

# HONG KONG HEADLINE INDICATORS FOR BIODIVERSITY & CONSERVATION

## 2011 REPORT



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## About the Authors

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## Introduction

In May 2011 the Convention on Biological Diversity (CBD) was formally extended to Hong Kong<sup>1</sup>, 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<sup>2</sup>.

### 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*<sup>3</sup> (“*The Framework*”) which was published in January 2011. The indicators were drafted based on discussions with environmental non-government organisations (EnvNGOs), academics, consultants, officials and other stakeholders. *The Framework* attracted vast interest, and was then 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 are were chosen 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) will publish these indicators every year so that the community can measure its progress in protecting, managing and enhancing the biodiversity in line with the CBD.

### Lack of data

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

of printing not all of the information for all of the indicators was readily available. These indicators have still been included in this report because it was considered essential to reflect the full expectations of the CBD.

### **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 when a formal BSAP for Hong Kong is prepared. Given that earlier data may not be available for some of the indicators, the current report does not aim to show trends over the past years but to establish a new baseline for future reporting.

### **What this report tells us**

This year's results do not make comfortable reading. We are losing ecologically sensitive sites to illegal trashing and "legal" rezoning, and the current enforcement infrastructure is inadequate. Hong Kong's extensive country parks lack biodiversity management plans and we need to expand the network of marine parks. We also lack basic data and management plans for most of our threatened species, while our exploitation of global natural resources and greenhouse gas emissions is increasing.

### **Setting the bad news in context**

This is the first time that Hong Kong's biodiversity conservation efforts have been assessed against global best practice. These findings must be placed in the context of the intent of the indicators, which is to identify gaps and paths for improvement. Despite the problems outlined above, Hong Kong's biodiversity is as rich, diverse and well protected as any major city in Asia. Our Country Parks and the Town Planning and Environmental Impact Assessment Ordinances serve as effective tools to control development in sensitive areas - when they are properly and fully implemented and enforced. Recent pro-environment policy initiatives include the banning of trawling in Hong Kong waters, the creation of a new Country Park and plans to extend zoning protection to Country Park enclaves. Recent consultations on the development of the Pearl River Delta include substantive measures to establish ecological corridors and protect the ecosystems that provide much of our food and water.

These examples show that the Government is responding to the public's growing interest. The level of public interest and engagement in protecting Hong Kong's natural heritage is higher than ever, and still rising. Environmental NGOs are growing in number, in size, and in the sophistication of their engagement, and more developers

are consulting the public earlier and more openly in the planning process.

### **Looking Forward**

All of these provide hope that Hong Kong will respond to its new responsibilities under the CBD by beginning the transition from preventing biodiversity loss to active management and restoration of habitats, sites and species both in Hong Kong and in our hinterland. The key requirement in managing this process is the development of a BSAP that fully involves the public in its formulation, and provides clear guidance for ensuring that future economic development is conducted in a more sustainable manner. It is hoped that these indicators will contribute to that larger goal.

## The Indicators and their recent status

| Focus Areas and Indicators   | Data year           | Status    |     |
|--|---------------------|-----------|-----|
| <b>Focus Area 1:<br/>Community-based conservation</b>  |                     |           |     |
| <b>1.1.</b><br>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 | 2009-2010           | X         |     |
| <b>Focus Area 2:<br/>Establish (and strive to improve upon) accepted global best practices for the conservation and sustainable use of biological diversity in Hong Kong by 2012</b>   |                     |           |     |
| <b>2.1</b><br>Percentage of taxa on a Published Red Data List protected by law and covered by species action plans   | 2009-2010           | X         |     |
| <b>Focus Area 3:<br/>Reversing the decline in native biodiversity</b>  |                     |           |     |
| <b>3.1</b><br>Percentage of (Terrestrial and Marine) Protected Areas covered by published, resourced and active biodiversity management plans  | 2009-2010           | X         |     |
| <b>3.2</b><br>Total area impacted by planning proposals that involves conservation zonings (SSSI, CA, CPA, GB, AGR)  | 2009-2010           | X         |     |
| <b>3.3</b><br>Percentage of lowland Rivers (below 200m) that remain in natural state and impacted by channelization  | ...*                | ...       |     |
| <b>3.4</b><br>Trends in number and populations of known alien invasive species   | 2007-2010<br>(part) | =         |     |
| <b>3.5</b><br>Trends in abundances and diversity of land birds and water birds   | a) Land Birds       | 2009-2010 | ... |
|  | b) Waterbirds       | 2006-2010 | =   |

|   |                                      |            |     |
|---|--------------------------------------|------------|-----|
| <b>3.6</b><br>Trends in populations of flagship and umbrella species  | a) Chinese White Dolphin             | 2006-2010  | X   |
|   | b) Breeding Egrets and Herons        | 2006-2010  | X   |
|   | c) Dragonfly diversity and abundance | ...*       | ... |
|   | d) Big-headed Turtle                 | ...        | X   |
|   | e) Buddha Pine                       | ...        | ... |
|   | f) Grassland Orchid                  | ...*       | ... |
| <b>Focus Area 4:<br/>Reversing impacts on global biodiversity</b>   |                                      |            |     |
| <b>4.1</b><br>Hong Kong's Ecological Footprint  |                                      | 2005, 2007 | X   |
| <b>4.2</b><br>Change in greenhouse gas emissions attributable to Hong Kong  |                                      | 2005-2008  | ... |
| <b>Focus Area 5:<br/>Plans &amp; resources for biodiversity conservation</b>  |                                      |            |     |
| <b>5.1</b><br>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   |

\*Data maybe available in some organisation or government departments but are not available at the time of publication.

| Legend and Summary                 |     |   |
|------------------------------------|-----|---|
| Action required                    | X   | 9 |
| Situation stable                   | =   | 2 |
| Cause for optimism                 | ✓   | 0 |
| Insufficient or no comparable data | ... | 6 |



## 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           |
|------------------------------------|----------------|----------------|
| involved sites (cases)             | 37             | 35             |
| Successful prosecution             | 2 (5.4%)       | 3 (8.5%)       |
| Restoration of ecological function | none confirmed | none confirmed |

Table 1.1b Information from Planning Department and Lands Department regarding unauthorized developments (UD) in rural areas<sup>4</sup>

|  | 2009       | 2010     |
|--|------------|----------|
| no. of complaints received   | 644        | 604      |
| Confirmed cases of UD  | 115        | 100      |
| Not empowered under Town Planning Ordinance due to absent of Development Permission Area plans | 37 (32.2%) | 23 (23%) |
| Successful prosecution   | 6 (5.2%)   | 3 (3%)   |

Table 1.1c Information from AFCD on illegal activities in Country Parks<sup>5</sup>

|                            | 2009     | 2010    |
|----------------------------|----------|---------|
| No. of complaints received | 12       | 26      |
| Successful prosecutions    | 1 (8.3%) | 7 (27%) |

## Discussion

The low prosecution rate is consistent in all sources.

**The rate of successful prosecutions (3%-27%)  
for environmentally destructive activities is extremely low.**

Loopholes remain in the current legislative framework and government departments are often not empowered to carry out enforcement actions. The low prosecution rate is consistent for all departments. One of the reasons is that there is often insufficient investigation, gathering and inter-departmental sharing of evidence for making successful prosecutions in cases of fly-tipping and other unauthorized activities. Not all cases result in prosecution – in many situations government departments may issue warnings or order remedial action.

There are also a significant proportion of cases in which the Planning Department is not empowered to carry out any enforcement actions due to absence of Development Permission Area (DPA) Plans. There is an obvious need to speed up the issue of DPA Plans in remaining Country Park enclaves to control unauthorized developments.

It is also essential to close the loophole for areas where an Outline Zoning Plan was issued without the coverage of DPA plans. In such cases enforcement is not empowered if the activities were agreed by the owner of a private lot. Tree felling on private land is poorly regulated, and specific legislation is required to protect trees.



Fly-tipping in Pui O, Lantau – None of the government departments are empowered to carry out enforcement actions. ©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     |
|--|----------|----------|
| Threatened species listed in IUCN Red List (CR, EN, VU)          | 70       | 72       |
| Covered by action plans (incl. global action plans) <sup>6</sup> | 3 (4.3%) | 3 (4.2%) |
| Species-specific conservation actions <sup>7</sup>               | 2 (2.9%) | 2 (2.8%) |
| Protected by laws (Cap. 96, 170, 586)                            | 45 (64%) | 45 (63%) |

#### Discussion

Neither the IUCN red list database nor the AFCD biodiversity database provide a complete list of the threatened species in Hong Kong. Both require updating. Hong Kong currently has no Red List of locally endangered species. Research and studies should be carried out to fill this important information gap. The nearest equivalent is *Fauna of Conservation Concern* by Fellowes *et al*<sup>8</sup> which is in need of review and revision.

Apart from the extremely low coverage of species action plans, only 45 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.

**37% of threatened species in Hong Kong are not protected by law  
Only 4% are covered by active conservation plans**

Species action plans should be produced for endangered species, especially for locally or regionally restricted species, to ensure that sustainable populations are maintained.



Short-legged Toad (*Xenophrys brachykolos*), a globally Endangered species but is not listed as a protected species in Hong Kong. ©CHENG Nok Ming

### 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)                                  |
|--|--|--|
| Total land area of Hong Kong <sup>9</sup>  | 110,439.00                                 | 110,439.00                                 |
| Protected Area network:<br>Country Parks and Special Areas <sup>10</sup>   | 44,004.34<br>(39.8% of land<br>area in HK) | 44,004.34<br>(39.8% of land<br>area in HK) |
| Area of Country Parks and Special Area<br>covered by biodiversity management<br>plans <sup>11</sup>  | 60.00<br>(0.05% of land<br>area in HK)     | 60.00<br>(0.05% of land<br>area in HK)     |
| Area not in Country Parks and Special<br>Areas, but covered by published,<br>resourced and active biodiversity<br>management plans <sup>12</sup> | 1,656.35<br>(1.5% of land<br>area in HK)   | 1,656.35<br>(1.5% of land<br>area in HK)   |

Table 3.1b Marine Protected Areas in Hong Kong

|  | 2009 (ha)                           | 2010 (ha)                           |
|--|-------------------------------------|-------------------------------------|
| Total marine area of Hong Kong <sup>9</sup>  | 165,064.00                          | 165,064.00                          |
| Area of Marine Parks and Reserves <sup>13</sup>  | 2430.00<br>(1.3% of marine<br>area) | 2430.00<br>(1.3% of marine<br>area) |
| Area of Marine Parks and Reserves<br>covered by published, resourced and<br>active biodiversity management plans | Not identified                      | Not identified                      |

#### Discussion

While Hong Kong has a substantial network of protected areas we do not meet the CBD's Aichi Biodiversity Targets<sup>14,15</sup> 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 biodiversity management plans for the Country Parks.

WWF Hong Kong has proposed an extensive expansion of marine “No-take protection zones” and refinements to the management of marine protected areas<sup>16</sup>.

**Only 1.5% of our land is managed for biodiversity conservation**  
**Only 1.3% of our seas are protected**



Many Country Parks are designated primarily for protecting water-gathering grounds or recreational use, biodiversity conservation is only a secondary objective. ©HKBWS

### 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<sup>17</sup>

| Zoning                                     | 2009 (ha) | 2010 (ha) |
|--|-----------|-----------|
| Site of Special Scientific Interest (SSSI) | 0.000     | 0.000     |
| Coastal Protection Area (CPA)              | 0.367     | 0.614     |
| Conservation Area (CA)                     | 5.674     | 0.216     |
| Green Belt (GB)                            | 20.053    | 12.081    |
| Agriculture (AGR)                          | 16.391    | 38.505    |
| Total                                      | 42.486    | 51.417    |

Table 3.2b Area of Planning Applications Approved by Town Planning Board<sup>17\*</sup>

| Zoning                                     | 2009 (ha) | 2010 (ha) |
|--|-----------|-----------|
| Site of Special Scientific Interest (SSSI) | 0.000     | 0.000     |
| Coastal Protection Area (CPA)              | 0.688     | 0.550     |
| Conservation Area (CA)                     | 1.401     | 0.216     |
| Green Belt (GB)                            | 11.183    | 10.800    |
| Agriculture (AGR)                          | 13.230    | 11.086    |
| Total                                      | 26.503    | 22.652    |

*\*applications and approvals are separately tabulated on a calendar year basis and do not mutually correspond.*

#### Discussion

Large areas of countryside are facing pressure from development. Land zoned as Green Belt and Agricultural land is the most vulnerable to change.

**94 hectares (equal to 5 Victoria Parks) of countryside areas are under planning pressure in 2009-2010. Half were lost to development; Much more land is lost that goes unrecorded or unexposed**

Agricultural land supports unique biodiversity and certain sites have high ecological value, for example Long Valley. 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. We currently lack a comprehensive study on the planning and conservation of these areas.

In addition to the loss of land from zonings designed to prevent such loss, a number of large-scale developments are planned in areas of demonstrated ecological importance, in particular in the Deep Bay area. Areas which have already been allocated a development-based zoning, but retain high ecological value include: Nam Sang Wai (151.30 ha), San Tin fishponds (171.95 ha), Fung Lok Wai (81.67 ha), Long Valley (84 ha) and Hoo Hook Wai (246.3 ha), covering a total of more than 735 hectares.

Many other proposed developments, especially those which do not require planning approval or have yet to apply for approval or rezoning are not recorded or remain unidentified.



Proposed Development at Nam Sang Wai may destroy one of the largest Reedbeds in Hong Kong.  
©HKBWS



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

The Drainage Services Department is helping to provide information regarding this indicator, but unfortunately it was not available at the time of publication.

#### 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. Increasing numbers of environmentally-friendly features are being incorporated into new designs, and older drainage channels are being rebuilt to encourage restoration of natural riparian habitats and processes.



The Ecologically Important and largely natural Tung Chung River is facing pressure. ©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 of them are confirmed invasive in Hong Kong (e.g. Rose-ringed Parakeet *Psittacula krameri*). 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 |
|--|--|------|------|------|
| House Crow<br><i>Corvus splendens</i> <sup>18,19</sup> | 210  | 220  | 250  | 190  |
| Apple Snail<br><i>Pomacea canaliculata</i>             | No systematic monitoring in Hong Kong  |      |      |      |
| Mikania<br><i>Mikania micrantha</i>                    | Controlled by AFCD in Country Parks, Special Areas and SSSIs <sup>20</sup> but there is no comprehensive survey of the coverage of this Mikania in Hong Kong |      |      |      |

#### Discussion

No trend of increase in population has been observed for the one monitored species – House Crow. This is a result of effective removal actions by AFCD. However, there is a clear need for a more detailed study on alien invasive species in Hong Kong and long-term monitoring for unmanaged species.



Prompt identification of the threat, followed by continuous monitoring and effective population control of House Crows by AFCD provides a good model for control of alien invasive species in Hong Kong.  
© CHENG Nok Ming

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

Table 3.5a Trends in Land Birds<sup>21</sup>

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

Table 3.5b Trends in Waterbirds<sup>22</sup>

|                | 2006-07<br>winter | 2007-08<br>winter | 2008-09<br>winter | 2009-2010<br>winter | 2010-2011<br>winter |
|----------------|-------------------|-------------------|-------------------|---------------------|---------------------|
| Peak count     | 80,108            | 90,986            | 87,633            | 87,379              | 76,679              |
| No. of species | 71                | 71                | 70                | 75                  | 67                  |

#### 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.

Waterbirds have been monitored in Hong Kong for more than two decades. Although there are no clear trends for the abundance and diversity of waterbirds over the past 5 years, the total population is higher in recent years than in 1990s and 2000s<sup>22</sup>. While the increase in waterbird abundance is positive, several species (including Eurasian Shelduck, Dalmatian Pelican and Saunders' Gull) have declined dramatically. Special attention should be paid to the dominance of newly



abundant species, as this may be related to increasing levels of organic pollution<sup>23</sup>.

The massive increase in Pied Avocet (*Recurvirostra avosetta*) numbers is likely related to intensified organic pollution in Deep Bay.

©CHENG Nok Ming

### 3.6 Trends in populations of flagship and umbrella species:

Table 3.6a Trends in flagship and umbrella species

|   | 2006  | 2007   | 2008 | 2009 | 2010 |
|---|---|--|------|------|------|
| a) Chinese White Dolphin<br><i>Sousa chinensis</i><br>(Encounter Rate per 100km) <sup>24,25</sup> | 6.9   | 9.9  | 7.2  | 6.3  | 6.8  |
| b) Breeding egrets and herons<br>(no. of nests) <sup>26</sup>                                     | 1017  | 822  | 664  | 809  | 734  |
| c) Dragonflies diversity and abundance  | AFCD has regular monitoring but data is not published   |  |      |      |      |
| d) Big-headed Turtle<br><i>Platysternon megacephalum</i>  | Ongoing surveys by HKU. Data is not yet published. The Population is probably declining <sup>27</sup> . |  |      |      |      |
| e) Grassland Orchid<br><i>Spathoglottis pubescens</i>   | Currently no systematic monitoring programme.   |  |      |      |      |
| f) Buddha Pines<br><i>Podocarpus macrophyllus</i>   | ---   | 2000<br>~3000<br>mature<br>trees <sup>28</sup> | ---  | ---  | ---  |

#### Discussion

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. 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 made available to enable systematic monitoring of key indicator species.



The population of Chinese White Dolphin in Hong Kong is experiencing a downward trend.  
©WWF/Third Institute of Oceanography

## 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<sup>29,30</sup>

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

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, source goods from sustainable sources etc. to reduce our ecological footprint<sup>29</sup>.

**“More than twice the world's available resources would be needed if everyone on the planet consumed as much as Hong Kong”**



## 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 estimations (million tonnes) <sup>31</sup>    | 42.0 | 42.3 | 43.3*             | 42.2*               | ---  | ---  |
| EPD estimations Per capita (tonnes) <sup>31</sup> | 6.2  | 6.2  | 6.3*              | 6.0*                | ---  | ---  |
| WWF estimations Per capita (tonnes)               | ---  | ---  | 8.1 <sup>29</sup> | 13.44 <sup>32</sup> |      |      |

*\*Provisional figures subject to revision*

Some academics have suggested that the actual emission could be 2-5 times of the figure reported by HKSAR government<sup>33</sup>. This echoes with the estimation by WWF-HK in 2010 according to the information collected by the carbon footprint calculator<sup>32</sup>. The cost of embodied carbon emission should be taken into account in infrastructure development<sup>34</sup>. It has also been suggested that the reporting should be made according to internationally recognized methodologies for proper policy-making<sup>33</sup>.

**Our actual Greenhouse gas emission is much higher than 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?**

Although the CBD was formally extended to Hong Kong in May 2011, no information is available yet from the government regarding any plan for implementation of the CBD.

**A BSAP with community-wide support is a key element of implementing CBD**

## References and Endnotes

- <sup>1</sup> UNTC, 2011, 8. Convention on Biological diversity. Available from:  
[http://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-8&chapter=27&lang=en](http://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-8&chapter=27&lang=en)  
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<http://www.cbd.int/2010-target/framework/indicators.shtml> Accessed on 1 Sep 2011.
- <sup>3</sup> Civic Exchange, 2011, Nature Conservation: a new policy framework for Hong Kong. Available from:  
<http://www.civic-exchange.org/wp/natureconservation> Accessed on 1 Sep 2011.
- <sup>4</sup> Including SSSI, CPA, CA, GB, AGR and V zonings. Information obtained from Planning Department through application for access to information.
- <sup>5</sup> Information obtained from Agriculture, Fisheries and Conservation Department through application for access to information.
- <sup>6</sup> 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*).
- <sup>7</sup> 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. However, no action plans properly published could be obtained.
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**PHOTOS ON FRONT COVER** (from left to right)

1. Dumping of construction and demolition wastes in Yuen Long ©HKBWS
2. A rural village on Lantau Island ©HKBWS
3. *Acrossocheilus beijiangensis* ©CHENG Nok Ming
4. Hong Kong Cascade Frog *Amolops hongkongensis* ©CHENG Nok Ming
5. Brown-breasted Flycatcher *Muscicapa muttui* ©CHENG Nok Ming
6. A Fishpond in Yuen Long ©HKBWS
7. Variegated Flutterer *Rhyothemis variegata aria* ©CHENG Nok Ming



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