

Biodiversity Strategy and Action Plan
Specific Proposals from Focus Groups

Item No.	Draft Key Action ¹	Proposed Priority ²	Specific Action Proposed by Focus Groups / Working Groups ³	Focus Group / Working Group ⁴
<i>Strategic Goal A – Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</i>				
A1	Continue to enhance the consideration of strategic environmental and sustainability issues in major planning and sectoral studies to facilitate integration of biodiversity considerations at an early stage of formulation of plans or programmes.	High	a. Carry out a comprehensive review on the HK2030 Study, including the need to conduct a Strategic Environmental Assessment (SEA) to provide an environmental baseline and assess development options.	IAFG
			b. Consider strategic environmental issues as part of major planning studies at an early stage of the formulation process.	IAFG
			c. Incorporate a territory-scale review to assess the cumulative environmental impacts in SEA.	IAFG
			d. *Conduct SEA including cumulative impact assessments on policy	HFG

¹ The draft Key Actions were consolidated and deliberated by the three Working Groups, and was tabulated to facilitate consideration by the Steering Committee. The information shall not be construed or interpreted as the view of the Government.

² The proposed priorities had been deliberated and revised at Working Group meetings (10th TBWG meeting / 8th MBWG meeting / 9th AMSWG meeting), by making reference to two sets of results of the prioritisation assessments, which are based on four prioritisation criteria: (1) relevance to Aichi Biodiversity Targets and Strategic Goals; (2) contribution to the Hong Kong BSAP; (3) contribution to the City Biodiversity Index; and (4) achievability/readiness. With the assistance of the Secretariat, Convenors of the Working Groups had further revised the priority based on the discussions of the Working Groups. The Steering Committee may further revise the priority.

³ Specific actions were extracted from focus group final reports / as recommended by the Working Groups. Edits were made to standardise the format and language, and to clarify the meaning in some cases. Specific actions would be compiled in a supplementary technical document to be made available online during public consultation. It should be noted that these specific actions have not been deliberated in detail by the Working Groups, and thus their inclusion in the table shall not be construed or interpreted as endorsed or accepted by the Working Groups, the Steering Committee or the Government.

* Specific actions identified to be of priority by Focus Groups.

⁴ TBWG – Terrestrial Biodiversity Working Group; HFG – Terrestrial Habitat Focus Group; IAFG – Terrestrial Impact Assessment Focus Group; RLFG – Status and Trend and Red List Focus Group; MBWG – Marine Biodiversity Working Group; MHFG – Focus Group on Marine Habitat; MIAFG – Focus Group on Marine Impact Assessment; SUMRFG – Focus Group on Sustainable Use of Marine Resources; AMSWG – Awareness, Mainstreaming and Sustainability Working Group; BFG – Focus Group on Business Sector; EFG – Focus Group on Education; LFG – Legislation Focus Group; NFG – Focus Group on Non-government Organizations; SEEFG – Sustainable Use, Ecological Footprint and Ecosystem Services Focus Group; TKFG – Traditional Knowledge Focus Group.

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	(ABT 2) ⁵		initiatives and plans, and identify and assess biodiversity gains and losses under alternative scenarios.	
			e. Review rural and new town development to minimise the associated impacts on biodiversity and formulate an effective mechanism for monitoring and mitigating post-construction impacts.	IAFG
			f. Ensure that new strategic initiatives or major programmes which may bring about noticeable or persistent implications on the economic, environmental and social conditions in Hong Kong are subject to sustainability assessments.	IAFG
A2	Promote the concept and awareness of biodiversity ⁶ among stakeholders. (ABT 1)	High	a. Raise public awareness and enhance education on activities that would result in adverse impacts to habitats.	IAFG
			b. Increase public and government awareness and appreciation of the value and biodiversity of Hong Kong's marine environment which contributes significantly to the rich biodiversity of the city.	RLFG
			c. Encourage catch and release amongst commercial and recreational fishers, particularly for juveniles of commercially important species such as education on catch and release, ages of maturity for different species through recreational fishing magazines, fishing clubs etc.	SUMRFG / MIAFG
			d. Enhance understanding within the fishing community of best-practice fisheries management, and gaining a common understanding of the direction that needs to be taken, and why specific management measures are being adopted, are important complementary measures.	SUMRFG
			e. Enhance understanding within other communities that use the sea (e.g. yachting community, diving community, companies offering vessels for hire) on measures underway to achieve sustainable fisheries, in order to build community support for sustainable fisheries management.	SUMRFG
			f. Educate the spear gun fishing community on the moves to transform the	SUMRFG

⁵ Each draft Key Action may be relevant to more than one Aichi Biodiversity Targets (ABTs). In this regard, the ABTs that are most relevant to the particular draft Key Action are listed for reference.

⁶ The word "biodiversity" here stands for "the local biodiversity, its conservation and the sustainable use of its components" in accordance with the Convention on Biological Diversity.

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			fishery towards sustainability in order to gain their support; encourage restraining their behavior, and spearfish in moderation.	
			g. Conduct awareness raising activities to vessel owners on areas where coral communities are distributed and where anchors should be deployed with caution or not at all.	SUMRFG / MIAFG
			h. Raise awareness on the potential impact of diversion/disruption of stream flows on marine biodiversity.	MIAFG
			i. Develop Code of Conduct for all eco-tourism, and increase knowledge and buy-in of the Code of Conduct for diving and snorkeling by the diving community.	SUMRFG / MIAFG
			j. Increase public awareness, and educate the key stakeholders (e.g. fishermen groups, legislators, business operators) of the benefits of the MPAs through education programme, talks, social media channels, site visits etc.	MHFG
			k. *Produce biodiversity videos, apps of iPad, iPhone, Androids, pamphlets, workshops, road shows to promote BSAP ⁷ .	EFG / LFG
			l. Organize roving exhibitions (road shows), public lectures, eco-film shows, engagement workshops, seminars, field trips, wildlife photo exhibitions and conservation essay competitions to raise public awareness on biodiversity.	EFG / LFG
			m. Facilitate the booking of LCSD or museum venues by selected NGOs committed to biodiversity education, including dedicated members of the EFG to run biodiversity exhibitions, workshops and seminars for the public free of charge.	EFG / LFG
			n. Maximise the coverage of public awareness campaign and activities with venue support from LCSD and AFCD. <ul style="list-style-type: none"> • Give priority to BSAP-related projects at LCSD and AFCD venues. Currently LCSD gives priority to arts and community projects. • An exhibition should be held near the end of 2015 to coincide with the 	NFG

⁷ Ranked ninth in priority by EFG.

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			launch of the BSAP.	
			o. Conduct surveys on knowledge and attitudes towards biodiversity in Hong Kong.	AMSWG
			p. *Conduct surveys every 2 years on public knowledge and attitudes, participation in voluntary and/or environmental activities, etc ⁸ .	NFG
			q. Explore appropriate multi-stakeholder engagement opportunities, to raise awareness and enhance public involvement in implementing BSAP.	AMSWG
			r. Establish regular stakeholder forums to share and discuss plans, development and management of biodiversity in Hong Kong. These forums could partly fill the gap in between the public awareness and engagement programme that has been conducted during 2014, and BSAP's implementation in 2016. It is intended to take the BSAP public lectures concept to the next level, beyond passive attendance to involvement through discussions. <ul style="list-style-type: none"> • These forums should be as informal as possible, to ensure that it is friendly and welcoming for all stakeholder groups to participate. • Each discussion forum could be focused on species group (e.g. bird conservation, native tree planting), focused on an area (e.g. Sai Kung East Country Park) or issue (e.g. enclaves policy, designating marine parks). • Each meeting should discuss a different issue or species/area focus, with a view that separate meetings could be arranged for more in depth discussion and developing actions. • News of upcoming meetings relating to conservation planning posted on Biodiversity Clearinghouse Website. 	NFG
			s. Launch a Hong Kong Nature Expo (Suggested model: Bristol Festival of Nature) <ul style="list-style-type: none"> • End 2016: Engage diverse Government, business and society partners to host a Hong Kong "Festival of Nature", an annual 1-day public event to engage the public, media, community and NGO groups, to showcase and enjoy the best of Hong Kong's nature. 	NFG

⁸ Ranked as of top priority by NFG.

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			<ul style="list-style-type: none"> • If successful and a large number of repeat partners engaged, in 5 years could evolve into a month-long programme of activities involving science communication e.g. Soapbox Science (UK initiative), FameLab (British Council Hong Kong initiative), arts, film, public talks, public workshops, school exhibitions, BioBlitzes, the Nature Expo, participating restaurants and others, with a Hong Kong nature theme, similar to the annual “Le French May” and “Le French Gourmay” festival showcasing French culture during the month of May. 	
A3	Incorporate the concept of biodiversity into education curriculum and provide capacity building for teachers on biodiversity ⁹ . (ABT 1)	Medium	a. Establish biodiversity conservation and sustainable use as part of the core curriculum in all primary and secondary school systems.	EFG
			b. Sort out the linkages between biodiversity education and the primary/secondary curriculum.	EFG
			c. Encourage teachers to include programme and activities related to biodiversity in different subjects.	EFG
			d. Sponsor green NGO-school partnerships in the format of extra-curricular green activities and school projects (保護生物多樣性學校計劃).	EFG
			e. Include 'What species have we already lost in Hong Kong?' in education in the schools and in the public domain. They include the relative short and long term natural history of wildlife in Hong Kong including estimated time lines for localized extinctions of when the last tigers, elephants, leopards, lorises, flying squirrels, various turtle species and so on where they were last seen in Hong Kong and forward projections for the probable localized extinctions of the Chinese White Dolphin, porpoises, Barking Deer, other bird and fauna species if responsible conservation is not made a priority ahead of the continued effects of pollution and development in the Country Parks are not curtailed.	EFG
			f. Encourage students and individuals to organize biodiversity awareness-raising campaigns.	EFG
			g. *Unpack the existing school curriculum, which is already tightly packed,	EFG

⁹ Same as footnote 6

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			to highlight biodiversity conservation of Hong Kong as a topic to teach, and make use of Other Learning Experiences (OLE) for BSAP education ¹⁰ .	
			h. *Include BSAP in the training of teachers and teacher trainees ¹¹ .	EFG
			i. Encourage (with funding supports) NGOs to organize school talks, class based activities or/and field trips to study biodiversity of Hong Kong.	EFG
			j. Make biodiversity conservation a part of the school curriculum. Enhance the capacity of NGOs to train teachers and develop teaching packs and hold outdoor field trips on biodiversity identification and conservation issues.	NFG
			k. Involve schools in teaching the value of biodiversity conservation within the curriculum and providing funding to arrange and select ECAs and programmes to advance students' understanding of HIPPO and ways to help to fight against them.	EFG
A4	Engender broader participation of the society in raising public awareness on biodiversity ¹² through partnering with the wider NGO sector. (ABT 1)	High	a. Develop a citizen science monitoring scheme on biodiversity, i.e. participation of citizen in data collection in scientific study/research.	AMSWG
			b. Invite schools, NGOs, retirees, and others to work together to promote BSAP.	EFG
			c. *Work with green NGOs such as WWFHK, KFBG, HKBWS, CA, TPEA, SAHK, PoE, HKGGA, CU Tree Project, the Grateful Green Group, and Civic Exchange etc. on ways of promoting BSAP, conservation and environmental protection ¹³ .	EFG
			d. *Set up a BSAP-grant mechanism for school-NGO partnership and for BSAP community-partner activities ¹⁴ .	EFG
			e. *Develop specific government-funded mechanisms for the implementation of BSAP. Projects should be assessed based on how the	NFG

¹⁰ Ranked fifth in priority by EFG.

¹¹ Ranked sixth in priority by EFG.

¹² Same as footnote 6

¹³ Ranked seventh in priority by EFG.

¹⁴ Ranked fourth in priority by EFG.

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			<p>activity contributes to the achievement of BSAP objectives and targets. Two different funding schemes should be in place¹⁵:</p> <ul style="list-style-type: none"> • A small grants scheme for wildlife NGOs and conservation small-to-medium enterprises to a) attend BSAP training, b) run BSAP training, c) run/expand biodiversity-related activities, d) expand membership. Featuring simplified application process, the scheme allows for funding of up to HK\$50,000. • Equal apportioning of funds within Environmental Conservation Fund (ECF) for its priority areas, since biodiversity conservation is but one priority area of ECF. Within its biodiversity conservation priority, projects should be assessed based on the extent to which it contributes to BSAP objectives and targets. ECF needs to become more streamlined in the application and reporting processes, and increase its transparency with greater details given to applicants about its deliberations. 	
			f. *Hire a BSAP Project Manager (Website & Media) and Community Scientists to communicate the goals, purpose and importance of the BSAP to the public in a compelling and understandable manner ¹⁶ .	NFG
			g. Give priority to biodiversity education projects in QEF and ECF.	EFG
			h. Give the focus groups permission to apply for funding sources in the name of BSAP so that dedicated focus groups can use the seed money to run specially designed programmes or activities for biodiversity education and mainstreaming activities.	EFG
			i. Launch a volunteer nature warden scheme to monitor changes in the territory's environmental and biodiversity condition.	EFG
			j. Provide incentives to university scientists /researchers to help citizens collect data for biodiversity study and conservation.	EFG
			k. Initiate a district-based volunteer-reporting eco-survey scheme	EFG
			l. Develop a publicly-funded citizen science programme and data-sharing	NFG

¹⁵ Ranked as top priority by NFG.

¹⁶ Ranked fourth in priority by NFG.

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			<p>app (e.g. like BioBlitz and iSpot) to enhance knowledge and experience with biodiversity.</p> <p>m. Design and prepare an info pack which helps make it easy for NGOs to do outreach activities. This pack could include suggested activities, maps and biodiversity surveying tools, etc.</p> <ul style="list-style-type: none"> • Info pack of outreach activities (e.g. bioblitz) takes the form of citizen science surveys developed by scientific institutions. Citizen science is a proven method to engage participants and provide credible data for scientific analysis by researchers. • Suggested model: Open Air Laboratories (OPAL) Network • Start 2016: Develop pilot survey. Suggest using OPAL Trees Survey, Lichen Survey or Bugs Count as basis for Hong Kong survey, working with Hong Kong's leading scientists in designing these info packs. • Mid-2016: Roll out pilot survey with NGOs and schools. Survey pack includes teaching pack, simple ID guide, activity sheets, pencil, magnifying glass (souvenirs). 	NFG
A5	<p>Raise awareness and engage the business sector on biodiversity¹⁷ through various platforms, including chambers of commerce.</p> <p>(ABT 1)</p>	Medium	<p>a. Encourage the business sector to transform from sustainability as a responsibility to business opportunity.</p>	BFG
			<p>b. Encourage the financial sector and supply chain companies in adopting biodiversity policy into operations.</p>	BFG
			<p>c. Incorporate business perspective in BSAP as business is expected to drive changes faster more than governments because of the possession of talent, resources, contacts and employment power. Business can be one of the solutions to a sustainable society, not an obstacle. A sustainable society will generate opportunities for business development.</p>	BFG
			<p>d. Use BSAP to help establish baseline/priorities to the society and provide information for a better informed debate on potential conflicts between development and conservation.</p>	BFG
			<p>e. Encourage partnership between government and business sector in biodiversity conservation.</p>	BFG

¹⁷ Same as footnote 6

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			f. Produce accurate biodiversity mapping and priorities in Hong Kong. Outline Zone Plan is inadequate to determine the biodiversity value of the agricultural zoned land.	BFG
			g. Provide a clear framework, specific topics for evaluation and a timeframe for feedback return to facilitate discussions on BSAP through consultation and engagement.	BFG
			h. Encourage the use of sustainable supply chain model e.g. FSC. Further roll out of the model may require legislative support and capital incentive.	BFG
			i. Promote a better understanding of the concepts on biodiversity, sustainability, ecological services and natural capital etc in business sector.	BFG
			j. Encourage BSAP outreach to business sector through the chambers.	BFG
A6	Promote the use of media and Internet as means to showcase Hong Kong's natural beauty and raise public awareness on biodiversity ¹⁸ . (ABT 1)	Medium	a. Set up an incentive scheme to encourage the media to produce multimedia materials on biodiversity of Hong Kong in the short-term.	EFG
			b. Promote the concept of biodiversity conservation through the use of existing quality media projects for the cause of biodiversity conservation and environmental protection through various Government/NGO channels.	EFG
			c. Provide adequate funding support to enable, coordinate, disseminate, and optimise the educational output of environmental education networks.	EFG
			d. Hire a marketing company to develop a BSAP Brand Identity Document, as well as to develop a marketing plan for the BSAP to showcase Hong Kong's natural beauty. The marketing plan should work in conjunction with, and take advantage of, existing promotional materials.	NFG
			e. Arrange media tours to showcase the value of BSAP and improve public communications about biodiversity conservation. Tours should be arranged before and after the launch of BSAP to raise awareness about opportunities for involvement in BSAP activities, and to build and	NFG

¹⁸ Same as footnote 6

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			maintain momentum about biodiversity issues. This should be part of an overall marketing effort to launch BSAP at the end of 2015.	
<i>Strategic Goal B – Reduce the direct pressures on biodiversity and promote sustainable use</i>				
B1	Develop practical methods for assessing, reporting and reducing natural habitat loss. (ABT 5)	High	a. Monitor and report annually the actual and the anticipated rate of loss in extent and quality of terrestrial habitats.	HFG
			b. With the implementation of the Convention on Biological Diversity, the cumulative impacts of ongoing, planned and committed development on the loss of habitats and biodiversity will need to be adequately assessed and recognised. Increased conservation commitment and resources are needed to account for and mitigate these inherent losses, including by adjusting existing policies, guidelines and mechanisms aimed at minimising biodiversity losses.	HFG
			c. *Identify the land areas where development and infrastructure is permitted, planned, committed or in progress, and the areas of surrounding land susceptible to impacts from such developments, and estimate the expected loss of habitats.	HFG
			d. Set up a geographic information system (GIS) database for quantifying the overall habitat loss due to development projects during the course of environmental impact assessment (EIA) study to facilitate impact assessment in terms of the preparation of habitat map and habitat loss calculation, and the database should be compatible with the existing GIS system of the Agriculture, Fisheries and Conservation Department (AFCD).	IAFG
B2	Continue to enhance the environmental impact assessment (EIA) process to better address significant impacts on biodiversity through subjecting designated projects to the EIA process. (ABT 5)	High	a. Continue to implement the EIA process and develop assessment tools to mitigate significant ecological impacts of development projects.	IAFG
			b. Conduct ecological surveys prior to EIA Study to collect adequate ecological data in early stage.	IAFG
			c. Develop guidelines and best practice notes on ecological mitigation measures including species translocation, on-site/off-site compensation and wetland compensation drawing reference from local and international experiences.	IAFG
			d. Estimate, identify and enhance biodiversity benefits under the EIA	HFG

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			process.	
			e. Explore opportunities for new and additional ecological compensation measures on a territorial or project scale (e.g. expanding protected areas; 'development tax' to fund high-priority conservation needs; etc.)	HFG
			f. Ensure mitigation measures for marine species under development projects are assessed for their effectiveness.	RLFG
			g. *Consider the environmental impact of any increase in population or visitor numbers in any environmentally sensitive area when taking any expansion project forward.	MIAFG
B3	Study the impacts of invasive alien species in Hong Kong, and implement monitoring, management and control plans for priority invasive alien species identified. (ABT 9)	High	a. Control the spread of invasive alien species in Hong Kong.	TBWG
			b. Build an inventory of invasive alien species in Hong Kong, and conduct a preliminary risk assessment.	TBWG
			c. Monitor the spread and impacts of alien fish species (e.g. North African Catfish, exotic snakeheads, poeciliids, tilapias) on native fish and other freshwater species (e.g. dragonflies, frogs) and formulate plan to control these alien species.	RLFG
			d. Prevent the unregulated release of exotic species, and the unregulated importation of invasive species through the pet trade or for the aquaculture business.	RLFG
			e. Study the impacts of Red Imported Fire Ants and other invasive species such as Tilapia and Mosquito fish on Deep Bay wetlands and their biota.	HFG
			f. Study the impacts of Green House Frog (<i>Eleutherodactylus planirostris</i>) on native amphibian fauna.	RLFG
			g. Study the impact of known alien invasive species, notably <i>Solenopsis invicta</i> , to evaluate and monitor the threat to native biota. The risk of further spread of <i>S. invicta</i> and other highly invasive species should be minimised through working with other regions.	RLFG
			h. Control the spread of invasive species, through exchange of information and collaboration in actions with responsible authorities in other jurisdictions.	RLFG
			i. Review to ensure controls are put in place to prevent the purchase and release of non-native voracious predatory fish which originated from the	MIAFG

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			<p>local mariculture industry.</p> <p>j. *Issue an advisory note by the Drainage Services Department to prevent the spread of cord grass during flood prevention works in Deep Bay.</p> <p>k. Build an inventory of invasive alien species in Hong Kong, and conduct a preliminary risk assessment.</p> <p>l. Control the spread of invasive alien species in Hong Kong.</p> <p>m. Address the unregulated release of exotic species, and the unregulated importation of invasive species through the pet trade or for the aquaculture business.</p> <p>n. Improve control local and international wildlife trade, and of invasive species, through exchange of information and actions with responsible authorities in other jurisdictions.</p> <p>o. *Address the release of predatory species of concern in religious fish release ceremonies. Priority be focused on the Sabah Giant Grouper. Consideration could be given to contacting local spear fishing groups to recruit them to hunt existing Sabah Great Grouper and other high profile invasive alien species.</p>	<p></p> <p>MIAFG</p> <p>RLFG</p> <p>RLFG</p> <p>RLFG</p> <p>RLFG</p> <p>MIAFG</p>
B4	Control pollution and reduce its impacts on biodiversity. (ABT 8)	Medium	<p>a. Identify and adopt innovative ways to collect and discharge surface runoff to reduce pollution of rivers and streams (e.g. using artificial wetlands).</p> <p>b. Implement rural and village sewerage networks to ensure full connection. Where there are no communal sewers, development should be restricted.</p> <p>c. *Enforce the requirement to carry out percolation tests for small house developments prior to deciding on the appropriate sewage treatment systems, and the design should be subject to stringent requirements and coordinated by the Government.</p> <p>d. The effectiveness of Water Pollution Control Ordinance in relation to stream/river pollution should be reviewed.</p> <p>e. Regulate development in areas without connection to the communal sewerage system (e.g. enclaves surrounded by country parks). Do not allow houses to be built along the riparian zone and strictly limit the</p>	<p>HFG / RLFG</p> <p>HFG</p> <p>HFG</p> <p>RLFG</p> <p>RLFG</p>

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			number of houses within each catchment in such areas.	
B5	Promote sustainable agriculture in Hong Kong through encouraging environmental and biodiversity friendly agricultural practices and providing support to farmers. (ABTs 3, 7)	Medium	a. Promote local farming, especially sustainable agriculture such as organic wet paddy farming and organic agroforestry so that it contributes to the conservation and sustainable use of biodiversity and the reduction of ecological/carbon footprint.	TBWG
			b. Provide financial and technical support to assist farmers to practice organic farming, and to promote the marketing of local organic products.	TBWG
			c. Diversify marketing systems, such as farmers' markets and community-supported agriculture scheme, to provide platform for the promotion of local agricultural produce and public education.	TBWG
			d. Encourage the preservation and use of landraces.	TBWG
			e. Explore the feasibility of practising sustainable agriculture technologies and practices, such as urban farming with renewable energy, water-saving in agriculture, forest farming, agroforestry, aquaponics, no-tillage farming, permaculture design, and biochar technology.	TBWG
			f. Explore different possibilities of sub-leasing (especially privately-owned) agricultural land to prospective farmers, particularly those with scattered ownership to encourage local farming.	TBWG
			g. Provide agricultural supporting facilities, such as access, irrigation and etc., to local farmers.	TBWG
			h. Explore the feasibility to re-establish agricultural priority areas, especially where biodiversity could benefit.	TBWG
			i. Identify and protect farmlands of significant agriculture and/or conservation values (including to ensure ecological connectivity of protected areas), and promote sustainable agriculture and biodiversity conservation of the sites identified.	TBWG
			j. Facilitate the sharing of agricultural data and information to enhance public discussion and participation.	TBWG
B6	Develop a standardised classification of habitat types to monitor the status and trends of habitats.	Medium	a. Enhance the classification, identification and assessment of terrestrial habitats in Hong Kong, and their rate of loss or transformation.	HFG
			b. Develop a standardised classification of habitat types, and develop a GIS habitat map, reflecting irreplaceability, ecological integrity,	HFG / RLFG

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	(ABTs 5, 19)		representativeness, management-dependence, connectivity and other relevant factors.	
B7	Develop innovative methods to enhance the conservation of ecologically important sites on private land. (ABTs 3, 5)	High	c. *Review and consolidate different habitat inventory classification systems.	HFG
			a. *Set up a Statutory Wetland Trust (or to include this function under a territory-wide Nature Conservation Trust) into which land can be vested and funds donated to manage the vested lands. The vesting of land and funds to the Trust is to be recognised in surrender and re-grant of land for development.	HFG
			b. Launch a wetland study to examine the ecological value of different management practices for existing wetland areas including traditional fish ponds, commercial fish ponds and abandoned fish ponds with a view to improving their ecological value.	HFG
			c. Incorporate adaptive management in on-going and future monitoring programmes of wetlands.	HFG
			d. Conduct regular surveys on wetlands of conservation importance, e.g. nocturnal use of fish ponds/mangroves by water birds, to monitor their status and allow for adaptive conservation management.	HFG
			e. Conduct a survey to establish the ecological value of the Outer Deep Bay wetlands.	HFG
			f. *Set up a “Deep Bay Advisory/Steering Committee” to improve the participation of key stakeholders in advising the Government to formulate a holistic plan of wetland conservation and management for Deep Bay area.	HFG
			g. Review the justifications including ecological data for extending the present zoning plan, Ramsar Site and/or management agreement scheme to cover outer Deep Bay area.	HFG
			h. Explore the possibility to incorporate target surveys on wetland associated taxa during regular monitoring of management agreement programme to compare traditional and intensively farmed ponds.	HFG
			i. Protect the biodiversity and important habitats within the Frontier Closed Area.	HFG

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			j. *Acknowledge conservation as a public purpose under the Lands Resumption Ordinance to expedite protecting important habitats.	HFG
			k. *Review the applicability of land resumption, land exchange, off-site mitigation and transfer of development rights as measures in support of conservation of important habitats on private land.	HFG
			l. Enhance the protection and management of land zoned for conservation and agricultural uses.	HFG
			m. Establish regulations and by-laws under the Town Planning Ordinance similar to the Country Parks Regulations for enhanced management and control of Green Belt, Conservation Area, Coastal Protection Area and Sites of Special Scientific Interest (SSSI) in line with local circumstances.	HFG
			n. Review the zoning of Conservation Area, Green Belt and Agriculture for development uses.	HFG
			o. Protect remaining natural lowlands and important freshwater wetlands in Hong Kong.	HFG
			p. Strengthen monitoring work by the Government and enforcement power against failures to reinstate land back to its original condition/habitat type following unpermitted land use changes and ensure compensation for lost ecological functions.	HFG
			q. Regulate agricultural use of abandoned farmland (e.g. by moving agriculture uses to column 2 under the Town Planning Ordinance, so they are not always permitted uses on abandoned but vegetated farmland) which, due to natural ecological succession processes, have become covered by sensitive or potentially-valuable habitats (e.g. foraging areas for animals of conservation concern).	HFG
			r. Strengthen enforcement against vegetation clearance, pollution, land and stream filling, stream diversion, culverting, unauthorised road building, and other forms of eco-vandalism on private land.	HFG
			s. Publish Development Permission Area plans for land not yet covered with statutory plans to ensure there is adequate protection against eco-vandalism and incompatible and polluting uses.	HFG

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B8	Implement the Mai Po Inner Deep Bay Ramsar Site Management Plan. (ABTs 5, 14)	High	a. Consider the provision of visitor screening to avoid disturbance of wildlife, as well as other facilities and educational materials for visitors, to reduce impacts on sensitive sites in Deep Bay, and to enhance their educational/recreational value.	HFG
			b. Carry out surveys to produce a species inventory of fish pond and gei wai and to identify the basis of biological production in these systems.	HFG
			c. Increase the annual government funding support to the Mai Po Marshes Nature Reserve.	HFG
			d. Expand and enhance the protection of Deep Bay, Mai Po and the Ramsar Site.	HFG
B9	Further study and enhance the practice on the identification, assessment, protection, restoration and management of local habitats. (ABTs 5, 15)	Medium	a. Undertake proactive management of selected habitat types such as freshwater wetlands and montane grassland to maintain the continued existence of these habitats, and to maintain the mosaic of succession to safeguard and enhance local biodiversity, especially threatened species confined to these habitats.	HFG
			b. Open up Country Park Committee meetings to the public to enhance transparency and public participation in the decision making regarding the country parks and special areas.	HFG
			c. Identify the habitat loss within the Frontier Closed Area due to permitted, planned and committed developments.	HFG
			d. Monitor the effectiveness of zoning for conservation and agriculture uses with regular reports and opportunity for public appraisal and comment.	HFG
			e. Initiate a community engagement process to identify natural landscapes and habitats for conservation, including soliciting proposals from the public for zoning for areas for conservation uses.	HFG
			f. *Review and improve the adequacy of protection of land and habitats with zoning for conservation (Green Belt, Conservation Area, Coastal Protection Area, SSSI) and agriculture uses under the Town Planning Ordinance, and specifically where there is a lack of enforcement due to absence of a prior Development Permission Area plan.	HFG
			g. Establish administrative measures and guidelines, and legislation, against vegetation clearance and tree-felling on private land under conservation	HFG

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			zonings.	
			h. Formulate appropriate criteria and objectives for assessments of ecological/biodiversity values (including the function of connectivity), ecosystem services, tree preservation, and landscape values prior to rezoning conservation and agriculture areas (including green belts) for development uses. Alternatives to development should be assessed and evaluated.	HFG
			i. Conduct ecological surveys and impact assessments (including cumulative impacts) during site selection stage prior to rezoning or approval of planning applications. The detailed assessment results should be published during public consultation and submitted to Town Planning Board for consideration.	HFG
			j. Review the Town Planning Board Guidelines (TPB PG-No.10) Application for Development within Green Belt Zone under Section 16 of the Town Planning Ordinance to minimise impacts on Green Belt sites with high ecological values.	IAFG
			k. Review the effectiveness of enforcement mechanism and measures of the Waste Disposal Ordinance, Town Planning Ordinance and Lands (Miscellaneous Provisions) Ordinance.	IAFG
			l. Strengthen the control of eco-vandalism.	IAFG
			m. Set up and publicise a user-friendly alert system so that members of the general public can report eco-vandalism cases.	HFG
			n. *Set up and manage a cross-departmental team to receive and act on reports of eco-vandalism and reports of ecological hot spots which are identified as under threat from development pressure. The team should develop procedures and practices to ensure that eco-vandalism is dealt with in an effective and timely manner.	HFG
			o. Ensure that land-use zoning plans that could have a negative impact on marine habitats important for threatened marine species are avoided or minimised.	RLFG
			p. *Incorporate the conservation of biodiversity as a main theme when designation of marine conservation zones are made.	MIAFG

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			q. *Put a proper monitoring system in place to identify and address threats to high ecological value marine habitats (e.g. seagrass beds), and vulnerable areas of clam digging and razor shell digging using salt, and all sites identified by the Focus Group on Marine Habitat as being important for conservation in Figure 2 of the Focus Group on Marine Habitat’s final report.	MIAFG
			r. *Consider the balance between land development and conservation of biodiversity in current and future land development plans, specifically through habitat protection. In all cases, due consideration should be given to ecologically sensitive habitats, especially on the issue of designation of protected areas/zones. Such considerations should not be limited to mudflats. They should be made in respect of all habitats.	MIAFG
			s. *Mandatory use of geological maps is made when making land development decisions in Hong Kong.	MIAFG
			t. *Take into account the following principles in all levels of planning and development in Hong Kong: i. Watersheds and rivers are a single system, from the tops of the hills to the bottom of the sea. ii. Whatever you do in a river system upstream will have downstream consequences, iii. Because of its geology, geomorphology and weather, Hong Kong is susceptible to sediment run-off events.	MIAFG
			u. *Use sediment curtains to prevent sediment run-off events when dredging projects are undertaken in the sea. Similar precautionary measures should be mandated for land-based projects in vulnerable areas.	MIAFG
			v. Consider no off-shore habitat, particularly critical spawning, nursery, foraging areas and migratory routes be the subject of development pressure and no new loss of natural coastline should occur without serious (per reviewed) justifications.	MIAFG
			w. Consider licensing for eco-tourism to sensitive areas.	MIAFG
			x. *Conduct a formal review of the setting of on-site septic tanks and	MIAFG

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			<p>soakaway (STS) systems in floodplains and on alluvial deposits. When any developments in coastal floodplains are being considered, recognition must be given to the geotechnical constraints associated with undertaking development in floodplains or on alluvial deposits associated with using on-site STS systems in such areas. For future developments, more stringent standards than are being currently applied are implemented, and that priority consideration be given to avoiding the use of STS systems which discharge into areas identified by the Marine Habitat Assessment Focus Group as being important for conservation. See Figure 2 of Marine Habitat Assessment Focus Group report.</p>	
			<p>y. *Consider building board walks to promote and protect high ecological value habitats in intertidal areas/suitable environmentally sensitive areas (e.g. Tung Chung) to protect the mudflat, at the same time allowing access to the better clam digging areas.</p>	MIAFG
			<p>z. Protect biodiversity from the impact of future climate change mitigation measures, the impacts of climate change, climate change considerations need to factored into current coastal development and planning decisions at all levels.</p>	MIAFG
			<p>aa. Install mooring buoys for vessels supporting diving and snorkeling operations around coral communities.</p>	RLFG / SUMRFG
			<p>bb. Protect important fish habitats (such as nurseries) from the potential impacts of reclamation projects.</p>	RLFG
			<p>cc. Apply improved land use planning system to prevent the impacts on coastal habitats from coastal developments.</p>	RLFG
			<p>dd. *Conduct a study in collaboration with the local diving industry to quantify recreational diving in Hong Kong, e.g. numbers of active divers, preferred sites, motivations for diving, seasonality, knowledge of codes of conduct, etc. Conduct further research to understand the susceptibility and rates of recovery of different coral species to diver damage. Use information from the two studies above to look at the carrying capacity of some of the most intensively dived coral communities in Hong Kong, to gain a better understanding of the likely broader impacts of</p>	SUMRFG

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			recreational diving. ee. *Conduct research to study the extent and environmental impact of eco-tourism, gleaning, clam digging, razor shell digging using salt and eco-tourism, in terms of species harvested, areas targeted, impact on marine biodiversity and sustainability. The study should also clarify whether such activities are recreational and/or artisanal/ commercial. ff. Conduct a study in conjunction with Marine Department to find solutions to prevent the sewage from all forms of marine traffic (passenger, freight, construction and recreational vessels) from being dispelled in environmentally sensitive areas, and more broadly to address related human health issues, and to start to implement them.	MIAFG / SUMRFG MIAFG / SUMRFG
B10	Designate Fisheries Protection Areas to protect important fish spawning and nursery grounds, as well as effectively and sustainably manage fisheries resources. (ABTs 6, 11)	High	a. Explore opportunity to the trial of new and mixed-management regimes in potential Fisheries Protection Areas (FPAs) (e.g. controlling mesh sizes for different gears in line with management objectives for important species). These can be decided on following consultations with an array of stakeholders. b. *Designate FPAs with no-take zones around the existing artificial reefs such as in Outer Port Shelter, to fully protect them from fishing, and eliminate the risk that they may be contributing to overfishing. c. *Establish 'No-take Zone/Season' or other restrictions in potential FPAs. Identify spawning and nursery areas for protection d. *Designate seagrass beds and select important intertidal mudflats as fisheries protection areas to promote the conservation and management of marine and fisheries resources, under Section 4A – Orders of Cap 171, Fisheries Protection Ordinance, to restrict these activities.	SUMRFG SUMRFG SUMRFG MIAFG
B11	Promote the sustainable use of marine resources and reduce their unsustainable use. (ABT 6)	High	a. *Conduct ongoing fisheries monitoring programme to directly quantify fish catches, collect information for stock assessment, including recreational fishery (e.g. gear used, locality, seasonality, species, abundance and size of individuals taken), and assess the effectiveness of fisheries management measures. The methodologies used should be sufficiently robust and remain similar over time to the degree that direct comparisons of different years can be made.	SUMRFG

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			b. *Establish an Advisory Committee for the Sustainable Use of Marine Resources consisting of fisheries and other scientists, representatives of the commercial and recreational fishing communities, relevant NGOs, and representatives of the marine recreational community to advise government.	SUMRFG
			c. *Determine the most important species/species groups for fishery in consultation with Advisory Committee for the Sustainable Use of Marine Resources, and other stakeholders; establish management objectives for various species/species groups; prioritize to rebuild those stocks of ecologically important species/species groups that have suffered major declines, and are the most important fishery species, respectively; protect vulnerable species according to ecosystem-based fisheries management principals, and rehabilitate the marine ecosystem.	SUMRFG
			d. Reduce the loss and impacts of ghost nets additional to the current ghost net clearing exercises (e.g. increase clearance of ghost nets in problem areas, examine on ways to provide positive incentives to fishers for encouraging them to take measures on preventing losing their nets in the first place through understanding local fishers attitudes towards lost nets, explore the use of overseas example in education, establish a mechanism for all members of the community to report loss of net and discovery of ghost net and publicize for gathering relevant statistics to fill in the current data gap as well to increase the possibility of taking timely clearance actions).	SUMRFG
			e. Investigate to introduce 'degradable panels' to reduce the possibility of a cage trap continuing to fish for long after it is lost through a study referencing overseas jurisdictions where the technology is quite mature (e.g. Texas).	SUMRFG
			f. *Initiate monitoring system to identify and address threats to seagrass beds and areas of most digging and visitors activities e.g. clams digging (e.g. Ha Pak Nai, Tung Chung Wan and Shui Hau Wan) and razor shells digging with salt (e.g. Ha Pak Nai).	MIAFG
			g. Control spear-fishing on some of the larger reef fish species which are a	RLFG

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			<p>avored target of spearfishermen.</p> <p>h. Consider to control minimum size of target species or mesh size of gears and release of undersize fish for species (e.g. the red grouper, <i>Epinphelus akaara</i>, and blackspot tuskfish <i>Choerodon schoenleinii</i>).</p> <p>i. Consider gear or other fishing controls (e.g. times and/or places protected, to reduce entanglement of immature individuals of threatened species).</p> <p>j. Consider bycatch reduction measures for species regularly associated with entanglement, such as the Chinese White Dolphin and the horseshoe crab.</p> <p>k. *Ban commercial fishing in marine parks without further delay. In addition to the fisheries and conservation benefits, this will fully protect the existing artificial reefs (ARs) deployed within the parks (and eliminate the risk that the ARs are contributing to overfishing).</p> <p>l. Move towards shared stock fisheries research and management with Guangdong authorities under the Framework Agreement on Hong Kong / Guangdong Co-operation.</p> <p>m. Hold an expert workshop to review the experience of deploying ARs, and the available information from Hong Kong and elsewhere on their effectiveness before more ARs deployment takes place.</p> <p>n. *Determine the levels of fishing (by all gears) that can be sustained biologically to effectively limit fishing effort to within those limits.</p> <p>o. *For species exploited by Hong Kong fleets, for which there is conservation concern but a wide regional distribution, regional level action by Hong Kong may also be relevant. For example, for certain species of larger sharks and rays, migrating fishes such as seabreams, and green turtle, regional actions or collaborations might be important for protection of biodiversity.</p>	<p></p> <p>RLFG</p> <p>RLFG</p> <p>RLFG</p> <p>SUMRFG</p> <p>SUMRFG</p> <p>SUMRFG</p> <p>RLFG</p> <p>RLFG</p>
B12	Conduct research on fisheries resources and fishing activities to inform sustainable fisheries management.	Medium	<p>a. *Conduct surveys using different fishing gears to determine the species that are most commonly caught, and their relative abundance for each gear type, and conduct interviews of fishers to learn whether and how they target specific species/species groups using different gears, and</p>	SUMRFG

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	(ABTs 6, 7, 19)		their expectations for future catch composition under a sustainable fisheries management regime.	
b. *Conduct research on spawning and nursery grounds of the most commercially important species, apart from some areas identified by older studies.			SUMRFG	
c. *Conduct stock assessment of a subset of commercially important species/key or indicator species (both species that were important in the past and present) that broadly represents the whole commercial fishery.			SUMRFG	
d. Conduct research on recreational fishery (including spearfishing and non-spearfishing underwater harvesting) such as species and sizes taken, their relative abundance, areas and habitats targeted, seasonality, and overall fishing effort in addition to information on current and potential economics, motivation to fish, and fishery structure.			SUMRFG	
e. *Conduct research on the sources of larvae for commercially important fish and invertebrate species to Hong Kong and create a network of protected areas that extends beyond Hong Kong along the coast of mainland China where needed.			SUMRFG	
f. Review existing reports/data to categorize gill netting, cage trapping and commercial hook and line fisheries in terms of gears deployed, habitats targeted, species and sizes taken, the relative abundance of species, seasonality, etc.			SUMRFG	
g. Conduct research on fishing effort using gill (and trammel) net, cage trap, and hook and line across all vessel types, including mixed-gear sampans, and calculate production figures for cage traps.			SUMRFG	
h. Conduct research on fishing effort using different gears is required for more than 2,300 mixed-use `sampans`, as this category includes the majority of fishing vessels. The use of on observers and the use of log-books are options that can be considered.			SUMRFG	
B13	Promote sustainable consumption of natural resources, and engage stakeholders to assess and address Hong Kong's ecological footprint.	High	a. *Initiate a programme to raise awareness on the "over-consumption" issues and "Ecological Footprint" concept.	SEEFG / LFG
			b. *Raise industry and consumer awareness about traditional Chinese medicine (TCM) sustainability.	SEEFG / LFG

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	(ABTs 1, 4)		c. *Educate the public with basic knowledge of medical principles and practice of TCM.	SEEFG / LFG
d. *Raise awareness of the public about seafood sustainability (e.g. adding in unsustainable Live Reef Food Fish (LRFF) species into the Hong Kong Government’s dining policy).			SEEFG / LFG	
e. *Raise awareness of the consumption impacts of beef and highlight it as a case to illustrate the link between human well-being, sustainable diet and biodiversity conservation.			SEEFG / LFG	
f. Demonstrate and educate the importance of responsible forest management, the origin of wood based products and habitats of local vegetation and animal species, to Hong Kong residents by getting a FSC certified forest in Hong Kong to connect Hong Kong consumers with FSC labelled products to the real certified forest.			SEEFG	
g. *Advocate that the legality and sustainability of forest management and related commerce and processing should be a particular focus of financial institutions (and their advisers) which facilitates transactions through the Hong Kong stock exchange for businesses which exploit plantations and forests			SEEFG	
h. Promote awareness, education, sustainable production, and use of certified products which incentivize sustainable resources, such as Forest Stewardship Council certified timber, Marine Stewardship Council certified sea food, Fairwild certified TCM products.			LFG	
i. Assess the feasibility of introducing supply chain traceability requirements in relation to imported seafood.			SEEFG	
j. *Study the consumption of TCM by obtaining information from expertise (e.g. universities, TCM pharmacy) in this area			SEEFG	
k. Support initiative to assess sustainability of seafood available in Hong Kong and make the information publicly available so consumers can have informed choices, also to businesses to improve their sourcing for sustainable seafood.			SEEFG	
l. By 2020 Assess the sustainable use of seafood, timber, paper, traditional Chinese medicine from the wild and beef			LFG	

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			m. Compile a list of trade TCM species, including information of their source (wild or farmed; geographical location) and trade volume. This list of species is to be used for proposal for new Hong Kong Harmonised System (HKHS) code statistics classification; trial species for sustainability certification, etc. Due to the prevalence of counterfeits and substitutes, the species identities should be verified by DNA barcoding or the protocol of Hong Kong Chinese Materia Medica Standards (HKCMMS).	SEEFG
			n. Improve regulation of trade in resources by access to information on illegal trade of specific commodities of concern, such as the above list, and by strengthening CITES law enforcement and the licensing system in Hong Kong.	LFG
			o. Conduct a feasibility study on the introduction of sustainable TCM certification system to Hong Kong market. The study should review existing certification systems on wild ingredients (e.g. FairWild); investigate the practical aspects of source- tracing (for both raw materials, and TCM formula), management and ethical standards; propose incentive policies needed from the Hong Kong Government to support the promotion and implementation of the certification systems.	SEEFG
			p. Improve the regulations and enforcement as per the specific examples in the Study such as, for Live Reef Food Fish, remove loopholes such as shortening the period of validity of the license to possess fish so that fish sold can be more easily verified as being covered by the license, under the Protection of Endangered Species of Animals and Plants Ordinance Cap 586; remove gaps so that import declarations are required under the Import and Export Manifests Notice Cap 60C and Import and Export Registration Regulations Cap 60E.	LFG
			q. *Identify gaps in law enforcement in regulating the claims of health benefits of TCM under the Trade Descriptions Ordinance. Strengthen the regulations on the claims of health benefits of TCM to alleviate wasteful consumption of TCM driven by fraudulent and unproven claims of marketers.	SEEFG
			r. Study the extent of illegally sourced commodities traded through Hong	LFG

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			Kong. For example, Hong Kong has no regulations that cover the purchase of illegally logged timber and paper products thus making it a potential laundering point for illegal timber.	
			s. Conduct a study to verify the trade data and look into the supply chain regarding the direct impact of Hong Kong's beef consumption.	SEEFG
			t. Investigate reasons why some endangered species/species of high conservation concern are still 'legally' appearing in the market (e.g., Golden Coin Turtle, live/dead corals) and close loopholes in the regulatory system, e.g. the existing permit system does not require individual identification for most species, hence it is open to abuse in which dealers do not transfer the permit to individual buyer and retain it to cover new animals/plants.	LFG
			u. Carry out a study on the trade of shark fins.	SEEFG
			v. Regulate the trade in resources by Lacey Act legislation whereby it is unlawful in Hong Kong to deal in species which have been taken contrary to the laws of another country or international law. In any event, regulations or Guidance Notes to limit and control possession and trade of illegally obtained species should be improved or drafted.	LFG
			w. Create separate species level HKHS codes for the new CITES species of sharks.	SEEFG
			x. Promote awareness, education, sustainable production, and use of certified products which incentivize sustainable resources such as Forest Stewardship Council certified timber, Marine Stewardship Council certified sea food, Fairwild certified TCM products.	LFG
			y. Include species used in TCM and are of conservation concern into HKHS code for monitoring.	SEEFG
			z. *Restrict the imports and re-exports of shark fin to designated ports, and at specific times, to facilitate monitoring efforts.	SEEFG
			aa. *Specify Forest Stewardship Council (FSC) products when purchasing wood or paper products, especially for HK Government's procurement.	SEEFG
			bb. *Encourage responsible purchasing programmes for wood or paper products and develop policies that support its implementation.	SEEFG

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			cc. Further develop the building codes of the public sector in Hong Kong to increasingly recognise that, in terms of sustainability, credibly certified timber is likely to be superior to alternative building materials; while more incentive should be given to private sector to use certified timber to gain credit from green building certification in Hong Kong.	SEEFEG
			dd. *Add additional unsustainable LRFF species into the Hong Kong Government official dining policy (along with sharks, black moss and bluefin tuna)	SEEFEG
			ee. *Develop responsible investment strategies that promote responsible forest management either in forest based investment or in forest products processing or forest products consuming investment.	SEEFEG
			ff. Publish a field guide to differentiate Manta ray gill rakers and make it available to traders and AFCD CITES enforcement officers.	SEEFEG
			gg. *Government to measure and announce Hong Kong's Ecological Footprint on a regular basis.	SEEFEG / LFG
			hh. *Government to develop a roadmap which set target, process and timeline to reduce Hong Kong's Ecological Footprint.	SEEFEG / LFG
			ii. *Government to adopt Ecological Footprint as one of the indicators to guide sustainable development strategy and planning for Hong Kong.	SEEFEG / LFG
			jj. *Request the listing of the Hong Kong's frequently traded and threatened shark species in CITES.	SEEFEG
			kk. Accede to international RFMO's monitoring and regulation conventions (e.g. ICCAT, CCAMLR), or extending from Mainland China, to implement the requisite measures and to more effectively monitor and regulate the trade in target seafood species (e.g. toothfish, Bluefin tuna).	SEEFEG
			ll. Facilitate and engage with any negotiations involving the European Union and China concerning any future negotiation of a Voluntary Partnership Agreement concerning the supply of wood-based products under the Forest Law Enforcement Governance and Trade (FLEGT) initiative and the European Union Timber Regulation.	SEEFEG
			mm. *Adopt Port State Measure in an effort to more holistically regulate against IUU fishing and trade in such seafood.	SEEFEG

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			nn. *Develop legislation to prevent illegally logged timber and paper products entering Hong Kong, in line with legislation developed in the EU, USA, Australia and China.	SEEFG
			oo. *HK Government to request that NDF are made publicly available by the exporting country. Thus allowing additional scrutiny by the science community, given governance issues in the region	SEEFG
			pp. Hong Kong Government should review provision such as those under the Lacey Act to regulate its trade and conduct a scoping study on the extent of illegally-sourced commodities in Hong Kong. The feasibility of adopting potentially similar legislation should be assessed (e.g. timber products, sharks)	SEEFG
			qq. *The exemption that “marine fish ... arriving in Hong Kong direct from fishing grounds on fishing craft registered or licensed in Hong Kong” is currently implemented in a manner that allows much LRFF to be undeclared and seriously undermines the “ability for research, discussion, planning and decision-making within the government and in the community. The meaning of the exemption should be clarified by the authorities to underscore that it does not exempt the reporting of fish from live fish transport vessels (fish carriers) but only exempts fish from local fisherman operations. The intended application of the exemption to fish caught only by local fishing operations should not only be clarified, but publicized by the government throughout the industry and rigorously enforced.	SEEFG
			rr. *A weight limit be applied as a means of enforcement to the exemption. Such that any amount of LRFF over say tonnes bought in by a single fishing vessel as an example would almost certainly not have been caught locally and could be used as prosecutorial evidence for non-declaration. Therefore any amount over such a specified weight should theoretically be declared, thus facilitating collection of data on the trade. Expert opinion could potentially be used to prosecute a vessel that does not declare, claiming that fish have been caught locally.	SEEFG
			ss. *However, a longer-term solution to fully and concretely control the	SEEFG

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			<p>trade in LRFF requires a legislative basis. We therefore recommend amending regulation 3 (the “fishing craft” provision) in the Import and Export (Registration) Regulations (Cap 60E).</p> <p>To better control the trade in LRFF we recommend that all live fish carriers (i.e. live fish cargo) be required (i.e. not exempted) to declare their cargo as imports and to provide manifests and customs declarations. This would, in turn, require that all vessels falling within the statutory definition of such “live reef fish carriers” or ‘live seafood cargo vessels’ be clearly identified.</p>	
			<p>tt. An alternative approach to provide the missing data would be to use the existing manifest system, since it is understood that fishing vessels are not exempt from the requirement to submit manifests. This would require Government to maintain the manifest data and make the country of origin, volume and species data publically accessible, in the same manner as data derived from the import declarations within the CSD database. The level of detail however would need to be enhanced to provide species-specific data. This would relieve AFCD the responsibility of informally collecting the HKRV data.</p>	SEEFG
			<p>uu. There are clearly practical limitations in species identification details for inclusion in both import declarations and manifests. However, it is clear that there is some room for building on the current system and updating species resolution as the trade changes (an example is the relatively new appearance of hybrid, such as Sabah grouper), or should other species be added to CITES appendices.</p> <p>Currently the HKHS codes do not have to be submitted as part of cargo manifests. It is recommended that the inclusion of HS codes or equivalent descriptions be introduced as a manifest requirement and mandatory for HKRV manifest data, so that gaps in existing import records i.e. HKRV may be filled.</p> <p>For fish carriers, the government encourages (but does not make compulsory) HS-6 or HS-4 equivalent descriptions to be submitted via manifests. However as this is not compulsory and details provided can</p>	SEEFG

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			<p>therefore be less. For air carriers, although there is no such specific guidance.</p> <p>Nevertheless, for identifying goods to species level, a specificity of HS-8 is required. If HS-8 equivalent descriptions are included in manifests of both air and ocean carriers for LRFF, the retrieval of species-specific information for each shipment will be possible. This will a) maximize the government's ability to monitor what is being traded into Hong Kong; and b) enable airlines to monitor what they carry far more effectively.</p>	
			<p>vv. *Chilled Reef Fish - It is recommended that CSD add codes to identify frozen/chilled grouper due to the substantial trade in this category. Currently chilled/frozen reef fish cannot be distinguished from the generic frozen/chilled fish/fillets, etc. commodity coding of CSD. On 28 June 2014 a recommendation was made to CSD (Y. Sadovy) to facilitate the recognition of frozen/chilled reef fishes/fillets and those of humphead wrasse due to the increasing tendency to ship frozen/fresh fish and fillets, as well as live reef fishes.</p> <p>The newly proposed categories of frozen/fresh reef fishes ("frozen grouper or grouper fillets", "frozen wrasses, other than Napoleon wrasse, or fillets" and "frozen snapper or snapper fillets") would help to understand more of this emerging trend. Since this trade is likely to be made up of a small group of reef fishes that come from a specific fishing sector (snappers, wrasses and groupers), their identification in trade documentation should be practical and straightforward and readily distinguishable from other major categories such as whitefish, tuna, other pelagics, salmon etc. many of which are already identified to taxon level.</p>	SEEFG
			<p>ww. *The compilation and reporting of data on CITES-listed species (App II) is an obligation for the government and would be facilitated by three measures:</p> <ul style="list-style-type: none"> • Government to have an official system to collect these Hong Kong registered fishing vessels data, rather than relying on the informal interview system, which may not be effective or comprehensive. 	SEEFG

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			<ul style="list-style-type: none"> • A separate category for ‘frozen/fresh’ Napoleon fish (Humphead wrasse, <i>Cheilinus undulatus</i>, for frozen/fresh Napoleon wrasse or fillets. Currently, live Napoleon wrasse are identified (0301-9931) but there is a growing frozen fish/fillet trade into Hong Kong that is currently undocumented. • Introduction of a single method to record humphead imports/re-exports to either ‘tails’ or weight or provision of a conversion factor. 	
			xx. Given the increasing volumes being reported under the ‘Other ‘ country category, An attempt should be made to clarify and report on these “other” countries in the AFCD HKRV data collection protocol.	SEEFG
			yy. *There appears to be a large cross-border trade in re-exporting live seafood that is unregulated and unmonitored and most likely conducted to avoid China import tariffs. Some of this is known, from interviews with traders, to occur by sea and includes CITES II species. Some also occurs by air, which apparently also goes unrecorded. There is a need for clearer record-keeping on cross-border trade. In particular, ensure that imports and re-exports of humphead wrasse are properly recorded and that shipments are regularly inspected.	SEEFG
			zz. *To improve enforcement, the possession license for humphead wrasse in Hong Kong should only be valid for one month (to reflect maximum turnover time for this species in possession). Currently, it is valid for five years, which makes it useless for enforcement purposes.	SEEFG
			aaa. *The exemption for a permit for chilled humphead wrasse to enter Hong Kong entering as personal or household effects should be removed.	SEEFG
			bbb. It is recommended that a comprehensive review of regional commitments, interests and guidelines, are reviewed with a view to implementation. An example would be the FAO voluntary guidelines on responsible fisheries, which contains several relevant actions for the government to consider in relation to the LRFFT.	SEEFG
			ccc. Require vessels to install a vessel monitoring system (VMS), a tool for the monitoring, control and surveillance of fisheries activities which would help inspectors understand vessel movement and aid inspections. VMS provides a fishery management agency with accurate and timely	SEEFG

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			information about the location and activity of regulated fishing vessels. A VMS would be able to distinguish whether a vessel is a carrier that primarily obtains live marine fish from the water of other countries, and therefore answer the question of whether the vessel in question falls in or out of the statutory exemption.	
Strategic Goal C – Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity				
C1	Assess the conservation status of species in Hong Kong to guide conservation actions. (ABT 12)	High	a. Assess the status of species in Hong Kong using IUCN Red List criteria and the guidelines for regional assessment. Appropriate documentation of the information, as in a Global Assessment, is essential and should be treated as part of the Assessment. Taxon groups that have adequate existing information and are under serious threats, such as freshwater fish and commercial marine fish, should be assessed as soon as possible. Species that are known to be threatened globally/regionally, restricted or rare, should also be a priority for assessment.	RLFG
			b. Review the Red List assessment regularly (at intervals not greater than 10 years and more frequently as necessary). The Hong Kong Red List Assessment should be submitted to IUCN and recognised as a formal regional assessment when the appropriate platform is set up.	RLFG
			c. Develop a Hong Kong Red List and a list of species of conservation concern based on the local (HK Red List), regional (China Red List) and global (IUCN Red List) status to inform conservation actions, EIA, planning procedures and the relevant legislation in wildlife protection etc.	RLFG
			d. Include the following 10 wasp species (6.5% of the locally identified species) in the list of species of conservation concern with a review of the status of each in five years: <ul style="list-style-type: none"> • <i>Eustenogaster nigra</i> • <i>Polistes gigas</i> • <i>Polistes strigosus</i> • <i>Polistes rothneyi graham</i> • <i>Ropalidia fasciata</i> • <i>Ropalidia marginata</i> • <i>Vespa mandarinia</i> 	RLFG

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			<ul style="list-style-type: none"> • <i>Vespa mocsaryana</i> • <i>Calligaster himalayensis</i> • <i>Amegilla fimbriata</i> 	
			e. Incorporate the considerations of regionally assessed threatened species routinely within EIA evaluations for development projects.	RLFG
C2	Prepare and implement biodiversity management plans for country park, special area, marine park and marine reserve to enhance biodiversity conservation in these protected areas. (ABT 11)	High	a. Review and enhance the biodiversity conservation objectives, management plans and management works of the Country and Marine Parks Authority to enhance the ecological value of country parks.	HFG
			b. *Increase resources to enable the Country and Marine Parks Authority to better manage and safeguard the country parks and special areas from poaching, eco-vandalism, hill fires and other risks to the local biodiversity.	HFG
C3	Maintain and enhance the Protected Area System ¹⁹ (PAS), and extend where possible, to cover ecologically important habitats currently outside the PAS. (ABTs 5, 10, 11, 14, 15)	High	a. Maintain the protected area system, and extend where appropriate and practicable.	HFG
			b. Review the strategy for the designation of new country parks as recommended by the Audit Commission in 2013.	HFG
			c. *Protect the 54 enclaves by restricting the areas where small house development is permitted.	HFG
			d. *Protect the country parks by incorporating the enclaves within the country parks, or at a minimum incorporate the ecologically important habitats within these enclaves within the country parks under the Country Parks Ordinance and by determining the proper uses of the remaining area through statutory planning.	HFG
			e. *Designate Robin's Nest as a new country park.	HFG
			f. Cover ecologically important habitats currently outside the protected area system, by extension of existing country parks and special areas; and/or designating conservation zonings under statutory plans.	HFG
			g. *Consult the community on potential areas for designation as protected	HFG

¹⁹ The Protected Area System in Hong Kong includes any country park, special area, marine park, marine reserve, fisheries protection area, restricted area under the Wild Animals Protection Ordinance, and conservation zone under any statutory plan.

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			areas.	
			h. Reconsider the designation of Lamma Island, Tung Lung Chau, Po Toi and other areas which have previously been identified, proposed or discussed as potential sites for country park and special area.	HFG
			i. Reconsider designating Shui Hau mudflat as an SSSI	HFG
			j. Designate all SSSIs under the Town Planning Ordinance, and recognise their importance in the EIA process.	HFG
			k. Protect known sites supporting the rare endemic reptiles by incorporating them into country parks, special areas or covered by SSSIs or Conservation Area.	RLFG
			l. Protect the important sites of ant species of conservation concern.	RLFG
			m. Protect the important habitats of the following priority wasp species: <ul style="list-style-type: none"> • <i>Ropalidia fasciata</i> • <i>Ropalidia marginata</i> • <i>Vespa mandarinia</i> • <i>Vespa mocsaryana</i> • <i>Calligaster himalayensis</i> • <i>Amegilla fimbriata</i> 	RLFG
			n. *Monitor and review the conservation effectiveness of the PAS, including production of regular (e.g. five-yearly) reports that are widely disseminated so as to provide an opportunity to communicate and for public appraisal and comment.	HFG
			o. Expand the PAS as a comprehensive safety net for local biodiversity.	HFG
			p. *Study the cumulative impacts of permitting village expansion and control development pressure to protect country park enclaves and the surrounding country and marine parks.	HFG
			q. Assess and acknowledge the ecological value of the former Frontier Closed Area, and its potential importance to the Hong Kong and regional community, and identify and adopt appropriate measures to minimise spill-over impacts of these developments on adjacent sensitive areas.	HFG
			r. Identify new land for conservation zoning when areas zoned for conservation and agriculture are rezoned in order to compensate for any	HFG

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			losses of biodiversity or habitat.	
			s. Apply the precautionary principle in permitting village expansion in country park enclaves, considering development in the former Frontier Closed Area, and rezoning land reserved for conservation and agriculture uses to development uses.	HFG
			t. Expand non-fishing areas (and the types of habitat included within them) to prevent a potential expansion of fishing effort from reducing the rate of recovery and sustainability of the fishery, in order to allow slow growing long-lived species across a range of habitats have an opportunity to grow and reproduce undisturbed, and to protect the nursery/spawning grounds of these species.	SUMRFG
			u. Adopt fisheries management as an appropriate objective in the marine park programme (i.e. in addition to conservation and recreation).	SUMRFG
			v. Expand the coverage of marine protected areas where spear gun fishing is prohibited (e.g. coastal offshore areas with deeper rocky reefs where the largest individuals of large reef species are typically found).	SUMRFG
			w. Designate marine protected areas to protect important marine habitats (e.g. habitats for horseshoe crabs and amphioxus, mangroves, seagrass beds, intertidal mudflats, soft corals communities etc).	RLFG
			x. Establish the coastal waters around Sham Wan as a Marine Park to better protect this very small remaining population of Green Turtle.	RLFG
			y. Establish more and connected marine protected areas that could meaningfully facilitate dolphin conservation and reduce impacts with vessels, etc.	RLFG
			z. Incorporate estuaries of high ecological value into the protected area system through zoning or designation of special area/ country park/ marine Park (e.g., restrict fishing activities such as fish moratorium).	MIAFG
			aa. Invite different stakeholders to participate in the process of designating marine parks. Create more incentives or look for common interest for various stakeholders to increase the chance for different parties to reach consensus. These incentives include: <ul style="list-style-type: none"> • Long term profit gained from engaging into commercial activity 	MHFG

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			associating with sustainable ecotourism, other than one-off compensation <ul style="list-style-type: none"> • Receive assistance of the related capacity building activities, e.g. training mutual benefit acquired through collaboration between stakeholders. 	
C4	Ensure proper protection of flora and fauna, in particular threatened species, through enforcing legislation related to species protection. (ABT 12)	High	a. Set up a wildlife crime unit / task force with tracking and investigative skills. Close interdepartmental collaboration, and working with Mainland/overseas police, Interpol and specialised NGOs, is needed, along with the use of the most sophisticated intelligence-gathering techniques such as DNA forensics.	RLFG
			b. Consider to impose deterring penalties for wildlife crime including smuggling.	RLFG
			c. Adopt a proactive approach to anticipate trends in wildlife crime and frequent analysis of trade and confiscation data by the proposed Wildlife Crime Unit and other enforcement officers.	RLFG
			d. Implement urgent enforcement and conservation actions for priority plant species including Incense Tree <i>Aquilaria sinensis</i> and highly threatened orchid species.	RLFG
			e. Maintain high vigilance on poaching/collecting activities targeting species of high commercial value, such as Incense Tree, Chinese Pangolin, freshwater turtles, orchids and certain freshwater fishes with more effective patrol, enforcement and education.	RLFG
			f. Implement legislation to regulate trade in 'illegal wildlife'.	MIAFG
			g. The information provided to the courts in such cases needs to be tightened up. Perhaps "an Email Advisory Panel" can be set up to advise on the conservation status of any animals in future seizures, to allow for all pertinent facts in such cases to be provided to the judicial process.	MIAFG
C5	Formulate and implement species conservation measures and action plans, including both in-situ and ex-situ conservation, for both fauna and flora species of conservation concern, in particular highly threatened and	High	a. Designate key sites for the priority mammal species including Chinese Pangolin, Crab-eating Mongoose, and Eurasian Otter as conservation zones and reduce development pressure in country park enclaves, in particular those in the North-eastern New Territories, to where Crab-eating Mongoose is restricted locally; and increase connectivity between country parks by establishing and enhancing 'wildlife corridors'.	RLFG

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	important species. (ABTs 6, 12)		Consider the ecological needs of Eurasian Otter and its conservation in the holistic planning of Deep Bay wetlands and undertake urgent action to limit the development pressure there.	
			b. Develop a priority list of bat hibernacula, maternity roosts and major roosts. Protect important mines and caves including Lin Ma Hang mines, Lin Fa Shan mines and other important roosts by gating or grilling (with locks to allow access by researchers) the mine or tunnel entrances. Provide fencing to prevent access to water catchment tunnels with important bat roosts. Conduct long term bat population monitoring for the key roosting sites.	RLFG
			c. Protect the important breeding, foraging and roosting sites of priority bird species including Chinese Grassbird and Collared Crow.	RLFG
			d. Extend the area of wetland habitats (in particular reed marsh, freshwater marsh and wet agricultural land) managed for the conservation of water birds, farmland birds and other wetland-dependent wildlife.	RLFG
			e. Undertake a reintroduction programme for the Rough-skinned Floating Frog <i>Occidozyga lima</i> by establishing and securing a good-sized rice paddy in a protected area.	RLFG
			f. Prepare species-specific conservation recommendations for priority dragonfly species, involving, where appropriate, prescriptions for study of specific habitat requirements and species distribution.	RLFG
			g. Draft a dragonfly action plan with particular focus on identifying species that are locally rare and their Hong Kong populations potentially threatened and monitor of species of conservation concern in order to establish population/occupancy trends and threats.	RLFG
			h. Undertake surveys on the following dragonfly sites: Luk Keng, Ma Tso Lung, Shuen Wan, River Jhelum, She Shan, Sha Lo Tung, Tai Tong, Nam Chung and Wu Kau Tang and designate the important ones as protected areas or co-managed areas of ecological production. Survey other key dragonfly sites identified by Wilson (1997) to facilitate a review of the state of Hong Kong's dragonfly fauna and evaluate any changes in status in the last two decades.	RLFG

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			i. Take appropriate actions such as habitat protection, habitat restoration, in-situ/ex-situ population restoration to rectify / negate any threats likely to result in major decline or extinction of Aculeate wasp species, or if a species is already at a low population level, action should be taken to increase the population to a state where it is no longer at severe risk of extinction.	RLFG
			j. Take part in regional and global conservation initiatives or collaborations for migratory birds and exchange information and experience with regional counterparts.	RLFG
			k. All freshwater fish species of conservation concern should be included in the Wild Animal Protection Ordinance to control capture and prevent over-exploitation and to ensure they will be considered when the potential environmental impacts of development projects are assessed.	RLFG
			l. Prepare an action plan for moth species of conservation concern with actions implemented to identify (i) the life histories (hence habitat needs) of, (ii) distributions of, (iii) population ecology of, and (iv) threats to all the species of conservation concern. The action plan should include actions to rectify / negate any threats likely to result in major decline or extinction of a species, or to increase the population of species with low population to a state where it is no longer at severe risk of extinction; such actions may include habitat protection, habitat restoration, in-situ or even ex-situ population restoration. Monitoring of all species of conservation concern should be undertaken in order to establish the population trends.	RLFG
			m. Priority butterfly species: <i>Hasora vitta</i> , <i>Halpe pauper</i> , <i>Taractrocera maevius</i> , <i>Thoressa monastyrskyi</i> should be given protection status	RLFG
			n. Develop and implement species action plans for highly threatened freshwater fish species such as Chinese Rasbora, Taiwan Lesser Beam and Rose Bitterling, taking into consideration the feasibility or desirability of conservation interventions such as habitat restoration including channelised stream/river sections, relocation, translocation, and ex situ breeding facilities for these species.	RLFG

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			o. Carry out a study to determine the range, preferred habitat and ecological requirements (including diet) of the Chinese Pangolin and Eurasian Otter so that their conservation measures can be optimised.	RLFG
			p. Form expert groups to prepare species action plans with clear conservation objectives and targets for highly threatened orchids, Chinese Pangolin, Eurasian Otter, and the three highly threatened stream turtles <i>Cuora trifasciata</i> , <i>Platysternon megacephalum</i> and <i>Sacalia bealei</i> and to oversee their implementation and review the action plans regularly.	RLFG
			q. Establish a standardised mechanism in formulating species action plans for highly threatened species.	TBWG
			r. *Introduce species level management measures for the most threatened, and depleted species (e.g. the Chinese Bahaba, <i>Bahaba taipingensis</i> , which is Critically Endangered globally and locally according to global and Regional Red List assessments. The following 4 endangered species also urgently need species-specific attention; large yellow croaker, <i>Larimichthys crocea</i> , Knobsnout parrotfish, <i>Scarus ovifrons</i> , Blackspot tuskfish, <i>Choerodon schloeneni</i> and Hong Kong grouper, <i>Epinephelus akaara</i> . The 8 Vulnerable species (spotted eagle ray, yellow grouper, longtooth grouper, Dwarf Goby, Melon and Chevron butterflyfishes, Green Mudskipper and Big-finned Mudskipper) need further data collection and some need immediate management or conservation actions (e.g., habitat protection). The Bahaba is already protected in Mainland China. Species action plans are also needed for marine species considered to be threatened by regional red list assessments.	RLFG / SUMRFG
			s. Species of special (e.g. international) concern such as Whale sharks should be fully protected from fishing through amendments to the Fisheries Protection Ordinance, and provisions made to allow for unintended interactions.	SUMRFG
			t. *Species-specific measures could be achieved by developing legislation in line with the protection of other (non-marine) Hong Kong wildlife (e.g. WAPO) and application of appropriate measures (e.g. bycatch minimum	RLFG

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			<p>size and gear controls, habitat protection. Moreover, threatened species could be designated as protected species under this ordinance.</p> <p>u. *Regulate dolphin-watching activities in areas of high dolphin densities. (Options include regulating dolphin-watching operations through a licensing system, which has been done in some other countries, establishing marine parks in these areas, establishing a broader network of properly placed protected areas across the Pearl River Estuary and setting stricter standards for pollutant discharge to mitigate pollutant accumulation, through regional cooperation between Hong Kong and the Guangdong Province.)</p> <p>v. *The Chinese White Dolphin urgently needs more and more connected marine protected areas to facilitate conservation, reduce impacts with vessels, etc. A species action plan and a broader network of properly placed (i.e. relevant to the species) protected areas across the Pearl River Estuary is needed as well as cross border cooperation.</p>	<p></p> <p>RLFG / SUMRFG</p> <p>RLFG</p>
C6	<p>Conduct long-term territory-wide biodiversity surveys and monitoring to guide conservation actions.</p> <p>(ABTs 12, 19)</p>	Medium	<p>a. Monitor the condition of vegetation in fung shui woods and freshwater wetlands.</p> <p>b. Launch long-term, territory-wide survey programmes using standardised methodology for the land bird communities in order to gather quantitative data that can be compared between sites/habitats/years to facilitate Red List assessment.</p> <p>c. Carry out more field surveys of <i>Dendrelaphis hollinrakei</i> and <i>Ahaetulla prasina medioxima</i> in Shek Kwu Chau to clarify their local status, and work closely with the organisation managing the island for protection of the important habitats for these and other threatened species.</p> <p>d. Carry out more field survey in the Keung Shan area on Lantau in order to find more specimens of the documented unidentified snake and to ascertain its taxonomic status.</p> <p>e. Carry out more targeted field surveys on little-known and highly restricted reptile species including <i>Plestiodon tamdaoensis</i>, <i>Typhlops lazelli</i> and <i>Ramphotyphlops albiceps</i> to find out their distribution, habitat use and ecology so that appropriate conservation actions can be</p>	<p>RLFG</p> <p>RLFG</p> <p>RLFG</p> <p>RLFG</p> <p>RLFG</p>

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			designed and implemented.	
			f. Carry out more surveys on understudied areas that may support rare species, including lowland forests on Hong Kong Island, Lantau Island and small remote offshore islands.	RLFG
			g. Carry out target monitoring/surveys with focus on collecting information that can help guide amphibian conservation, with regular analysis and dissemination of findings built into such a programme, including (1) targeted surveys to find out the distribution of South China Cascade Frog; (2) the impact on amphibians and their habitats of mosquito control measures such as oiling, removal of boulders to straighten the stream course and the removal of trees on stream banks in hill streams.	RLFG
			h. Launch a long-term, territory-wide and systematic freshwater fish monitoring/survey programme, using standardised methodology, to gather quantitative data that can be compared between sites, habitats and years to facilitate Red List assessment. The survey programme should cover areas that have received little survey effort in the past (e.g. western New Territories, Frontier Closed Area).	RLFG
			i. Monitor fish hotspots regularly to record trends in target species and their habitat condition for collecting up-to-date data, formulating necessary conservation actions and making informed decisions.	RLFG
			j. Implement a consolidated survey and monitoring programme between the various stakeholders such as AFCD, NGOs and individuals on a suite of taxa selected based on available resources and local knowledge to increase our knowledge of the local aculeate fauna by implementing a consolidated survey and monitoring programme.	RLFG
			k. Conduct surveys on macrofungal diversity to collect information on ecosystem functioning including the prevalence, diversity and phenology of pathogenic, mycorrhizal and saprotrophic fungi. A comprehensive survey is recommended to start in Tai Po Kau Nature Reserve and the more ecologically-intact fung shui woods (e.g. Mui Tsz Lam). Mycorrhizal fungi such as <i>Boletus</i> , <i>Russula</i> or <i>Lactarius</i> are recommended to be priority genera for study. These genera have tight plant-fungus	RLFG

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			association, are sensitive to disturbance and are potential candidates for indicator species of forest quality. After such study, flagship species may be identified for fungal conservation.	
			i. Support and encourage local academic institutes to carry out more ecological studies on lesser known taxa groups including algae, lower plants such as bryophytes, lichens, invertebrate groups such as spiders, land snails, insects, etc. More training and exchange to build up local expertise/capacity is needed, and studies should be encouraged.	RLFG
			m. Review and adapt, if necessary, current biodiversity monitoring approaches to ensure they are adequate to track changes related to climate change, on species, habitats and / or ecosystems most at risk from climate change, and on potentially threatening invasive species.	TBWG
			n. Carry out a study on mammal species that have been categorised as Data Deficient or Not Applicable (for presumed vagrant species) to determine their status in Hong Kong. This will include further DNA work for mammals that form species complexes and more intense surveys of islands and sea caves.	RLFG
			o. Carry out a study on the bird community and the types, locations, ecological value of different types of grassland habitat to determine the degree of threat, the distribution and abundance of species and the conservation actions needed.	RLFG
			p. Develop a strategy for monitoring marine species, especially commercially important or threatened species, in terms of biology, ecology, use and population trends, as well as identifying key habitats, such as spawning and nursery areas. Such monitoring and research needs to be conducted in a consistent, scientifically based, and standardized way that encompasses long term data collection planning and monitoring to evaluate the effectiveness of introduced actions. Such monitoring can be selectively designed to address key species, issues and concerns. There are a number of modeling and fishery assessment approaches available for multi-species fisheries. Species action plans are needed for marine species considered to be threatened by regional red list	RLFG

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			<p>assessments.</p> <p>q. Encourage research institutes to apply for the Sustainable Fisheries Development Fund to conduct research projects that are consistent with the scope of the Fund to fill the information gaps identified. Additionally, a mechanism by which the suggested Advisory Committee for the Sustainable Use of Marine Resources could share recommendations on the research it considers most urgent with the Advisory Committee for the Sustainable Fisheries Development Fund, in order to facilitate such research from being undertaken, should be put into place.</p>	SUMRFG
C7	Protect and conserve natural streams and rivers and their riparian zones. (ABT 5)	High	a. Strengthen enforcement against illegal activities on streams such as stream diversion, filling and destruction in riparian zone. The land and planning authorities should also safeguard these areas by not having “Village” zones or approving small house developments next to/within them.	HFG
			b. Avoid adverse impacts on natural and semi-natural streams and its riparian zones from development as far as practicable.	HFG
			c. Study, promote and adopt “integrated river basin management approach” in land-use planning and drainage strategies in line with international best practices.	HFG
			d. Promote safeguarding the remaining natural and semi-natural streams and rivers and their riparian zones from development, engineering works and eco-vandalism; as a general concept for all government departments.	HFG
			e. Identify and protect important streams/rivers and their riparian areas by incorporating them into the protected area system so as to establish a network with a comprehensive and connected coverage of different habitat types, wildlife communities, and biodiversity.	HFG
			f. *Implement appropriate and enforceable zoning plans/active conservation measures for the protection of Ecological Important Streams (existing or recommended) in areas that currently lack any enforceable zoning plans (e.g., Tung Chung, Pui O, Sham Wat) or outside protected areas (e.g., through the gazette of appropriate zoning plans,	HFG / RLFG

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			re-zoning, publication of new practice notes to guide land use planning/application, incorporating these habitats into the PAS). Protection of these habitats should also involve establishment of appropriate buffer zones; in particular, protection of stream riparian zones should be mandated. The current list of Ecological Important Streams should also be updated, revised and finalized and made effective through statutory/non-statutory measures.	
			g. Revise the list of Ecological Important Streams as soon as possible and the freshwater fish Red List should also be finalised as soon as possible to guide the formulation of land use plans and development proposals, as well as development decisions to safeguard fishes and their habitats.	RLFG
			h. Formulate guidelines on minor river/stream maintenance and hygiene works (e.g., desilting, weeding, removal of stones in streams) with a view to minimising ecological impacts from these works.	HFG / RLFG
			i. Monitor important stream/ aquatic habitats and their water quality, as well as species of conservation concern, regularly.	RLFG
			j. Study the environmental flow allocations for Hong Kong streams and eco-hydrological relationships to ensure that water extraction, particularly during the dry seasons, does not impair downstream communities of native species and the ecological conditions in lowland streams below water extraction points and consider imposing restriction and enforcement of controls upon informal and unregulated extraction of water from streams by any parties other than the authorities.	HFG / RLFG
			k. Designate aquatic habitats (including streams, rivers, marshes and the riparian zones) of freshwater fish of conservation concern in relatively undeveloped areas such as the country park Enclaves, Tung Chung river valley and Pui O as protected areas including country parks, special areas and conservation zones, in particular in areas without enforceable zoning plans.	HFG / RLFG
			l. Apply a holistic and ecosystem approach in protecting natural rivers and streams (e.g. the whole stretch of the watercourse from the estuarine area to the upper section should be protected) and the planning of the	HFG / RLFG

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			protective zonings as many diadromous species appear in these areas.	
			m. Protect, enhance and manage streams, rivers and riparian zones.	HFG
			n. Protect natural and semi-natural streams, rivers and freshwater marshes and their surrounding riparian zones in areas for large-scale development projects through appropriate land use planning.	HFG / RLFG
C8	Control the environmental release of genetically modified organisms. (ABT 13)	Medium		TBWW
C9	Maintain wildlife corridors and promote habitat connectivity. (ABTs 5, 11)	Medium	a. *Identify lack of connectivity and risk of loss of connectivity between habitats and especially the protected areas. Employ creative ideas to link the fragmented areas (e.g. under road animal highways, green bridges connecting fragmented patches over channelized streams, fish-ladders to allow movements across weirs and silt pits etc.)	HFG
			b. Implement measures to protect, enhance and secure connectivity between protected areas, habitats and to the seas.	HFG
			c. Identify and protect streams and riparian zones as ecological corridors. Review connectivity options based on effectiveness and feasibility.	HFG
			d. Develop a system of wildlife corridors to retain and enhance connectivity among and between protected areas.	HFG
C10	Develop a marine hotspot map to guide conservation actions. (ABT 11)	High	a. *Develop a marine hotspot map by the following approaches: i. Conduct workshop (Phase I) composed by local academics and scientists, and other government and non-government experts for the comprehensive discussion of the criteria and scoring system to develop a marine hotspot map. For maximal effectiveness, and assure compliance with international standards CBD experts should be invited to share their knowledge. ii. Test out the trials on different species and locations to devise a suitable supplementary ranking/ scoring system for accurate and representative evaluation. iii. Workshop (Phase II) composed by local academics and scientists shall be conducted for Marine Hotspot Areas identification. The Hong Kong Red	MHFG

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			<p>List shall be referred for species of conservation concern (i.e. threatened, vulnerable, endangered).</p> <p>iv. Produce a Marine Hotspot map with habitats that are ecologically important to marine animals (e.g. spawning and nursery grounds, areas of primary productivity such as seagrasses, mangroves, and coral communities.)</p>	
			<p>b. Prioritize the importance of identified Marine Hotspot Areas based on three criteria: EBSA, Hong Kong Red List and Threat Impact assessment.</p>	MHFG
			<p>c. *Establish a Marine Protected Area Steering Group by academics and NGOs to study and suggest potential sites for MPA establishment, as well as the corresponding management measures. The Marine Protected Area Steering Group shall host rounds of meeting to</p> <ul style="list-style-type: none"> - Assess and evaluate the suggested sites for MPA by AFCD - Assess and evaluate the potential sites which are of conservation importance or suggested by the Planning Department 	MHFG
			<p>d. *Produce an MPA list making up at least 10% of the total waters including no-take zone of Hong Kong, with different phases and a solid timeline for establishment provided. Different levels of protection and management measures for various locations should also be suggested.</p>	MHFG
			<p>e. *Carry out a study on no-take zone, including its size and management approach (e.g. adaptive management).</p>	MHFG
			<p>f. *Overlay a map of areas where restaurant waste and greywater is being discharged into storm water drains on the sites identified by the Marine Habitat Assessment Focus Group as being important for conservation and taking action to address these important conservation areas first.</p>	MIAFG
<i>Strategic Goal D – Enhance the benefits to all from biodiversity and ecosystem services</i>				
D1	Identify opportunities for habitat enhancement at existing river channels, and provide ecologically friendly measures for new river improvement works.	Medium	<p>a. Identify opportunities for habitat enhancement at existing river channels that will make a significant contribution to biodiversity conservation, and provide ecologically friendly measures for new river improvement works. A pro-active and well-funded program is required for restoration of channelised watercourses and clear biodiversity objectives is needed to guide such work.</p>	HFG

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	(ABT 15)		b. Avoid channelisation of rivers and streams and, adopt eco-friendly and site-specific design in channels. Engineering and stream maintenance should be improved following liaison between relevant departments, stakeholders and environmental NGOs.	HFG
D2	Safeguard and restore important ecosystems to ensure that the ecosystem services they provided are maintained. (ABT 14)	Medium	a. Restore, rehabilitate and manage terrestrial and freshwater habitats (e.g. rice paddies) to sustain and enhance biodiversity in accordance with the conservation objectives to be adopted, with ongoing monitoring and adaptive management to ensure that stated targets are met. Relevant findings in this regard should be accessible to the public.	HFG
			b. Identify conservation actions to restore or rehabilitate and manage freshwater wetlands to enhance their biodiversity.	HFG
D3	Enhance biodiversity by using native species for afforestation and enrichment planting in urban areas, countryside and country parks. (ABTs 7, 15)	Medium		TBWG
			a. Develop a pilot programme to boost native vegetation in city parks. Invite community and wildlife NGOs to assist planting and monitoring throughout the planting process.	NFG
<i>Strategic Goal E – Enhance implementation through participatory planning, knowledge management and capacity building</i>				
E1	Adopt, finance and implement the BSAP for Hong Kong. (ABTs 17, 20)	High	a. Provide adequate funding and manpower to facilitate implementation, monitoring and enforcement of the recommended action plans.	RLFG / SUMRFG
			b. Collaborate with tertiary institutions, Green NGOs, wildlife groups, businesses to make the effective use of available resources and even to generate more resources.	RLFG
			c. Formulate overarching vision, aims and targets of Hong Kong's BSAP as soon as possible, to aid in the efforts of the Working and Focus Groups.	NFG
			d. Provide capacity building to frontline enforcement officers on the implications and importance of particularly rare and protected native species that may be at risk from harm such as illegal collectors of flora and poachers of fauna in Hong Kong.	EFG / LFG
			e. *Create a Government point of contact to assist NGOs in setting up BSAP activities and generally to manage ongoing projects as part of BSAP	NFG

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			<p>implementation²⁰.</p> <ul style="list-style-type: none"> • Mid-2015: Establish an AFCD Biodiversity Liaison as point of contact for NGOs participating in BSAP, to assist in navigation of HKSAR Government departments and resources, and provide communication/branding/design advice for consistency of message. E.g. an NGO wishes to organise a BioBlitz, contacts AFCD Biodiversity Liaison to ask: which Government departments would be relevant to contact, what funding might be available and help on application, any other NGOs working on similar project for potential collaboration, submit details to BSAP website and promotional materials. • AFCD Biodiversity Liaison to manage team of Project Managers working with NGOs and other stakeholders, for carrying out specific actions under BSAP. AFCD Biodiversity Liaison to be hired around mid-2014, a project manager (website & media) to be hired around mid-2014; other project managers for events, education partnerships and Government partnerships to be hired or designated by early 2015. • Mid-2015: Internship scheme for undergraduate/graduate/ vocational training students interested in environmental management /conservation or related field to gain experience and conduct research. 	
			f. *Get strategic buy-in of bureaux and departments ²¹ .	EFG
E2	<p>Establish a publicly accessible biodiversity information hub to improve information sharing.</p> <p>(ABTs 1, 19)</p>	High	<p>a. Maintain an up to date database of previous and ongoing habitat surveys and assessments and make the information accessible to the public (with selected data subject to security clearance to minimise risk of poaching or eco-vandalism).</p> <p>b. Allocate more resources for the Environmental Protection Department / AFCD to make reference to the previously approved EIA data in terms of habitat maps and loss and integrated them into the AFCD's existing GIS system.</p>	HFG
				IAFG

²⁰ Ranked fifth in priority by NFG.

²¹ Ranked as top priority by EFG.

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			c. *Analyze and release existing government fisheries data, and establish an online database with fisheries related studies and data to inform and facilitate fisheries research.	SUMRFG
			d. Release periodically public updates on the status and recovery of the marine ecosystem, and fisheries. Summaries from trawl and other fisheries surveys could be released every 1-2 years to inform interested stakeholders of the status of the recovery of the fishery, and progress towards management objectives.	SUMRFG
			e. Seek advice from experts on biodiversity to assist the Government on the conservation of biodiversity.	RLFG
			f. Establish a mechanism that relevant expert(s) should be consulted before releasing the ecologically sensitive information especially in cases that the information is provided by the experts.	RLFG
			g. Produce summaries or publications (such as a more detailed version of the AFCD newsletter Hong Kong Biodiversity) for raw data considered non-releasable in order to make information available in a form useful enough to advance understanding of the species, habitat.	RLFG
			h. Compile a list of the ongoing significant monitoring and/or surveys of natural resources by AFCD including objectives, methodology and geographic coverage and release publicly across all taxa studied.	RLFG
			i. Assess the accuracy of ecological data received by AFCD using ECF and other relevant studies.	RLFG
			j. Share data on marine species within the Hong Kong community as a whole.	RLFG
			k. Develop/establish some form of database/centralized archive on Hong Kong biodiversity to pull together the wide range of materials, reports, data, studies, etc. that have been completed, already published, etc..	RLFG
			l. Establish guidelines to improve data release and access as considerable data are collected by AFCD.	RLFG
			m. Construct a centralized and public-assessable platform for the sharing of HKU's marine biodiversity database. Funding support may need to be considered for the long-term maintenance of the database.	MHFG

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			n. Release and share with academics (e.g. contribute to HKU's marine biodiversity database) all the raw data collected from past internal ecological studies/ monitoring surveys / consultancies studies by the Government.	MHFG
			o. Create a website on the BSAP. This website would be public-friendly and multifunctional, and should include not only basic information about Hong Kong's biodiversity, a vision and goals for biodiversity conservation and work on BSAP, but also serve as a clearinghouse of biodiversity knowledge. An "experts corner" within the website would include GIS facilities where new data from biodiversity field surveys could be fed in, and where sensitive data can be stored and password protected. The website should be well populated and launched in time for the BSAP public consultation.	NFG
			p. Develop massive open online courses (MOOC) based on Hong Kong biodiversity and conservation practices, targeted at a Hong Kong audience. The HKSAR Government could facilitate tertiary institutions to provide this service online, and take advantage of the experience universities have with creating self-learning online platforms.	NFG
			q. Encourage NGOs and other stakeholders to share their materials on biodiversity conservation online. Tackling the silo approach will require all stakeholders to be involved to achieve the objectives of the BSAP. <ul style="list-style-type: none"> • On the development of a Biodiversity Clearinghouse Website where stakeholders can share study data and results, promotional materials, etc. • On the development of a BSAP Brand Identity Document. NGOs can seek editorial, design or other input from AFCD Biodiversity Liaison to finalise materials produced in connection with BSAP initiatives. • Other materials can include fold-out Field Guides, in partnership with local wildlife NGOs, which all follow a consistent design and format. Suggested model: Field Studies Council (FSC) UK, which partnered with many different wildlife NGOs to develop field guides for diverse UK 	NFG

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			species and habitats, which are available at bookstores, field centres, Natural History Museum London and other museums, Royal Botanical Gardens at Kew, and other nature centres. FSC was publications partner for OPAL to publish field guides and briefing packs for citizen science surveys. Can link to Small Grants Scheme.	
			r. Learn from successful BSAP practices in Taiwan and Japan and others.	EFG
			s. *Update the AFCD Hong Kong biodiversity database and make it available to the public for education, research, and reference purposes ²² .	EFG
			t. Provide funding incentives for production of self-access biodiversity materials	EFG
			u. *Produce an inventory of biodiversity education reference for teachers by categorising all "ready-to-use" educational materials produced by Green Groups and other relevant bodies as "Inventory of Biodiversity Education reference for Teachers" ²³ .	EFG
			v. *Publish this list of books / online resources and keep updating it, making it available to schools and the general public ²⁴ .	EFG
			w. Building a Conservation Database. Locating the persons and institutions with relevant knowledge and relevant documents, and urgently recording the knowledge because of the age of many persons. There is a mass of information which needs to be organized. Establishing a repository or archive of Traditional Knowledge relevant and beneficial to biodiversity conservation and sustainable use of natural resources and making this accessible.	LFG
			x. Identifying rules and practises which serve as precedents for conservation and sustainable living can foster implementation, e.g. the Hoi Ha Fung Shui Wood Rules noted by Dr Patrick Hase in the Journal of the HK Branch of the RAS. Identifying and enhancing practises beneficial to conservation	LFG

²² Ranked eighth in priority by EFG.

²³ Ranked third in priority by EFG.

²⁴ Ranked second in priority by EFG.

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			and sustainable living, the countryside economy, and agriculture are examples of outcomes.	
			y. The Education FG also has a Priority for an Inventory and Platform for learning, where data, resources can be shared and added via public participation. This is part of the Priority for a data base of documents so decision makers, leaders can be better guided and informed and citizens and the private sector can better assist in achieving CBD principles and Aichi Targets through the sharing of knowledge and participation.	LFG
			z. Integrating CBD and related expertise into Heritage Policy and practices is a Priority. Co-ordination is needed to make use of resources. The Country Parks Ordinance has a statutory duty to protect heritage in CPs. Town Planning supports heritage conservation. Antiquities Advisory Authority and Board can provide support under the Antiquities and Monuments Ordinance with its Office. Government consultation for Built Heritage has started again. See Submission to Public Consultation on Conservation of Built Heritage in Hong Kong July 2014 by Civic Exchange which summarizes the Departments involved. The Hong Kong Countryside Foundation seeks to protect the links between heritage and nature. Protection of old villages aid conservation of nature, rural landscapes, countryside enjoyment and deliver multiple benefits. But buildings need history and knowledge and surrounding natural context, and all need each other for holistic conservation. These resources can be used to achieve the CBD objectives and Aichi Targets.	LFG
			aa. For example, Old Stone paths and bridges are tangible links between past and future, nature and history and culture and provide natural access to our beautiful and interesting countryside. Helping existing efforts in protecting and restoring these is a Priority.	LFG
E3	Conduct additional research on information gaps identified in particular in relation to ecosystem services and resilience of keystone and functionally important species.	Medium	a. Review and consolidate available information, identify knowledge gaps in habitats, areas, taxa, threats and action plans, and fund studies to address shortfalls in information of biodiversity conservation.	HFG
			b. Review policies, plans and zoning, and assess emergent threats, in order to forecast or predict changes to Hong Kong's habitats and their	HFG

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	(ABT 19)		biodiversity.		
				c. Collect and consolidate existing regional information (e.g. bird populations and trends, wetland habitats and species under threats) for Deep Bay wetlands and to identify information gaps for further study.	HFG
				d. Carry out a study on plant species of ecological importance, e.g. trends and interaction of pollinators.	RLFG
				e. Carry out further research into the numbers and habitat preferences of threatened wetland associated passerines including Styan's Grasshopper Warbler and Manchurian Reed Warbler for which the Deep Bay area may be of significance as a stop-over or wintering site.	RLFG
				f. Carry out a study to clarify the taxonomy of Tree Gecko <i>Hemiphyllodactylus</i> sp.	RLFG
				g. Carry out a study on the genetics of reptile species to aid taxonomy and to better understand population genetics and genetic diversity.	RLFG
				h. Carry out a study on the population genetics of the fragmented populations of Three-striped Grass Frog <i>Hylarana macrodactyla</i> and Two-striped Grass Frog <i>H. taipehensis</i> .	RLFG
				i. Conduct review and update the identification of Hong Kong ants.	RLFG
				j. Conduct improved mapping of ant assemblages, using up-to-date spatial analysis tools, so as to understand differences between habitats, elevation and aspect and respond to trends in ant biodiversity (including the impact of invasive species), as a surrogate for terrestrial invertebrates as a whole.	RLFG
				k. Encourage studies on the genetic diversity of local species, in particular those with conservation concern, fragmented distribution and very small population size.	TBWG
				l. Conduct a study to establish priorities for species / habitat / ecosystem most at risk from climate change.	TBWG
				m. Consolidate and review information on wildlife trade, and identify the trends in trade and species with high trade volume that may require special attention and/or conservation action.	TBWG
			n. *Undertake study to identify all environmentally sensitive areas in Hong	MIAFG	

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			<p>Kong which have suffered increased visitor numbers due to any form of development, including the promotion of tourism, with a view to identifying areas critical for conservation and areas amenable to exploitation, then designating different areas for different activities, with the primary objective of protecting the most ecologically sensitive areas. The map produced by the Focus Group on Marine Habitat as being important for conservation (Figure 2 of the Focus Group on Marine Habitat's final report) could form the basis of this study.</p>	
			<p>o. *Carry out a study on environmentally unfriendly product additives and water extraction for cooling.</p>	MIAFG
			<p>p. Carry out a study on the underwater acoustic disturbance to marine mammals.</p>	MIAFG
			<p>q. Conduct a study on companies based in Hong Kong which carry out activities having an impact on the marine biodiversity in other jurisdictions.</p>	MIAFG
			<p>r. Conduct a study into the adverse impacts of oysters farming in Deep Bay and propose solutions to address those problems.</p>	MIAFG
			<p>s. Conduct research on marine species of actual or suspected conservation concern, and of high commercial value and greatly reduced in numbers due to overfishing, those with specialized habitat requirements, or with restricted distribution due to their habitat requirement (e.g., fish species highly depending on coral/ certain coral species/ mudflat/ mangrove) and some diadromous species that might be particularly susceptible to environmental changes, in terms of in terms of biology, ecology, use and populations trends, as well as identifying key habitats, such as spawning and nursery areas.</p>	RLFG
			<p>t. Consider to contract fisheries science expert in order to bring in fishery science expertise and design fishery assessment protocols and other data collection, as identified herein, considerably more work (research and monitoring) is needed for marine species.</p>	RLFG
			<p>u. Conduct surveys to update the marine biodiversity species-specific database based upon the distribution within Hong Kong waters and</p>	MHFG

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			relevant site(s).	
			v. Conduct surveys on the potential marine hotspots.	MHFG
			w. Carry out a comparative study on various MPA in order to elucidate the intended outcome of each MPA type, their effectiveness and the potential for further advancement/ improvement.	MHFG
			x. Conduct a feasibility study to see whether the Multi-Use Zoning approach is applicable to achieve the CBD Strategic Goals & Aichi Targets and to help manage MPAs in Hong Kong.	MHFG
			y. Establish an inventory of local species.	MBWG
			z. Identify the spatial and temporal variations of important species and habitats of high conservation value and conservation concern to these species.	MBWG
			aa. Identify keystone species and species that are important in regulating essential ecosystem functions (including energy flow, productivity, carbon sequestration, and nutrient and biogeochemical cycles etc.) in local ecosystems.	MBWG
			bb. Evaluate ecosystems services and natural capital (including their monetary values) provided by our natural landscapes and seascape.	MBWG
			cc. Study the relationships between biodiversity, ecosystem function and ecosystem services.	MBWG
			dd. Identify and monitor the potential human threats to local biodiversity, in particular to species of high conservation value, keystone species and important functional species, and assess their resistance and resilience to perturbations caused by these threats.	MBWG
			ee. Conduct research on global best practices in protected areas management. <ul style="list-style-type: none"> • An independent study with the aim of improving the management of Hong Kong's protected areas to meet current and future societal ambitions for conserving nature, recreation and eco-education. The paper should deal the application of relatively new concepts to Hong Kong park management (for both terrestrial and marine parks) such as 	NFG

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			<p>the ecosystem approach, adaptive conservation management and sustainable use. This should include input from a panel of Hong Kong academic experts in terrestrial and marine ecology and environmental management, and an element of community consultation (involving representatives of all stakeholder groups), to identify attitudes towards natural areas and usage levels, as well as the community's aspirations for nature conservation of Hong Kong.</p> <ul style="list-style-type: none"> Overseas field visits of national park authorities by Hong Kong country park stakeholders – including AFCD officers, Country and Marine Parks Board members, and other non-government aligned stakeholders. 	
			<p>ff. *Conduct research to understand the trade and consumption of gill raker and gill plate of Manta and Devil Ray as well as fins of other shark-like ray species. Pilot study conducted by KFBG genetic lab gill raker can be easily identified to species using genetic barcoding method.</p>	SEEFG
			<p>gg. *Initiate project to assess sustainability of TCM available in Hong Kong and make the information publicly available.</p>	SEEFG
			<p>hh. *Initiate an in-depth ecosystem assessment for Hong Kong. An ecosystem assessment is a collective deliberative process to gather data on the status and trends of biodiversity, and its links to human well-being. Expert-driven and literature-driven approach can be employed given that sufficient information is not readily available. In the process, experts (and other stakeholders) review, analyse, and synthesise scientific knowledge, provide baseline and guidelines to disseminate understanding of ecosystem services and its benefits</p>	SEEFG
			<p>ii. *Conduct studies on the economic valuation of ecosystem services With reference to the following timetable²⁵:</p> <ul style="list-style-type: none"> Mid-2015: Work with Hong Kong universities, financial services sector (banking, accountancy, insurance firms etc.), Government to set up 	NFG

²⁵ Ranked third in priority by NFG.

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			<p>funding for Chair Professor role.</p> <ul style="list-style-type: none"> • Early 2016: Appoint Chair Professor of Economic Valuation of Ecosystem Services and Biodiversity. Work with local NGOs to identify 2-4 sites for pilot studies for economic valuation of ecosystem services and biodiversity. Work with international/local NGOs to develop pilot training programmes for “citizen science” approach for financial services sector to participate as CSR opportunity. Work with environmental management courses to provide course content. • Mid-2016: Commence six-month pilot studies of selected sites using international best practice. Commence 6-month pilot outreach programme for financial sector. • Mid-2017: Hong Kong to host flagship international conference to present outcomes of pilot studies and training programme, invite attendees to provide best practice studies from other world cities, invite attendees to present framework/approach for Hong Kong-wide assessment, event is opportunity to mainstream biodiversity values in Hong Kong’s financial sector industry. 	
			<p>jj. *Assess the relationship between biodiversity and human well-being. This can facilitate the communication of its value. The outcome will provide Hong Kong-specific evidence for urban planning, and contribute to global studies on urban sustainability. This issue is related to economic valuation of ecosystem services²⁶.</p>	NFG
			<p>kk. 22 different Eco-system services are identified and are listed for 18 different relevant habitats in Hong Kong. Major unquantified and unvalued benefits are delivered and need to be assessed before decisions can be made which cause loss. Action needed is to conduct Eco-system services assessment and measure their contribution to human well being so that the value of our bio-capacity and natural capital can be taken into account in decision making.</p>	LFG
			<p>ll. Ecosystem services assessment between 2015 to 2020 to create a</p>	LFG

²⁶ Same as Footnote 18. Ranked third in priority by NFG.

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			baseline and set up indicators to value ecosystem services and their contribution to well being and becomes part of an accounting system and used to guide decision making which takes into account conservation and sustainable use values.	
E4	Develop indicators to monitor the status and trend of local biodiversity and conservation efforts. (ABT 19)	Medium	a. Review the methodology and develop guidelines for use of biological indicators including ecological guilds susceptible to different types of threat.	HFG
			b. Explore the use of 'Marine Trophic Index', an indicator accepted by the CBD for use in measuring progress against Aichi Target 6 for applicability, and the availability of suitable data, in measuring rehabilitation of the marine ecosystem in Hong Kong.	SUMRFG
E5	Explore the setting up of a natural history museum in Hong Kong with non-governmental funding. (ABTs 1, 19)	High	a. Set up a natural history museum on biodiversity as a depository for local species, research when necessary.	MHFG
			b. *Build Hong Kong's first Museum of Natural History as a base for archive, education, and research of biodiversity in Hong Kong ²⁷ .	EFG / LFG
			c. Coordinate the existing natural history collections in the Hong Kong History Museum and in the Woodside Biodiversity Education Centre, re-position all existing visitor centres as well as the Hong Kong Wetland Park to make them more biodiversity-oriented under a single theme	EFG
			d. *Establish a venue for biodiversity learning to develop a physical venue, in an accessible location, to inspire and experience biodiversity. Types of venue could include large-scale eco-parks, with both indoor and outdoor botanical parklands; or a natural history museum, which could provide an opportunity to showcase the large collection of local and regional biodiversity specimens. As plans for a large-scale venue for biodiversity learning is being developed, all existing venues such as the Environment Resource Centres in urban areas, country park information centres and the Hong Kong Wetlands Park should be oriented towards building	NFG

²⁷ Ranked tenth in priority by EFG.

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			<p>biodiversity awareness and experiential learning. These could be turned into centres for research, monitoring and public outreach²⁸.</p> <p>e. These outcomes contribute to the Priority for a Natural History Museum as an institution growing up from better use of existing resources, Visitor Centres, the Hong Kong Herbarium (the oldest such institution in China), and with premises in suitable heritage buildings. It will provide a tangible institution and framework for BSAP work into the future with CBD/BSAP programmes and projects.</p> <p>f. Funds are required to employ persons and NGOs to do the above and better use NGOs and volunteers. Citizen science and volunteer Nature Wardens increase capacity where needed and make use of increasing awareness. Partnerships between government and NGOs can make for efficient use of resources and provide ongoing participation which is the CBD method so far. This is a case where heritage, knowledge, government, NGO and nature conservation support each other and an integrated or mainstreamed CBD can use resources more efficiently.</p> <p>g. The Community needs an overarching Vision to create awareness and gain support for action. A BSAP manager to provide media and website access and provide a coherent message for conservation is essential.</p> <p>h. Knowing the value of conservation and ecosystem services requires an assessment by a professional person, such as a chair professor in a university to assess the value from a quality of life perspective to facilitate integration into government accounting and decision making.</p> <p>i. See Education FG and Traditional Knowledge FG and NGO FG Reports and links to Global Sustainability and local Sustainable use of natural resources FGs and Agriculture, which illustrates the number of Targets achievable by adopting these Priorities.</p>	<p></p> <p>LFG</p> <p>LFG</p> <p>LFG</p> <p>LFG</p> <p>LFG</p>
E6	Study, stock take and consider the adaptive use of traditional knowledge,	High	a. 與康樂及文化事務署就《保護非物質文化遺產公約》展開的香港非物質文化遺產保育工作積極探討合作，尋求協力進行生物多樣性保育相	TKFG / LFG

²⁸ Ranked sixth in priority by NFG.

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	<p>innovations and practices of indigenous and local communities relevant to conservation and sustainable use of the biodiversity in Hong Kong through involving the indigenous and local communities.</p> <p>(ABT 18)</p>		<p>關的傳統知識的研究，恰當地串連非物質文化遺產保護與生物多樣性保育相關的傳統知識，協力爭取主流化。</p> <p>(Explore collaboration with LCSD to integrate traditional knowledge relevant to BSAP into the conservation plan for ‘intangible cultural heritage conservation in Hong Kong’. Build synergy with initiatives conserving intangible cultural heritages to facilitate promotion and conservation of BSAP related traditional knowledge.)</p> <p>b. *就研究生物多樣性保育相關的傳統知識正式成立工作小組，邀請與傳統知識直接相關的宗族、社群、相關的研究人員及其他持份者加入 BSAP 傳統知識工作小組。</p> <p>(Establish a formal BSAP Traditional Knowledge Expert Group with representatives of core stakeholders that include indigenous communities, academia, educators and conservationists.)</p> <p>c. 為確保研究所得能充份支援四個策略方向的未來發展，研究應以整全模式進行，探究傳統知識的宏觀概念、社區協作型式、善用資源的技能及措作模式，以及應用於生活上概念和技能各方面。</p> <p>(Map and identify research priorities to support development of the four strategic directions of traditional knowledge on holistic worldviews, models of community engagement in natural resource management, sustainable use of natural resources, sustainable living practices.)</p> <p>d. 有鑑於保護的急切性，優先處理面臨失傳危機的相關傳統知識。</p> <p>(Encourage and support research and documentation of traditional knowledge of high priority.)</p> <p>e. 在 BSAP 傳統知識工作小組下設定工專題小組，促進研究的覆蓋面及整全性，探究傳統知識在維護生態系統、物種基因多樣性、人類植物學、生物資源的可持續管理及利用及生態系統恢復等層面上的應用。</p>	<p></p> <p style="text-align: center;">TKFG</p> <p style="text-align: center;">TKFG</p> <p style="text-align: center;">TKFG</p> <p style="text-align: center;">TKFG</p>

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Item No.	Draft Key Action ¹	Proposed Priority ²	Specific Action Proposed by Focus Groups / Working Groups ³	Focus Group / Working Group ⁴
			(Consider setting up task force to draw in specialists to examine specific aspects of traditional knowledge such as ecosystem service, anthropology, ethnobotany, etc.)	
			<p>f. 定期舉辦 BSAP 傳統知識科普交流會，藉研究促進科學家、保育人員與傳統知識承傳人及村民的交流，為生物多樣性保育建立互信互助的長遠合作平台。</p> <p>(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.)</p>	TKFG
			<p>g. 在支援相關研究的資源批核準則注入誘因，鼓勵研究項目爭取相關社區積極參與，並設定教育及技能提升元素</p> <p>(Create incentives to encourage cross-sectorial collaboration between different stakeholders on research, documentation and application of traditional knowledge in biodiversity conservation.)</p>	TKFG
			<p>h. 審視相關研究成果，挑選及推廣：</p> <ul style="list-style-type: none"> - 具應用潛力的社區協作共管傳統知識 - 用於深化生物多樣性保育教育的傳統知識宏觀保育觀念 - 可倡議市民採用的資源持續管理及順應自然的生活技能，降減生態足印及支持生物資源可持續利用 - 有助豐富主流化公眾教育活動的傳統知識文化及藝術內涵 <p>(Identify and promote traditional knowledge of:</p> <ul style="list-style-type: none"> - community collaborative models for participatory conservation management - holistic conservation concepts on traditional knowledge to enhance education on biodiversity conservation - 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 	TKFG

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Item No.	Draft Key Action ¹	Proposed Priority ²	Specific Action Proposed by Focus Groups / Working Groups ³	Focus Group / Working Group ⁴
			<ul style="list-style-type: none"> - art, culture, language, philosophy, practices and other aspects which can enrich BSAP mainstreaming programme's uniqueness as well as cultural and social links) 	
			<ul style="list-style-type: none"> i. 挑選恰當的地點及社區伙伴進行行動研究(Action Research) ，探究傳統知識作社區協作共管的適切應用(Adaptive Use)模式 (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.) 	TKFG
			<ul style="list-style-type: none"> j. *審視在新自然保育政策下的管理協議計劃及公私營界別合作計劃中，恰當注入傳統知識的社區協作概念及元素。 (Explore integration of appropriate traditional community collaborative models in ECF-funded projects, especially for those working under conservation management agreement (MA) scheme.) 	TKFG
			<ul style="list-style-type: none"> k. *建立平台集中收錄及分享與生物多樣性保育相關的傳統知識的記錄及研究成果，以促進資源共享及啓動更廣泛研究。 (Develop a platform to facilitate sharing of resources related to traditional knowledge that are relevant to BSAP.) 	TKFG