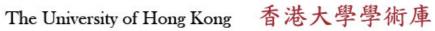
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Author(s)	Chan, Ngar-lam, Aileen; Cheung, Ting-fung, Franky; Leung, Manwai, Joanne; Tam, Kwok-chu, Joe; Yip, Ho-yin, Chris		
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Tree Management and the Greening of the Environment in Hong Kong: A Study of Collaborative Governance

by

CHAN Aileen Ngar Lam (2003220077)

CHEUNG Ting Fung, Franky (2012931598)

LEUNG Man Wai, Joanne (2012932164)

TAM Kwok Chu, Joe (2000222634)

YIP Ho Yin, Chris (2012932176)

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Department of Politics and Public Administration

The University of Hong Kong

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Declaration

We hereby declare that this Capstone Project Report, entitled "Tree Management and the Greening of the Environment in Hong Kong: A Study of Collaborative Governance", represents our own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or any other institution for a degree, diploma or other qualification.

(Signed)

CHAN Aileen Ngar Lam
CHEUNG Ting Fung, Franky
LEUNG Man Wai, Joanne
TAM Kwok Chu, Joe
YIP Ho Yin, Chris



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Abstract

Trees are invaluable and essential public asset for any cities particularly in congested cities like Hong Kong. While trees embellish the environment, the planning and management of trees is a complex issue. The Hong Kong Government bears the ultimate responsibility of managing trees and greening while it adopts a collaborative governance approach to govern such issue. This project examines the effectiveness and addresses the problems of the collaborative governance initiatives of the Hong Kong Government in managing trees and greening the environment in Hong Kong.

Guided by the analytical framework, different collaborative governance arrangements are addressed from a conventional perspective of different types of governance which helps illustrate the interlocking relationship of the government, the market and the civil society, to the idea of "new public service" which emphasizes the participation of non-governmental bodies in public governance, and eventually to notions of collaborative governance comprising principled engagement, shared motivation, capacity for joint action, and several associated pre-requisites and challenges.

The context of tree management is then discussed in detail which includes the organizational setting, policy dimensions, government's tree management strategy and the involvement of the public. It is observed



that the collaboration strategy of greening and tree management is not as effective as it was expected. Reasons of failure of collaboration are analysed thoroughly referencing various cases.

This study then draws up recommendations towards the way to improve the efficiency and effectiveness of collaboration in tree management and greening in Hong Kong. It is believed that governance on tree management and greening would be successful by effectively engaging the public and enforcing the essential elements of collaboration into the governance network.



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Abbreviations

AFCD Agriculture, Fisheries and Conversation Department

ASD Architectural Services Department

CEDD Civil Engineering and Development Department

DC District Council

DEVB Development Bureau

DSD Drainage Services Department

FHB Food and Health Bureau

GLTM Section Greening, Landscape and Tree Management Section

GLO Greening and Landscape Office

GMP Greening Master Plan

HA Housing Authority

HAB Home Affairs Bureau

HAD Home Affairs Department

HD Housing Department

HyD Highways Department

ISA International Society of Arborist

Lands Department

LCSD Leisure and Cultural Services Department

SCGLTM Steering Committee on Greening, Landscape and Tree

Management

TAFEHC Tourism, Agriculture, Fisheries and Environmental Hygiene

Committee

TMO Tree Management Office

WSD Water Supplies Department



Chapter One: Introduction

Focus, Objective and Background of the Project

This project examines the effectiveness and addresses the problems of the collaborative governance initiatives of the Hong Kong Government in managing trees and greening the environment in Hong Kong. The objective of the project is to analyse tree management and greening work in Hong Kong from the perspective of collaborative governance which recognizes that there are various forms of collaborative governance that governments can adopt in managing activities involving numerous agencies.

The discussion considers the existing work of the Government in coordinating the agencies in managing trees and greening the environment, including the problems the Government encounters in facilitating collaboration between different responsible departments within government, non-governmental organisations, and for-profit private sector organisations. Governance models and theories are utilized to analyse the existing tree management and environmental greening initiatives, leading to suggestions being given on how to strengthen effectiveness and efficiency in managing trees and greening the environment in Hong Kong.



The project recognises that trees are invaluable and essential public asset for any cities particularly in congested cities like Hong Kong. Apart from providing a more pleasant environment in the area for us to live and work, trees can improve air quality and help alleviate the urban air pollution problem. However, the planning and management of all the trees, especially in a dense city like Hong Kong, is a complex issue. Tree management and greening involves a number of aspects such as planning, planting, maintenance, risk assessment and protection of the trees and requires the collaboration of a number of parties including departments within government, non-governmental organisations, and for-profit private sector organisations.

Nowadays, the majority of environmental greening and tree management work in Hong Kong is mainly carried out by the Government. Private land owners are also responsible for tree management within their land. However, since the majority of people in Hong Kong live in high-rise flats, the responsibility of tree management lies within the management office of the buildings. The general public thus have little knowledge and experience in identifying problem trees and managing them. The major responsible party in managing trees is therefore the Government. Up to date, an "Integrated Approach" has been adopted for the division of responsibilities in tree management among the government departments. A good collaboration among all these "agencies" is thus necessary since



collective effort from these departments under different bureaus is required to manage and take care of all the trees in Hong Kong.

The greening and tree management work done by the Government has not been a very satisfactory issue in the eyes of the public, especially after a series of poor tree management incidents in recent years, including a couple of fatal accidents in 2008 and 2010. Since a young girl was killed by a collapsing Coral Tree in Stanley in 2008, the Government was critically criticized for being unprofessional in managing trees. The Greening, Landscape and Tree Management (GLTM) Section under the Development Bureau (**DEBV**) was then set up in 2010 with a purpose to improve the coordination between responsible government departments in greening and managing trees in Hong Kong. However, another fatal tree collapse case took place again in Yuen Chau Kok Park of Shatin District in 2010, in which a middle-aged man was killed by a collapsing Yellow Poinciana while he was cycling. Since then, the public's trust in the Government's tree management ability has still been very low. Up to now, GLTM Section still could not prove to be able to effectively organise the coordination with all the government departments, not to mention other agencies like non-governmental organisations or private organisations.

Planting trees helps create 'green lungs' in cities, which aids in the reduction of global warming, carbon emissions and the urban heat island



effect. Additionally, trees improve local air quality, increase water retention in township soils, create natural and pleasant noise barriers, and add both aesthetic and economic value. Planting trees also dramatically increases the biodiversity of urban areas, providing habitat for birds and small animals, and welcome shade to people in the community. In a few years' time, these trees will form a living, green, productive canopy where once was bare ground and concrete. The trees will provide much needed shade, will help filter air of pollutants, and create a pleasant, resilient microclimate throughout the township. Management of existing trees not only ensures safety of passers-by, it also helps preserve the natural heritage.

Greening the urban environment through the rich and colourful trees, shrubs, flowers together with a series of greenery can create a fresh, beautiful and comfortable environment to improve the urban living conditions and enhance the quality of people's lives. Greening landscape is an important means to change the urban environment. Through tree and flora planting will form a complete greenery system which can achieve purification of air, prevention of pollution, adjustment of climate, improvement of soil quality and ecology as well as enhancement of visual environment.

Apart from adding aesthetic quality and human dimension to the urban design for creation of a more pleasant cityscape, greening functions as urban lung to offer visual and psychological comfort and relief, which are



vital to the health and well-being of people in a high-density and congested environment. Landscaped earth bunds can even be used as a form of traffic noise mitigation measures. Furthermore, suitable trees and plants of indigenous species provide food and shelter for wildlife, such as insects and birds, and hence maintain the ecology of the area and conserve wildlife.

In short, greening beautifies the environment and improves the ecological condition and it is inter-related and inseparable to management of vegetation. Given greening environment and management of vegetation are essential and important to both human and the ecological system, high emphasis should be accorded to these aspects.

Research Questions and Related Propositions: Theory and Practice

The following research questions are addressed in the project:

- 1. What collaborative governance arrangements can governments adopt in the management of activities involving a diverse array of organisations-- and what are the key challenges?
- 2. What particular collaborative governance arrangements has the Hong Kong Government adopted in relation to the issue of tree management and the greening of Hong Kong -- and why?
- 3. How effective have these collaborative governance arrangements been?



4. How could these collaborative governance arrangements be strengthened and/or complemented by the adoption of other potentially more effective arrangements?

The Government has long adopted an "Integrated Approach" for the management of trees on government land which the department responsible for the maintenance of an area or a facility is also responsible for the maintenance of trees there. However, the Government has on and off been criticized for its failure in managing the vegetation, especially after a series of poor tree management incidents over the years, including a couple of fatal accidents. In order to uplift the quality of people's living environment and to improve the work on greenery, the Government has established the GLTM Section to champion a new and strategic policy on greening, landscaping and tree management, with a view to achieve the sustainable development of a greener environment of Hong Kong. It is believed that the GLTM Section is responsible for central coordination of government's greening and landscape planning and design efforts and also advocates the adoption of a professional approach to tree management among tree management departments and in the community at large. expected that cooperation and coordination work will be enhanced after the establishment of GLTM Section hence better quality of tree management work can be achieved. As such, evidences will be gathered to analyse the current collaboration work among relevant departments and parties in



greening and management under the current system and the problem of the "Integrated Approach" currently adopted in Hong Kong will be studied. The project will try to develop insights for enhancement of the Government's collaborative governance regarding these issues as a properly administrated collaboration among different departments and parties is definitely crucial to effective greening and tree management in Hong Kong.

Overview of the Analytical Framework

The traditional concept of government as an authoritative and regulating organisation is found inadequate to cope with the public problems that are often multifaceted and complex. Attention has been shifted from "government" to "governance" which focuses on all kinds of organisations and arrangements involved in the pursuit of public interest and the steering role of government in the management of public affairs. Knill and Lenschow (2003) identified four ideal types of governance which are mainly based on two analytical distinctions, which is the degree of cooperation between public and private actors in the policy making process and the degree of legal obligation that characterizes collective policy The four ideal types of governance are interventionist solutions. governance, regulated self-governance, cooperative governance and private self-governance.

The conventional perspective of different types of governance illustrating



some interlocking of the government, the market and the civil society, evolves to the idea of "new public service" which emphasizes the active participation of non-governmental bodies in public governance. Consistent with this emphasis, Emerson, Nabachi and Balogh (2011) argue that the stages within collaborative dynamics are cyclical or iterative interactions. Principled engagement, shared motivation and capacity for joint action are three essential, interacting elements of collaborative dynamics. These and related elements are addressed in Chapter Two to form an integrated analytical framework to guide and inform the empirical analysis in subsequent chapters.

Research Methodology

In the course of the research, literature review is one of the important means adopted to establish the analytical framework for the project. An intensive literature search and review on relevant documents in relation to forms of collaborative governance available to management of trees and greening the environment of Hong Kong will be based on. To gather information, data and information from various sources, such as books, journals, government and other official documents are collected and analysed. The above information collected can serve as a basic reference for interpretation. Data and information released by the Government, especially information from GLTM Section and departments engaging in tree management are referred to. Reports and articles from media and District Council will also



be reviewed as they reflect the opinion of the general public on the issue. News reports on tree incident will also be studied to evaluate the effectiveness of collaboration among agencies and whether synergy effect has been created among the departments. It is expected that the majority of the research documents being reviewed are available via the Internet. Given that many documents that are already in existence are available in the aspect of tree management and greening of Hong Kong, desktop research is considered appropriate as it is considered that resources and data are available, adequate and up-to-date for the scale of analysis of the study. Nevertheless, departments engaging in tree management will be approached directly to collect information which is not available at their websites.

Currently, local citizens and private parities only have limited level of participation in greening and tree management work in Hong Kong. The desktop research approach is considered appropriate and sufficient to the project because the greening and tree management work in Hong Kong are mostly initiated by the Government. There are a lot of relevant government documents and reports available. Furthermore, the media and the district councils act as monitoring roles on the government work. Articles and council meeting papers, which include views from professionals and the general public, are also easily available on the internet.



The information collected from various sources assists in addressing the research questions and associated propositions in evaluating the effectiveness of collaborative governance on tree management and the greening of Hong Kong. Possible alternative collaborative governance arrangements are examined to strengthen or complement current practice.

Chapter Outline

This project report is structured as chapters, which includes this introductory chapter. Chapter Two provides an analytical framework for the study. It consists of the definition, types and practices of collaborative governance, along with benefits and risks of collaborative governance. This is followed by Chapter Three which details the current collaboration work of greening and tree management by the Government, including the background and work of both the Greening and Landscape Office and the Tree Management Office under the Greening, Landscape and Tree Management Section of the Development Bureau and how they are currently coordinating the work of greening and tree management in Hong Kong. Chapter Four then provides a detailed analysis of the effectiveness and the problems of the collaborative governance of the Hong Kong Government in managing trees and greening the environment in Hong Kong. Finally in Chapter Five, a conclusion is made by summarizing the research findings and making suggestions for a more effective and continual coordination among relevant parties for better greening and tree



management in Hong Kong.



Chapter Two: Analytical Framework

Introduction

This chapter establishes the analytical framework for the project. Various arrangements comprising collaborative governance are discussed. The arrangements are addressed from a conventional perspective of different types of governance which helps illustrate the interlocking relationship of the government, the market and the civil society, to the idea of "new public service" which emphasizes the participation of non-governmental bodies in public governance, and eventually to notions of collaborative governance comprising principled engagement, shared motivation, capacity for joint action, and several associated pre-requisites and challenges. The arrangements are neither independent nor contradicting to one another, but are interlocking which demonstrate the progression of collaborative governance.

Definition of Collaborative Governance

The traditional conception of government as an authoritative, regulating, bureaucratic and monolithic organisation is found inadequate to cope with public problems that are often multifaceted and complex. Attention has been shifted from "government" to "governance" which focuses on all kinds of organisations and arrangements involved in the pursuit of public



interest and the steering role of government in the management of public affairs. Under the concept of governance, government is only one of the many actors in public service delivery.

Nowadays in public administration, the term "collaborative governance" has become common but its definition remains ambiguous and its use is still inconsistent. Emerson, Nabatchi and Balogh (2011) define collaborative governance broadly "as the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished". This definition will be adopted in this project because it allows collaborative governance to be used as a broad analytic construct in public administration. This definition can be applied to multi-partners governance which include partnerships among the state, the private sector, civil society and the community, as well as can be applied to participatory governance and civic engagement (Emerson, Nabatchi and Balogh, 2011).

The broad definition of collaborative governance embraces interrelated public administration models which are relevant in describing the collaborative bases of governance. Included are elements required for successful collaborative governance and for evaluating the extent and



outcomes of collaboration.

Types of Governance

Knill and Lenschow (2003) identify four ideal types of governance (as shown in Table 2.1), which is mainly based on two analytical distinctions, which is on one hand the degree of cooperation between public and private actors in the policy making process; and on the other hand the degree of legal obligation that characterizes collective policy solutions.

Table 2.1: Four Ideal Types of Governance

		Cooperation of public and private actors	
		High	Low
Degree of legal	High	Regulated Self-Governance	Interventionist Governance
obligation	Low	Cooperative Governance	Private Self-Governance

Source: Knill and Lehmkuhl (2002b:49) in Knill & Tosun, 2012

Interventionist Governance

This refers to the traditional and classical setting of policy making, namely the limited governance capacity of private actors and the overall responsibility for the provision of public goods lies with the government. The government and the private actors are in a hierarchical relationship, with the government adopting a top-down approach in making public policy decision, through highly detailed and legally bidding requirements. There is an underlying assumption that the government has better knowledge on the provision of public goods than the private actors. In the context of



interventionist governance, rules and regulations are clearly defined by the government and private actors do not have much role in setting the game rules. The government exercises a high degree of "command and control" over the private actors, while the private actors do not have much bargaining power. Interventionist governance is also the dominant model of "old public administration".

Regulated Self-Governance

This refers to constellations in which hierarchical intervention through legally binding rules is accompanied by more cooperative relationships between public and private actors during the formulation and implementation of public policies (Knill and Tosun, 2012). The private actors participate on the basis of clearly formalized and institutionalized procedures, whilst the government still plays a dominant role in making the final decision on policy contents and regulatory arrangements. There might also be various kinds of arrangements of the relationship between the Comparing to interventionist governance, public and private actors. regulated self-governance involves a higher degree of cooperation between government and private actors. Under the context of regulated self-governance, private actors are empowered in the "shadow of hierarchy", in which private actors or organisations are delegated with public functions and responsibilities, while at the same time under the supervision of the government. When the government-private cooperation fails, i.e. public



interest is adversely affected, the government would intervene and be capable to take over the decision making.

Cooperative Governance

In cooperative governance, the definition and application of instruments does not occur on the basis of legally binding requirements, but through negotiations and voluntary agreements between public and private actors (Knill and Tosun, 2012). Policy decisions are not made in a top-down approach, whilst both public and private actors participate on an equal standing. The government is not dominating in policies formulations and implementations but is cooperating with private actors through negotiations and voluntary agreements. Cooperative governance also relies on the voluntary participation of private actors, as well as continuous bargaining processes between the actors. Comparing to regulated self-governance and interventionist governance, lesser degree of legal obligation is observed in cooperative governance. Rules of game are jointly defined by both government and private actors in a cooperative manner.

Private Self-Governance

Similar to cooperative governance, private self-governance is based on voluntary rather than legally binding instruments. The provision of public goods depends heavily on the governance capacity of the private actors, rather than the government. Comparing with cooperative governance,



there is a lesser degree of cooperation between the government and private actors in private self-governance. The government might only contribute by providing complementary governance contributions, for instance by officially acknowledging the outcomes of private governance or to provide guidance to private actors in societal self-governance, mediating and moderating between conflicting interests, enhancing communication and coordinating actions of different actors of the governance network. In other words, the government is taking a more coordinating and supporting role in the decision making process by provide relevant infrastructure to the private actors, while the private actors are the decision makers.

The Underlying Significance of Collaboration

The four types of governance cannot be understood in light of mere ideological orientations or political preferences of the governing party, but against the backdrop of specific institutional and political structures, which might vary across countries and policy sectors and so determine the governance capacity of public and private sectors (Knill and Tosun, 2012). Although the four types are considered to be ideologies and have apparent disparity with the reality, they help illustrate the interlocking relationship of the government, the market and the civil society and so the importance of collaboration governance.



Ideal Collaboration: "New Public Service"?

In nowadays' complex and diverse societies, governance is increasingly a multifaceted and multidimensional phenomenon. In the early twentieth century, the "old public administration" was the dominant model, which is a hierarchical structure similar to interventionist governance. With an ideological desire to reduce the size of the government, the government later evolved to become a steering role with decentralized public organisations and considerable outsourcing that was known as "new public management" (Denhardt and Denhardt, 2003). With the growing importance of collaboration, the idea of "new public service" is considered as the normative governance model and the most efficient form of modern governance.

Instead of solely depending on the government bureaucracy or the market mechanism, new public service aims to achieve policy goals by leveraging and managing networks and partnerships involving various non-government agencies. New public service focuses on aligning the public, non-governmental organisations, non-profit organisations and private companies. By negotiation and coordination among the parties, mutual agreements are made upon needs of the stakeholders. In the context of new public service, the government no longer takes up all the works in generating and implementing policies. It would only engage in those activities that cannot be privatized, contracted out or handled by market



mechanism (Denhardt and Denhardt, 2003). The government takes up a serving role in the process, of which mainly involves bridging the gap in expectation among stakeholders, facilitating negotiations and information sharing and, eventually, achieving jointly accepted values and policy decisions. By inclusion and involvement in the policy making process, stakeholders' ownership to the solution is improved and smooth implementation can be achieved by reducing conflicts and enhancing legitimacy.

A new collaborative structure is also introduced in the idea of new public service. Leadership is not only maintained within the bureaucracy or simply controlling the agents. It is now more about coordination and cooperation, neither centralized nor decentralized control, and leadership may be shared both internally and externally, which implies that bodies out of the bureaucracy may even lead the network in achieving policy objective on particular issues. In the model, the network structure is comparatively less hierarchical than traditional bureaucratic structure and connection with organisations outside the bureaucracy is gaining its importance.

New public service also re-molds the accountability structure. Government and political leaders are not only responsible to political leaders or keep their hands off to let the market prevails policy. Instead, accountability of the government became multi-dimensional. Government



has to attend to law, community values, political norms, professional standards and citizen interest (Denhardt and Denhardt, 2003). Even though the government moved from a generator role to a facilitator role in new public service, it does not reduce its accountability in achieving policy objective.

Essential Elements for Collaboration

Emerson, Nabachi and Balogh (2011) argue that the stages within collaborative dynamics are cyclical or iterative interactions. Principled engagement, shared motivation and capacity for joint action are three essential and interacting elements of collaborative dynamics.

Principled Engagement

Principled engagement means engaging different stakeholders at different times and settings such as face-to-face or virtual formats, cross-organisational networks, or private and public meetings, etc. Through principled engagement, people with differing content, relational, and identity goals work across their respective institutional, sectoral, or jurisdictional boundaries to solve problems, resolve conflicts, or create value (Cahn 1994; Cupach and Canary 1997; Lulofs and Cahn 2000; Emerson, Nabachi and Balogh 2011).

Getting the "right" people to the table is important (Anesell and Gash 2008;



Carlson 2007; Carpenter and Kennedy 2001; Emerson et al. 2009; Susskind, Mc Kearnan, and Thomas-Larner 1999, Emerson, Nabachi and Balogh 2011). Diversity is essential as it allows people with multiple perspectives and different interests to voice out and allows the development of more thoughtful decisions that take a broader view of who will benefit or be harmed by an action (Beierle and Cayford 2002; Sirianni 2009, Emerson, Nabachi and Balogh 2011).

Principled engagement occurs over time through the iteration of four basic process elements: discovery, definition, deliberation, and determination (Emerson, Nabatchi and Balogh 2011). Through this iterative process, collaboration partners can develop a sense of purpose to achieve their common goals and purposes. Principled engagement enables the collaboration partners understand the size of the problem or challenge they are facing ahead, as well as the scope and degree of the activities or interventions chosen by the collaboration partners.

Principled engagement is generated and sustained by the interactive processes of discovery, definition, deliberation and determination. The effectiveness of principled engagement is determined, in part, by the quality of these interactive processes (Emerson, Nabatchi and Balogh 2011).



Shared Motivation

Shared motivation is defined as "a self-reinforcing cycle consisting of four elements: mutual trust, understanding, internal legitimacy and commitment" (Emerson, Nabatchi and Balogh 2011). Shared motivation highlights the interpersonal and relational elements of the collaborative dynamics and is sometimes referred to as social capital (Colman 1988; Putnam 2000; Putnam, Leonardi, and Nanetti 1993; Emerson, Nabatchi and Balogh 2011). Shared motivation is, in part, initiated by principled engagement, and is an intermediate outcome. Once initiated, shared motivation also reinforces or accelerates the principled engagement process.

In networks, trust can reduce transaction costs, improve investments and stability in relations, and stimulate learning, knowledge exchange, and innovation. With shared motivation, trust generates mutual understanding, which in turn generates legitimacy and finally commitment. Trust enables people to understand other people's thinking, interests, needs, values and constraints which go beyond their own understandings.

Trust enables people to reveal their true self to others and is the basis of mutual understanding. Mutual understanding does not only mean knowing what others think in mind but specifically refers to the ability to understand and respect others' positions and interests even when one might not agree.



Interpersonal validation and cognitive legitimacy are generated from mutual understanding. Trust and interactions further reinforce confidence in the legitimacy and efficacy of the collaborative dynamics. This leads to creating bonds of shared commitment, which enable participants to cross the organisational, sectoral, and/or jurisdictional boundaries that previously separated them and commit to a shared path. Repeated quality interactions through principled engagement will help foster trust, mutual understanding, internal legitimacy and shared commitment thereby generating and sustaining shared motivation (Emerson, Nabatchi and Balogh 2011).

Capacity for Joint Action

The purpose of collaboration is to generate desired outcomes together that could not be accomplished separately (Emerson, Nabatchi and Balogh 2011). Collaboration is engaging in cooperative activities to enhance the capacity of both self and others to achieve a common purpose (Himmelman 1994). A new capacity for joint action which did not exist before is expected from collaboration. Capacity for joint action can be viewed as an intermediate outcome of the interacting cycles of principled engagement and shared motivation. The capacity for joint action can also improve and strengthen the engagement and shared motivation cycles. Synergy, more effective actions and impacts are expected from the joint action. Capacity for joint action is the combination of four necessary elements: procedural



and institutional arrangements, leadership, knowledge and resources (Emerson, Nabatchi and Balogh 2011).

The capacity for joint action must be supplemented with some formal institutional design such as regulations, rules or laws as different collaboration partners bring different informal norms. To a larger extent, more explicit structures and protocols for administration and management of work are required to create a more complex and long-lived collaborative networks.

Leadership is the second element in capacity for joint action. Leadership can be an external driver, an essential ingredient of collaborative governance itself, and a significant outgrowth of collaboration.

The third element in the capacity for joint action is knowledge. Collaborative action enables data and information to be aggregated, separated and resembled. Generation of new and shared knowledge are required in collaborative action.

Resources are the final element of the capacity for joint action. Funding, time, technical and logistical support, administrative and organisational assistance, requisite skills for analysis or implementation, expertise are different forms of resources. Power is also a form of resources but it is



always distributed unevenly across participants. Benefit can be gained by sharing and leveraging scarce resources in collaboration. Principled engagement and shared motivation will stimulate the development of institutional arrangements, leadership, knowledge and resources, thereby generating and sustaining capacity for joint action (Emerson, Nabatchi and Balogh 2011).

Other Essential Elements

Donahue and Zeckhauser (2008) suggest that non-governmental actors are appropriately enlisted into public undertakings to improve performance in the creation of public value. Resources, productivity, information and legitimacy are the advantages gained in public-private collaboration. They are closely related to principled engagement, capacity for joint action and shared motivation, and are a measurement of the outcome of collaboration (Emerson, Nabatchi and Balogh 2011).

Resources are the simplest reason for public-private collaboration when the government itself lacks resources. It also refers to the lack of ability to mobilize the resources. Government's command of resources is not only measured by its net worth or collateral availability, but rather in terms of the citizens' tolerance for taxation (Donahue and Zeckhauser, 2008). The government's resources are considered inadequate when the citizens are unwilling to provide revenues to fund a particular project, such as



opposition or protest against the government. Even the citizens are willing to devote resources to the mission, the resources are still inadequate when the funds are not enough.

In some cases, the government lacks the productive capacity while the external agents have. By collaboration, the government can improve performance or lower costs or both which taps the efficiency edge. Emphasizes should be put on technical know-how, proprietary intellectual capital, or other potentially transferable capacity that happens to reside in the private sector instead of in the government. Focused invectives of the profit motive, procedural flexibility and the ability to harvest economies of scale and scope also allow the private sector to bring higher productivity than the government.

Even the government has the available resources in hand and the productivity is not lower than the non-government sectors, collaboration still brings advantages when it is impossible or costly for government to acquire pertinent information. For example, non-profit organisations have local knowledge in the needs of the communities such as the citizens' preferences. The government may finance the non-profit organisations while they provide community service to the society directly.

In some cases, the government is seen as inappropriate to pursue a



particular task on its own and private involvement may enhance the perceived legitimacy. Although the society understands that recycling activities would help saving the environment, it is still preferred that the government should encourage and even fund groups such as the green groups to do the work, rather than running the recycling business itself.

Concluding Comments

This chapter has addressed a number of aspects of collaborative governance, including definitions, types, and essential elements for collaboration. The discussion of these matters constitutes an analytical framework for a description and assessment of the work of tree management and greening in Hong Kong. The framework structures and guides the analysis of the system contexts and significant features of the work of the government.

In essence, the analytical framework consists of three layers. On the top layer, Knill and Lenschow's discussion comprises four ideal types of governance. In the second layer, the discussion focuses on how a government should leverage governance networks, in accordance with the ideas of new public service. The third layer embraces the essential elements for collaboration, as suggested by Emerson, Nabatchi and Balogh (2011). The outcome of collaboration is measured in terms of resources, productivity, information and legitimacy.



Chapter Three: Organisational and Policy Dimensions

This Chapter examines the work of tree management and greening environment of the Government with a focus on collaborative governance in accordance with the analytical framework in Chapter Two. The establishment of the GLTM Section under the DEVB and the adoption of an "Integrated Approach" for various greening and tree management work are studied.

Greening, Landscape and Tree Management Section

The issue of greening and tree management has long been discussed within the Government, but minimal effort was put in concrete policy formulation before 2008. Traditionally, government departments or civil organisations were responsible for managing trees under their own turf. There was no integrated guideline or approach on how trees should be managed and the management of trees was up to the responsible parties' discretion, causing great variation in handling methods. As such, although greening and tree management often affected various aspects, the importance of it was often ignored. Greening and tree management were commonly put aside when responsible parties had other agenda in line.

In 2008, a fatal tree falling accident took place in Stanley. A sick and



unmanaged coral tree fell in Stanley accidentally killing a 19 year-old school girl and injuring 2 other girls. The accident alerted people's awareness of tree management work in Hong Kong. To cope with public awareness and expectations, the Task Force on Tree Management, led by the Chief Secretary for Administration, was set up to conduct a comprehensive review on the cause of the accident and the work of tree management in Hong Kong. Followed by a comprehensive review, the Task Force on Tree Management published the "Report of the Task Force on Tree Management – People, Tree, Harmony" in June 2009. suggested in the report, the Greening, Landscape and Tree Management (GLTM) Section was established under the Works Branch of Development Bureau (**DEVB**) in March 2010, with a hope to enhance the system of tree management at that time, by acting as advisory body and policy maker on trees, and coordinating the efforts of many different departments with fragmented responsibility.

The GLTM Section is underpinned by the Greening and Landscape Office (GLO) and the Tree Management Office (TMO). The GLO is responsible for central coordination of Government's greening and landscape planning and design efforts while the TMO advocates the adoption of a professional approach to tree management among tree management departments and in the community.

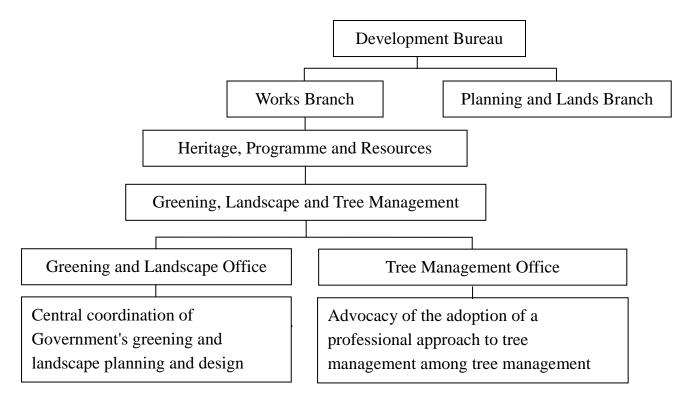


With different focus and priority tasks, the two offices work in close cooperation to promote a holistic approach in greening and tree management. The GLO takes care of the upstream factors, including adequate space allocation for new plantings, selection of suitable planting species and good-quality landscape design and planting practices. The TMO, on the other hand, takes care of vegetation maintenance, i.e. the downstream aspects and acts as a central authority to give policy steer on tree management matters and a provider of expertise in tree management. Both units emphasize on protection of public safety as a priority consideration.

The organisation structure of GLTM Section is presented in Figure 3.1. Apart from staff providing administrative support, most staff members working in GLTM Section are either administrative officers or tree management officers who possess professional qualification in tree management and arboriculture.



Figure 3.1: Organisation Chart of GLTM Section



Source: http://www.trees.gov.hk/en/home/index.html

A Steering Committee on Greening, Landscape and Tree Management (SCGLTM) has also been set up under the GLTM Section. SCGLTM is chaired by the Permanent Secretary for Development (Works) with members drawn from 16 bureaux and departments. Various committees were set up under SCGLTM, namely Works and Maintenance Committee on Greening, Community Involvement Committee on Greening, Greening Master Plan Committee and Expert Panel on Tree Management. They are responsible for providing technical and administrative support, as well as to collate input from the general public and expert advisers. In addition, they have regular meetings to promote greening, review the existing standards and guidelines on greening, and establish reference guidelines for



maintenance of trees and vegetation.

The GLO aims to enhance the quality of the living environment through active planning, proper maintenance and preservation of trees together with other vegetation. It also aims to bring out noticeable improvements in urban greenery, to enhance existing greened areas and opportunities of quality greening during the planning and development of public works projects. To achieve these, the Government has developed strategies which aim to improve the coordination and effectiveness of greening efforts within the current regime. Greening as an integral part of future public and private works projects is promoted and the private sector and community participation are also encouraged to promote greening.

The Government compiles a territory-wide greening programme each year to facilitate planning and monitoring of related progress and outcome. The programme includes incorporating planting elements into works projects, and increase planting along roadside amenity areas and expressways; carrying out planting and beautification works at priority sites in the urban areas (e.g. key promenades, public housing estates, footbridges and pedestrian zones); providing vegetation on man-made slopes; and planting tree seedlings in the countryside. The Government also focuses on targets to improve the urban greenery through the implementation of Greening Master Plans (GMPs) and related streetscape improvement in



selected urban areas.

Recognizing the importance of greening, the Government invested great efforts in constructing GMPs for districts. The Civil Engineering and Development Department (CEDD) takes the major responsibility for the construction of GMPs. Taking into account the local characteristics and public aspirations, a GMP seeks to define the overall greening framework of a district, and serves as a guide for all parties involved in planning, design and implementation of greening works. In addition to identifying suitable locations for planting, the GMP will establish the greening themes and propose suitable planting species.

The Government adopts an "Integrated Approach" for the management of trees on Government land. In essence, the department responsible for the maintenance of an area or a facility is also responsible for the maintenance of trees there. After the set-up of the TMO, TMO acts as a central authority that provides policy steer and coordinates various departments on tree management while different departments carry out the responsibilities for maintenance of vegetation in their lands.

The set-up of the TMO aims to act as a central authority to give policy steer on tree management matters and a provider of expertise in tree management. Raising the professional standard of tree management in Hong Kong is one



of the key areas of work of the TMO.

To enhance tree risk management, the TMO has promulgated Guidelines for Tree Risk Assessment and Management Arrangement since 2010 for departments' implementation so as to enhance tree safety. TMO is disseminating knowledge on various aspects of tree management through the formulation of guidelines and best practices. Guidelines on a variety of tree management topics, including General Guidelines on Tree Pruning, Guideline on Brown Root Rot Disease, Guidelines on Arboriculture Occupational Safety and Health, Guideline on Pavement Renovation Works and Tree Stability, Management Guidelines for Stonewall Trees and The Proper Planting Practice have been issued. The TMO conducts audit check to the tree risk assessment carried out by departments to ensure that the assessments are conducted in a professional manner and in compliance with the promulgated guideline. Besides, random tree inspections in districts are also carried out by the TMO.

To enhance training for tree management personnel in departments, the TMO is committed to enhancing training for tree management personnel in departments. Tree-related training organised by the TMO for tree management personnel in departments includes such topics as tree risk management, tree identification, common tree problems, pests and diseases management, proper tree maintenance, tree protection during construction



etc.

The TMO is also spearheading research studies to build up the professional knowledge base. Identified research topics including street tree management plan, wood strength of common tree species in Hong Kong and common biological tree decaying agents in Hong Kong have been conducted. The research findings were shared among the tree management departments as well as the industry.

Departmental Responsibilities for Maintenance of Vegetation

Under the "Integrated Approach", the department responsible for the maintenance of an area or a facility is also responsible for the maintenance of tress there. The Technical Circular (Works) No. 2/2004 issued by the Environment, Transport and Works Bureau of the Government Secretariat has set out the departmental responsibilities for maintenance of vegetation and hard landscape features.

As the maintenance of vegetation is performed by different departments, the standard of service varies among them. Departmental guidelines, manpower and the requirements of tendering out the tree management work are significant to the standard and level of service. The same incident happens in different government land may result in different result because of different professional judgement of the case officers, different work



protocols and different requirements of contract when tendering out the tree management work. Various level of standard will ultimately affect the effectiveness of organisational collaboration work. Six major departments engaging in maintenance of vegetation have been approached so as to have a better understanding of their work on tree management.

Responsibilities of the Water Supplies Department (WSD)

In accordance with the Technical Circular (Works) No. 2/2004, Water Supplies Department is responsible for maintaining vegetation on waterworks reserve if the waterworks installations are above ground. Since the set-up of TMO, WSD follows guidance from TMO on tree management where practicable.

WSD has a Landscape Services Unit, comprising 1 Landscape Architect and 1 Field Officer with relevant arboricultural qualifications, to provide advice on tree matters should such be required from the maintenance divisions. Additionally, staff at managerial level who are responsible for the administration and supervisory of maintenance contractors have acquired relevant tree handling knowledge through training courses organised by the TMO as well as other training institutions from time to time.

For the day to day handling and maintenance of tree matters within the



lands under the care of WSD, the works are outsourced, amongst other routine maintenance works, to the maintenance contractors. The contractors are required to be in the "List of Approved Suppliers of Materials and Specialist Contractors for Public Works" under the category of "Landscaping: Class I - General Landscape Work". If not, the contractors are required to sublet the works to a subcontractor who is in the aforesaid list. The contractors in the list are required to meet the financial, technical and management criteria for admission and retention on the approved lists and for the award of public works contracts.

Responsibilities of the Housing Department (HD) / Housing Authority (HA)

In accordance with the Technical Circular (Works) No. 2/2004, Housing Department is responsible for maintaining vegetation within the public housing area, vested land including temporary housing areas and cottage areas. HD does not have their own legislation or guidelines governing the tree management work within the department. They follow the policies and guidelines formulated by the TMO.

HD has a tree management team, comprising Senior Landscape Architects, Landscape Architect, Senior Leisure Services Manager and Leisure Services Managers. All of them have taken the Tree Risk Assessment Course & Examination conducted by TMO. Some have obtained the



qualification 'Certified Arborist' from International Society of Arborist (ISA), U.S.A. or 'Professional Tree Inspection' awarded by LANTRA, U.K.

HD outsources most of their tree risk assessments and tree remedial works to specialist contractors. A small portion of the tree management works of some new projects remains with the Tree Management Unit and Landscape Groups in HD. A copy of the Conditions of Tender of the Tree Risk Assessment and Tree Remedial Works contracts are collected from HD. From the tender for the provision of arboricultural services for tree inventory records, tree risk assessments and tree works certification in public housing estates and Housing Authority Properties, it requires the contractor to provide particular personnel in the execution of the contract works. The tender requires the contractor to deploy Assessment Team Leaders to review and endorse all inspection reports and work records. The Assessment Team Leader is required to possess the qualifications set out in Table 3.2.

Table 3.2: Qualification Requirements for Assessment Team Leader in Housing Authority's Tender

	Degree Entry	Non-Degree Entry
Academic	Recognized Bachelor	Recognized diploma in
Training	Degree or above in	Arboriculture,
	Arboriculture,	Horticulture or Biological
	Horticulture or Biological	Science or equivalent to
	Science or equivalent to	the standards of Level 3 in
	the standards of Level 5	Hong Kong Qualifications
	or above in Hong Kong	Framework (HKQF);
	Qualifications Framework	
	(HKQF);	
Professional	Certified Arborist	Certified Arborist



Qualifications	qualification of	qualification of		
Q www.iii	International Society of	International Society of		
	Arboriculture; or	Arboriculture; or		
	Theorieutare, or	Theoricalitate, of		
	Technician Member,	Technician Member,		
	Professional Member or	Professional Member or		
	Fellow of the	above of the		
	Arboricultural Association	Arboricultural Association		
	of the UK; or	of the UK; or		
	European Tree Technician	European Tree Technician		
	of the European	of the European		
	Arboricultural Council; or	Arboricultural Council; or		
	Registered Arborist (Level	Registered Arborist (Level		
	3 or above) of	3 or above) of		
	Arboriculture Australia; or	Arboriculture Australia; or		
	Accredited Arboricultural	Accredited Arboricultural		
	Practitioner of the	Practitioner of the		
	HKILA; or □	HKILA; or		
		Professional Diploma		
	Professional Diploma	Programme in		
	Programme in	Arboriculture of the		
	Arboriculture of the	CUHK; or equivalent		
	CUHK; or equivalent			
Working	Have at least four (1)	Have at least five (5)		
	Have at least four (4)	` ´		
experience	years of working	years of working		
	experience in	experience in		
	arboriculture prior to the	arboriculture prior to the		
	Tender Closing Date	Tender Closing Date		

Source: Housing Authority Tender for the Provision of Arboricultural Services for Tree Inventory Records, Tree Risk Assessments and Tree Works Certification in Public Housing Estates and Housing Authority Properties for Wong Tai Sin, Tsing Yi, Tsuen Wan and Islands Region

The tender also requires the contractor to deploy Tree Risk Assessors to discharge all compilation of tree inventory record, tree risk assessment, tree remedial works for those trees with imminent danger during tree risk assessment and certification of tree works. The Tree Risk Assessors are



required to possess the qualifications set out in Table 3.3.

Table 3.3: Qualification Requirements for Tree Risk Assessor in Housing Authority's Tender

Professional	Certified Arborist qualification of International
Qualifications	Society of Arboriculture; or
	Technician Member, Professional Member or Fellow of the Arboricultural Association of the UK; or
	European Tree Technician of the European Arboricultural Council; or
	Registered Arborist (Level 3 or above) of Arboriculture Australia; or
	Accredited Arboricultural Practitioner of the HKILA; or
	Professional Diploma Programme in Arboriculture of the CUHK; or equivalent
Working	Have at least two (2) cumulative years of working
experience	experience in arboriculture within the immediate past five (5) years prior to the Tender Closing

Source: Housing Authority Tender for the Provision of Arboricultural Services for Tree Inventory Records, Tree Risk Assessments and Tree Works Certification in Public Housing Estates and Housing Authority Properties for Wong Tai Sin, Tsing Yi, Tsuen Wan and Islands Region

For the tender for tree remedial works in public housing estates and Housing Authority Properties, it requires the contractor to provide Aboricultural Supervisor to supervise all tree works. Each Aboricultural Supervisor shall possess the following qualifications set out in Table 3.4.

Table 3.4: Qualification Requirement for Aboricultural Supervisor in Housing Authority's Tender

Professional	Certified	Arborist	qualification	of	International
Qualifications	Society of	Arboricult	ure; or		



	Technician Member or above of the Arboricultural Association of the UK; or			
	European Tree Technician of the European Arboricultural Council; or			
	Registered Arborist (Level 3 or above) of Arboriculture Australia; or			
	Accredited Arboricultural Practitioner of the HKILA; or			
	Professional Diploma Programme in Arboriculture of the CUHK; or equivalent			
Working experience	Have at least two (3) cumulative years of working experience in arboriculture within the immediate past five (5) years prior to the Tender Closing			

Source: Housing Authority Tender for Tree Remedial Works in Public Housing Estates and Housing Authority Properties for Tai Po, North, Shatin and Sai Kung Region

The Tree Management Team of HD/ HA monitors the performance and progress of the tree risk assessment and tree remedial works contractors, and ensures that the works are in compliance with TMO's requirements.

Responsibilities of the Leisure and Cultural Services Department (LCSD)

LCSD is one of the tree management departments managing and maintaining about 500,000 trees. In accordance with the demarcation of Maintenance Responsibility for Vegetation as stated under the Environment, Transport and Works Bureau Technical Circular (Works) No. 2/2004 on 'Maintenance of Vegetation and Hard Landscape Features', LCSD is responsible for tree management and maintenance of the following land



categories:

- 1. Facilities on land allocated to LCSD, e.g. parks, playgrounds, garden and sitting out areas, etc; and
- 2. Landscaped areas along non-expressway public roads (outside country parks) and handed over to LCSD for maintenance.

LCSD, among other tree maintenance departments, performs tree management according to GLTM Section's promulgated policies, guidelines and standards, such as Technical Circular (Works) No. 2/2004.

LCSD has set up six Regional Tree Teams at Urban and New Territories areas since May 2010. Each Team consists of managers, supervisors and operational staff. Members of the Tree Teams are trained and experienced in tree management. Apart from giving expert advices to other departments on tree issues, the Tree Teams will conduct tree risk assessments and subsequent mitigation tree works to ensure trees under our management are properly maintained.

From year 2010 to 2015, LCSD would train up more than 5,000 staff to enhance the professional knowledge and skills of employees especially in tree risk management, of which some them would also obtain professional qualifications, such as the Certified Arborist, Certified Tree Risk Assessor



and Certified Tree Worker Climber Specialist.

LCSD has contracted out minor tree maintenance works through tendering. Generally speaking, contractors will provide service such as tree pruning, tree planting, application of fertilizers, pest and disease control etc. Tree works like tree risk assessment and aerial tree works are carried out by the Tree Teams.

Responsibilities of the Drainage Services Department (DSD)

In accordance with the Technical Circular (Works) No. 2/2004, Drainage Services Department is responsible for maintaining vegetation, including tree planting, cutting and trimming of the overgrowth, growing within DSD's nullahs, drainage channels, engineered watercourses, stormwater drainage systems and facilities.

Landscape Unit of DSD is responsible for providing advisory services on landscape and tree matters. Certain members of Landscape Unit, including Landscape Architect and Field Officer, possess professional qualifications in arboriculture, such as Certified Arborist of the International Society of Arboriculture. As of year 2013, there are 3 Landscape Architect and 1 Field Officer in the Landscape Unit of DSD, in which 3 of them are Certified Arborist of ISA.



The tree management work of DSD is implemented under various contracts. In general, tree planting, tree transplanting, other tree surgery works, tree preservation and protection works are carried out by the contractors in accordance with Section 3 and Section 26 of the General Specification for Civil Engineering Works (2006 edition).

Responsibilities of the Lands Department (LandsD)

In accordance with the Technical Circular (Works) No. 2/2004, Lands Department is responsible for the tree management work on unleased and unallocated government land (not managed by other government department). Since the unleased and unallocated government land is a very large amount and spreading across the territory, LandsD generally carries out ad hoc maintenance (e.g. tree felling, trimming and grass cutting) upon receipt of referrals and complaints. LandsD is also responsible for processing tree works involving tree felling/transplanting of the private land which has tree preservation clause in the lease. LandsD refused to disclose if there is any policy and guidelines governing the tree management work of the Department.

The Tree Unit in LandsD staffed with landscape architects and forestry officers is to discharge the aforementioned tree management responsibility of the Department. In general, where tree works are needed for trees on unleased and unallocated government land, the District Lands Offices of



Lands Department would carry out the tree works with the assistance of the vegetation contractors. However, LandsD refused to provide a copy of tender regarding the contract requirements.

Responsibilities of the Highways Department (HyD)

In accordance with the Technical Circular (Works) No. 2/2004, Highways Department is responsible for maintaining vegetation within the boundary of expressways and landscaped deck/ noise enclosure of public roads without pedestrian or vehicular access. HyD follows guidance from TMO on tree management where practicable.

HyD has a Vegetation Maintenance Team, mainly comprising landscape architects and field officers grade, is responsible for tree management and maintenance works for those vegetation located on the registered HyD SIMAR slopes and areas within the boundary of expressways. Certain members in Vegetation Maintenance Team in HyD possess international professional qualifications in arboriculture, such as the International Society of Arboriculture (ISA) Certified Arborist, ISA Certified Tree Risk Assessor, holder of Certificate in Professional Tree Inspection (LANTRA Awards UK), etc.

Tree management and maintenance works in HyD is implemented under various term contracts. However, HyD refused to reveal the tender



document and contract to outsiders.

Public Engagement and Community Involvement in Greening and Tree Management Work

Since the set-up of the GLTM Section, the Government seeks to foster a culture of care in Hong Kong for greenery, including trees, across the territory through a variety of community involvement and public education activities, and encourage the public to participate in tree risk management and community surveillance of trees. The government hopes that the community would play a significant role in the greening and tree management work. The GLTM Section is mounting a variety of community involvement and public education activities for various target groups to foster an attitude of greening the environment and care for trees across the territory. These activities include roving exhibitions, school talks, seminars for the industry, private owners and property management companies, etc.

The Agriculture, Fisheries and Conservation Department (**AFCD**), the LCSD and the Home Affairs Department (**HAD**) are also directed by the GLTM Section to set up their publicity programmes to promote greening and tree management and encourage participation by the community in tree planting activities. LCSD is responsible for encouraging members of the public to assist in monitoring the conditions of trees in the territory through



enhanced engagement with the Green Ambassadors, the District Tree Care Volunteers and students, etc., thereby helping the Government carry out its tree management work more effectively. Furthermore, to facilitate public surveillance, new "Tree Care Report" is available on the web for members of the public to report suspected problematic trees in government land for follow-up action by departments.

The "1823" service is one of the channels the public can get involved in tree management in Hong Kong. The "1823" Call Centre was set up by the Efficiency Unit in 2001 to improve the efficiency and accessibility of call handling by the Government. It is responsible for providing a 7 x 24 one-stop hotline service to answer public enquiries on behalf of 22 participating departments and to receive reports or complaints about any area of Government services including reports on problematic trees or tree accidents.

For enquiries or reports regarding departments not covered by 1823, the Call Centre can provide relevant contact information to the enquirers. For complaints, while it is the responsibility of the bureaux or departments concerned to consider and act on the complaint, "1823" Call Centre provides communication, recording and tracking of each complaint. "1823" Call Centre also helps ensure that complaints that cut across different departments' responsibilities are acted on properly and may pass



information to a complainant if requested by departments.

Apart from telephone, "1823" Call Centre also accepts public reports / inquiries of tree problems by e-mail, fax or letter. The official website of 1823 also provides a user-friendly platform to facilitate members of the public to lodge reports on problematic trees or other tree problems. On the "Report / Complaint" section of the website, "Trees" is one of the three major categories (the other two are "General" and "Slope") for people to choose when lodging report on tree problems through the website. User-friendly interfaces such as a list of simple questions and choices were provided for reporters / complainants to provide necessary information in four steps including "Where", "What", "More" and "Who". After going through the four quick and easy steps, the 1823 Centre can identify the location and problem of the tree concerned and then refer the case to respective government departments to follow up.

The "Tell me@1823" smart-phone app was launched in April 2011, whereby members of the public may submit photographs along with voice descriptions and digitally registered geo-data when reporting problematic trees. Apart from the providing various channels to facilitate public members' report on tree problems, the website of 1823 also provide a lot of useful information concerning tree management, which encourages the public to report tree problems with knowledge including how to inspect



trees, how to help preserve safety of trees, how to check a tree's health by examining its condition to see if there are any abnormalities and what information should be provided when reporting problematic trees, etc.

By receiving tree related reports from the public through various channels, the "1823" Call Centre referred about 15,000 tree complaint cases in 2012 and nearly 8,000 in 2013 to respective government departments to process or follow up. The breakdown of the number of tree complaint cases referred to the departments by "1823" Call Centre in 2012 and 2013 are respectively listed in Table 3.5.

Table 3.5: Number of tree complaint cases referred by 1823 to responsible

government departments

Government	No. of Cases		
Departments	Year 2012	Year 2013	
Lands Department	5,911	5,103	
Highways Department	3,606	2,039	
Leisure and Cultural Services Department	3,382	1,650	
Fire Services Department	1,595	545	
Other Departments	575	447	

Source: Written reply from '1823' Call Centre (Case Ref: 2-284061649)

Discussion of the Main Arrangements

Before the setup of GLTM Section, the government, as well as the public, did not have much awareness on tree management and related greening issues. In other words, there was little government involvement, not to



mention governance of such issues.

After the set-up of TMO and GLO under the GLTM Section, it appeared that the government adopted a private self-governance approach in governing tree management and related greening issues. The six major departments involved in tree management rely heavily on reporting of tree-related issues by citizens through 1823, and the tree management ground works, such as tree maintenance and tree planting, are outsourced to contractors who possess the expertise in managing tress. Even though there are qualified tree management experts in the six departments, those experts mainly supervise the work of contractors. In other words, the six departments take a facilitator role by providing complementary governance contributions, mediating and moderating between conflicting interests.

TMO appears to be the facilitator of the facilitators. TMO set up standards, provides guidelines to working departments and proving trainings to government departments as well as other agencies, but does not directly involved in tree management. TMO has a coordinating and supporting role in tree management by provide relevant infrastructure to other actors in the network.

In the tree management and greening issues, the measures adopted by the government, including outsourcing tree management works to contractors



and reporting tree-related issues to 1823 by citizens, does not have strong legal obligation on other actors of the network. On the other hand, the cooperation of the public and private actors is low, as the government dominates in policies formulations and implementations and with little negotiations and cooperation between the government and other private actors.

In tree management and greening issues, the government aims to achieve policy goal, through utilizing ideas of new public service, by leveraging and managing networks and partnerships involving various non-government agencies, instead of solely depending on the government bureaucracy or the market mechanism. By negotiation and coordination among the parties, mutual agreements are made upon needs of the stakeholders. TMO takes up coordinating role in tree management in the network, through providing tree management guidelines and advise to tree managing department, providing training to the public as well as other actors of the network and taking a leading role in complex tree management cases.

Under new public service, the accountability of the Government on tree management and greening became multi-dimensional. Government has to attend to relevant ordinances and laws related to tree management, including community values and citizen interest into the decision making and policy making process, setting up professional standards and guidelines



for tree management, and inevitably the government bear the ultimate responsibility for the outcome of tree management and greening in Hong Kong. In other words, even though the Government has taken up a facilitator role in the New Public Service model, it does not reduce its accountability in achieving policy objective.

In order to achieve successful collaboration, three elements - principled engagement, shared motivation and capacity for joint action - are essential. In greening and tree management, the three elements are observed.

Principled engagement occurs over time through the iteration of four basic process elements: discovery, definition, deliberation, and determination. In the greening and tree management issues, actions in accordance with the four elements had been taken by actors of the network.

The discovery stage on greening and tree management issue happened after the lethal tree falling accident in 2008. The Government and the public realized the necessity to address such issue. Thus, the government did fact finding and analysis on both the organisational arrangements and practices. Definition was achieved through setting up of TMO. The scope and the policy goal of tree management were established by getting consensus on concepts. Deliberation focuses on communication and negotiation between actors of the network. The result of deliberation is reflected by



the guidelines of tree management with clear division of labour. As a result, Determination is observed through the establishment of TMO and the execution of policy.

Shared motivation is initiated by principled engagement and is based on trust and mutual understanding between the actors of the network. Collaboration on greening and tree management enables participants to cross the organisational, sectoral, and jurisdictional boundaries that previously separated them and commit to a shared path. Departments might not have enough communication to deal with tree related problems in a collaborative view and might just focus on preventing problem. With collaboration, a boarder view of policy is included, e.g. incorporating elements of greening into tree management.

Repeated quality interactions through principled engagement, e.g. clearly defined scope of work and division of responsibility, will help foster trust, mutual understanding, internal legitimacy and shared commitment thereby generating and sustaining shared motivation.

The purpose of collaboration is to generate desired outcomes together that could not be accomplished separately. And thus collaboration is achieved by procedural and institutional arrangements, leadership, knowledge and resources.



Collaboration improved the cost effectiveness and productivity of governance, in which the government tap the efficiency edge to improve performance and lower costs. In greening and tree management, joint action by different actors is necessary for tree management. Since it is too costly for the government to inspect all trees in Hong Kong and realize every potential tree accidents, collaboration makes it practicable by creating workflow and platform for information sharing, initiating and executing actions with reasonable cost and control.

Improved information flow is one of the advantages achieved by collaboration. Through collaboration, tree management and greening knowledge is shared in the following ways:-

- Knowledge is shared by TMO with the departments through the
 established guidelines, and thus the departments would acquire the
 skills and knowledge in supervising and tendering the tree management
 works.
- Knowledge is shared by working departments with contractors, e.g.
 through tender and contracts, so that the contractor would understand
 the requirement and the expectation of the government.
- Knowledge is shared by the public with other actors of the network.
 Under the current practice, the realization of tree problems relies heavily on the local knowledge trees, such as reporting of dangerous



trees and trees which may have caused inconvenience to road users.

Knowledge is shared to the public, which mainly focuses on educating
the public on preserving the safety of trees and inspecting trees, e.g.
through 1823 and courses organised by TMO.

Sense of responsibility involving parties of the network of governance is enhanced. Compare to the situation prior to the set-up of TMO, tree management and greening requirements are concretely laid down in relevant guidelines and instruction, and so involving government departments understand their responsibilities better. Also, private involvement, including citizens' report of potential tree problems, enhances the perceived legitimacy of the policy and approach of governance.

Concluding Comments

Prior to the set-up of GLTM Section the Government did not pay much attention on governing tree management issue. After setting up TMO and GLO under the GLTM Section, the Government adopted a private self-governance approach, in accordance with the top layer of the analytical framework, in governing tree management and related greening issues.

The Government, instead of solely depending on the government bureaucracy or the market mechanism, leveraged networks and partnerships involving various non-government agencies, in accordance with the second



layer of the analytical framework – the new public service model, in governing the greening and tree management issue. Even though the government has taken up a facilitator role, it does not reduce its accountability in achieving policy objective.

Essential elements of collaboration, as mentioned in the third layer of the analytical framework, are also observed. The three interlocking essential elements, namely principled engagement, shared motivation and capacity for joint action, are developed and mutually reinforced during the progress of collaboration. As such, desired outcomes, which could not be accomplished separately, are achieved by parties of the network working together. The advantages of successful collaboration are measured and evaluated in terms of improved resources efficiency, improved productivity, better information flow and enhanced legitimacy.



Chapter Four: Tree Management Office and the Challenges of Collaboration

Introduction

This chapter focuses on the analyses of the GLTM Section through extensive empirical cases. The setup of TMO under the GLTM Section under the DEVB in the wake of the fatal tree collapsing accident in Stanley killing a 19-year-old girl in 2008 is supposed to be able to provide a stronger tree management system and a more effective collaboration among relevant government departments with a better greening and tree management strategy for Hong Kong, with an objective to transform tree management from self-governance to cooperative governance among the public and private sectors. However, a series of tree collapsing accidents causing deaths and injuries after the setup of TMO indicates that public safety is still at risk and there are still problems and challenges for the TMO to collaborate among the departments to implement greening and tree management strategy in Hong Kong.

Tree Collapsing Accidents

A cyclist killed by a falling Pionciana in Sha Tin in June 2010

On 14 Jun 2010, a 49-year-old man was cycling on the track outside Yuen Chau Kok Park in Sha Tin when a branch of a 15-metre yellow Poinciana



tree snapped off four metres above the ground and fell meters in front of him. When trying to avoid the falling branch, the men fell off his cycle and strike his head on the ground heavily. The victim was admitted to hospital unconscious and died on the next evening.

Five pedestrians injured by a falling Bayern Tree in Tsim Sha Tsui in July 2012

Five pedestrians were injured when a 14-meter Chinese banyan tree collapsed at the Park Lane Shoppers' Boulevard, one of Tsim Sha Tsui's busiest shopping areas, in the evening of 19 Jul 2012. The tree also toppled a light pole and damaged the glass canopy of a bus stop shelter. The tree collapsed just three months after a risk assessment which determined the tree was safe to remain in place.

A truck passenger killed by a falling banyan in Tai Po in October 2012

A man was killed when a 100-year-old banyan tree fell on the truck in which he was travelling along a narrow road approaching Lam Kam Road in Tai Po on 11 Oct 2012. The 20-metre-tall, 10-tonne tree crushed the passenger side of the vehicle. The 41-year-old driver escaped serious injuries and managed to climb out of the wreckage shouting for help, but his 29-year-old passenger, who was a delivery worker, was trapped inside. Firefighters took more than one hour to free him and he was declared dead later in hospital. Specialist said at the site that the tree was sick and had



been structurally imbalanced, as the tree's branches had outgrown the trunk, increasing the risk of collapse. It was believed that the concrete road left little space for roots to grow and 80 per cent of the tree's trunk was rotten and believed to be infected with fungi and pests.

A 43-year-old driver injured by a falling banyan tree branch in October 2012

After a passenger in a truck was killed by a falling banyan tree in Tai Po just one week earlier, a large branch of a 10-metre tall banyan tree fell on to and damaged the roof of a truck in Yau Ma Tei on 18 Oct 2012. The 43-year-old was sent to hospital for treatment after the fall of the branch. The incident happened in Tak Hing Street at a junction with Tak Shing Street and the section of road was closed as firefighters removed the branch. The LCSD later said a team inspected the tree on April 5 and found its condition normal.

Falling tree injured a 49-year-old man in Tsuen Wan in August 2013

A 49-year-old man was hit by a falling tree in Tsuen Wan on 16 Aug 2013. The tree in Kwong Pan Tin Tsuen, whose trunk had a diameter of around 60cm, collapsed in the afternoon and hit the man, who suffered head injuries and was in critical condition after being sent to hospital.



Case Studies

The following two case studies give an in-depth report and discussion on the problems of greening and tree management in Hong Kong. They are particularly relevant in providing a comprehensive empirical analysis for the strength and weaknesses of the current greening and tree management policies.

Case Study 1 – Lack of Greening Plans

This case involves questionable greening plans concerning Acacia confusa which was planted along South Lantau Road on Lantau Island. Islands District Council Members have frequently questioned that trees of such species should not be planted along roadsides, as has deep roots, causing cracks on pavements, and it is difficult to transplant it. Further, since it has a relatively short life span of around 50 years, some of them are now falling along the road, causing safety of passersby to be in jeopardy, but almost nothing has been done to rectify the problem. The responsible department, HyD, is reluctant to remove trees, as this may be subject to criticism by greening organisations, especially the removal of trees that do not have major health issues. The Islands District Council has long been complaining the above issue to different government departments.

Mr. Randy YU, Member of Islands District and Convenor of the on Islands Healthy City Working Group, went on an inspection with Dr. SO Kwok-yin,



the Chief Executive of The Conservancy Association, together with other people, on 27 June 2012, to check on the situation of Acacia confusa along South Lantau Road (Mui Wo to Pui O segment). (See Appendix 1) They inspected Acacia confusa samples along four different positions of the road, and found that most Acacia confusa has various degrees of health and structural problems, such as crown wilt, termites bite, fungi erosion, and some has danger in collapsing. Later, Dr. SO further examined other Acacia confusa in other sections of South Lantau Road, and came out with the following report in Table 4.1:

Table 4.1: Report on the health and structural problem of Acacia confusa

Number of	Diameter	Age	Percentage	Percentage
Acacia			with health	with serious
confusa			problems	structural
				problems
252	>50 cm	20-30	80%	>50%
93	<50cm	10-20	50%	>30%

Source: Tourism, Agriculture, Fisheries and Environmental Hygiene Committee, Islands District Council (2012-2015), Minutes from 17 September 2012 (Appendix 1)

The inspection covered a quarter of the entire South Lantau Road. The whole of South Lantau Road is approximately over 1,000 Acacia Confusa in total.

The above concerns were raised numerous times in Islands District Council meetings. At the sub-committee meeting on 13 September 2012, the representative of the GLTM Section responded that the Government



adopted an "integrated approach" in tree management. The entire South Lantau Road is up to 14 km of length, which is spread into different government departments' jurisdiction, such as in or outside country parks areas, artificial slopes etc. According to the integrated approach, the management of trees in each area should be handled by a different department. If DC members think that having different government departments in charge of different parts of South Lantau Road might cause difficulty in the management of Acacia confusa, the GLTM Section offered to gather DC members' opinion and reflect them to the responsible departments. The GLTM Section had received information about Acacia confusa in the South Lantau before the meeting, and also noted that three government had started preliminary coordination on the above issue. If DC Members think that the progress is not satisfactory, the GLTM Section also offered to help contact other responsible departments.

Mr. Randy YU clarified to the GLTM Section that the entire South Lantau Road (from Mui Wo to Tai O) should be 13.5 miles in length, rather than 14 km, and about 600 Acacia confusa should be removed. Residents are not only concerned on the removal of old Acacia confusa, they also hope can there would be replanting of new trees after the removal. The government needs to consider the feasibility of sustainable development, human needs, regional development and environmental conditions when planning how to plant new trees after the removal of Acacia confusa. Since the Acacia



confusa had reached the end of its life span, he suggested the GLTM Section to take this opportunity to consider the abovementioned three 3 factors, and come up with a detailed plan. After the detailed plan is constructed, the GLTM Section should also consult the local community, such as the District Council, representatives of the Rural Committee and representatives of the Islands District Healthy City Working Group.

The GLTM Section would discuss with the LandsD and the LCSD to on the Acacia confusa of South Lantau Road. If there are safety issues, the government would first remove trees with serious problems. He also promised that the Government would also carry out extensive planning on the pruning, removal and replanting work for the 200 Acacia confusa along South Lantau Road, and will consult when the area's rural committees and District Council members on details of the plan.

One year later, the CEDD presented a GMP to the Islands District (See TAFEHC Paper No. 48/2013 in TAFEHC meeting on 30 September 2013, of Islands District Council), the GMP did not include detailed greening plan in South Lantau, let alone how to replace the Acacia confusa along South Lantau Road. Up to 2014, Acacia confusa along South Lantau Road remained, no replacement has been made.



Case Study 2 – Reluctance of Departments to Take Responsibility for Trees

There are examples of bad tree management that departments refuse to take responsibility of trees which are in unclear turf or territory. TMO might then have to act as the deciding party, and assign the responsibilities the apparently most responsible departments. With the TMO being the party with the authority to assign or to decide on tree management responsibility, or to smoothen the collaboration between managing parties, it is expected that the efficiency of tree management should be improved. The following example is used to illustrate the efficiency of TMO as the deciding role:-

After Typhoon Vicente swept through Hong Kong on 23 July 2012, there are many fallen trees lying in the streets and in front of residential doorways in Cheung Chau. The Cheung Chau Rural Committee had sent volunteers to help clean up as much as possible, but due to the absence of professional knowledge and equipment, a lot of fallen trees were not fully cleaned. According to a Member of the Islands District Council, one week before the typhoon, an old lady named GONG reported to the government call centre (1823 hotline) that there was a moth-eaten big hole in a tree in front of her house, but the government did not send any staff to handle the situation. After the typhoon, the tree in front of GONG's house had fallen, blocking the entrance of the house, and GONG was unable to open her door.



During one of the sub-committee meetings of the Island District Council (The Tourism, Agricultural, Fisheries and Hygiene Committee (TAFEHC) meeting on 17 September 2012) (See Appendix 1), the sub-committee Chairman reflected the case to the representatives of the GLTM Section, and claimed that the wooden logs of the fallen tree in front of the house of GONG remained there for more than 50 days, and nobody had cleaned it up yet. The Chairman then requested the government to set up an inter-departmental working group to deal with similar cases. The initial response of the representative of the GLTM Section is that they had to first find out the responsible government departments, before helping GONG to clean up the fallen trees. Since the collapsed trees were located on private land, the representative of the GLTM Section also claimed that it may be difficult to find suitable government departments to take care of the tree. The GLTM Section also required that the wood logs should also remain in public area after the collapse, if the wood is located on private land, the GLTM Section claimed that it would be difficult for the government to arrange clean up. The Chairman of the subcommittee then clarified that the tree was grown on public area, not on private land, and it fell on GONG's doorway, GONG is then unable to open the door of her home, the area in front of her house was also in a mess. Volunteers had helped GONG to cut the large tree trunk into logs and placed them on public land, so that GONG can at least open the door of her home, but until then the government not clean up the relevant pieces of wood, and the wood was



starting to rot. The representative of the GLTM Section finally agreed that they would follow up with the Chairman on the exact position of GONG's home after the meeting, and arrange clearing of the wood logs as soon as possible. However, the representative reiterated that the GLTM Section belonged to a policy bureau, and was responsible for formulating policy, but not directly responsible for the daily management of trees. The GLTM Section finally assigned a government department to follow up the case afterwards and the wooden logs were finally cleared around three weeks after the meeting, and it was proved that the tree was initially located on public area, i.e. a public road managed by the government in front of GONG's home.

Missing Elements to Achieve Successful Collaboration

Findings from Case Study 1

This is a typical situation of insufficient planning during the greening stage, due to the lack of a concrete approach or protocol in the government guiding the planning of greening before 2000, greening and tree management at that time were mainly by private self-governance, government departments or private parties were responsible for the management of trees in their own jurisdiction, but no concrete guidelines were provided. There were also limited coordination among different departments and parties. Further, although a lot of government departments are responsible for the management of trees in their



jurisdiction, they generally lack the sense of seriousness and also the expertise to plan well on the greening. Since the life spans of trees are commonly quite long, it takes time to wait until the trees to reach the end of its life span and then replace them.

The set-up of GMPs is obviously for the hope to transform greening from private self-governance to cooperative governance. Both the government departments and private land managing parties then have more concrete guidelines in carrying out or following greening plans. The concept of GMP also requires coordination between all managing parties. The Government also hoped to create principled engagement through the development of GMPS, so that different stakeholders may develop discussions or networks at different points in different formats. However, apart from CEDD, which was responsible for the development of GMPs, LCSD seemed to be the only major government department willing to take up the responsibility of greening, and being included in the GMPs.

Moreover, it may be easy to understand that due to the fear of being accused of not protecting the green, the GLTM was unwilling to actively replace the Acacia confusa before it has reached the end of its life span and collapsed naturally. This created an obstacle for the Government to initiate principled engagement. Yet, if the trees really collapsed because of health problems, and in an inappropriate timing, it is likely that it was



cause threat to motor drivers and other users of the road. The way of natural elimination may not be absolutely suitable for such roadside trees.

Further, it is interesting to know the fact that the newest GMP did not include a detailed future plan on the greening of the South Lantau Road. During the TAFEHC meeting on 30 September 2013, DC members had asked the reason for not including Tai O (See Appendix 2) in the GMP, the representative of CEDD had mentioned that the current GMP was only able to include places under the jurisdiction of LCSD, and have to find and agree with other responsible departments before adding other areas into the GMP. This might indicate that different government departments have difficulty in collaborating, and some might be unwilling to take up greening work. Due to the large amount of parties involved, the time needed for constructing a sophisticated greening plan for a district, and eventually the entire Hong Kong, may take an extremely long period of time. It showed that although the government department hoped to set up a structure for greening with high cooperative governance, there are many obstacles in the practical implementation, even between government departments, let alone private land managing parties. However, since greening involves all parties taking initiative and appreciation in the coordination, and the planning process is sophisticated and highly dependable on the situation and environment, it is also difficult to use other ways, e.g. regulation governance, to manage these parties' greening actions. As greening



represents the planning and early stage of onward long term tree management, government departments also have a high tendency to avoid taking up the responsibility at this stage, in order to avoid the increase of workload. Though government departments which lack the expertise may still engage in contractors to conduct greening on lands under their jurisdiction, they may still be reluctant to do so as they will have to take up the long term responsibility to manage these trees, or at least supervise and monitor their contractors' performance in managing these trees. The lack of resources and expertise may indicate a lack of capacity in joint action that should actually be flourished, before successfully collaborative governance is achieved. This further indicates that there is lack of shared motivation among all these managing parties (actually most of them have a shared motivation in avoiding greening responsibility, i.e. to avoid increase in workload).

Findings from Case Study 2

The fact that the government did not send any representatives to follow up the sick tree before the typhoon may indicate that, the reporting mechanism through "1823" Call Centre is ineffective. Either "1823" Call Centre was unable to identify the correct responsible department, or that the responsible department may lack the resources to provide a timely response. The effectiveness in relying on 1823 as a hub to divert tree related cases, so as to provide effective cooperative governance, may be doubtful.



After the Chairman of the sub-committee mentioned the incident to the representatives of the GLTM Section in the meeting, the initial response of the GLTM Section showed that they were reluctant to take up the responsibility. Even before sending staff to the site for inspection, the representatives of the GLTM Section already disclaimed that they were not responsible for the management of trees on private land. The GLTM Section even tried to claim that they were also not responsible for removing wooden logs that has fallen on private land, despite that they were previously located on public area and managed by a government department. Being the policy unit of tree management and coordination work, the attitude of the GLTM Section reflected that the either this policy unit might had found difficulty in coordinating and assigning tree management work to other departments, or they themselves did not have enough resources and manpower to do so. The setting up of GLTM Section in acting as the unit for facilitating cooperative governance may not be as effective as expected. Again, a problem in lack of capacity of joint action can be seen. In a broader perspective, the Government also has to consider whether there is enough expertise within the structure, or even throughout the entire market in Hong Kong. Without sufficient human resources, the capacity of joint action may require much longer time or capital to be built up, i.e. either recruit from overseas, or to train or educate an entire fleet in Hong Kong, to serve its own community.



Further, even after the DC member had pressured the GLTM Section to follow up GONG's case, and GLTM Section agreed to follow up as soon as possible, it still took the government another three more weeks to settle the problem. This also reflected that the current mechanism is too ineffective to deal with urgent situations. Actually the total time required for the government department to clear up the fallen tree, calculating from the day that the tree had fallen, was over two months. This may be because of the existence of complicated procedures in the current mechanism, causing much red tape for different government departments to achieve its shared motivation of effective tree management.

Last but not least, it was ridiculous for the representative of the GLTM Section to say that the government would not be responsible for clearing wooden logs of fallen trees located on private land, no matter whether the tree was originally located on public area and managed by a government department. Further, the fact that government eventually cleaned up also showed that the they might actually have the responsibility and capacity to clean the logs, just that they are reluctant to do so, and would find excuses to delay the cleanup or deny their responsibility. The lack of manpower and knowledge for the public in Cheung Chau to clean up the logs also meant that community independence in tree management may not be as strong as what the government expected, private self-governance is proven



to be impractical in this case. Since public support also acts as an important and significant part in the new public service model that the government hoped to build when setting up the GLTM Section and the entire workflow, the lack of knowledge within the community also makes collaborative governance less effective as it was originally modelled.

Lack of Capacity for Joint Action

The "procedural and institutional arrangements" and "leadership" are two of the four essential elements in capacity for joint action. The former should be defined at both the intra-organisational level (i.e. how a single group or organisation will govern and manage itself in the collaborative initiative) and at the inter-organisational level (i.e. how the groups of organisations will govern and manage together in the regime and integrate with external decision making authorities) (Emerson, Nabatchi and Balogh 2011), while the latter is essential at the outset, during moments of deliberation or in championing the collaborative determination through to implementation (Agranoff 2006; Bryson, Crosby, and Stone 2006; Carlson 2007). However, greening and tree management in Hong Kong obviously lack these two elements, leading to insufficient capacity for joint action.

The questionable greening work in Hong Kong may be the root of poor tree management problems. In contrast to tree management, greening focuses on the planning stage of arboriculture and horticulture. It is especially



important during town planning of both urban and rural parts of Hong Kong.

A good greening plan not only benefits urban planning, but also greatly facilitates the work of tree management.

As discussed in Chapter Three, the CEDD takes the major responsibility for the construction of GMPs. Development of GMP for Southeast NT (Sha Tin and Sai Kung Districts) and Northwest NT (Tuen Mun and Yuen Long Districts) commenced in May 2011. Development of GMP for remaining NT regions, which includes Southwest NT (Tsuen Wan, Kwai Tsing and Islands Districts) and Northeast NT (Tai Po and North Districts) commenced in February 2012. In view of the extensive geographical spread of the New Territories, the GMPs mainly focus on densely populated areas (such as town centres), tourist attraction locations and major transportation routes. The bureaucratic characteristics of government departments in Hong Kong imply a vertical line of command from the top level through the hierarchical structure. When there is work requiring collaboration among departments, the vertical line of command in each department makes it difficult to effectively communicate and coordinate among them.

CEDD, being the major constructor of the GMP, is not the major department responsible for the actual tree management work. It would have difficulty in understanding thoroughly on the needs of different department. It can only relies on feedback or suggestions from other



departments when constructing the GMP, which may likely be inherently in conflict with each other, and CEDD also have to rely on GLTM to provide professional opinion.

Whilst CEDD is responsible for constructing the GMP, the Planning Department (**PlanD**) is constructing or continuously modifying outline zoning plans, which are legally binding. It is easy for them to overlook each other's work and concerns during their course of exercise.

In general, an effective coordination among different parties or agencies is only possible at the top level. However, in the case of tree management in Hong Kong, there is no party at the "very top" to coordinate and make instructions for each relevant government departments.

TMO is obviously not very capable to play this leading role to coordinate the departments. Since the Head of TMO is at the rank of D1 only, he can hardly advise or instruct other departments which are headed by D6 directors to cooperate and work under TMO's advice.

Another reason for the TMO's difficulty in coordinating the departments in managing trees is that although the TMO, were set up under the DEVB, DEVB is not the direct supervising bureau of major responsible departments like LCSD and AFCD. Since LCSD and AFCD are under



Food and Health Bureau (**FHB**) and Home Affairs Bureau (**HAB**) respectively, they may not have the sense to be held accountable for following DEVB's directions or instructions in managing or protecting trees, not to mention the advices of TMO, since they are not under the supervision of DEVB. After all, the main work of TMO is only to coordinate and provide guidelines to various departments at the central level, but it has no power to give direct instructions to them on exactly when and what to do on specific tree problems.

It is clear that the "procedural and institutional arrangements" is not well defined especially at the inter-organisational level as the departments concerned do not govern or manage together and integrate with TMO in the regime. TMO is also not able to play the role of leader in the collaboration process due to limitation of its power or authority. The lack of a proper "procedural and institutional arrangements" and "leadership" forms part of the reasons for insufficient capacity for joint action in tree management in Hong Kong.

Lack of Principled Engagement

Deliberation and determinations are two of the four basic process elements of principled engagement; Deliberation focuses on communication and negotiation between actors of the network, while determinations include procedural decisions and substantive determinations. Although the



deliberation and determination can be partly reflected through the establishment of TMO and the execution of relevant policy, there is a lack of the two elements among different departments in managing trees in Hong Kong.

Accountability may be blurred when there is collaboration among agencies, especially when a large number of agencies were involved in such collaboration. Although the TMO is responsible for coordinating government departments' tree management efforts, it may still be unclear which department is responsible and accountable for a particular tree. Since more than one department has to be involved in a tree problem in view of its complexity, the accountability for each of the departments is inevitably blurred and unclear in some circumstances. The following two examples shows that certain departments involved in tree management generally lack sense of ownership and accountability on their duties in tree management.

The first example is the slow response of the responsible department after the fatal tree falling accident killing a 49-year-old cyclist in Sha Tin in Jun 2010. The tree had actually collapsed hitting the victim before noon of the day but no official of the TMO or any other department could give an account of the accident promptly until nightfall. According to the press report, after the tree collapsed, the LCSD had been evasive about reporters



query until 8pm in the evening, at which an LCSD official finally met reporters and acknowledged that the LCSD was actually responsible for the management of the collapsed tree and they would look into the cause of the accident.

Another example is the collapse of an 18-meter giant banyan tree in Hong Kong Park on 17 December 2013. According to sources close to the Architectural Services Department (ASD), the supports of the collapsed tree were known to be too weak with two thin cables tied to two very weak trees and one of the supporting trees was eaten up by termites. According to the press report, the sources close to the department and a member of the Tree Management Office's expert panel confirmed that both parties had already found that the tree was dangerous before the incident. The panel member and a department consultant had warned one year earlier that the tree was a risk to the public but their advice had been ignored until the tree collapsed. ASD refused to explain the reason why no action had been taken upon the advice, but only claimed that the trees near the fallen one had been inspected with no problem detected. This example also shows that ASD lacked sense of ownership and accountability of the trees under its jurisdiction.

Some departments tend to only act on complaints or reports and they do not actively seek problematic trees. For example, after the collapsed tree killed a truck passenger in Tai Po in October 2012, the Director of Lands



Bernadette Ling Hon-ho admitted that the tree, despite its location close to a highway and a village housing hundreds of people, was not checked by the department, given that the department was actually responsible for managing trees on unallocated sites and unleashed land including the fallen tree. They would rather have to rely on identification of such trees upon referrals and complaints. It was meant that despite high vehicle and pedestrian flow, the surrounding trees do not warrant comprehensive risk assessment unless complaints had been received.

TMO may assign complex cases to different government departments for their follow up, but if the specific case assigned is not under the respective government department's jurisdiction, some of the departments have tendency to be reluctant in following up the case, they may put TMO's request to a lower priority than their own core duties in hand.

Due to tight human resources, and unlimited trees under widely spread areas, the government actually depends on the public to report tree related incidents via "1823" Call Centre. However, both the TMO and DEVB are not within the 22 core servicing departments that "1823" Call Centre has agreement with. Under such circumstances, we can see that TMO has only invested limited resources to "1823" Call Centre. For example, although TMO relies quite heavily on "1823" Call Centre to divert tree incidents to the corresponding departments for their further processing and



follow-up, but TMO might not have drawn up comprehensive standards and guidelines for staff of "1823" Call Centre to carry out such task, staff of "1823" Call Centre are also not equipped with sufficient knowledge in handling tree enquiries and incident reports. According to TMO, when staff of "1823" Call Centre receives tree incident reports from the public, the staff would ask the reporting person a few questions, so as to identify the responsible government department for the tree incident. However, the public has often reflected that "1823" Call Centre was sometimes unable to directly divert their incident reports to the correct responsible departments. In some occasions, cases may then be passed from one department to another and much time would be spent in repeated referral of a single case. Even if a certain department is willing to carrying out initial inspection of a tree incident, after it confirms that it is not the responsible department, it may not refer the case to that responsible department directly even it knows which department the case should be belong to. Instead, it would divert the case back to the "1823" Call Centre, and "1823" Call Centre would then have to repeat the whole process in identifying the correct responsible Given the significant bureaucracy and red tape, department again. accidents or tragedies may have already ocurred before the public report has finally been able to reach the correct responsible department.

TMO is also responsible for coordination among departments for complex and urgent cases. There is an internal alert system among TMO and



relevant departments. When serious tree accidents (e.g. collapse of tree or branch causing injury, death, serious property loss, obstruction of public facilities, etc.) occur, the FSD, HKPF, HyD and "1823" Call Centre will inform TMO through the internal alert system at once. In view of the urgency, responsible departments are usually able to immediately and effectively handle the accidents and eliminate danger. TMO actually does not have any role in immediately dealing with the accidents since it is only responsible for conducting review on the cause of them. As such, the internal alert system among TMO and relevant departments seems to be just a mechanism to provide confidence to the public, rather than handling or solving the actual problems instantly.

From the examples raised above, it can be observed that there is a lack of deliberation among departments to manage the trees and solve tree problems in Hong Kong. When tree incidents happened, some departments tend to avoid taking responsibility in the first place, showing that they are not determined enough to be engaged and solve the problems with the best effort. In this regard, it can be summarized that among the four basic process elements in principled engagement, "deliberation" and "determinations" are obviously insufficient among the relevant departments, leading to a weak principled engagement in the collaboration process and thus ineffective tree management in Hong Kong.



Concluding Observations

The above examples reflect that the set up and workflow of the GLTM Section and other responsible parties is well structured in its aim to provide effective collaborative governance, but there are undoubtedly flaws in the implementation of it. Due to the large area involved (the entire Hong Kong), and the large amount of people participating (all Hong Kong residents), the facilitation, implementation and monitor of collaborative tree management are the most challenging part that GLTM Section has to face.

In this chapter, a number of greening and tree management issues, incidents and cases that happened after the set up of the GLTM Section have been illustrated. These information provide large amount of empirical data, and facilitate the identification of the strengths and limitations of the current greening and tree management policies of the Government.

It is found that although the GLTM Section has built up a well-developed structure in greening and tree management, there is still a lack of essential elements for a successful collaboration, i.e. lack of capacity for joint action and principled engagement, throughout different government departments, NGOs and the public. The effectiveness of greening and tree management carried out by these parties is still not as high as portrait. Having a well-developed structure of the GLTM, the difficulties in identifying the



core deficiencies are then higher. Only if the core problems affecting the effectiveness of greening and tree management in Hong Kong can be unveiled, efficient and precise recommendations could be made for the Administration.



Chapter Five: Recommendations and Conclusion

Introduction

The GLTM Section was established almost a year after the recommendation of the Task Force report first came to light. Effective collaboration among the three parties, namely the Government, non-governmental organisations and the public was deemed to be the determining factor in the arena of tree management and the greening of the environment in Hong Kong. The set-up of the GLTM Section has good intention of collaborating among different government departments, as well as the other two parties. GLTM Section is also well structured as it involves all these three major parties in the management of trees in Hong Kong. However, the spate of tree accidents happening in recent years has conversely proven the failure of the collaboration. The preceding chapter focuses on examining some of the many tree-collapsing accidents, in this concluding chapter, an overview on the subject issue will be provided and the existing problems will be revisited.



Overview

According to Emerson, Nabatchi and Balogh, "principled engagement", "shared motivation" and "capacity for joint action" are the three essential elements to achieve successful collaboration in the collaborative governance regime, and each of them is also combination of various elements. Discovery, definition, deliberation and determinations are the four basic process elements of "principled engagement"; "shared motivation" is defined to be consisting of four elements including mutual trust, understanding, internal legitimacy and commitment; "capacity for joint action" is a combination of procedural and institutional arrangements, leadership, knowledge and resources. It is deemed that some of these basic elements have been missing in the current system leading to the failure of collaboration between parties in tree management and this will be summarized in the rest of the chapter.

Lack of Principled Engagement

Principled Engagement is generated and sustained by the interactive processes of discovery, definition, deliberation and determination.



Through the process, collaboration partners develop a shared sense of purpose and a shared theory of action for achieving that purpose.

In the current integrated approach adopted by the Government, the element of "principled engagement" is fairly achieved and is yet to be reinforced. The division of labour of tree management among government departments is clearly defined, however, the TMO relies on the "1823" Call Centre to directly divert tree incidents to relevant departments for further processing, in which the TMO has not set up clear guidelines of referral and the TMO also does not fall within the 22 servicing departments of "1823" Call Centre. It is therefore reflected that the "1823" Call Centre is very often unable to divert the incidents to the correct departments, thus leading to a loophole in the collaborative governance of tree management.

Lack of Shared Motivation

Shared Motivation is based on mutual trust, understanding, internal legitimacy and commitment. It is shown from the examples in the preceding chapter that certain involved departments lack sense of ownership and commitment, most of them only act upon complaints and



have the tendency to evade from the responsibilities, thus there is a lack of "shared motivation" observed.

The Government adopts an "integrated approach" for the management of trees on Government land, which means the department responsible for the maintenance of an area or a facility is also responsible for the maintenance of trees thereat. As such, there are mainly eleven departments engaging in the management of trees in Hong Kong. This arrangement has the advantages of division of labor, but would on the other hand give rise to the opportunities to shirk or free riding behavior; given no effective check and balance system could be observed. The accountability is blurred and unclear in some circumstances.

Lack of Capacity for Joint Action

Capacity for joint action is the combination of four necessary elements, namely, procedural and institutional arrangements, leadership, knowledge and resources. The current procedural and institutional arrangement is considered to be a big hindrance to successful collaboration in tree management.



GLTM Section was set up under the DEVB. DEVB, being the policy bureau in charge of tree management and greening, however does not have a direct hierarchical relationship over those departments which are required to undertake the work on tree management. For instance, the LCSD is under the FHB and the AFCD is under the HAB. On accountability front, these departments do not have the sense to be held accountable for following DEVB's directions. Due to the unclear procedural and institutional arrangement at the outset, it is hard for the GLTM Section to facilitate its leading role in the inter-departmental collaboration. With a closer look into the institutional setup, it is also noted that the TMO is only headed by a director with D1 rank, but other departments involved in the tree management are headed by directors with D4-D6 ranks.

In addition to the institutional arrangement, there is generally a lack of expertise within the current structure. From chapter three, it is shown that except for LCSD, there are only limited staff members responsible for tree management in each of the involved departments. Most of the tree works, including the risk assessment works are outsourced. This addresses the



reason why most involved departments are acting in a passive way, and more often forced to take action only after accidents had emerged or the matters have been made public. The missing of the elements "resources" and "knowledge" also has led to a lack of the "capacity for joint action".

Way Forward

Albeit the setting up of the GLTM Section and the TMO had good intention of facilitating coordination among different involved departments and other parties, the lack of essential elements (e.g. principled engagement, shared motivation & capacity for joint action) to achieve successful collaboration causes weakness in the support of NGO and public, leading to failure in tree management. Two recommendations are hereby put forward with a view to providing some ideas for improving the current systems and enhancing the overall effectiveness.

Structural Reform of the Institutional Arrangement

Although the TMO could give advice and request other departments to work together, it is ultimately up to the department's discretion in whether and how to carry out the tasks. Departments are self-interested and only



concerned of the work within their jurisdictional turf. They are reluctant to take responsibility on trees that lie on grey areas. Departments tend to have different interpretations and definitions on the same tree problem when grey areas appear. The Government should critically re-examine the hierarchical relationship between the policy bureau and the supporting departments, so that the GLTM Section or the TMO can take the leading role more effectively and better coordination among departments can be facilitated. Grey areas should be removed by setting clear standards, formulating guidelines that are easy to understand. With clearly defined boundary, free-riding behavior could be avoided.

Strengthen the involvement of NGO and public

On top of the collaboration among government departments, the contribution of citizens and the engagement of the NGOs are also indispensable. The Government could raise the consciousness of the community through educational program or large-scale publicity activities such as tree planting day, advertisements through the mass media, etc. The public should also be given basic information and knowledge on identifying problematic trees and their responsible departments concerned.



Likewise, the policy bureaus could also take initiatives to engage the NGOs by providing incentives, such as subsidizing or to provide funding to them. The government should also try to take on board their suggestions, if found to be rational and logical. In the end, collaborating the efforts of the public and the NGOs are considered to be the most effective mean and is way more important than any other measures.

Limitation and Possible Lines of Future Research

The research is mainly based on extensive book research and web-based research on the concepts of the related areas on Collaborative Governance. This study is also based on literature search and review of relevant documents in relation to the structures and practices of relevant government departments. It is necessary to stress the limitation in this study that no ideas and comments are gathered from the staff of the involved units of relevant government departments, in which they may wish to contribute their suggestions in the process. In any event, being the frontline staff, they would be in good positions to provide comments and their comments are worth considering.



Secondly, among the six involving government departments that had been approached, not all of them were willing to provide the required documents or information for this study. Some of them refused to provide the tender documents and contracts to outsiders for analysis. This unavailable information is in fact imperative in examining the standard and level of service provided by relevant governments, and its absence did create certain difficulties to the comparison, thus the evaluation on the effectiveness of the collaboration work.

Third, this study was conducted mainly from the perspective of the public administration. Focus of this study had been placed on evaluating the effectiveness of the collaborative governance in tree management and greening of the environment in Hong Kong. No professional opinion on horticulture or aboriculture had been obtained from the expertise. Similar future studies may consider expanding the dimension of the analysis by including opinions of horticulture and aboriculture experts on the greening and tree management in Hong Kong, which are also deemed to be necessary and important.



Lastly, apart from studying on the matter of greening and tree management on the local regime, it may be also worth pursuing to explore the practice of tree and greening management in overseas countries for similar studies in the future. The practice of greening management in the Singapore is suggested to look into, as there are always comparisons between Hong Kong and Singapore in the terms of efficiency of the two governments and given the similar size of the cities, as well as the density of the population.

-END-



Islands District Council Tourism, Agriculture, Fisheries and Environmental Hygiene Committee (TAFEHC)

Extract of minutes of the TAFEHC Meeting held on 17 September 2012

(Translated English version, should there be any doubts, please refer to original Chinese version)

- II. The work of Greening, Landscape and Tree Management Section,
 Development Bureau
- III. Question on tree collapsing on Cheung Chau(Paper TAFEHC 53/2012)
- IV. Question on safety of trees on Lamma Island
 (Paper TAFEHC 54/2012)

The Chairman welcomed attending guests: Dr. CHAU Kam-chiu, Lawrence, Director of Tree Management Office and Ms. WONG Chau-wan, Assistant Secretary of Development Bureau.

Dr. CHAU and Ms. WONG introduced the work of Greening, Landscape and Tree Management Section.

The Chairman said that after the typhoon on 23 July 2012, there are many fallen trees lying in the streets and residential door in Cheung Chau. The Cheung Chau Rural Committee had sent volunteers to help clean up as much as possible, but due to the absence of professional knowledge and equipment, a lot of fallen trees was not fully cleaned. Actually, one week before the typhoon, an old lady named GONG reported to the government that there was a moth-eaten big hole in a tree in front of her house, but the government did not send any staff to handle the situation. After the typhoon,



the tree in front of GONG's house had fallen blocking the entrance of the house, and GONG was unable to open her door.

Ms YU Lai-fan introduced TAFEHC 54/2012.

District Council Members also raised the following questions and comments:

- (a) Mr Randy YU said that, as the convenor of the on Islands Healthy City Working Group, he himself went on an inspection with Mr. WONG Fuk-kan, and Dr. SO Kwok-yin, the Chief Executive of The Conservancy Association, on 27 June, to check on the situation of Acacia confusa along Southern Lantau Road (Mui Wo to Pui O segment). They inspected Acacia confusa samples along four different positions of the road, and found that most Acacia confusa has various degrees of health and structural problems, such as crown wilt, termites bite, fungi erosion, and some has danger in collapsing. Later, Dr. SO further examined other Acacia confusa in other sections of Southern Lantau Road, and came out with the following report: there are around 252 Acacia confusa with diameter 50 cm or above and 20-30 years of age, of which about 80% have apparent health problems, more than half of them have serious structural problems; 93 Acacia confusa with diameter less than 50 cm and 10-20 years of age, about half of them have apparent health problems, and nearly 30% of them have serious structural problems. The inspection covered a quarter of the entire Southern Lantau Road. The whole of Southern Lantau Road as approximately over 1000 Acacia Confusa in total. He has also raised the above concerns in the Islands District Council meetings. He asked in what ways the TMO would follow up on these issues.
- (b) Miss CHAU Chuen-heung said that, although the TMO under the Development Bureau, and other government departments claim that they



are responsible for the management of trees, but residents reported it is very difficult to find the responsible departments for particular tree problems. Many cases also involve departments that are not under the Development Bureau, such as the Leisure and Cultural Services Department ("LCSD") and Highways. Residents' queries or requests are usually referred to the appropriate department after a very long time and many referrals. She suggested that upon receipt of tree related public inquiries from the "1823" Call Center ("Call Center"), these inquiries should be first directed to the TMO, and then being further referred to the to the responsible departments by the TMO. Furthermore, when Typhoon Vicente hit Hong Kong, the first department who turn up to clean up the area of trees in the Islands District is the Hong Kong Police Force, as police were responsible to emergently move the fallen trees to the roadside in the middle of the night, and to guard the fallen trees until the typhoon signal is lowered. Three weeks after the storm hit, the fallen trees was still not cleared, causing mosquito breeding, and the Tung Chung Ovitrap index increased to as high as 22%. Instead, the Housing Department's clean team and gardening team, had cleared all fallen trees in a short time within their area of responsibility. Further, she encouraged the GLTM to promote high-quality landscape design, which could give an organised and healthy environment for the growth of trees. Yet, she was worried after the division of labor in the management of trees, the quality in carrying out of the plans may be affected. She enquired the details on how work is divided among the GLTM and other tree management departments are, and the ways on how residents would find the right government departments when needed.

(c) Mr YUNG Chi-ming said that a lot of local residents of Cheung Chau complained that healthy trees was quietly removed by the Government, but the Government did not consult the local community beforehand. On the other-hand, the Government was slow to deal with trees with health problems. He suggested that before removing the trees, the Government



should put up notices on the trees, indicating the status of the trees, as well as details of the arrangements in removing the trees.

- (d) Ms. YU Lai-fan said the government should send staff to conduct regular inspections of trees, so as to protect the safety of pedestrians. The government should not only send staff to inspect trees had fallen, or after receiving complaints from residents. Although there are lots of trees in the Islands District, but apart from LCSD, other responsible government departments do not have trees teams in the district. Whenever a typhoon, local residents are very worried of tree collapsing. In addition, she asked how the Government would handle slopes with collapsed trees slopes, so as to prevent trees on the slope from further collapsing or blown off when typhoon arrives. She had written letters to the GLTM, suggesting the GLTM to improve their work by gathering Mainland and overseas experiences. She understood that the GLTM had a very heavy workload and insufficient resources. She suggested that the Government to increase resources provided to GLTM, and also set up a tree team for the management of trees in the Islands District.
- 9 Dr. Lawrence CHAU responded that the Government adopted an "integrated approach" in tree management. The entire Southern Lantau Road is up to 14 km of length, which is spread into different government departments' jurisdiction, such as in or outside country parks areas, artificial slopes etc. According to the integrated approach, the management of each artificial slope is handled by a different department. Apart from artificial slopes, there are also government departments responsible for the management of green and non-green areas. If DC members think that having different government departments in charge of different parts of Southern Lantau Road might cause difficulty in the management of Acacia confusa, GLTM would gather DC members' opinion and reflect them to the responsible departments. The GLTM had received information about



Acacia confusa in the Southern Lantau before the meeting, and also noted that three government departments had started preliminary coordination on the above issue. If Members think that the progress is not satisfactory, GLTM would help contact the responsible departments, especially the LCSD and the LandsD. If the tree falls into the country park ares, AFCD would actively follow up the management of its trees; the Highways Department is also responsible for managing of more than 60,000 marked trees grown on the artificial slopes in Hong Kong. There are a few hundred trees managed by the LCSD in Southern Lantau Road; GLTM would follow up with the LCSD and LandsD on the above matter as soon as possible. For DC members information, the Government had also taken the integrated approach in the management of trees in Cheung Chau, Lamma Island and other areas of Hong Kong. Under the Integrated Approach, if residents found problematic trees, they should report the matter to the government as soon as possible. As for tree management before and after the typhoon, the government regards the safety of residents and staff as its top priority. Due to traffic and safety constraints, GLTM, government departments and tree management contractors might have difficulty in arriving to the islands within a short time when typhoon signal No. 10 is hoisted. Therefore, police nearby would be responsible for public safety, and arrange on-site clean-up as soon as possible. GLTM also appreciates the help of the FSD and the HKPF. Since the typhoon in July 2012 was very strong, apart the Islands District, many trees were also destroyed in the Urban Areas, it took the government some time to clean up the collapsed The government had also arranged the cleanup of trees fallen on main roads at a higher priority. The function of GLTM is to provide direction in policy formulation, and assist in the co-ordination work among different departments. For example, if there are difficulties in the coordination among different departments concerning the management of Acacia confusa along the Southern Lantau Road, the GLTM would assist in sorting out matter. However, the GLTM is not a front-line department, and



thus is not responsible for cleaning up of trees, it would do its best in its co-ordination role.

In response to Dr. Lawrence CHAU's reply, DC members raised the following concerns and questions:

- (a) Mr. Randy YU said that the entire Southern Lantau Road (from Mui Wo to Tai O) should be 13.5 miles, and there are about 600 Acacia confusa that should be removed. Residents are not only concerned in the removal of old Acacia confusa, they also hope can there would be replanting of new trees after the removal. The government needs to consider the feasibility of sustainable development, human needs, regional development and environmental conditions when undergoing the replanting. Further, the current Acacia confusa grows flourishingly along the bends of Southern Lantau Road, blocking the views of motor drivers. Since the Acacia confusa had reached the end of its life span, he suggested the GLTM to take this opportunity to consider the abovementioned three 3 factors, and come up with a detailed plan. After the detailed plan is constructed, the GLTM should also consult the local community, such as the District Council, representatives of the Rural Committee and representatives of the Islands District Healthy City Working Group.
- (b) Mr. Wong Fuk-kan said that after Typhoon Vicente swept through Hong Kong, he reported three problematic trees to the government. He thanked the LandsD, which quickly dealt with one of them, and now the problems of 2 more trees left near Mui Wo Ferry Pier Road and in between Tong Fuk and Cheung Sha Road were still remained unprocessed. Acacia confusa and the roundabout connecting Tung Chung Road and Southern Lantau Road were also left untrimmed, blocking motor drivers' vision.. He had consulted the LCSD, but the LCSD replied that they are not responsible for the management of trees in the area, they also do not know which department is



responsible for this role. He also aksed what the role of GLTM is in this kind of incident. In addition, the typhoon caused a tree near the bend of Southern Lantau Road and Changsha Road being tilted. The diameter of the tree trunk is approximately 12 inches, and now the tree is relying on surrounding trees' support to remain upstanding. He thought that the tree is hazardous. and hoped the government would deal with it as soon as possible. He suggested the government to establish tree teams, so as to patrol the areaa and inspect treesa and then coordinate with various departments to solve tree problems.

(c) Mr. LAI Tsz-man said that the role of the GLTM, i.e. the planning, execution and monitoring of trees was actually very confusing, and that the process of reporting problematic trees was indeed very inconvenient. According to the government's advice, when a resident found a problematic tree, he/she must first call the government call centre, the call centre would refer the case to a government department which they assumes should be responsible. If ther respective government department thought that it should not be responsible for the case, it would refer the case to the GLTM Section, the GLTM Section would then understand the situation, and then discuss with other government departments. He asked why wouldn't the call centre directly referring all tree related cases to the GLTM Section, so that the GLTM Section could directly assign the tree management work to responsible departments. Even if the GLTM Section does not have its tree inspection team, the GLTM Section could still delegate tree inspection work to other departments, while the GLTM Section continues to play a supervisory role itself, the process should also be much simpler in that way. The GLTM Section has its powers and responsibilities, but both of them were not carried out effectively. In addition, after the typhoon Vicente swept Hong Kong, many trees have been destroyed. For the safety of residents, some volunteers who also lived Cheung Chau helped out to remove dangerous trees, but not have the expertise to replant them. He



asked whether these volunteers had convicted crimes for removing damaged trees, and whether the GLTM Section had records of these damaged trees for future replant work. Finally, he asked whether the Government had learnt from the experience of Vicente, and had developed contingency and cleanup plans for subsequent typhoons.

- (d) Mr. CHEUNG Fu said that the GLTM Section should be set up a tree team in each district, responsible for the inspection and management of trees in the district, this also helps protect public safety.
- (e) Mr. CHAN Kam-hon said, in addition to clean up work of fallen trees, the Government should have protocols to prevent trees from falling during typhoons.
- (f) The Chairman said that the tree in front of the house of the old lady GONG aforementioned had collapsed for more than 50 days, and nobody cleaned it up to date. She requested the government to set up an inter-departmental working group to deal with similar cases.

11 Dr. Lawrence CHAU responded as follows:

(a) In respond to the issue that residents believe the government removed healthy trees, but did not remove problematic trees, since he does not have any information in hand, he found it difficult to comment on the case. The government would consider Mr. YUNG Chi-ming's suggestion for the views, and consult local organisations' and residents' opinion before removing problem trees, and also post notices before the removal of trees. However, for urgent cases, in order to ensure the safety of residents, the trees must be cleaned up as soon as possible, the responsible departments may not have sufficient time to communicate with local residents or post notices before taking action. Government departments would go through



thorough inspection before removing the trees. If contractors are responsible for the management of the trees, there is also a monitoring mechanism, to ensure it is necessary to remove the trees before the contractors take any action.

The fallen tree in Lamma Island that Ms. YU Lai-fan mentioned (Paper TAFHEC 54/2012) was located on privately-owned land, the government was unable to conduct inspections before it collapsed. He agreed that there is a large amount of trees in the Islands District, and the management of them should be strengthened. The GLTM has sent staff to the outlying islands to conduct tree inspections. Some of the trees were referred to appropriate departments for follow-up, maintenance, pruning or removal work. He encouraged residents to report problematic trees to relevant government departments as soon as possible. If residents do not know which government departments are responsible for problematic trees, they could report the cases to the government call centre, or send letters to the GLTM Section, the GLTM Section would arrange the appropriate government departments to follow up the cases as soon as possible.

- (c) A specific government department is responsible for the management all artificial slopes in Hong Kong. The relevant departments are required to conduct annual risk assessment on trees on the artificial slopes.
- (d) The GLTM Section would discuss with the LandsD and the LCSD to on the Acacia confusa of Southern Lantau Road, but if there are safety issues, they would first remove trees with serious problems. Concerning the trees at roundabouts blocking motor driver's view, if residents had reflected the case to the Highways Department, Highways Department would follow up as soon as possible, so as to ensure the safety of residents and motor drivers. The Government would also carry out extensive planning on the pruning, removal and replanting work for the 200 Acacia confusa along Southern



Lantau Road, and will consult when the area's rural committees and District Council members on details of the plan.

- (e) He would consult Mr. Wong Fuk-kan on the exact location of the trees at the roundabout which blocked motor drivers' views, to ensure that they would follow-up the proper trees.
- (f) The TMO had 16 staff in total. They are mainly responsible for the co-ordination work of tree management. The government call centre in ha received tens of thousands of tree related complaints in the past year, and the GLTM Section had work closely with the call centre on tree related matters. After receiving a tree related complaint, the call centre would raise questions 5-6 to the complainant, to determine the location and the trees and the responsible party as soon as possible, which helps speed up the follow-up efficiency.
- (g) Three weeks after the typhoon Vicente had left, there are still fallen trees left on the streets. As mentioned by the press, the contractor responsible for cleaning up the trees do not have enough lifting tools and facilities to meet the suddenly increased workload, and therefore failed to clean up all the trees in a short time, all they could do was to gradually clear the fallen logs.
- (h) For the past few years, the GLTM Section had been advocating proper planting of trees in suitable places, and to strengthen the planning and design of trees before planting, and enhance the healthy growth of current trees. With improved management, the GLTM Section hoped that the new trees planted can resist typhoons, and no longer easily destroyed by typhoon.
- (i) The GLTM Section needs to first find out the responsible government



departments, before helping GONG clean up the fallen trees. Since the collapsed trees were located on private land, it may be difficult to find suitable government departments. After the collapse, the wood logs should also remain in public area, if the wood is located on private land, it is difficult for the government to clean up.

The Chairman said that the tree was grown on public area, not on private land, and it fell on GONG's doorway, GONG is then unable to open the door of her home, the area in front of her house was also a mess. Volunteers had helped GONG sawn the tree trunk into logs and placed them on public land, but until then the government not clean up the relevant pieces of wood. She hoped that the GLTM Section could help co-ordinate and arrange speedy cleanup of the wood.

Mr. LAI Tsz-man said that he is disappointed with the GLTM Section saying that they have difficulty in cleaning up fallen trees on private land Dr. Lawrence CHAU said call centres handled tens of thousands of complaints each year, this proved that the Government really needed to increase manpower management group recommended that the government increase manpower and resources, so that the GLTM Section could effectively play its co-ordinating function. In addition, Dr. Lawrence CHAU said that the Government contractors did not have enough tools to clean up fallen trees after the typhoon, but he thought that it was impossible. For example, a former government official had illegal structure in his Kowloon Tong mansion events, the media reporter was able to find 13 locomotive cranes in one afternoon, to take pictures of the mansion. This proves that there are enough tools in the Hong Kong market, but the government did not try its best to seek for assistance.

The Chairman said that there is a large number of trees in the Islands District, and suggested the Government to strengthen checks on roadside



trees, so as to remove dangerous tree timely, especially when typhoon seasons arrives. In addition, DC Members and residents were very confused by the powers and responsibilities of different government departments, and they also found difficulty in identifying the responsible government departments by calling the Government call centre. The efficiency of the integrated approach was questionable, and the safety of residents was also at risk.

Mr. Cheung Fu asked, apart from co-ordination work, what areas of trees were under the direct management of the GLTM Section.

Dr. Lawrence CHAU said that they would follow up with the Chairman on the exact position of GONG's home, and arrange clearing of the wood logs as soon as possible. He reiterated that the GLTM Section belonged to a policy bureau, and was responsible for formulating policy, but not directly responsible for the daily management of trees. Other government departments would be responsible for the management of trees under their jurisdiction. For example, after the LandsD received a general case on trees, the LandsD did not have to report to the GLTM Section, the District Lands Office of the LandsD would follow up the case with the tree team of the LandsD.

Mr. CHEUNG Fu said that if no trees were directly responsible by the GLTM Section, he believes the existence of GLTM Section would make the process on the management of trees even more complicated.

Members have no other comments.

(End of Agenda II, II and IV.)

Source: http://www.districtcouncils.gov.hk/island/doc/common/committee meetings_minutes/TAFEHC/TAmin0912.pdf



Islands District Council Tourism, Agriculture, Fisheries and Environmental Hygiene Committee (TAFEHC)

Extract of minutes of the TAFEHC Meeting held on 30 September 2013

(Translated English version, should there be any doubts, please refer to original Chinese version)

I. <u>Greening Master Plans for the Islands District</u>

(Paper TAFEHC 48/2013)

II. Question on greening proposals at Yung Shue Wan, Lamma Island

(Paper TAFEHC 49/2013)

- 4. The Chairman welcomed the following guests:
- Mr. CHAN Hei-wan, Senior Engineer, and Mr. FUNG Siu-cheuk, Peter, Engineer of the Civil Engineering and Development Department;
- Representatives of ALCA;
- Ms. LO Man-kam of the Lands Department; and
- Ms. LAW Cheuk-yung, Deputy District Leisure Manager(Islands), and Ms. LAW Oi Ping, Apple, District Leisure Manager(Islands) of the Leisure and Cultural Services Department._

<u>The Chairman</u> proposed to discuss agenda (2) and (3) together, as they are relevant. Further, Tree Management Office ("TMO") failed to send representatives to attend the meeting, but provided a written reply for members' reference. •



- 5. <u>Representative of CEDD and ACLA</u> introduced Agenda (2).
- 6. <u>Ms. YU Lai-fan</u> introduced Paper TAFEHC 49 / No. 2013. She also mentioned that she was informed that the CEDD ("TDD") had withdrawn the greening proposals for Yung Shue Wan, Lamma Island.
- 7. Ms. LAW Man-kam said that, as mentioned, the Greening Master Plan (GMP) were constructed by ALCA and CEDD. As for the criteria for allowing government departments or organisations to carry out greening, after the CEDD and ALCA set out greening areas, the Islands District Lands Office ("IDLO") would require CEDD to set out departments responsible for the management of the greening area in the future. IDLO also need to determine whether the greening area was government land, if not, the respective party would not need LandsD's approval before greening. If the proposed greening area was government land, it was required to determine whether it had been used by other government departments or bodies, as well as the future management and maintenance unit. The relevant government department responsible for the greening also had to seek comments from other government departments, before deciding whether the greening activities should be approved.
- 8. Ms. LAW Cheuk-yung said that, CEDD was responsible for the concept design, construction, construction supervision of the GMPs. After the completion, flower beds and trees will be handed over to the LCSD for management and maintenance. During the planning phase, CEDD and ALCA maintained close contact with the LCSD, to seek consensus in greening matters. LCSD would conduct site inspections for greening plans raised by CEDD. Since there were many trees in the Islands District, apart from new towns, streets in other areas were normally very narrow, but had to be used by pedestrians, village vehicles, motorcycles and emergency vehicles. Therefore, when recommending places for adding flower beds and trees, LCSD would base on past experiences, and also the physical environment, such as nearby water source, transportation, nearby buildings, and also consider



existing and future land use sustainability. LCSD would further consider human resources and other factors such as occupational safety and health, and then decide on a place for greening. LCSD would also choose plant species which are suitable to the environment. In designing flower beds, LCSD need to take into consideration on dog fouling, cycling collision or blockage of trafficetc. LCSD would provide professional advice on horticulture, including cost-effectiveness and future landscape, in order to provide quality greening to the Islands District.

- 9. Ms. YU Lai-fan said that she had repeatedly written to the TMO and requested them to conduct site inspection of hazardous trees in Lamma Island, so as to effectively arrange trimming, removing, or replacing some dangerous trees. TMO responded that its duty is to monitor all departments' tree management work, but individual government departments are responsible for the management of the trees under their jurisdiction. The TMO would also inspect old trees. She agreed that there should be an appropriate division of labour between various government departments, but to ensure the health of trees in the Islands District, and to protect pedestrians, the government should establish a tree team in the Islands District. She believed that the tree team could carry out measures before typhoons to prevent fallen trees, thereby reducing subsequent remedial work, and also reduce the workload of other departments.
- 10. <u>Kwong Koon-wan</u> thanked to the LCSD and consultants to accepted Cheung Chau residents' opinions about Sai Tai Road's existing flower bed. In addition, when carrying out greening work on Cheung Chau Tai Hing Tai Road, he suggested to migrate trees at the center of the existing roads to roadside, to widen the road and reduce the conflicts between pedestrians and vehicles.
- 11. <u>Mr. TANG Ka piu, Deputy Chairman</u> asked whether all the trees within the new GMPs would be managed by the LCSD, including the area near Hing Tung Street. He understood that CEDD and ALCA



had conducted regional consultation for the GMPs in Tung Chung area. In addition, the North Lantau Hospital had just started operation at that time, and On Tung Street would be connected Chui Kwan Drive as a footpath. Without affecting the overall planning, he suggested the greening this new footpath.

- 12. Ms. LO Cheuk Yung said that not all the trees in Lamma Island were managed by the LCSD. LCSD would inspect trees within its jurisdiction annually. If the trees did not pose a risk, nor it had health problems, the LCSD would not usually trim the trees, and would let them grow naturally. The LCSD had developed a tree team, responsible for the tree care of entire New Territories West (including the islands). The LCSD also hired contractors to trim shrubs and herbs in the Islands District. In addition, since Cheung Chau could not accommodate large cranes and trucks, it is difficult to migrate the trees on Tai Hing Tai Road, The LCSD and its contractors would study other possible ways to migrate the trees. The future new trees planted under the GMPs would be managed and maintained by the LCSD. The LCSD was in the progress of discussing with CEDD and ALCA, regarding the greening of On Tung Street would be connected Chui Kwan Drive, hoping to beautify the environment near the North Lantau Hospital. They would report their progress to the Committee in due course.
- 13. Mr. Chen Hei-wan said that, after the CEDD and ALCA finished greening or tree planting in accordance with GMPs, most plants will be handed over to the LCSD for maintenance and management. CEDD would also discuss with members on the greening proposals for individual regions after the meeting. If necessary, CEDD would also conduct on-site inspections with DC Members and other government departments.
- Ms. CHAU Chuen-heung said that there are many trees in the Islands District, even Tung Chung New Town, there was quite a lot of greening. She supported planting trees at the Tung Chung Waterfront roadside, but cycling tracks might be built on that roadside, she



suggested that ALCA to determine the cycle track route before greening. In terms of plant species, trees in front of the Tung Chung Rural Committee were planted over 10 years ago, the original intention was to provide shade for people, but the roots of trees had grown to the ground, causing an obstruction, and also easy to stumble pedestrians. She hoped that the relevant government departments would follow-up the above matter, and carefully select the varieties of plants. Further, there were many Acacia confusa in the islands District, with average life expectancy of only less than 20 years, and many have needed to be replaced, she hoped that ALCA would deal with it in the GMPs. In addition, she believed poinciana flowers withered in a short period of time, and petals scattered on the road, it was not suitable for planting them in next to the road. Oleander was also highly toxic, she worried that its toxicity would endanger passers-by. Finally, she criticized the government just did not pay much effort in planting trees at areas near Shun Tung Road and Yu Tung Road, and eventually planted too many trees, and affecting the overall appearance.

- 15. Mr. CHAN Kam-hon said that trees along Cheung Chau Ferry Pier to Ping Chong Road was very beautiful, but there are a lot of articles and waste, which should be cleaned up.
- 16. Mr Kwong Koon-wan said that, trees at Cheung Chau Tai Hing Tai Road area are dying, he hoped CEDD and ACLA could utilize the new GMPs to re-plan trees in the area. He was very supportive of the GMPs, but required the government to consider the overall layout of the existing plants, to achieve better greenery effect.
- 17. Mr. Wong Hoi-yue said, several trees on Wing Hing Street at South Bay, Peng Chau had signs of infestation, residents believed that they should be removed and replant new trees in the same area. In addition, trees at Peng Chau Promenade are too tall, affecting the landscape, he suggested to plant flowers there instead.
- 18. <u>Ms. YU Lai-fan</u> asked, in GMPs, apart from those that are managed by the LCSD trees, what other government departments are



responsible for the management and maintenance of trees.

- 19. Mr. LEE Chi-fung asked, the Islands GMP did not include Tai O, did it meant that the government believed that there are enough trees in Tai O, and no further greening was required.
- 20. Mr. CHAN Hei-wan said, CEDD had close contact with TD, to avoid plants on roads blocking road views or obstructing the roads. Before planting trees, CEDD and ALCA would consult the TD on every location concerned, to ensure that it would not affect the traffic. He had consulted staff of CEDD who are responsible for the Chung Waterfront Road cycling track project, and was informed that the GMP did not have conflict with the cycling track. Since it was still a preliminary stage on the development of GMPs, they had not developed any details on plant species, but they promised that they would ensure that the tree species are suitable to the environment. CEDD and ALCA would study the feasibility of migrating trees at Cheung Chau Tai Hing Tai Road. The greening listed in the existing GMPs were within the jurisdiction of the LCSD. For areas outside the jurisdiction of the LCSD, CEDD had to determine the maintenance and management first, before carrying out greening.
- Mr. FUNG Siu-cheuk, Peter said that, he had no information on trees at South Bay, Pend Chau at the moment, but he would carry out site inspection after the meeting, and think of suitable species. CEDD had conducted site inspections at Tai O with Mr. LEE Chi-fung, but did not draw concrete greening proposals. CEDD would carry out on-site inspectionagain, to examine whether places suitable for greening, and revised the GMPs if necessary.
- Mr. CHEUNG Chi-wing said Tai O residents often reflected to him, trees at Kat Hing Street and Shek Tsai Po Street area were in danger of collapsing. He suggested that CEDD and ALCA to visit Tai O, and discuss greening plans with the local residents, as well as the handle dangerous trees in the area mentioned above.



- 23. <u>The Chairman</u> asked whether the relevant government departments might first perform site inspections in Tai O, and check the health status of trees, before starting to construct greening proposals in Tai O.
- 24. Miss LO Man-kam said that the LandsD would contact Mr. CHEUNG Chi-wing, in order to identify the location of dangerous trees, and find out the responsible government departments.
- 25. The Chairman said that when choosing the right species to plant, the government should pay special attention to Ficus microcarpa and Aleurites moluccana. The roots of Ficus microcarpa extended very long, which may block clog the channels and drainages, so she did not recommend planting them in between buildings or on streets. The fruits of Aleurites moluccana were very hard, and might endanger passers-by when falling.
- 26. Mr. YU hon-kwun, Randy said that, from February 2012 to date, CEDD and ALCA had conducted a number of GMP consultations, they should understand the greening in the Islands District are different from the Urban areas, Some people agree with planting trees, but some people think that there were enough trees in the Islands District, and no longer require more greening, the CEDD should strike a balance between the two opinions. At the meeting held on 28 August 2013, a lot of people expressed their views, he expressed his appreciation that the CEDD tried to revise the GMPs according to opinions received. In addition, due to the ongoing revitalization of Tai O, green proposal may be conflict with the revitalization plan, therefore after the site inspections at Tai O, CEDD was still unable to find suitable greening space at the area. He supported CEDD to conduct site inspection at Tai O. Although the GMP is still at its preliminary stage, he suggested that the CEDD and ALCA to continue to conduct consultation, so as to continue to improve the GMPs.
- 27. <u>The Chairman</u> said that the Committee conditionally supported the contents of GMP. She also recommended the CEDD



and ALCA to study the study the abovementioned comments, and modify the GMPs accordingly.

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Source: http://www.districtcouncils.gov.hk/island/doc/common/committee_meetings_minutes/TAFEHC/2013/TAmin0913.pdf



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