in the early mornings and late afternoons, on the one hand. Then is there enough time in between the two peaks for the park's eco-system to recover or not? If we offer more space to fit the large number during the "rush hours", then a problem is that there is more 'sleeping' space in middle of the day, which costs a lot of money. On the hand, it would be a question for park's designers and managers when conflicts between park's users arise. For example, joggers do not like badminton-players, because those players use the tracks where they jog.

Second, distances between the gaps, in term of quantity and time, would change during the course of the seasons. Because of the change in lighter hours, the weather effects more or less on people's behaviour seasonally. However, further studies are needed for a more accurate conclusion.

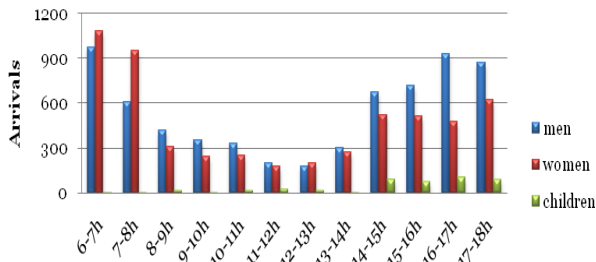


Fig. 1. Number of arrivals in the course of a day.

**Difference in gender.** Furthermore, figure 1 shows a gentle change between the number of men and women users during the days. Women use the park more often than men in the morning. Then, in the afternoon, it is the men's turn to use the park more than the women. So, in general, space and facilities would be offered in balance to both male and female users. It depends on their specific activities; so park's designers could offer separate areas or overlapping areas for use at different times.

**Low number of children in the parks.** Figure 1 also indicates that there is a low number of children that go to the parks. They use parks much less than the adult population. Children using parks appear more scattered during the day time.

There are two reasons for this. Basically, the percentage of children is much lower than adults. Additionally, children need longer sleep and almost always need to be accompanied by other persons.

This result also supports the hypothesis that children do not need parks as much as older people. And they would prefer to be entertained indoors. However, a contradictory finding from European experts is that, another developing trend is that after 30 – 50 years, as this children's generation gets older and requires more parks and gardens, it will use UGAs as much as the former generation recently used.

### 3.2. Utilization in the course of a week

However, in one park (Thong Nhat park) on one observed workday, more park-users were counted than on the Saturday in the same week. The reason for this "exception" is high number of students from neighbouring universities, who were taking physical lessons. This example clearly shows the strong connection between parks and their neighbourhood.

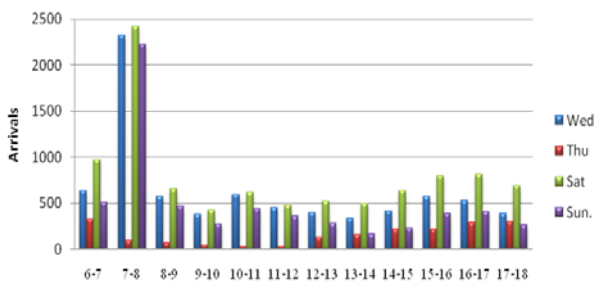


Fig. 2. Number of arrivals during the course of a week.

**Activity groups.** Results are shown in the figure below. It is easy to see that the dominant activities belong to training/ organized group which averagely reaches 26.8% of the number of park users in one observation. It is explained by many universities making contracts with Thong Nhat and Bach Thao parks to have some sport lectures and training there. Beside these specific activities, individual sport/ exercise and walking/ passing through the park occur in quite high rates (19% and 13%). These show that, on the one hand, park-users gain mostly from the physical health benefits there, on the other hand, mostly park-users' lifestyle are healthy in term of doing exercise.

Regarding completely social benefits, the groups of park-users who spend their time there to communicate, relax, and reduce stress is just a bit lower than the groups of those doing physical activities, (9.5% and 11.1%). In addition, as my personal observation in EU parks and other Asian cities has shown, communication in Hanoi's parks remains at a much higher rate.

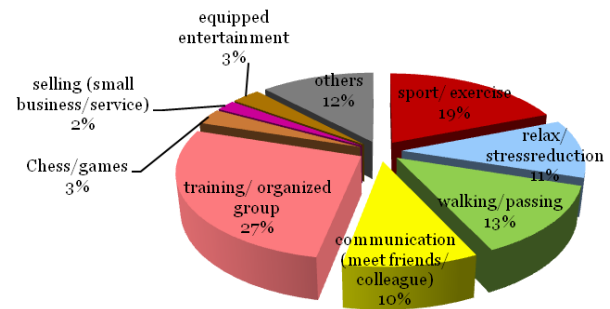


Fig. 3. Activities of park users during mid-day period.

When the main activity groups share Thong Nhat and Bach Thao parks quite well, it provides the park's planners and managers' information about the scales of supplied facilities that they should offer for different groups. However, are these scales changing or will they be changing in the coming decades?

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