Minutes of the 2nd Urban Forestry Advisory Panel (UFAP) Meeting

Date: 16 November 2017
Time: 9:30 am
Venue: Communal Conference Room 7, G/F, West Wing, CGO

ATTENDANCE

Chairperson

Ms Deborah KUH	Head of Greening, Landscape and Tree Management Section (GLTMS)	

Members

Ir CHAN Yun-cheung	Geotechnical Engineer	
Prof. CHAU Kwai-cheong	Soil Scientist	CUHK
Ms Cecilia CHEUNG So-mui	Urban Forestry Manager	MSAR
Mr Kingsley CHOI Lim-cho	Horticulturalist	
Mr Mark DUNTEMANN	Tree Risk Manager	Natural Path
Mr Evans IU Po-lung	Landscape Architect	
Mr Patrick LAU Hing-tat	Landscape Architect	EarthAsia
Dr David LAU Tai-wai	Botanist	CUHK
Mr Frank RINN	Urban Arborist	RINNTECH
Dr WONG Fook-yee	Ecologist	
Ms Yasmin CHIR	Head of Tree Management Office	
Ms Annie FUNG	SLM(H) representing Chief Leisure Manager (Passive Amenities), Leisure and Cultural Services Department	
Dr Winnie KWOK	Senior Conservation Officer (Technical Services), Agriculture, Fisheries and Conservation Department	
Mr Perry TO	Senior Landscape Architect/District (Urban) (Ag), Highways Department	

Via Skype

Dr Paul BARBER	Forest Pathologist	ArborCarbon
Mr Kevin ECKERT	Urban Arborist	ArborGlobal

Secretary

Ms Tina TAI	Assistant Secretary (Tree Management)3, GLTMS

IN ATTENDANCE

Ms Vina WONG	Head of Greening and Landscape Office, GLTMS
Ms Narelle HAMEY	Assistant Secretary (Greening and Landscape)2, GLTMS
Ms Angie AU YEUNG	Assistant Secretary (Tree Management)1, GLTMS
Dr Samuel LAM	Assistant Secretary (Tree Management)2, GLTMS

Action

ABSENT WITH APOLOGIES

Dr Philip CANNON	Forest Pathologist	USDA
Dr Billy HAU Chi-hang	Ecologist	HKU
Prof. Cecil KONIJNENDIJK	Scholar	UBC
Mr Ian SHEARS	Urban Forestry Manager	CoM
Prof. ZHANG Qi-xiang	Horticulturalist	BFU
Prof. XING Fu-wu	Horticulturalist	SCBG

Discussion Items

1. Opening Remarks

1.1 The Chairperson welcomed all Members to the meeting.

2. Confirmation of Notes of Meeting

2.1 The notes of the 1st Meeting were confirmed without amendments.

3. Lessons Learnt from the Removal of Brown Root Rot Disease Infected Old and Valuable Trees and Way Forward for Brown Root Rot Disease Management (UFAP Paper No. 5/2017)

3.1 Dr Samuel Lam reported recent events regarding the Brown Root Rot Disease (BRRD) management work, lessons learnt from the removal of three (3) BRRD Infected Old and Valuable Trees (OVT) in Hong Kong Park and Mong Kok and the way forward for enhancing the BRRD management. More focus would be put on the study, training and education video/material, to foster a better understanding and reinforce key messages of BRRD management work.

3.2 In response to a Member's enquiry about the removal of the BRRD infected tree, possible cure of BRRD and proper message to the public, GLTMS indicated that BRRD was an international disease prevalent in tropical and sub-tropical regions with no effective cure. Once the tree was infected, it could not be cured. Isolation of the infected trees was impracticable with the dense and compact urban environment. As such, to save the surrounding landscape and urban forest assets, the non-OVTs should be removed within four weeks once confirmed with BRRD as stipulated in the Guideline. GLTMS informed Members that they had been publicising the above message to raise public education and awareness of BRRD and to build positive capacity in BRRD management in the industry through seminars, roving exhibition and website. GLTMS solicited Members' assistance to help disseminate the message.

Action

3.3 A Member agreed that there had been numerous claims of cures or effective BRRD management in the world, such as *Trichoderma*. However, there was still no scientific proof that the BRRD could be cured. The best method was therefore to detect it as early as possible, as a mitigation measure, so as to limit the spread to other trees and have timely containment. That Member suggested using trained dogs to detect BRRD infected trees, which was proven to be effective in some European countries. Although the climatic conditions of Europe and Hong Kong were different, it might be an option to consider.

3.4 The following comments and observations were raised by a Member: GLTMS

(a) educating the public to identify the BRRD infected trees in the long run;
(b) adoption of more encouraging words such as 'new opportunity' or 'new initiative' instead of 'difficulty' in the government papers;
(c) the need for the study on planting strategy with BRRD resistant plant species; and
(d) inclusion of a list of qualified contractors or professionals for handling BRRD for public reference.

3.5 The Chairperson welcomed Member's suggestion of using encouraging words. She reported that GLTMS would conduct a study to select plant species with resistance to BRRD as well as build up a list of qualified contractors in the long run. For the community surveillance of BRRD infected trees, it should be handled with extra care as it was a highly specialised subject and the public would not have adequate knowledge on it. As such, the current priority was to foster public's deeper understanding and awareness of BRRD.

3.6 A Member shared the experience of a previous study of disease resistant tree species in Australia and the case of *Phytophthora* issue causing rapid declining urban tree in Perth, Australia. That Member also stressed the importance of proper treatment and disinfection of the site as well as the contamination method after the removal of the trees. If the BRRD infected tree was completely isolated, the subject tree could be kept monitoring.

3.7 For BRRD detection method, a Member suggested identifying some sites with high BRRD reported cases and collect soils samples in these sites for quantitative investigation through quick diagnosis method, such as LAMP, so as to study the BRRD population of the infected area. That Member also suggested conducting monitoring for plants nearby in the long run to help identify some resistant native species to BRRD for restoration.

3.8 A Member raised concern on the possible spread of the disease through tree transplanting and the relatively low survival rate of the transplanted trees. That Member suggested reviewing the guidelines on GLTMS

transplanting with regard to the cost effectiveness. The Chairperson responded that a healthy landscape with good soil and favourable growing environment was crucial to an effective urban forestry management. Maximising the soil options for healthy planting environment in Hong Kong was also one of their key initiatives. GLTMS further informed that the transplanting practice would be reviewed.

3.9 A Member opined that in order to avoid the spread of disease through tree transplanting, the works departments should have adequate knowledge on the proper procedure and handling of tree transplanting.

3.10 A Member suggested using the existing BRRD information to map out the spatial distribution, the possible process of transmission and plant species that commonly affected by the disease. It would help enhance the understanding of BRRD in Hong Kong. Dr Samuel LAM welcomed the suggestion and responded that such information would be used in a recent study on the genetic diversity and population structure of *Phellinus noxius*.

3.11 To sum up, Dr Samuel LAM concurred that quick diagnosis method was important for early detection and had been collaborating with different laboratories to explore ways and methods. GLTMS would continue to collaborate with tertiary, educational and research institutions to conduct studies, such as biological and chemical treatments for BRRD and selection of BRRD resistant plant species for site restoration. These studies would enhance the understanding on the genetic diversity and virulence of the *P. noxius* population in Hong Kong and help exploring means for limiting the spread of BRRD and urban forest reclamation to help formulate a "Preventive" management strategy. GLTMS

3.12 The Chairperson further pointed out that prevention was the best strategy for BRRD management. It included proper landscaping practice, provision of proper planting environment and sustainable landscape design etc. It was concluded that an updated BRRD management policy and strategy was being developed including a technical circular on BRRD management, a frontline operation manual and education and training tools. GLTMS would further explore ways to provide relevant information to the private sectors for reference. GLTMS

4. Study on Street Ecology Strategy for Hong Kong (UFAP Paper No. 6/2017)

4.1 Ms Narelle HAMEY introduced that they commissioned a multi-disciplinary consultant to undertake a pilot study on street ecology strategy (the Study) for Hong Kong. It aimed to formulate a practical guide to support strategic street tree planting and urban forest

Action

management. Members were briefed on the preliminary findings of the Study (i.e. the street tree selection criteria, street typology classification, and recommended tree species list) and some recommendations for further studies.

4.2 Members in general welcomed the Study and considered it was a good start to provide a useful guidance to facilitate tree selection for streets. A Member asked if the guide would be mandatory or a guideline for reference, and would the Study cover slopes and include recommendations for tree spacing. Another Member commented that due consideration should also be given to the physiological characteristics of tree species in addition to the site and design characteristics.

4.3 The Chairperson supplemented that the Study served as a baseline guideline for future further studies for enhancing street ecology and urban landscape. The Study would also help to encourage the propagation and production of nursery stock of uncommonly used species, in particular for native species. It was hoped that more varietals, suitable for urban environment, could be produced and available in the market.

4.4 A Member commented that the introduction of exotic species should be carefully considered with regard to quarantine measures and the quality of imported plant stock. The selection of inappropriate tree species would generate lots of management and maintenance issues. Tree species recommendations should also consider future climate change factors.

4.5 A Member commented on the following in respect of the Study: GLTMS

(a) Agreed that the potential list of suitable street tree species should include both native and exotic species;
(b) The Study was suggested to be applied in housing and highways projects;
(c) While some species could tolerate urban soils conditions better than others, it was better to focus on providing appropriate soils for better growing conditions for healthy trees. A viable and sustainable soil management strategy was crucial;
(d) Agreed with another Member that the physiological aspects should not be ignored;
(e) Cultural and historical factors were equally important in addition to ecology aspect in formulating the tree selection criteria;
(f) Hoped that the town planning and other guidelines could be reviewed;
(g) The discount factor should be taken into account for the useful life expectancy (ULE) in response to local factors; and
(h) To recommend more nitrogen fixing species.

Action

4.6 A Member opined that species with poisonous parts such as *Adenanthera microsperma* (海紅豆) (seeds were poisonous) and *Schima superba* (木荷) (bark, trunk and roots were poisonous) should be avoided. GLTMS

4.7 Mr Perry TO briefed Members om the programme on 'Enhancement of Vegetated Slopes of Highways Department (Phased Replacement of Senescent Acacia)' implemented by Highways Department.

4.8 A Member shared experience in USA and suggested contracting with nurseries to safeguard the stable supply of good and high valued stock for planting. That Member also suggested targets for recommended species and commented that some of the top 20 common species in the Tree Management Information System (TMIS) in Hong Kong might have significant value that should not be eliminated in future street tree planting. GLTMS

4.9 A Member shared the views from European perspectives as follows:

(a) Trees in many European countries were also growing in a compact and dense environment similar to Hong Kong. Soils were also in poor quality; and

(b) The failure rate of new tree planting was about 70% within the first five years which was a large waste of monetary and human resources. However, a recent study found that the failure rate significantly dropped down to 20% if some selected complementary shrub species were planted underneath the trees. They also required less maintenance in the long run. It showed that good mix of vegetation provided a favourable condition for tree growth

4.10 A Member made the following comments:

(a) In preparing the recommended tree list, be cautious to tree species with the following characteristics:
  (i) ecologically important;
  (ii) bird-attracting;
  (iii) deciduous; and
  (iv) with hard and large fruit or seeds.
(b) To allow some buffer zone in the planting end;
(c) Some native species might not be easily available in the market, or the seed might be collected illegally;
(d) Some seeds of native species imported from other countries might not be suitable in Hong Kong; and
(e) Eucalyptus was not favourable as it would release some chemical compounds which inhibit other plant species from growing nearby.

4.11 A Member opined that the top 20 common species in Hong Kong should not be totally ignored with regard to their adaptability to the environment and importance in providing greenery for a long time.

These species must have some properties that were compatible with the local soil, climate and the environment.

4.12 A Member proposed to consider an urban arboretum in the new town for education and training purposes.

4.13 In response to comments made by members, Ms Narelle HAMEY clarified that:

(a) The physiological characteristics of tree species would be covered in Task 5 of the Study and would also be included in the practical guide for users' reference;

(b) In the Study, there were discussions about consideration of site specific factors, such as cultural and historical aspects, which might be unique to the site during the tree selection process;

(c) GLTMS agreed with the planting principle of "Right Tree Right Place" and had no intention of discouraging the use of top 20 common tree species in Hong Kong when it was considered appropriate. However, since the objective of the Study was to explore and expand suitable species for street planting, these top 20 common tree species need not be emphasized in the Study; and

(d) The list of tree species was under further review. Members were most welcome to share with GLTMS their practical experience and expertise after the meeting.

(Post Meeting Note: At the request of some Members, the powerpoint presentation was emailed to all Members on 23 November 2017 for further comments. Additional comments and advice were received from two Members.)

4.14 The Chairperson thanked Members for the valuable comments. The Study aimed at producing a good integrity of vegetation community and building up a herbarium database with complimentary species. She agreed that various guidelines needed to be reviewed. She also remarked that the Study was a first step to engage the departments and industry moving forward to the next step. GLTMS

5. Any Other Business

5.1 A Member noticed recently that a new tree support system was found in Kowloon Park and objected to have such provision. Some of the trees supporting systems are doing more damages to the trees and in some cases they may also reduce the amenity value. The Chairperson reminded departments that all recommendations from previous panel to be forwarded to GLTMS for review. GLTMS would seek more current advice from the new UFAP if required. The Chairperson re-emphasised that GLTMS did not support the use of external steel frame structures and re-emphasised proper life cycle management with community and education involvement. GLTMS

Action

5.2 A Member enquired if there was any guideline governing the arrangement on tree replacement. That Member mentioned the difficulty of understanding the recent modification of a numerical tree replacement program by LCSD with one replacement for three removals. The Member also emphasised the need to avoid the arbitrary numerical values, to review the amenity of the trees, to identify tree species that are appropriate for replacement and to seek the international expertise and experience in the UFAP. Ms Annie FUNG supplemented that the arrangement of tree replanting for LCSD would all depend on the site environment.

5.3 There being no other business, the meeting adjourned at 12:35 pm.

Greening, Landscape and Tree Management Section
Development Bureau
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