FORMULATION OF LANDSCAPE ENVIRONMENT ASSESSMENT FACTORS (LEAF) FOR URBAN DEVELOPMENT

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With the rapid urbanization of Developing World and the rising standard of living, people have started to pay attention to the creation of urban landscape environment as a way to improve quality of life. As part of the Urban Design elements, landscape planning and design are effective in reflecting image and character of cities as well as the lifestyles of their people. Creating the urban landscape environment by scientific and sustainable planning is imperatively required for the urbanization of Developing World.

However, how to create desirable landscape environment from people’s perspectives? What are the basic principles of liveable cities? Hong Kong Institute of Landscape Architects recently proposed a Landscape Policy Agenda for Hong Kong to provide a guideline for the formulation of long term landscape policy. At the same time, the Secretary General of Asian Habitat Society had been invited by the Fukuoka Asian Urban Research Institute, to study the implementation and management of the Fukuoka city landscape. Perhaps these experiences can be applied in China.

1. Major problems of the urban landscape of China cities

With a few thousand years of history, China has cultivated a unique aesthetic and cultural landscape environment standard. However, the history of modern urbanization is relatively young. The relation between urban landscape and environmental design for a very long time has been neglected. Moreover, China is lack of a comprehensive and mature landscape environment planning system. The major problems of the urban landscape of China cities can be summarized as follows:

1.1. Lack of understanding and management of landscape resources

One of the basic problems in the urban development in China is the lack of a comprehensive value assessment on landscape resources, including natural and cultural landscape. The mis-understanding and mis-management of these landscape resources are creating many long term issues in sustainable development. Therefore, Hong Kong Government has also formulated a Landscape Value Mapping to provide planning guidelines for future urban development.

1.2. Lack of city’s identity and character

The character of cities refers to the temperament of cities. Urban identity is not only the uniqueness of cities which is different from others, but also a reflection of the standard of governance of cities. It can be a large extent on the urban landscape environment to create the most intuitive expression. A rapid development or urbanization in most cities can only produce generic cities. “Character” should be cultivated naturally.

1.3. Loss of historical and cultural heritage

Cities evolve over a long period of time and go through varies stages in history. In order to follow the trend of constant pursuit of “new” and “modernized”, many cities are continuously building modern buildings to replace the unique historic buildings and local culture which recorded the important past of the history. As a result, the original architectural style has been completely abandoned, the physical and intangible cultural heritage has been buried by the modern reinforced concrete. Cities’ own identity built up over a long history has been lost.

1.4. Damage of ecological environment

It is well recognized that modern cities are the major polluters in the ecological system. Carbon emission,
heat island effect, energy consumption, waste production are some of the problems that most cities are suffering due to uncontrolled development, poor planning and bad transport policy. The ecological approach and sustainable principles must be adopted in urban development to avoid further deterioration of landscape environment.

1.5. The mis-interpretation of ‘Sustainable Development’

It is very often to hear city leaders stressing the importance of sustainable development by balancing the economic growth and environmental protection. This mis-conception is in fact one of the root problems causing many urban development issues. ‘Sustainable Development’ is a positive cycle in which economic growth is driven by enhancing the environment so that the society will be able to benefit and upgrade the city management together with the government. By going through the process, new economic activities and ideas will be stimulated to inject new life to the city.

1.6. Fail to respond to peoples’ needs

Urban landscape environment in recent years have over-emphasised on its grand scale and cosmetic appearance, while ignoring people are the end users of place. The basic needs and aspiration of people in urban landscape environment should be well reflected in the early planning stage. On the appearance, towns have become more “beautiful” and “modernized”. However, there are a few questions to be considered: are the functions of cities improved? Could people really enjoy these environmental and public spaces? These are basic principles in creating a sustainable and harmonious city.

2. Learning from the advanced experience of the Japanese landscape planning

Compared with the Chinese landscape and environmental planning, landscape planning in Japan is more comprehensive and advanced. Japan proposed a scenic area system in the “City Planning Act” back in 1919. In 1990, the establishment of an advisory body to Minister of Construction - “Shaping beautiful cities Forum” which was led by Ministry of Construction officials and leading industry experts to discuss how to shape the urban landscape. In 2004, Japan introduced the “Landscape Act.” The main body of laws and regulations not only include urban landscape, but also agriculture, mountains, fishing villages and other areas. Under the ‘Landscape Act’, all cities would develop their own landscape policy based on individual cities’ own natural, cultural and historical characters.

The landscape planning would then be carried out under the guidance of experts and the landscape policy. Amongst many cities in Japan, the performance of Fukuoka City is more prominent. A comprehensive coverage includes the government, civil society and cultural preservation to create the urban landscape environment which receives high level attention. The measures include:

2.1. Government’s responsibilities

Since 1988 Fukuoka City has formulated the "Fukuoka City Landscape Ordinance". It begins with the investigation of urban landscape (including natural, historical, social, roads, utilities, landscape types, the public impression). The scientific analysis of the existing landscape will be evaluated, to establish the basic urban development goals and urban landscape character which form the basis for the landscape master plan (including the whole city image, axis image, the image of all types of landscapes, etc.) and implementation mechanism, methods and related management regulations.

Geographically, the regulations also identify four designated area such as Tenjin, coastal landscapes based on their landscape characters for special control. Within the city, every building taller than 11 floors or 33 meters requires approval from Urban Landscape Office. Therefore, the urban design in all parts of the city are not only carried out under a general concept impression, but also provides a legal basis for environmental management.

2.2. Public participation

Any government’s policy cannot be implemented without public’s support. Therefore, the Fukuoka Municipal Government issued a new urban landscape management approach, which outlines the public consultation process, such as the leaflets distributed by government agencies to pedestrian and other on street publicity. So that the public is well informed to transform government’s act into people’s self-consciousness. For example: “Fukuoka City Landscape Ordinance” stipulated the drying clothes rack placed on the balcony could affect
the urban landscape. The Ordinance has also provided the building colours, roadside landscaping, parking, trash bins, bus stop kiosks and advertising design standard. These provisions can be effectively implemented in Fukuoka City because there is a high level of public awareness in protecting urban landscape.

2.3. Cultural preservation

Traditional culture is the spiritual pillar of national survival, and the fulcrum of the country’s prosperity. Especially in the information era, the protection of traditional culture is very important. The traditional culture of Fukuoka in the process of modernization has not been abandoned, its protection can be reflected in their design of the landscape environment. On the one hand, the traditional streets, traditional architecture, historical district have been preserved while improving the living conditions without affecting the lifestyle of the residents. On the other hand, the traditional symbol is extracted and integrated into the new environment to reinforce traditional spirit of understanding. Therefore, landscape design could be an effective a method to protect traditional culture.

2.4. Incentive Schemes

In order to promote the urban landscape regulations, the Fukuoka municipal government has established the "Fukuoka City Landscape Award" which is an annual award to complement best practices in landscape and environmental design for projects, district or facilities. Over the past two decades, the annual award has been successful to guide, encourage and test the appropriateness of the urban design and landscape environment which put Fukuoka City in the leading role and provided many excellent examples.

The clear and concise city landscape planning system and the legal system of the Fukuoka City is very well worth learning from. With more than 30 years experience, these initiatives have been developed and improved while tackling many problems during the process. Similarly, "Fukuoka Urban Landscape Award" is also worth learning. At present, there are a lot of awards on the building, planning project concepts established by other organizations, but there is no performance assessment for landscape environment in a city. This initiative will definitely inspire the planning and design of urban landscape in China and Asia.

3. Fostering the development of Urban Landscape standard for China and Asia

In order to learn from the advanced experience of Japan, and to promote best practice in the China and Asia's landscape environment, Asian Habitat Society, have recently carried out a research jointly with the Asian Urban Institute and the Asian Institute of landscape design on "Asia's Urban Landscape Environment Assessment System ". This research will very much based on the 20 years experiences learn from Fukuoka and the Asian perspective of urban development. Through the preparation of evaluation system, a clear urban landscape environment assessment factors will be established to improve city management and the public awareness of innovative city governance.

The modus operandi are: the participating agencies will send senior experts in the field to form the research group. First, the group will identify and study the elements of the urban landscape and its distribution, matching and combination, with the intention to establish a more complete urban landscape environment evaluation system. The group will then carry out pilot project based on research work. Through this experiment, the group will examine a variety of technical indicators to urban landscape and environmental evaluation index system to ensure scientific, feasible and reliable results. The experiences will be very will documented and adopted in other urban landscape environment projects. Asian Habitat Society will organize training classes in Japan Fukuoka on urban governance, urban landscape environment, management and technology. The research results will be promoted in China and Asia.

The vision of today's urban landscape has gone beyond the mere planning of gardens or green areas in cities, but rather becomes a discipline of a high degree of superposition and integration of architectural design, culture, arts and other subjects. Starting with the comprehensive process, a system for co-ordinated environmental planning with other science will provide a correct understanding and guidance, thereby building more harmonious, beautiful and liveable cities and to protect our long and brilliant cultural background. In my opinion, this is not only the true meaning of the subject, but also the future direction in the development of urban landscape planning design and management.
Presenter’s Background

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Mr. Lau is a Registered Landscape Architect and Urban Designer, graduated from University of Toronto and Hong Kong University. He has been practising for over 25 years and has designed many award-winning projects throughout the region. In 1995, he established EDAWearthisa Ltd and has completed many projects include Hong Kong Disneyland Resort, Beijing Olympic Aquatic Park and Athletes Village. He is now the Chairman of EADG. For professional development, Mr. Lau was the Past President of Hong Kong Institute of Landscape Architects and established the Landscape Architects Registration Board. He is the current chairman of Association of Landscape Architects and Asian Habitat Society.

For public services, Mr. Lau is District Councilor of HKSAR Government and Political Consultative Member of Wuhan Government.