

Biodiversity Strategy and Action Plan (BSAP)
Awareness, Mainstreaming and Sustainability Working
Group

Traditional Knowledge Focus Group -
Final Report (English Summary)

Submitted on 15 September 2014

Remarks:

This is a English summary of the *Traditional Knowledge Focus Group - Final Report*. Appendix of the Final Report are only available in Chinese and they are not included in this document.

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Administration

1. Title

Traditional Knowledge Focus Group

2. Relevant Aichi Biodiversity Target(s)/CBD requirement(s)

Article 8(j) of the CBD¹ states:

Each Contracting Party shall, as far as possible and as appropriate:

Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices.

The Aichi Biodiversity Target 18² states:

'By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels'³.

3. Leader(s)

Mr Pang Siu Kei and Ms Idy Wong

4. Key experts / stakeholders who should be involved in the discussion

4.1 Within the Steering Committee / working groups

BSAP Secretariat: Mr Simon Chan and Ms Flora Mok

BSAP Steering Committee / working groups: Ms Vicky LAU, Dr WONG Fook Yee, LAU, Mr PANG Siu Kei, Mr Ken SO and Ms Idy WONG

4.2 Outside the Steering Committee / working groups: Ms May CHENG, Dr Chiu Sein Tuck, Ms Stella CHONG, Dr David LAU, Mr C. P. Kwok, Mr Tobi

¹ <http://www.cbd.int/traditional/default.shtml>

² <http://www.cbd.int/sp/targets/>

³ <http://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf>

LAU, Mr TAM Yip Shing, Mr YIP Tsz Lam, Mr YIU Kiu Choy, Dr YAU Wing Kwong and Dr John Fellowes

5. Expected date for submissions of recommendations to the working group(s)

June 2014

Expected date for submissions of revised recommendations to the working group(s)

August 2014

Content

6. Aim / Objectives

The Traditional Knowledge Focus Group is one of the five focus groups set up by the Awareness Raising, Mainstreaming and Sustainability Working Group (AMSWG). Focusing on Aichi Target 18, the objectives of this Focus Group are defined by the AMSWG⁴ as:

- 6.1 to stock-take the traditional practices relevant to biodiversity and ecosystem services in Hong Kong;
- 6.2 to explore and/or propose action plans to promote the use of traditional practices in enhancing biodiversity conservation and its sustainable use;
- 6.3 to explore involving rural communities in the work of this Focus Group.

7. Scope

7.1 The Traditional Knowledge Focus Group made reference to the 'explanation of the Target' stated in the chapter *Quick Guide to the Aichi Biodiversity Targets 18 – Traditional knowledge respected*⁵ to define its scope as below:

- i. This target specifically relates to knowledge relevant to the conservation and sustainable use of biodiversity.
- ii. Customary use of biological resources refers to indigenous and local systems for the control, use and management of natural resources.

⁴ http://www.afcd.gov.hk/english/conservation/con_bsap/bsap_wg_fg/bsap_fg.html

⁵ <http://www.cbd.int/doc/strategic-plan/targets/T18-quick-guide-en.pdf>

Customary use of biological resources includes spiritual, cultural, economic and subsistence functions.

- iii. Given different national circumstances and the diversity of indigenous and local communities and that traditional knowledge is addressed at multiple levels and by a number of international initiatives, actions taken to implement this target should be developed subject to national legislation and relevant international obligations.

7.2 The Traditional Knowledge Focus Group also took note of the following listed 'implications for setting national targets' stated in the chapter *Quick Guide to the Aichi Biodiversity Targets 18 – Traditional knowledge respected*⁵:

- i. In line with Article 8(j) of the Convention, traditional knowledge, innovations and practices should be respected, protected, maintained and promoted, and used in local ecosystem management, drawing upon experiences of customary use, and with the prior informed consent of relevant communities.
- ii. In line with Article 10(c), customary use of biological resources that is compatible with conservation and sustainable use, should be protected and encouraged.
- iii. The rights of indigenous and local communities over their traditional knowledge, innovations, practices and related biological resources, along with their rights to practise and pass on such knowledge, innovations and practices, should be respected and accessed only with prior informed consent.
- iv. Indigenous knowledge, innovations and practices are most often highly specific to the locality in which each community lives and thus Parties will need to develop approaches which take into account the diversity of indigenous and local communities as well as their specific national circumstances. This would also contribute to the development of sui generis systems for the protection of such knowledge.

8. Methodology

In its first meeting, the Traditional Knowledge Focus Group decided to use the following listed methodologies:

8.1 Adopt Chinese as working language

Chinese is adopted as the working language of this Focus Group to facilitate and widen participation of different stakeholders. It also assures a more accurate communication of the subject, for which most of the traditional knowledge in Hong Kong are rooted in Chinese culture and communities.

8.2 A quick review of international instruments of relevance to traditional knowledge

Given traditional knowledge has been gaining wider attention both locally and internationally in recent years, the Focus Group conducted a quick review of relevant international instruments to explore if there is common ground between BSAP and other existing field of traditional knowledge conservation. For example, as per the Convention for the Safeguarding of the Intangible Cultural Heritage in effect in 2006, the Government of Hong Kong SAR has developed a Draft Intangible Cultural Heritage (ICH) Inventory of Hong Kong.

Table 8.1 - Multilateral Instruments of Relevance to Traditional Knowledge

(Source: UNU-IAS Policy Report on Biodiversity, Traditional Knowledge and Community Health Strengthening Linkages, UNEP, 2012)

	Policy	Position
Indigenous People and Human Rights, Self-Determination		
1	Indigenous and Tribal Peoples Convention (ILO) 1957	States that due account shall be taken of the cultural and religious values and of the forms of social control existing among indigenous populations.
2	The International Covenant on Economic, Social and Cultural Rights (OHCHR) 1966	Protects rights of individuals and peoples to self-determination and means of subsistence.
3	Indigenous and Tribal Peoples Convention (ILO) – revised in 1989	Calls for rights of indigenous peoples to be actively involved in decisions related to their development and their right to continue with their ways of life and choose their priorities.
4	UN Declaration on Rights of Indigenous Peoples (UNPFII) 2006	Declares right to self-determination, and to determine access to their cultures, resources and knowledge.
Biodiversity, Traditional Knowledge and Communities		
5	Convention on Biological Diversity (CBD) 1992	<p>Calls for the need to respect, preserve and maintain traditional cultures and encourage customary use of biological resources in line with principles of sustainable use and conservation; need to ensure equitable sharing of benefits among TK holders; and the need to obtain prior informed consent of providing parties to access biological resources and related knowledge on mutually agreed terms between the parties.</p> <p>COP10/Decision 20 affirms the need to identify and strengthen priorities on biodiversity and health between relevant institutions and national agencies dealing respectively with public health and environmental resources.</p> <p>Sets forth the Aichi Biodiversity targets related to the Strategic Plan of the Convention on Biological Diversity 2011–2020 (Target 14 specifically mentions health and biodiversity linkages; several other targets relate to allied fields for good health including ecosystem resilience, genetic diversity, etc.).</p> <p>Includes community protocols as part of international regime on access and benefit-sharing (ABS) especially relating to community rights to resources, knowledge and practices.</p>
6	UN Convention to Combat Desertification (UNCCD) 1994	Encourages the use and protection of TK related to ecological development—subject to their respective national legislation and/or policies, exchange information on local and traditional knowledge, ensuring adequate protection for it and providing appropriate return from the benefits derived from it, on an equitable basis and on mutually agreed terms, to the local populations concerned.

	Policy	Position
7	International Treaty on Plant Genetic Resources (ITPGR), FAO 2001	Affirms farmers' rights and TK which allows for benefit-sharing and participatory decision making on use of plant genetic resources.
Traditional Knowledge and Development		
8	United Nations Educational, Scientific and Cultural Organization - International Council for Science (UNESCO-ICSU) Declaration on Science and the use of Traditional Knowledge 2002	Calls for co-existence of knowledge systems and suitable integration for contemporary needs.
9	World Summit on Sustainable Development (WSSD) 2002	Plan of Implementation: Calls for sensitive framing of policy actions incorporating traditional knowledge in various sectors, and accounting for poverty, health and environment linkages. In the specific context of Health and Sustainable Development, the Plan seeks to "Promote the preservation, development and use of effective traditional medicine knowledge and practices, where appropriate, in combination with modern medicine, recognizing indigenous and local communities as custodians of traditional knowledge and practices, while promoting effective protection of traditional knowledge, as appropriate, consistent with international law" (53(h) of Plan of Implementation of the WSSD).
Health		
10	World Health Organization (WHO) Traditional Medicine Strategy 1978, 1995, 2002, 2002–2005, 2008	Calls for integration of traditional medicine in health systems, national regulation focused on quality, safety, efficacy, access and rational use.
11	Food and Agriculture Organization / WHO (FAO/WHO) Food-Based Dietary Guidelines	FAO/WHO Food-Based Dietary Guidelines (FBDG) provide a framework following a preventive lifestyle approach calls for culturally sensitive action taking into consideration the traditional food practices, customs, cooking practices etc., and with awareness of the needs of the target groups within these populations.
12	United Nations Standing Committee on Nutrition (UNSCN)	States the role of traditional knowledge related to food in maintaining nutrition and health.
Protection of Traditional Knowledge, Cultural Resources		
13	World Intellectual Property Organization (WIPO)	Provides <i>sui generis</i> models for protection of traditional cultural expressions, traditional knowledge and folklore.
14	UNESCO Convention for the Safeguarding of Intangible Cultural Heritage (ICH) 2003	Protects oral expressions, performing arts, social practices and rituals, knowledge and practices concerning nature and universe and traditional craftsmanship.
15	UNESCO Convention on Protection and Promotion of the Diversity of Cultural Expressions 2005	Reaffirms the importance of the link between culture and development.
Ecosystems and Well-being		
16	Office of the Higher Commission for Human Rights (UNHCHR) 2000	Affirms right to highest attainable standard of health – States have "obligation to refrain from prohibiting or impeding traditional preventive care, healing practices and medicines."
17	United Nations Environment Programme - International Institute for Sustainable Development (UNEP-IISD) 2004	Identified ability to use traditional medicine as one of 10 resources of well-being.

8.3 Expert Advice and Desktop Research

8.3.1 As per the Convention for the Safeguarding of the Intangible Cultural Heritage in effect in 2006, the Government has developed a Draft Intangible Cultural Heritage (ICH) Inventory of Hong Kong. The framework covers five domains: 1) oral traditions and expressions, including language as a vehicle of ICH; 2) performing arts; 3) social practices, rituals and festive events; 4) knowledge and practices concerning nature and the universe; and 5) traditional craftsmanship. The Focus Group adopted the *Draft Intangible Cultural Heritage Inventory of Hong Kong*⁶ published by Leisure and Cultural Services Department as a foundation to initiate Focus Group discussion, and review the relevance of the 477 listed items conservation and sustainable use of biodiversity.

8.3.2 Since there is no established link between BSAP and intangible cultural heritage conservation in Hong Kong, The *Draft Intangible Cultural Heritage Inventory of Hong Kong* does not have any category featuring biological resource conservation. To fill this gap, the Focus Group adopted members' individual works, publications and research on specific areas to stock-take traditional practices and relevant resources (including people and publications). Specific areas of focus include:

- a. local traditional knowledge and practices concerning nature and the universe;
- b. local and traditional models of communities' participatory management of natural resources and ecosystems (such as fishponds, river resources and Fung Shui Woodland);
- c. traditional ways for collection and use of natural resources that are widely integrated in everyday living;
- d. belief and/or practices that are highly site-based or specific.

Results of the stock-taking exercise and relevant reference are documented in Appendix 1.

8.4 Ecosystem Approach

In view of the locality-specific nature of traditional knowledge and its close link with ecosystem services, it was decided to adopt an ecosystem focus in stock-taking of traditional practices that are relevant to biodiversity and ecosystem services in Hong Kong. This approach is adopted as the framework to categorize information collected from the stock-taking exercise (see Appendix 1).

8.5 Permaculture Zoning Concept

⁶ http://www.heritagemuseum.gov.hk/downloads/Draft_ICH_Inventory.pdf

The Focus Group also adopted the permaculture zoning concept in its discussion of the different faces of traditional knowledge based in relation to the level of human-nature interaction at different land zones.

9. Hong Kong's existing status

Indigenous populations have relied for centuries (or longer) on their direct environment for subsistence and autonomy. Over time, they often developed ways in which to manage and use their resources that ensured their conservation into the future. Such traditional societies are interested more in preserving their own social, cultural and environmental stability and integrity than in maximizing production. The traditional way of life is often based on a strong sense of interconnection and interdependence, and this also applies to their social life. Ethics is explicitly part of the traditional approach. Relationships are based on reciprocity obligation towards community members. Activities in traditional societies often include a strong symbolic dimension in which action is ritualized, and allow humans to participate in the preservation of natural order. These rituals differ between cultures, as each society has its own belief systems, which determine its cultural identity and type of technology.

There is also increasing recognition of the value of such traditional systems of commons – the communities and their shared resources and the rules they develop to steward them – in correcting the destructive patterns of globalised society.

9.1 Developed from experience gained over the centuries and adapted to the local culture and environment, indigenous and local communities in Hong Kong have developed a body of traditional knowledge, innovations and practices. Local traditional knowledge tends to be collectively owned and transmitted orally from generation to generation. It takes many forms including stories, songs, folklore, and agricultural practices, including the development of plant species and animal breeds.

9.2 Today, some traditional practices relevant to conservation and sustainable use of biodiversity still exist (such as Fung Shui Forest⁷). There are also traditional practices being adopted locally by conservationists in ecosystem management, for example, *gei wai*, a traditional tidal shrimp pond management practice is adopted by WWF-Hong Kong in wetland conservation management⁸ (See Appendix 2 for more detail); with funding support from the Environment and Conservation Fund, the Hong Kong Bird Watching Society has been running a management agreement scheme at Inner Deep Bay to encourage fishpond owners adopting traditional techniques in operation so as to enrich feeding habitats for waterbirds; at Long Valley, Conservancy Association has integrated rice-paddy as part of its plan for wetland habitat management; at Kadoorie Farm and Botanic Garden, traditional and sustainable agriculture knowledge, such as using native bee in apiary, are integral part of its holistic estate management to demonstrate sustainable use of natural resource. There are also organizations, such as the Environmental Association's E-Wise Centre at

⁷ http://www.hkherbarium.net/herbarium/topics/fsw/FSW_6_e.htm

⁸ http://awsassets.wwf.hk.panda.org/downloads/gei_wai.pdf

Lam Tsuen, make an effective use of traditional knowledge as educational resource to promote sustainable living.

9.3 Traditional Chinese Medicine (TCM) and Herbal Tea (Guangdong) are examples of traditional knowledge that are relevant to conservation and sustainable use of biodiversity and remain highly popular in Hong Kong. Both practices use an extensive variety of biological resource - their popularity creates a high market demand for biological resource and unsustainable collecting of certain resource has been posing threat to biodiversity.

9.4 Certain traditional activity, such as hunting and wild-animal trapping, is controlled by law and regarded as illegal. Table 9.1 lists out legislation and administrative controls for conservation in Hong Kong.

Table 9.1 Legislation and administrative controls for nature conservation in Hong Kong.

Legislation	Administered by
Forests and Countryside Ordinance (Cap 96)	Agriculture, Fisheries and Conservation Department
Waterworks Ordinance (Cap 102)	Water Supplies Department
Wild Animals Protection Ordinance (Cap 170)	Agriculture, Fisheries and Conservation Department
Fisheries Protection Ordinance (Cap 171).	Agriculture, Fisheries and Conservation Department
Country Parks Ordinance (Cap 208)	Agriculture, Fisheries and Conservation Department
Marine Parks Ordinance (Cap 476)	Agriculture, Fisheries and Conservation Department
Marine Fish Culture Ordinance (Cap. 353)	Agriculture, Fisheries and Conservation Department
Protection of Endangered Species of Animals and Plants Ordinance (Cap 586)	Agriculture, Fisheries and Conservation Department
Town Planning Ordinance (Cap 131)	Planning Department
Environmental Impact Assessment Ordinance (Cap 499)	Environmental Protection Department
Administrative Regulation	
Site of Special Scientific Interest	Agriculture, Fisheries and Conservation Department
Outline Development Plans/Layout Plans	Planning Department

9.5 As per the Convention for the Safeguarding of the Intangible Cultural Heritage in effect in 2004, the Government of Hong Kong SAR developed a Draft Intangible Cultural Heritage (ICH) Inventory of Hong Kong, which provided an initial base for traditional knowledge conservation.

- 9.6 Under the Heung Yee Kuk New Territories (N.T.), there is a N.T. Traditional Culture Committee set up to promote and conserve culture of indigenous villages in Hong Kong, and conduct research on Hakka, Wai-Tau and Tang Ka's culture. Besides, there are also a number of thematic research studies on traditional knowledge undertaken by local institutes, NGOs and individuals. Findings are documented by publication, oral history archive and/or in visual forms.
- 9.7 Currently there is no comprehensive research or documentation being undertaken systematically on traditional knowledge in Hong Kong.
- 9.8 In-depth research focusing on the relationship between traditional knowledge and biodiversity conservation is also absent.

10. Gaps identified

10.1 Existing documentation of traditional knowledge and practices largely focus on their visible expression. Insufficient attention was given to the holistic worldview, philosophy, participatory management models and sustainable living skills related to traditional knowledge and biodiversity conservation. For example, local documentation of Fung Shui Woodland largely featured its biological information of today, and there is little attention given to the traditional knowledge and practices' roots in religious, tribal and livelihood traditions, that had shaped the establishment, conservation and management of the woodland in the early days. These traditional knowledge and practices are a valuable resource to explore strategies to harmonize the interaction between people and nature, so as to improve conservation management and mainstreaming, and arouse community engagement in BSAP.

Fung Shui Wood and the traditions

The establishment, management and preservation of Fung Shui Wood by local indigenous communities is a representative example that illustrates the holistic perspective of traditional knowledge that could be harnessed for the protection of biodiversity and achievement of sustainable development.

Recently, local research on Fung Shui Woods has focused primarily on biological information while traditional knowledge has received little attention. The holistic perspective behind this traditional knowledge provides a path to learn new ecological insights from ancient knowledge, has potential value for the management of natural resources and is useful in conservation education.

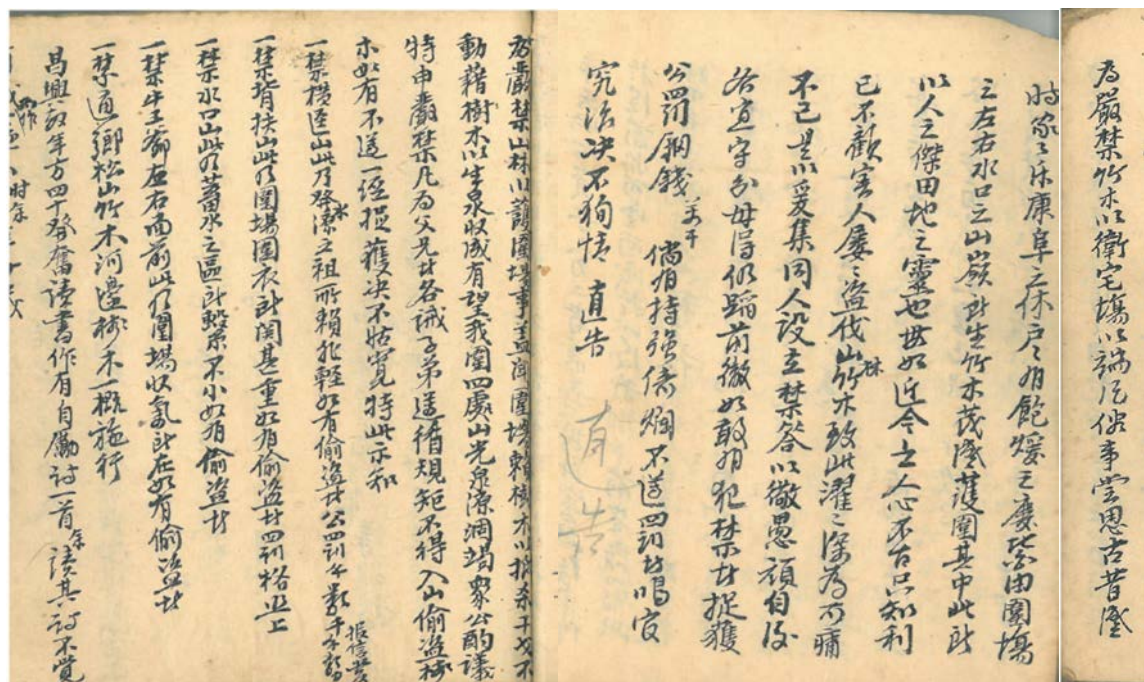


Figure 11.1 The village rules for the fungshui wood of Lin Ma Hang describe the fung shui landscape, articulate the importance of ecosystem services it provides, the importance of conserving it for the current and future generations and the community rules for conserving the ecosystem (credit: Dr CW Ip)

10.2 There is generally a lack of comprehensive research or documentation being undertaken systematically on traditional knowledge in Hong Kong. Relevant research featuring its potential contribution in biodiversity conservation is also largely absent. Existing records, documentation and other information are scattered and not easily accessible.

The major gaps identified are insufficient documentation and research on the following areas:

- i. The worldview, philosophy, belief, value and ethics behind traditional knowledge and practices concerning nature and the universe.
- ii. Local and traditional community collaborative models, practices and concepts for sustainable management and sharing of natural resources.
- iii. Traditional knowledge and practices that have no written record and/or rely solely on verbal means (including local dialect) to transfer.
- iv. Traditional knowledge and practices that are widespread but not supported by scientific evidence.
- v. Beliefs and/or practices that are site-based or landscape-specific.

10.3 Other issues identified include:

- i. Some holders of unique traditional knowledge have emigrated abroad and this will pose difficulties for future research and documentation of such knowledge.
- ii. There is an urgency to protect certain unique and relevant traditional knowledge that is held by senior citizens.
- iii. Not all relevant traditional practices have active exponents in modern-day Hong Kong. Further discussion may be needed on the inclusion of practices from a longer historical and wider spatial range, with ecological relevance and cultural continuity to Hong Kong.
- iv. In the absence of scientific research and evidence, the contribution of some relevant traditional knowledge and practices are not widely recognized.

10.4 Limitations of the Focus Group

10.4.1 The Traditional Knowledge Focus Group worked under a very tight schedule and limited resources to conduct the stock-taking exercise. The list of traditional knowledge compiled by the Focus Group (Appendix I) is not exhaustive and recommendations for further studies are included.

10.4.2 Based on the scope defined (see Section 7), the Focus Group developed the following list of criteria for conducting an initial assessment on the relevance of traditional knowledge to BSAP:

- i. Species and genetic resource conservation
- ii. Ecosystem management
- iii. Sustainable use of biological resources
- iv. Knowledge for use of biological resources
- v. Habitat protection
- vi. Ethics and philosophy for conservation

There are also some items of traditional knowledge and practice that were identified as relevant to BSAP but the Focus Group had insufficient resources to verify their validity and importance. These items are kept in Appendix I for reference and further investigation is recommended.

10.4.3 The Focus Group identified some traditional practices (e.g. hunting, trapping, burning vegetation) that have negative impacts on conservation in the current context. These are relevant to BSAP but not beneficial – and generally illegal. The Focus Group decided to exclude these items from this inventory. Three items of traditional knowledge and practices, in view of their severe impact to BSAP, are highlighted in Table 12.1.2 for reference.

10.4.7 The Scope of the Focus Group is confined to local traditional knowledge and practice. However, it is realized that some Mainland and overseas traditional practices are highly applicable to Hong Kong and have potential to be incorporated into BSAP. The Focus Group identify some of these items in Table 12.1.3 for reference.

11. Recommended Strategies

11.1 The Focus Group developed the following list of principles to review the importance of relevant traditional knowledge to BSAP.

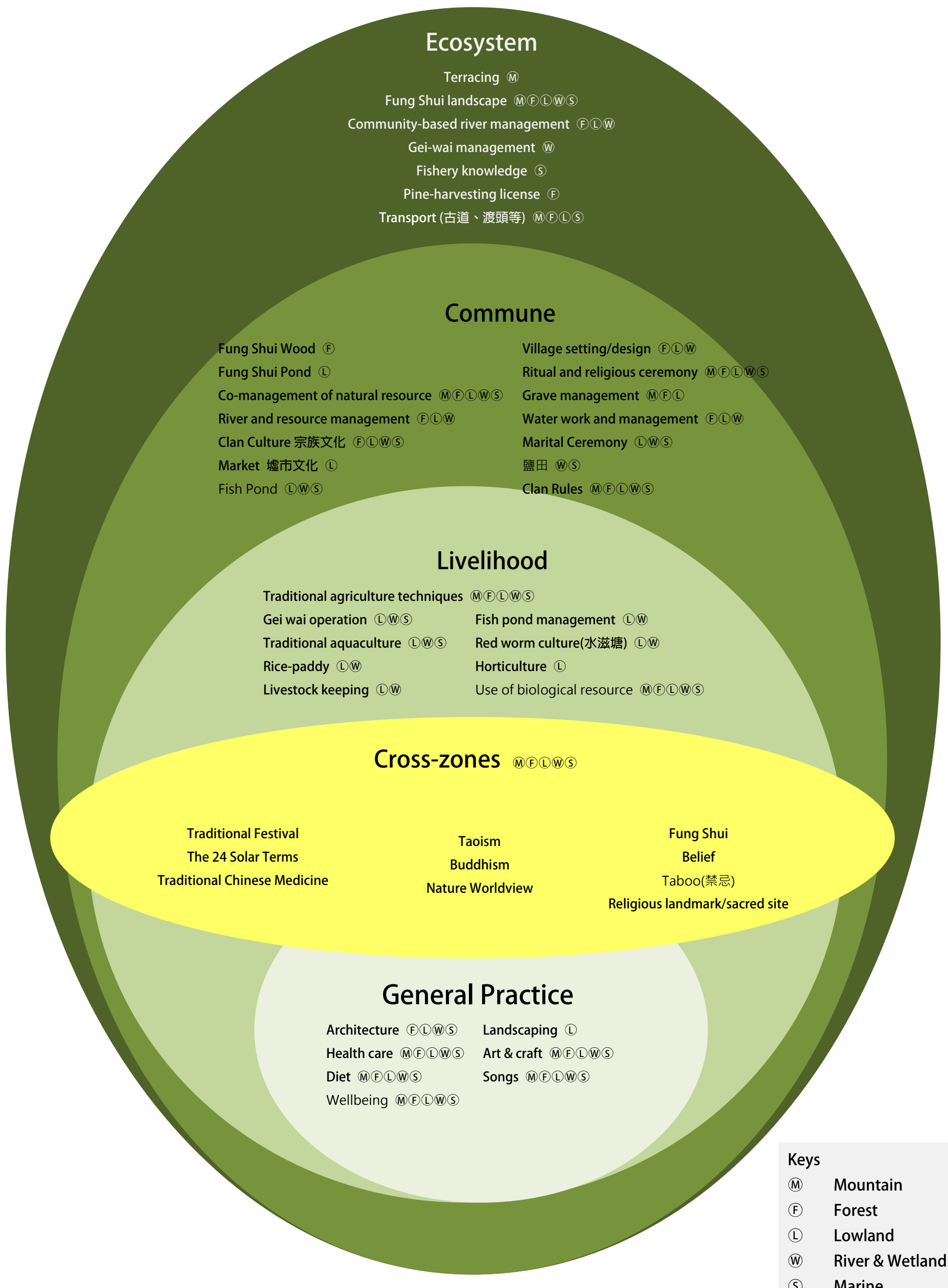
- i. Urgency of protecting the knowledge
- ii. Compatibility with conservation and sustainable use
- iii. Uniqueness to Hong Kong
- iv. Compliance with local legislation and relevant international obligation
- v. Harmony with local ecosystems and their carrying capacity
- vi. Potential to enhance conservation and sustainable use of biodiversity in HK
- vii. Having deep cultural roots and being widely spread within Hong

Kong

- viii. Offering a holistic worldview that enhances nature conservation and human wellbeing

A list of traditional knowledge and practices that are initially identified as important is generated (Appendix 1). This set of criteria could be taken as a reference to explore inclusion of new traditional knowledge items in future.

11.2 A summary of Focus Group' s perspective of how the relevant traditional knowledge relate to different ecosystem/habitats and land zones is illustrated in the following chart.



Keys

(M)	Mountain
(F)	Forest
(L)	Lowland
(W)	River & Wetland
(S)	Marine

- 11.3 Any attempt to integrate traditional knowledge into biodiversity conservation and sustainability of natural resources should be based on the understanding that traditional knowledge often cannot be dissociated from its cultural and institutional setting. The four Strategic Directions identified here are:
- 11.3.1 Adopt the **holistic worldview, philosophy and approach** of traditional practice/knowledge (across generations and landscapes) to improve and enhance conservation and mainstreaming programmes in Hong Kong.
 - 11.3.2 Make adaptive use of appropriate traditional **models of community collaboration in preserving, managing and sharing of ecosystem services and biological resources** to actively engage communities in biodiversity conservation in Hong Kong
 - 11.3.3 Make adaptive use of appropriate **traditional knowledge and practices in sustainable use, preservation, restoration and management of ecosystem services and biological resources** to improve nature management and restoration in Hong Kong
 - 11.3.4 Creatively use **traditional knowledge, skills and practices for sustainable living** to promote respect for the carrying capacity of ecosystems and inspire today's population with the principles and means to fulfill our basic needs, and form the basis for decision and strategies in many practical aspects.

12. Recommended Actions

The core recommended actions are:

- 12.1 Create **platforms and resources** to encourage collaborative research and facilitate resource sharing to promote application of relevant traditional knowledge for biodiversity conservation.
[Fulfilling Aichi Target Nos. 1, 2, 3, 17, 18, 19, 20]
- 12.2 Make effective use of the research and documentation process to **empower and cultivate capacity of stakeholders** to multiply and sustain conservation and education efforts.
[Fulfilling Aichi Target Nos. 1, 2, 3, 4, 17, 18, 19]
- 12.3 Make adaptive use of traditional community collaborative models to **create opportunities for** the local community and public to learn, experience and act for nature conservation, in habitat management (especially in projects funded under Management Agreement (MA) scheme of the New Conservation Policy) and other BSAP programmes.
[Fulfilling Aichi Target Nos. 1, 2, 3, 4, 7, 11, 17, 18, 19, 20]
- 12.4 **Enrich BSAP mainstreaming programmes** by explore creative

partnership over the rich context of traditional knowledge so as to deepen understanding cultural linkages, holistic worldview and skills for sustainable living.

[Fulfilling Aichi Target Nos. 1, 2, 4, 7, 17, 18, 19, 20]

Chart 12.1 – An illustration of the recommended strategies and actions



Table 12.1 Traditional Knowledge and Practices that are identified as relevant to BSAP (Please see Appendix 1 for full detail)

Mountain & Forest	Lowland and Wetland	Marine	Others
<ul style="list-style-type: none"> ● Terrace design ● Fung Shui Woodland (religious, tribal, management and protection traditions) ● Fung Shui Landscape ● Orchard management (on eco-friendly pest control) ● Native bee keeping techniques 	<ul style="list-style-type: none"> ● Community-based management system of Fung Shui Pond ● Traditional agriculture ● Landrace and traditional livestock breed ● Traditional village setting and design ● Gei-wai, fishpond, aquaculture, rice-paddy and red-worm production system(水滋塘) 	<ul style="list-style-type: none"> ● Fishermen's song ● Knowledge for tracking, fishing and use of marine resource 	<ul style="list-style-type: none"> ● TCM ● Herbal tea (Guangdong) ● 24 Solar Term ● Lunar Calendar ● Festival ● Religious traditions ● Traditional market (墟市) system ● Traditional architecture ● Mountain song

Table 12.2 Tradition knowledge and practices that are outside the scope of Aichi Target 12 but require attention in BSAP development (Please see Appendix 1 for full detail)

Traditional knowledge and practices that pose severe negative impact to biodiversity conservation.
Poaching of wildlife
Sky Lantern (孔明燈)
Mercy release

Table 12.3 Traditional knowledge that are not local in origin but has potential to contribute to BSAP (Please see Appendix 1 for full detail)

Item	Habitat	Reason
Agroforestry	Farmland, Woodland	It can be introduced into agricultural operation (especially orchard) to maintain productivity and enhance ecological integrity of farmland (orchard), especially at ecologically sensitive areas.
Biochar		By converting horticultural waste (wood) to biocharcoal, and then apply it in reforestation or farming help restore soil vitality and contribute to carbon sequestration.

Expected Targets/outcomes, Implementation, Evaluation and Monitoring

Please refer to Table Nos. 13.1-13.4 for detailed recommendations in expected targets, outcomes, timeline, evaluation and monitoring. Information is presented in the format of logical framework.

Appendix 1-7 is only available in Chinese. Please refer to the Chinese version.

Table 13.1 - Create **platforms and resource** to encourage collaborative research and facilitate resource sharing to promote application of relevant traditional knowledge for biodiversity conservation

	Recommendations	Performance Indicators	Evaluation & Monitoring
Overall Goals [Aichi Target Nos. 1, 2, 3, 17, 18, 19, 20]	<ol style="list-style-type: none"> 1. Enable the holistic worldwide, philosophy and approach of traditional practice/knowledge (cross generations and landscapes) to improve and enhance conservation and mainstreaming programmes in Hong Kong. 2. Make adaptive use of appropriate traditional models of community collaboration in preserving, managing and sharing of ecosystem services and biological resources to actively engage communities in biodiversity conservation in Hong Kong 3. Make adaptive use of appropriate traditional knowledge and practices in sustainable use, preservation, restoration and management of ecosystem services and biological resources to improve nature management and restoration in Hong Kong 4. Creatively use traditional knowledge, skills and practices for sustainable living to promote respect for the carrying capacity of ecosystems and inspire today's population with the principles and means to fulfill our basic needs, and form the basis for decision and strategies in many practical aspects. 	<ol style="list-style-type: none"> 1. Volume and variety of resources and archive being shared in the established platforms. 2. Number and variety of platform users. 3. Citation and other use of traditional knowledge in research, field application and education programmes for biodiversity conservation 4. Number and variety of research projects on traditional knowledge being supported under BSAP. 	<p>Stage 4</p> <ol style="list-style-type: none"> 1. There are widely recognized, local platforms for sourcing and sharing resource of traditional knowledge relevant to biodiversity conservation to support conservation and education programme. 2. There is a growing awareness, appreciation and application of traditional knowledge that are relevant to biodiversity conservation. 3. There is an established system to support different stakeholders to initiate projects to research and document traditional knowledge relevant to biodiversity conservation.
Objective	12.1 Create platforms and resources to encourage collaborative research and facilitate resource sharing to promote application of relevant traditional knowledge for biodiversity conservation.	<ol style="list-style-type: none"> 1. Research and documentation of relevant traditional knowledge of high priority (including those listed under Table 12.1) are undertaken. 2. The platform provides access to research findings, archive records and information on traditional knowledge. 	<p>Stage 3</p> <ol style="list-style-type: none"> 1. The platforms created are widely used by different stakeholders for sharing resources and archives of relevant traditional knowledge. 2. Resource and platforms are provided to support research and documentation of relevant traditional knowledge by different stakeholders.
Outcomes	<ol style="list-style-type: none"> 1. A list and map of relevant traditional knowledge and its application for biodiversity conservation in Hong Kong is published. 2. A platform for sharing resources and archives on related traditional knowledge is launched for public use. 3. Research of high priority is supported and implemented. 4. Working closely with LCSD and other stakeholders to promote and conserve traditional knowledge relevant to BSAP jointly. 	<ol style="list-style-type: none"> 1. The list of Traditional Knowledge for Biodiversity Conservation 2. Progress of the BSAP Traditional Knowledge Expert Group 3. Progress of the platform for sharing resource 4. Progress reports on resource sourcing. 	<p>Stage 2</p> <ol style="list-style-type: none"> 1. Publication and public response to the 5-year plan of Traditional Knowledge for Biodiversity Conservation 2. Deliverables and other milestones of the 5-year plan are met 3. Resource secured to support the 5-year plan is secured.
Actions	<ol style="list-style-type: none"> 1 Explore collaboration with LCSD to integrate traditional knowledge relevant to BSAP into the conservation plan for 'intangible cultural heritage conservation in Hong Kong' 2 Establish a formal BSAP Traditional Knowledge Expert Group (in-link with 12.2) 3 Map and identify research priorities to support development of the four strategic directions. 4 Develop a platform to facilitate sharing of resources related to traditional knowledge that are relevant to BSAP 5 Encourage and support research and documentation of traditional knowledge of high priority. 6 Build synergy with initiatives conserving intangible cultural heritages to facilitate promotion and conservation of BSAP related traditional knowledge 	<ol style="list-style-type: none"> 1. Establishment of Formal BSAP Traditional Knowledge Expert Group. 2. Research priorities are identified and mapped. 3. Resource to support research is identified and funding for establishing a platform is secured. 	<p>Stage 1</p> <ol style="list-style-type: none"> 1. A 5-year plan to support research and develop platforms for information sharing is established.

Table 13.2 Make effective use of the research and documentation process to **empower and cultivate capacity of stakeholders** to multiply and sustain conservation and education efforts.

	Recommendations	Performance Indicators	Evaluation & Monitoring
Overall Goals [Aichi Target Nos. 1, 2, 3, 4, 17, 18, 19]	<ol style="list-style-type: none"> 1. Enable the holistic worldwide, philosophy and approach of traditional practice/knowledge (cross generations and landscapes) to improve and enhance conservation and mainstreaming programmes in Hong Kong. 2. Make adaptive use of appropriate traditional models of community collaboration in preserving, managing and sharing of ecosystem services and biological resources to actively engage communities in biodiversity conservation in Hong Kong 3. Make adaptive use of appropriate traditional knowledge and practices in sustainable use, preservation, restoration and management of ecosystem services and biological resource to improve nature management and restoration in Hong Kong 4. Creatively use traditional knowledge, skills and practices for sustainable living to promote respect to the carrying capacity of ecosystems and inspire today's population with the principles and means to fulfill our basic needs, and forms the basis for decision and strategies in many practical aspects. 	Active participation of local communities and core stakeholders in applying traditional knowledge of high priority in biodiversity conservation.	Stage 4 <ol style="list-style-type: none"> 1. Application of relevant traditional knowledge in biodiversity conservation bridged collaboration of different stakeholders (conservationists, educators, academia, and knowledge holders) and local communities to sustain conservation and education impacts. 2. Relevant stakeholders and local communities have a high awareness, appreciation and motivation in applying traditional knowledge of high priority in biodiversity conservation.
Objective	12.2 Make effective use of the research and documentation process to empower and cultivate capacity of stakeholders to multiply and sustain conservation and education efforts.	Local communities and core stakeholders are actively involved and collaborate to explore adaptive use of traditional knowledge of high priority in biodiversity conservation.	Stage 3 <ol style="list-style-type: none"> 1. Research of high priority (including the listed item in Table 12.1) has actively engaged and build capacity of local community in conservation and application of relevant traditional knowledge in biodiversity conservation
Outcomes	<ol style="list-style-type: none"> 1. The BSAP Traditional Knowledge Expert Group facilitates participation of core stakeholders in identifying priorities and bridging understanding for effective application of traditional knowledge in biodiversity conservation. 2. Regular seminars, forums, workshops and field trips are organized to improve interflow between conservationist, educators, researchers, traditional knowledge holders and other relevant stakeholders so as bridge communication and collaboration. 3. Local communities' capacity to conserve, apply and promote relevant traditional knowledge in biodiversity conservation and education programmes is enhanced through cross-sectorial collaborative projects. 	<ol style="list-style-type: none"> 1. Number, nature and topic of BSAP seminars, workshops, forums, field trips and workshops featuring Traditional Knowledge. 2. Components of cross-sectorial collaboration and building capacity of local community are widely integrated to projects exploring use of traditional knowledge in biodiversity conservation and education programmes. 	Stage 2 <ol style="list-style-type: none"> 1. Deliverables, milestones and meeting record of the BSAP Traditional Knowledge Expert Group 2. Response and feedback to the regular seminars, forum, workshops and field trips 3. Performance of the approved projects in bridging cross-sectorial collaboration and community capacity building.
Actions	<ol style="list-style-type: none"> 1. Establish a BSAP Traditional Knowledge Expert Group with representatives of core stakeholders that include indigenous communities, academia, educators and conservationists. 2. Consider setting up task force to draw in specialists to examine specific aspects of traditional knowledge such as ecosystem service, anthropology, ethnobotany, etc. 3. Develop a plan to organize regular seminars, forum, workshops and field trips to facilitate interflow between conservationists, educators, researchers, traditional knowledge holders and other relevant stakeholders to bridge communication and collaboration. 4. Create incentives to encourage cross-sectorial collaboration between different stakeholders on research, documentation and application of traditional knowledge in biodiversity conservation. 	<ol style="list-style-type: none"> 1. Member list of the BSAP Traditional Knowledge Expert Group. 2. A plan for regular BSAP seminars, workshops, forums, field trips and workshops featuring Traditional Knowledge is developed. 3. Criteria that encourage cross-sectorial collaboration between different stakeholders on research, documentation and application of traditional knowledge in biodiversity conservation. 	Stage 1 <ol style="list-style-type: none"> 1. BSAP Traditional Knowledge Expert Group with adequate representation of different stakeholders is established. 2. Create incentives to encourage cross-sectorial collaboration between different stakeholders on research, documentation and application of traditional knowledge in biodiversity conservation. 3. Funding and administrative support for a 5-year plan is secured.

Table 13.3 Make adaptive use of traditional community collaborative models **to create opportunities** for local community and public to learn experience and act for nature conservation, habitat management (especially in MA projects) and other BSAP programmes.

	Recommendations	Performance Indicators	Evaluation & Monitoring
Overall Goals [Aichi Target Nos. 1, 2, 3, 4, 7, 11, 17, 18, 19, 20]	<ol style="list-style-type: none"> 1. Adopt the holistic worldwide, philosophy and approach of traditional practice/knowledge (cross generations and landscapes) to improve and enhance conservation and mainstreaming programmes in Hong Kong. 2. Make adaptive use of appropriate traditional models of community collaboration in preserving, managing and sharing of ecosystem services and biological resource to actively engage communities in biodiversity conservation in Hong Kong 3. Make adaptive use of appropriate traditional knowledge and practices in sustainable use, preservation, restoration and management of ecosystem services and biological resource to improve nature management and restoration in Hong Kong 4. Creatively use traditional knowledge, skills and practices for sustainable living to promote respect to the carrying capacity of ecosystems and inspire today's population with the principles and means to fulfill our basic needs, and forms the basis for decision and strategies in many practical aspects. 	<ol style="list-style-type: none"> 1. The level and rate of community participation 2. Number and type of projects that adopt traditional models of community collaboration to sustain conservation management effort. 	Stage 4 <ol style="list-style-type: none"> 1. Appropriate traditional models of community collaboration more are widely applied to engage community participation in biodiversity conservation in Hong Kong. 2. There is a strong community participation in biodiversity conservation to conserve both the relevant traditional knowledge and biodiversity. 3. An increasing number of conservation programmes initiated by local or indigenous community to conserve traditional knowledge and practice that are relevant to biodiversity conservation.
Objective	12.3 Make adaptive use of traditional community collaborative models to create opportunities for local community and public to learn, experience and act for nature conservation, habitat management (especially in MA projects) and other BSAP programmes.	<ol style="list-style-type: none"> 1. Number of appropriate traditional models identified 2. Reports of action research projects and the status of models' integration to community participatory conservation programmes. 	Stage 3 <ol style="list-style-type: none"> 1. Appropriate traditional models of community collaboration are adopted in Management Agreement (MA) and Public-Private-Partnership (PPP) scheme of the new conservation policy to enhance community participation in biodiversity conservation.
Outcomes	<ol style="list-style-type: none"> 1. Action research project(s) is/are undertaken at appropriate project site (preferably integrated with ECF-funded projects under MA scheme) to engage of relevant stakeholders and indigenous community in developing a models to make 'adaptive use' of traditional community collaborative models in biodiversity conservation. 	<ol style="list-style-type: none"> 1. Engagement and participation rate of indigenous and local community in biodiversity conservation project (especially projects funded under MA scheme) 2. Number of action research projects with capacity building elements. 3. Number and nature of potential traditional community collaborative models being studied. 	Stage 2 <ol style="list-style-type: none"> 1. An increase interest to study feasibility for applying traditional community collaborative models of high priority in biodiversity conservation. 2. At least one action research project is implemented to explore an 'adaptive use' of traditional community collaborative models in biodiversity conservation.
Actions	<ol style="list-style-type: none"> 1. Identify traditional community collaborative models of high priority based on Action Nos. 12.1 and 12.2 2. Explore integration of appropriate traditional community collaborative models in ECF-funded projects, especially for those working under conservation management agreement (MA) scheme. 3. Identify appropriate project sites and partners to develop action research projects to explore adaptive use of traditional community collaborative models in nature conservation and habitat management. 	<ol style="list-style-type: none"> 1. Number and nature of potential traditional community collaborative models identified. 2. Criteria for assessing the feasibility of making adaptive use of traditional community collaborative models 3. Performance indicators for review the education and conservation benefits of traditional community collaborative models 4. Number and nature of action research projects identified. 	Stage 1 <ol style="list-style-type: none"> 1. Assess the feasibility of making adaptive use of traditional community collaborative models in nature conservation and habitat management. 2. Review the education and conservation benefits of using traditional community collaborative models to engage communities in conservation management. 3. Funding and administrative support to the identified action research projects.

Table 13.4 **Enrich BSAP mainstreaming programmes** by explore creative partnership over the rich context of traditional knowledge so as to deepen understanding cultural linkages, holistic worldview and skills for sustainable living.

	Recommendations	Performance Indicators	Evaluation & Monitoring
Overall Goals [Aichi Target Nos. 1, 2, 3, 4, 17, 18, 19]	<ol style="list-style-type: none"> 1. Adopt the holistic worldwide, philosophy and approach of traditional practice/knowledge (cross generations and landscapes) to improve and enhance conservation and mainstreaming programmes in Hong Kong. 2. Make adaptive use of appropriate traditional models of community collaboration in preserving, managing and sharing of ecosystem services and biological resource to actively engage communities in biodiversity conservation in Hong Kong 3. Make adaptive use of appropriate traditional knowledge and practices in sustainable use, preservation, restoration and management of ecosystem services and biological resource to improve nature management and restoration in Hong Kong 4. Creatively use traditional knowledge, skills and practices for sustainable living to promote respect to the carrying capacity of ecosystems and inspire today's population with the principles and means to fulfill our basic needs, and forms the basis for decision and strategies in many practical aspects. 	<ol style="list-style-type: none"> 1. Number and diversity of fund application for BSAP conservation and education programme integrating traditional knowledge with biodiversity conservation.. 2. Mapping of the diversity, number and organizers of conservation and education programme having traditional knowledge element. 3. The number and diversity of project organizers of conservation and education programme integrating traditional knowledge with biodiversity conservation 4. Participation rate of traditional knowledge related BSAP conservation and education programme. 	<p>Stage 2</p> <ol style="list-style-type: none"> 1. Traditional knowledge enriched the diversity and spectrum of biodiversity conservation programme in Hong Kong and reach out a wider range of audiences. 2. There is a stronger and wider ownership and support to biodiversity conservation by different sectors through understanding the cultural, social and ecological aspect of traditional knowledge. 3. There is a wider public awareness and support to conserve biodiversity conservation and the relevant traditional knowledge. 4. Traditional knowledge is widely used in education programme to inspire and promote actions to conserve biodiversity conservation and reducing individual ecological impacts.
Objective	12.4 Enrich BSAP mainstreaming programmes by exploring creative partnerships over the rich context of traditional knowledge so as to deepen understanding cultural linkages, holistic worldview and skills for sustainable living.		
Outcomes	<ol style="list-style-type: none"> 1. Traditional knowledge is integrated widely in conservation education programmes in Hong Kong. 2. The holistic approach of traditional knowledge is widely integrated into mainstreaming and conservation education programmes. 3. There is a growing diversity of organizers and expression of BSAP related conservation and education programmes. 4. There is wider awareness, appreciation and support to conserve traditional knowledge related to BSAP. 5. Traditional knowledge for sustainable living is widely adopted by different stakeholders, sectors and the general public as responses to act for biodiversity conservation. 		
Actions	<ol style="list-style-type: none"> 1. Based on Stage 2 outcomes 13.1 and 13.2, identify traditional knowledge, skills and practices for sustainable living which should be promoted to enhance the public's respect for the carrying capacity of ecosystems and inspire people to reduce ecological impacts in many practical aspects. 2. Based on the project Actions 13.1 and 13.2, identify a wide variety of partners for development and implementation of creative mainstreaming programmes so as to deepen programmes' learning experience, motivating conservation actions and sustainable living, as well as and sustain educational impacts. 3. Explore ways to enrich existing conservation and education programme with the art, culture, language, philosophy, practices and other aspects of traditional knowledge so as to enrich programme's uniqueness as well as cultural and social links. ° 	<ol style="list-style-type: none"> 1. Traditional programmes identified. 2. Partners identified and programme planning is in progress. 3. Fund application status. 	<p>Stage 1</p> <ol style="list-style-type: none"> 1. A growing number and diversity of fund applicants and programme organizers of BSAP related conservation and education programmes. 2. An increasing integration traditional knowledge in BSAP conservation and education programmes.