Hong Kong Headline Indicators for Biodiversity & Conservation

2012 Report

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The Hong Kong Bird Watching Society

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Hong Kong Bird Watching Society was established in 1957 and is the only local civil society aiming at appreciation and conservation of Hong Kong birds and natural environment. It was recognized as an approved charitable institution of a public character in 2002.

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- Designing Hong Kong
- Earthwatch Institute
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- Planning Department
- Lands Department

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Introduction

In May 2011 the Convention on Biological Diversity (CBD) was formally extended to Hong Kong[1], opening a new page for nature conservation here. Under the CBD the community is encouraged to formulate a Biodiversity Strategy and Action Plan (BSAP), which should be published, implemented, monitored, and reviewed. The Conference of the Parties of the CBD recognize the regular publication of headline indicators as an effective means to monitor and share information about the state and progress of biodiversity conservation and thus reflect the progress of a BSAP[2].

Selection of headline indicators

A draft set of indicators were suggested by Civic Exchange in its report *Nature Conservation: A new policy framework for Hong Kong*[3] (*"The Framework"*) which was published in January 2011. These indicators were drafted based on discussions with environmental non-government organisations (EnvNGOs), academics, consultants, officials and other stakeholders. *The Framework* attracted great interest, and was widely discussed among EnvNGOs in Hong Kong.

With the help of many EnvNGOs the headline indicators have been further developed. The indicators in this publication were based on the following criteria:

1. Are they consistent with the strategic objectives of the CBD and the Framework?
2. Are they scientifically robust?
3. Are they clearly defined, logical and easy to understand?
4. Could the information be readily obtained?
5. Are they easily comprehensible by the public?
6. Will they drive positive changes in biodiversity conservation?

Protecting our biodiversity also plays a critical role in retaining Hong Kong's position as the most liveable city in China. These indicators will provide a broad picture of the state of both biodiversity and conservation in Hong Kong. Hong Kong Bird Watching Society (HKBWS) publishes these indicators every year so that the community can measure its progress in protecting, managing and enhancing our biodiversity in line with practice as expressed through the CBD.

Lack of data

The indicators also highlight areas where data should be collected in order for Hong Kong to have an accurate picture of its biodiversity and conservation initiatives. Most

of the data gaps identified in last year's report remain unfilled. This year HKBWS has tried to look for alternative data to provide partial information for these indicators.

A consistent set of indicators

The chosen indicators should be consistent so that results and trends can be tracked from year to year. Revision of the indicators may be required if improvements can be made, and they should be reviewed following thorough discussions when a formal BSAP for Hong Kong is prepared.

The situation in 2012

Hong Kong's biodiversity is still under considerable threat from a variety of sources. These include habitat destruction, lack of adequate protection and management, over-exploitation and invasive species.

The legend has been slightly amended in this year's report so they reflect the progress in 2012. Nevertheless, the overall trend is also an important consideration and this is described in each of the indicators in the following sections of this report. Although there have been some minor improvements in 2012 for a few indicators, substantial improvement remain essential as we are still far away from meeting the requirements and targets under the CBD. The government, fortunately, is taking the first steps towards compliance with the objectives of the CBD such as preparing a BSAP, and is and carrying out more conservation action for endangered species.

Looking forward

There are a number of positives in this year's report. However, many of our species and habitats are still under threat and the development pressure on our rural areas is increasing. In order to achieve global best practice and maintain Hong Kong's leading position in regional and international biodiversity conservation, a BSAP which is prepared in line with the requirements of the CBD would be a powerful tool. The incoming Chief Executive of the Hong Kong SAR has committed to implement the CBD in Hong Kong. It is hoped that this support from the highest level of Government will encourage all parts of the community to collaborate closely in the development of a world class BSAP for Hong Kong.

The Indicators and their recent status

Focus Areas and Indictors		Data year	Status in previous years	Progress in 2012
Focus Area 1: Community-based conservation				
1.1. Percentage of instances of illegal/unauthorized activity (trashing, trapping, collection, etc.) reported per year by environmental NGOs and verified sources (e.g. media and websites) where enforcement action led to a) successful prosecution, and b) restoration of ecological function		2009-2011	X	+
Focus Area 2: Establish (and strive to improve upon) accepted global best practices for the conservation and sustainable use of biological diversity in Hong Kong by 2012				
2.1 Percentage of taxa on a published red data List protected by law and covered by species action plans		2009-2011	X	=
Focus Area 3: Reversing the decline in native biodiversity				
3.1 Percentage of (terrestrial and marine) protected areas covered by published, resourced and active biodiversity management plans		2009-2011	X	+
3.2 Total area impacted by planning proposals that involves conservation zonings (SSSI, CA, CPA, GB, AGR)		2009-2011	X	=
3.3 Percentage of lowland rivers (below 200m) that remain in natural state and impacted by channelization		2006-2012 (partly)	?	X
3.4 Trends in number and populations of known alien invasive species	a) House Crow	2007-2011	=	=*
	b) Apple Snail	...	?	?
	c) Mikania	...	?	?

3.5 Trends in abundance and diversity of land birds and water birds	a) Land Birds	2009-2011	?	?
	b) Waterbirds	2006-2011	=	X*
3.6 Trends in populations of flagship and umbrella species	a) Chinese White Dolphin	2006-2011	X	=*
	b) Breeding egrets and herons	2006-2011	X	=*
	c) Dragonfly diversity and abundance	...*	?	?
	d) Big-headed Turtle	...	X	?
	e) Buddha Pine	...	?	?
	f) Grassland Orchid	...*	?	?
Focus Area 4: Reversing impacts on global biodiversity				
4.1 Hong Kong's ecological footprint		2005, 2007	X	?
4.2 Change in greenhouse gas emissions attributable to Hong Kong		2005-2010	?	=
Focus Area 5: Plans & resources for biodiversity conservation				
5.1 In how many months' time will an approved, resourced, and active BSAP that meets the principles and standards of the CBD be in place?		N/A	X	+

Legend and Summary**		2012
Deterioration since last year	x	2
Situation as last year	=	6
Improvement since last year	+	3
Insufficient Information	?	8

**Natural fluctuations occur for some indicators. The 2011 figures are being compared to the mean value and standard deviations of previous years. It is considered to be a significant change if the difference is larger than 2 standard deviations.*

***The legend has been slightly amended in this year's report so they show any progress. Nevertheless, the overall trend is also an important consideration and this would be described in each of the indicators in the following sections of this report.*

Results and Discussion

1. Community-based conservation

1.1. Percentage of instances of illegal/unauthorized activity (trashing, trapping, collection, etc.) reported per year by environmental NGOs and verified sources (e.g. media and websites) where enforcement action led to a) successful prosecution, and b) restoration of ecological function

Table 1.1a Information from EnvNGOs and other verified sources

	2009	2010	2011
Involved sites (cases)	37	35	27
Successful prosecution	2 (5.4%)	3 (8.5%)	0 (0%)
Restoration of ecological function	none confirmed	none confirmed	none confirmed

Table 1.1b Information from Planning Department and Lands Department regarding unauthorized developments (UD) in rural areas[4]

	2009	2010	2011
No. of complaints received	644	604	778
Confirmed cases of UD*	115	100	148
Not empowered under Town Planning Ordinance due to absent of Development Permission Area plans	37	23	46
Successful prosecution	6 (5.2%)	3 (3%)	1** (0.6%)

* The Planning Department has issued enforcement notices for all of the cases.

** Other cases are under different stages of enforcement action and therefore the figure is subject to revision.

Table 1.1c Information from AFCD on illegal activities in Country Parks[5]

	2009	2010	2011
No. of reports	12	26	64**

Successful prosecutions	1 (8.3%)	7 (27%)	29 (45.3%)

** 39 cases are reported by public and 25 cases detected by AFCD staff

Discussion

There is an increase in reported unauthorized activities both inside and outside the Country Parks. While this may reflect growing pressure on the environment by such activities, increasing public awareness may also be a reason for the higher number of reports. This could be related to the extensive media coverage on illegal occupation of government land (e.g. the Tai Tong case in Yuen Long) and environmental vandalism.

It is encouraging to see that the prosecution rate inside Country Parks has increased in 2011. We hope that the relevant departments could continue putting effort in enforcement actions to tackle the activities.

There were more reported cases of environmental destruction in 2011, but the rate of successful prosecutions in Country Parks also increased.

However, there are still no confirmed cases of restoration of ecological function. While in some cases there is no authority to carry out enforcement, reinstatement of any kind is seldom carried out except by the government on government land. It also takes time for the habitat to recover its ecological function. It is suggested that the Green Groups should re-visit affected sites after some time in order to observe habitat conditions.

Suspected site formation and vegetation clearance on Po Toi Island. © Geoff Welch/HKBWS

2. Establish (and strive to improve upon) accepted global best practices for the conservation and sustainable use of biological diversity in Hong Kong by 2012

2.1 Percentage of taxa on a published Red Data List protected by law and covered by species action plans

Table 2.1a Threatened Species and their conservation in Hong Kong

	2009	2010	2011
Threatened species listed in IUCN Red List (CR, EN, VU)	70	72	72
Covered by action plans (incl. global action plans)[6]	3 (4.3%)	3 (4.2%)	3 (4.2%)
Species-specific conservation actions[7]	2 (2.9%)	2 (2.8%)	3 (4.2%)
Protected species by laws (Cap. 96, 170, 586)	45 (64%)	45 (63%)	48 (63%)

Discussion

Hong Kong currently has no Red List of locally endangered species. Research should be carried out to fill this important information gap. The nearest equivalent is *Fauna of Conservation Concern* by Fellowes *et al*, which covers terrestrial species[8]. This important document is now more than ten years old in need of review and revision.

There are no new species covered by published action plans this year. Apart from the extremely low coverage of species action plans, only 48 threatened species (63%) are protected by law in Hong Kong. Under the CBD Hong Kong has a duty to strengthen its protection of globally endangered species. It should be noted that many threatened species, such as all marine fishes (including some globally critically endangered species) are not protected at species level.

The authority should act to protect threatened species by introducing species action plans and strengthen legislation

The Chief Executive promised in his manifesto to "*compile an endangered species register and draw up corresponding protective measures*"[9]. Species action plans should be produced for endangered species, especially for locally or regionally

restricted species, to ensure that sustainable populations are maintained. It is encouraging to note that the AFCD is carrying out monitoring and studies for particular species of conservation importance, such as for Chinese Grassbird (*Graminicola striatus*)[10] which is a potential globally endangered species. The department has conducted population monitoring the Critically Endangered Yellow-crested Cockatoo (*Cacatua sulphurea*)[11]. This is reflected in the change in number of species-specific conservation actions from 2 to 3 this year (The Chinese Grassbird is not included this year, as its current status is "Near threatened" at the time of publication of this report).

3. Reversing the decline in native biodiversity

3.1 Percentage of (terrestrial and marine) protected areas covered by published, resourced and active biodiversity management plans

Table 3.1a Terrestrial Protected Areas in Hong Kong

	2009 (ha)	2010 (ha)	2011 (ha)
Total land area of Hong Kong[12]	110,439.00	110,439.00	110,441.00
Protected area network: Country Parks and Special Areas[13]	44,004.34 (39.8%)	44,004.34 (39.8%)	44,239.00 (40.1%)
Area of Country Parks and Special Area covered by biodiversity management plans[14]	60.00 (0.05%)	60.00 (0.05%)	60.00 (0.05%)
Area not in Country Parks and Special Areas, but covered by published, resourced and active biodiversity management plans[15]	1,656.35 (1.5%)	1,656.35 (1.5%)	1700.80 (1.5%)

Table 3.1b Marine Protected Areas in Hong Kong

	2009 (ha)	2010 (ha)	2011 (ha)
Total marine area of Hong Kong[12]	165,064.00	165,064.00	165,062.00
Area of Marine Parks and Reserves[16]	2430.00 (1.3% of marine area)	2430.00 (1.3% of marine area)	2430.00 (1.3% of marine area)
Area of Marine Parks and Reserves covered by published, resourced and active biodiversity management plans	None	None	None

Discussion

While Hong Kong has a substantial network of protected areas we do not meet the CBD's Aichi Biodiversity Targets[17,18] requirement for 17% of our land and 10% of our marine territory be "effectively and equitably managed, ecologically

representative and well connected".

The Country Parks have principally been managed as water-gathering grounds and for passive recreation. While the Department of Agriculture, Fisheries and Conservation has conducted tree-planting and hill fire prevention work for many years there are no published biodiversity management plans for the Country Parks. In 2011, the department designated a number of islands in Sai Kung as special areas in order to protect the geological features in the Hong Kong Geopark which contributed to the slight increase in total area of protected areas.

Protected areas covered by an active biodiversity management plan increased slightly in 2011 due to an increase in the area of managed agricultural land in Long Valley and Ho Sheung Heung. It is expected that the figure for the next report would increase due to a new management agreement conducted by HKBWS in the fishponds in North West New Territories, which started in early 2012.

The Government has also started the progress of designating various country park "enclaves" in 2012. Currently, 54 out of 77 country park enclaves are still not covered by outline zoning plans. Apart from the DPA plans gazetted in 2010 for the 4 enclaves (Tai Long Sai Wan, Yuen Tuen, Pak Lap and Kam Shan), only 13 DPA plans have been published for these enclaves in 2011. However, most areas of these plans are designated as "Unspecified Use" and conservation zonings have not yet been designated for these sites, pending further studies in the preparation of Outline Zoning Plans (OZPs).

There is no change in the area of marine protected areas in 2011. WWF Hong Kong has proposed an extensive expansion of marine "No-take protection zones" and refinements to the management of marine protected areas[19]. About 2 hectares of marine habitat were lost to reclamation. Under the Aichi Biodiversity Targets, 10% of marine areas should be protected and managed by 2020[17].

Slight increase of areas of managed terrestrial habitat in 2011;
No progress for marine habitats.

Management Agreement covering roughly 700 hectares of fishponds in Deep Bay, will contribute to the large increase in area managed for biodiversity conservation. © Bena Smith/WWF

3.2 Total area impacted by planning proposals that involves conservation zonings (SSSI, CA, CPA, GB, AGR)

Table 3.2a Area of planning applications received by Town Planning Board[20]

Zoning	2009 (ha)*	2010 (ha)*	2011 (ha)**
Site of Special Scientific Interest (SSSI)	0.000	0.000	0.069
Coastal Protection Area (CPA)	0.367	0.614	7.825
Conservation Area (CA)	5.674	0.216	22.572
Green Belt (GB)	20.053	12.081	8.460
Agriculture (AGR)	16.391	38.505	36.320
Total	42.486	51.417	75.246

Table 3.2b Area of Planning Applications Approved by Town Planning Board[20]

Zoning	2009 (ha)*	2010 (ha)*	2011 (ha)**
Site of Special Scientific Interest (SSSI)	0.000	0.000	0.069
Coastal Protection Area (CPA)	0.688	0.550	1.206
Conservation Area (CA)	1.401	0.216	0.511
Green Belt (GB)	11.183	10.800	3.681
Agriculture (AGR)	13.230	11.086	13.584
Total	26.503	22.652	19.051

***the data from 2011 are obtained and calculated through the Statutory Planning Portal and also information from Town Planning Board Minutes.*

Discussion

The land area subject to planning applications has substantially increased. There is a major increase in planning applications in area zoned as "Conservation Area" and "Coastal Protection Area" due to a large-scale planning proposal on Lamma Island. The proposal was we believe correctly, not agreed by the Town Planning Board.

There is an apparent decrease in planning applications in "Green Belt" zone but the pressure on "Agriculture" zone remained high.

Although the area of approved applications decreased slightly, there is a significant increase in area of countryside land that is under planning pressure.

Active and fallow agricultural land supports unique biodiversity and certain sites have high ecological value, for example Long Valley, Sha Lo Tung and Ping Che. The ecological value of these habitats is often under-estimated and they are generally poorly protected. Green Belt areas are important buffers between urban development and the natural environment. They are also important as corridors between areas of ecological importance. There is a need for a comprehensive study on the planning and conservation of these areas.

Many of these areas are under increasing threat. In particular, a large area of agricultural land has been proposed for development in the latest North-east New Territories New Development Areas proposal. There is also increasing development pressure in outlying islands.

Shek Pai Wan and Sham Wan on Lamma Island. Development pressure on remote islands is increasing. There was a large-scale development proposal in South-east Lamma in 2011, but the application was subsequently rejected by the Town Planning Board. © HKBWS.

3.3 Percentage of lowland rivers (below 200m) that a) remain in natural state and b) are impacted by channelization

The information on length of natural streams is not available. However, the length of engineered river channels is presented below:

Table 3.3 Length of engineered river channels in Hong Kong

	2006	2007	2008	2009	2010	2011	2012
Length of engineered channels as at end of March[21]	184 km	199km	243km	258km	278km	N/A	338km

Discussion

A very large proportion of lowland rivers have been channelized in order to reduce flood risk to low-lying areas in Hong Kong. This practice is extremely harmful to native biodiversity in lowland rivers, as steep-sided concrete walls and small fast-flowing low-flow channels cannot support species that rely on slower moving waterways with natural edges.

It is encouraging that drainage channel design is changing in recognition of this concern. However, the increasing trend of length in engineered channel is worrying. There is an urgent need to protect the remaining rivers in their natural state.

A river training work in Ping Che. Although green measures are increasingly applied in these works, the ecological value of drainage channels is still much lower than natural rivers.

© HKBWS

3.4 Trends in number and populations of known alien invasive species

At least 29 exotic species on the Global Invasive Species Database are present in Hong Kong. However, not all are confirmed invasive in Hong Kong. Nevertheless, some of the known invasive species have caused substantial harm to local biodiversity. Three species covering terrestrial and aquatic environments are listed below.

Table 3.4a Trends of selected invasive species

	2007	2008	2009	2010	2011
House Crow *Corvus splendens*[22],[23]	210	220	250	190	230
Apple Snail *Pomacea canaliculata*	No systematic monitoring in Hong Kong				
Mikania *Mikania micrantha*	Controlled by AFCD in Country Parks, Special Areas and SSSIs[24] but there is no comprehensive survey of the coverage of Mikania in Hong Kong. In 2011, The Government cleared 8.5 hectares of Mikania[25] while WWF also conducts removal of Mikania in Mai Po Nature Reserve.				

Discussion

The population of House Crow showed a slight increase in 2011. Although this could be within the range of natural population fluctuation, the government should continue its efforts in controlling this species in order to limit the impact of House Crow on native biodiversity.

Monitoring data is still not available for the other two selected species. One of the reasons is that both Apple Snail and Mikania are found extensively in Hong Kong in large populations and therefore it is very costly to carry out territory-wide monitoring of the two species. Both are known to have negative impacts on the biodiversity of the habitats they colonise[26,27].

Greenhouse Frog (*Eleutherodactylus planirostris*), a potentially invasive species, have been increasingly reported in Hong Kong[28]. The authority should closely monitor the spread of this species and carry out control actions if appropriate.

3.5 Trends in abundance and diversity of land birds and water birds

Table 3.5a Trends in Land Birds[29]

		Nov 2008 - Oct 2009	Nov 2009 - Oct 2010
Tai Po Kau, Shing Mun and Tai Mo Shan IBA	Abundance	34,040	31,914
	Species	139	140
Mai Po (Inner Deep Bay IBA)	Abundance	46,151	34,619
	Species	104	113

Table 3.5b Trends in Waterbirds[30,31]

	2006-07 winter	2007-08 winter	2008-09 winter	2009-10 winter	2010-11 winter	2011-12 winter
Peak count	80,108	90,986	87,633	87,379	76,679	72,492
No. of species	71	71	70	75	67	64

Discussion

A study on land birds in Important Bird Areas (IBA) was conducted in 2008-2010. However, there is no current plan for further study and therefore there is no updated information for the abundance and diversity of land birds.

The peak count of waterbirds and the species recorded has been decreasing in the last several years. For the year 2011-2, poor weather, together with the presence of fishermen in the Deep Bay mudflat are possible reasons for the decreased waterbird numbers and number of species recorded[31]. It has been suggested that AFCD should work with relevant parties to control unauthorized access in the restricted areas[31]. Nevertheless, more years of monitoring is required to confirm the trend.

3.6 Trends in populations of flagship and umbrella species:

Table 3.6a Trends in flagship and umbrella species

		2006	2007	2008	2009	2010	2011
a) Chinese White Dolphin *Sousa chinensis*	(Encounter rate per 100km)[32]	6.9	9.9	7.2	6.3	6.8	7.6
	Abundance estimate in Lantau[32]	107	124	96	88	75	78
b) Breeding egrets and herons (no. of nests)[33,34]		1017	822	664	809	734	803
c) Dragonflies diversity and abundance		AFCD conducts regular monitoring but data is not published					
d) Big-headed Turtle *Platysternon megacephalum*		HKU research completed and there are some surveys by KFBG and AFCD but data not published yet[35].					
e) Grassland Orchid *Spathoglottis pubescens*		Currently no systematic monitoring programme.					
f) Buddha Pines *Podocarpus macrophyllus*		- - -	2000 ~3000 mature trees[36]	- - -	- - -	- - -	- - -

Discussion

Although the latest results of abundance of Chinese While Dolphins and breeding egrets in 2011 appears similar to previous year, previous monitoring results showed that Chinese White Dolphin and breeding egrets and herons are experiencing a downward trend. This shows that the habitat quality of western waters maybe decreasing. Major threats to dolphins include habitat loss and deterioration, overfishing of prey, pollution, increased vessel traffic, etc. Rural developments near wetlands can be a reason for the decline of breeding egrets and herons.

There are data gaps for other flagship species and a pressing need for resources to be made available to enable systematic monitoring of key indicator species.

4 Reversing impacts on global biodiversity

4.1 Hong Kong's Ecological Footprint

Table 4.1 Hong Kong's Ecological Footprint and global capacity per capita[37,38]

	2005	2006	2007
Ecological Footprint per capita (global hectares)	4.4 gha	- - -	4.0 gha
Global Bio-capacity per capita (global hectares)	2.1 gha	- - -	1.8 gha

There is no updated information for this indicator since publication of the report last year.

WWF's *Hong Kong Ecological Footprint Report 2010: Paths to a Sustainable Future* suggests that more than twice the world's available resources would be needed if everyone on the planet shared Hong Kong's current lifestyle. The report suggests that we should improve energy efficiency and source goods from sustainable sources to reduce our ecological footprint[37].

Sustainable seafood has been promoted by many groups such as WWF[39] and Greenpeace[40]. The campaigns received a certain degree of support from the business and catering sector[41]. In recent years, public awareness on consumption of unsustainably harvested seafood products such as shark fin has increased resulting from continued campaigns and education programmes by green groups. 142 organizations have pledged not to trade, consume nor promote shark fin soup in any corporate activities, and 107 hotels and Chinese restaurants have joined to provide no shark fin menu options. Cathay Pacific has recently taken an important step by banning shark fin from cargo flights[42].

More than twice the world's available resources would be needed if everyone on the planet consumed as much as a Hong Kong person; Fortunately the public and the private sector are increasingly aware of sustainable use of resources.

4.2 Change in greenhouse gas emissions attributable to Hong Kong

Table 4.2 Hong Kong's greenhouse gas emission estimates

	2005	2006	2007	2008	2009	2010
EPD estimate (million tonnes)[43]	42.0	42.3	43.6	42.3	42.9*	- - -
EPD estimate Per capita (tonnes)[43]	6.2	6.2	6.3	6.1	6.1*	- - -
WWF estimate Per capita (tonnes)	- - -	- - -	8.1[37]	13.44[44]		

**Provisional figures subject to revision*

There are no significant change in greenhouse gas emissions per capita, according to be most updated figure by EPD.

Some academics have suggested that Hong Kong's actual emissions could be 2-5 times the figure reported by HKSAR government[45]. This echoes the estimates by WWF-HK in 2010 according to the information collected by the carbon footprint calculator[44]. The cost of embodied carbon emissions in infrastructure development should be taken into account[46]. It has also been suggested that the reporting should be made according to internationally recognized methodologies for proper policy-making[45].

Hong Kong is responsible for Greenhouse gas emissions much higher than official figures official figures

5. Plans & resources for biodiversity conservation

5.1 In how many months' time will an approved, resourced, and active BSAP that meets the principles and standards of the CBD be in place?

According to informal discussions with AFCD, the department is drafting a BSAP on which it expects to consult the public in 2013. However, it is not clear when the BSAP is being put in place.

The BSAP appears to be drafted under one department. There are therefore concerns on how actions which require cross-departmental co-operation will be developed, approved and implemented, as required under article 6 of the CBD[47]. Nevertheless, it is encouraging that the Chief Executive has suggested to prepare "a comprehensive package of nature conservation policies"[9] according to the CBD, and that there are signs that the government has started working towards meeting this goal.

The Government has begun the process of developing a BSAP,
but concerns remain about its scope and how its will be implemented.

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[6] Black-faced Spoonbill (*Platalea minor*) and Spoonbill Sandpiper (*Eurynorhynchus pygmeus*) were covered by Global Species Action Plans that are applicable to Hong Kong. Although there are action plans for the Critically Endangered Christmas Island Frigatebird (*Fregata andrewsi*), it does not cover Hong Kong because it is an extremely rare vagrant in Hong Kong. The Kadoorie Farm & Botanic Garden has a conservation plan for Three-banded Box Turtle (*Cuora trifasciata*).
[7] There have been satellite-tracking and artificial breeding programmes for Green Turtle (*Chelonia mydas*) organised by AFCD. The Romer's Tree Frog (*Liuixalus romeri*) also has a relocation project monitored by AFCD. AFCD has also monitored the population of Yellow-crested Cockatoo (*Cacatua sulphurea*) in 2012. However, no action plans properly published could be obtained.
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