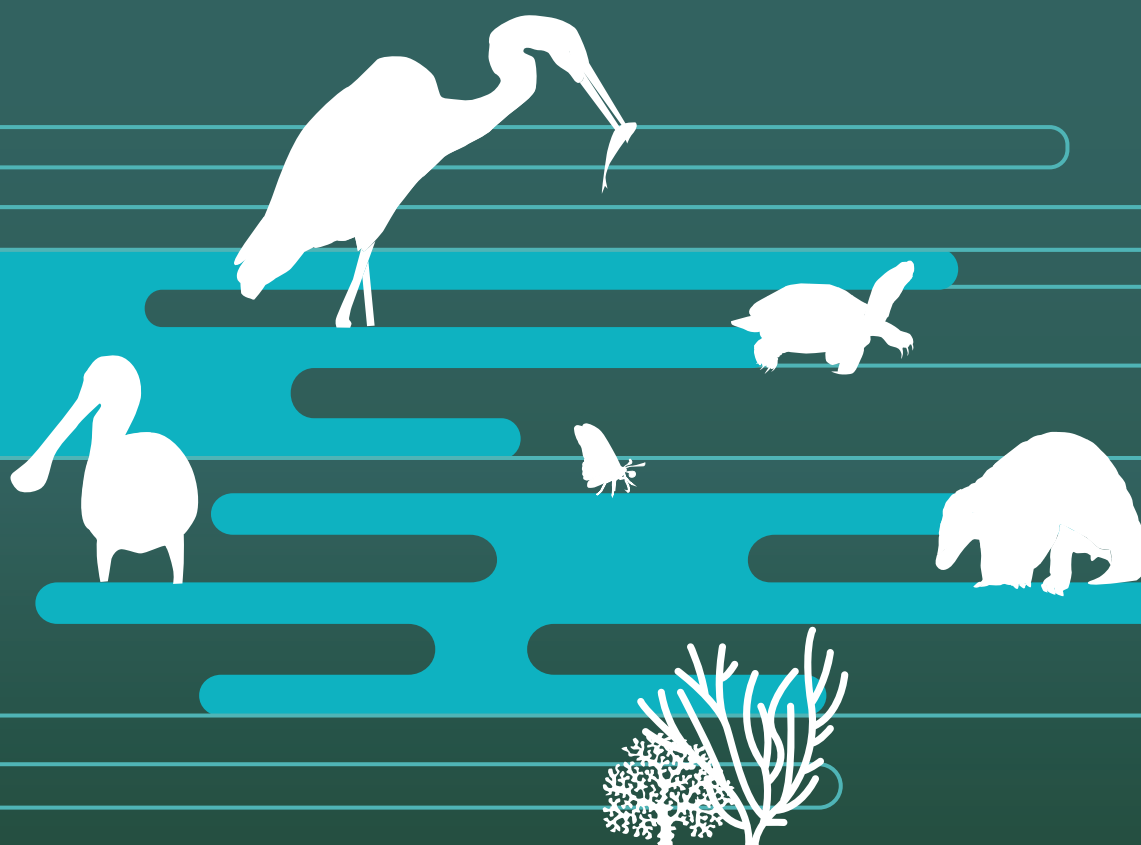


HONG KONG
BIODIVERSITY AND
CONSERVATION

10-YEAR REVIEW AGAINST THE
CONVENTION ON BIODIVERSITY



The Hong Kong Bird Watching Society is a non-governmental organization established in 1957 with a vision of “people and birds living in harmony as nature continues to thrive”. It aims to promote the appreciation and protection of birds and their habitats through education, research, habitat management and conservation advocacy. The Society became a public charitable organization in 2002, an Associate Member of BirdLife International in 1994, a BirdLife International Partner in 2013, and the 38th Partner of the East Asian-Australasian Flyway Partnership in 2020.

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PREFACE

This report brings to a close a ten-year programme to monitor Hong Kong's performance against its responsibilities under the Convention on Biological Diversity (CBD) that was initially developed by public policy think tank Civic Exchange and conservation experts from key sectors of the community. Recognizing the importance of disclosing the performance of Asia's World City, the Hong Kong Bird Watching Society (HKBWS) took up the task of producing regular reports using information that was either publicly available or sourced under Hong Kong's Freedom of Information regulations. These five Headline Biodiversity Indicator Reports, published in 2011, 2013, 2015, 2018 and 2021, provide the hard core of data and observations that underpins the high-level assessment presented in this Ten Year Review.

During this period, awareness of the risks posed to our environment and society by deeply ingrained patterns of unsustainable exploitation and consumption of natural resources have continued to rise at the global and local level. The indicators that provide the framework for these reports have identified the specific "pressure points" where a conscious effort must be made to ensure that Hong Kong's biodiversity, and all the benefits it confers, are not swept away in the name of economic development.

While our Country Parks and the regenerating forests they protect demonstrate the value that proactive conservation planning here has achieved, Hong Kong is equally notorious as a global hub for illegal wildlife trafficking and the largely unsustainable seafood trade, thereby influencing the sustainability of biodiversity far beyond its boundaries. Our native species, especially those dependent on wetland and marine habitats, face increasing threats from policy-level and unauthorised encroachment that a conflicted development agenda and persistently under-resourced enforcement are failing to prevent.

While these reports contain more criticism than praise, it is sincerely hoped that they are received as a respectful attempt to identify the opportunities to better protect and enhance biodiversity as a public good which contributes so much to the prosperity, enjoyment, physical and mental wellbeing of every member of our ultra-dense city. As one of the best-educated and wealthiest cities in the world, and with new national drivers emerging to conserve our biodiversity under Ecological Civilization, and particularly as part of the Greater Bay Area's wider

agenda for sustainable development, Hong Kong is uniquely positioned to respond.

As a monitoring tool it is not the role of these reports to provide detailed solutions to address the challenges identified. While a number of high-level recommendations have been proposed, much work will be required to shape these into specific actions. Such work properly belongs to the wider community under the steering hand of the Hong Kong Special Administrative Region Government (HKSARG). HKBWS remains ready to contribute where it has the resources and expertise to do so.

Looking forward, HKBWS's next task will be to conduct a complete review that takes into account Hong Kong's progress to date, the effectiveness of the current indicators and the new guidance emerging from the CBD and wider national regulation. Out of this process will emerge a new set of indicators that will be used to track Hong Kong's performance out to 2030, and perhaps beyond.

In closing I would like to thank Exxon Mobil, for funding the original work on biodiversity conservation by Civic Exchange, and ADM Capital Foundation for funding the 2021 reports; Christine Loh, who as CEO of Civic Exchange encouraged the development of a conservation strategy and as Undersecretary for the Environment was the driving force in taking Hong Kong's current Biodiversity Strategy and Action Plan (BSAP) as far as consensus would allow, and Simon Chan, Assistant Director (Conservation) of Agriculture, Fisheries and Conservation Department (AFCD) as the BSAP's chief implementer; the "wise men" – Ruy Barretto, Paul Zimmerman, Clive Noffke, Andy Cornish and Roger Kendrick – who played a crucial role in overseeing the formulation of the indicators – as well as all the experts too numerous to name from every sector that contributed their specific expertise. Finally, none deserve more thanks than the HKBWS Conservation Officers that put in the enormous and highly skilled work that producing these reports requires: Woo Ming Chuan and Wong Suet Mei (2021), Woo Ming Chuan (2018), Jocelyn Ho (2015), and Beetle Cheng Nok Ming (2011 and 2013), to whose memory this report is dedicated.

Mike Kilburn

Vice-chairman

Hong Kong Bird Watching Society

1

INTRODUCTION

The Convention on Biological Diversity (CBD)

The CBD is a multilateral environmental agreement with the objectives of: 1) conservation of biological diversity; 2) sustainable use of its components; and 3) fair and equitable sharing of the benefits arising out of the utilization of genetic resources¹.

The Convention was opened for signature in 1992 at the United Nations Conference on Environment and Development (the Rio "Earth Summit") and entered into force in 1993². Currently, the CBD has 196 parties and 168 signatories³ including China, which signed in 1993 and extended it to Hong Kong in 2011. According to Articles 6 and 26 of the Convention, Parties need to develop their national Biodiversity Strategy and Action Plans (BSAPs) for the implementation of the CBD and report the progress against their national BSAPs to the Conference of the Parties (COP), which takes place every two years.

The tenth meeting of the COP held in 2010 in Nagoya (Aichi Prefecture, Japan), adopted a revised and updated Strategic Plan for Biodiversity 2011-2020. This is a 10-year overarching international framework for action by all parties to conserve and sustainably manage biodiversity⁴. Under this global strategic plan, five strategic goals and 20 "Aichi Biodiversity Targets" were developed⁵.

Hong Kong Government's commitment to CBD

Recognizing the importance of the CBD in the protection of biological diversity, the Hong Kong Special Administrative Region Government (HKSARG) proposed to apply to the Central People's Government for the extension of the CBD to Hong Kong back in 2003⁶. In 2004, the HKSARG launched the New Nature Conservation Policy (NNCP) for biodiversity conservation in Hong Kong, with twelve Priority Sites for Enhanced Conservation identified and two incentive schemes proposed (the Public-Private Partnership and Management Agreement schemes)⁷. The CBD was finally extended to Hong Kong on 9 May 2011. Later in the same year the HKSARG reaffirmed its commitment to implementing the CBD in Hong Kong⁸, and in 2013 it established a Steering Committee on BSAP and three working groups⁹. Academics, biodiversity experts, representatives from green groups, the private and public sectors, and relevant government departments were involved in the participatory process of the BSAP formulation in the following two years, during which a list of over 400 specific actions were compiled¹⁰. The final BSAP was published in late 2016, with HK\$150 million earmarked for the first three years of implementation¹¹. The Environment Bureau and the Agriculture, Fisheries and Conservation Department (AFCD) reports the progress on implementation of the BSAP to the Advisory Council on the Environment on an annual basis¹².

Civil society participation in the CBD

Even with the implementation of the NNCP in 2004, Hong Kong's biodiversity continued to suffer degradation that was intended to facilitate development of private housing and public infrastructure. Enforcement action and habitat management remained un-coordinated and under-resourced. In response, public policy think tank Civic Exchange in 2011 produced a new policy framework for nature conservation in Hong Kong based on global best practice and principles as set out in the CBD¹³. It aimed to stimulate discussion on policy formulation by outlining a strategic framework that was intended to facilitate the development of a comprehensive BSAP for Hong Kong, which included strategic objectives as well as specific and time-bound actions for achieving these objectives.

Civic Exchange also worked with over 40 environmental Non-governmental Organizations (NGOs), academics, consultants, officials and other expert stakeholders to develop a set of Hong Kong-specific indicators that were derived from CBD's 2010 Biodiversity Targets Headline Indicators¹⁴. These indicators were intended to monitor and provide a broad overview of the status of biodiversity and nature conservation in Hong Kong. Since 2011, the Hong Kong Bird Watching Society (HKBWS) has collected data and published five reports under the "*Hong Kong Headline Indicators for Biodiversity and Conservation*" report series¹⁵.

10-year review of Hong Kong's biodiversity and nature conservation

This review comprises a summary of the data collected under the headline indicators and published in the previous five reports (please refer to Chapter 3), a review of the city's response to the CBD, and an assessment of Hong Kong's progress towards achieving the 20 Aichi Biodiversity Targets under the Strategic Plan for Biodiversity 2011-2020 of the CBD (Chapter 2)¹⁶. Through this process, current gaps in achieving biodiversity conservation and lessons learned in the past decade have been identified, and a number of high level recommendations for the next BSAP, which is expected to be launched in 2022, have been proposed (Chapter 4).

A new Post-2020 Global Biodiversity Framework under the CBD will be adopted at the next COP. This COP was originally scheduled in October 2020 in Kunming (China) but is currently postponed to October 2021 due to the COVID-19 pandemic¹⁷. This new framework will be briefly introduced towards the end of this document (please refer to Chapter 5). It is essential that the preparation of the next BSAP makes reference to this new framework, so that Hong Kong is better aligned with the global targets for achieving the CBD's 2050 Vision of living in harmony with nature¹⁸.

2

ASSESSMENT OF PROGRESS TOWARDS THE 20 AICHI BIODIVERSITY TARGETS

Overview

In September 2020, the CBD Secretariat published the Global Biodiversity Outlook 5¹⁹. This provides an overview of the global state of nature and a report card on the global progress in achieving the 20 Aichi Biodiversity Targets, as well as lessons learned from the past decade and best practices from different countries.

HKBWS has conducted a similar assessment for Hong Kong. The city's progress towards the Aichi Biodiversity Targets is assessed based on the 10-year data and findings under each headline indicator of the *"Hong Kong Headline Indicators for Biodiversity and Conservation"* series, and Hong Kong's first city-level BSAP, which was published in 2016. This is summarized in the one-page overview below (Table 1). Corresponding assessments and commentaries for the specific aspects under each target are provided in Table 2. Among the 20 biodiversity targets under the five strategic goals, only six targets have been partly achieved, and the remaining 14 have not been achieved.


Hong Kong made good progress in Strategic Goal E - **Enhance implementation through participatory planning, knowledge management and capacity building** - with three of its four targets partially achieved. This is because the HKSARG published a BSAP, secured funding for its implementation, and conducted various monitoring programmes for different species or taxa

groups. Hong Kong also performed well under the "terrestrial protected area" element of Target 11 in Strategic Goal C - **Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity**. Country Parks and Special Areas account for about 40% of the total area in Hong Kong, which far exceeds the target of 17%. Another area with satisfactory progress was the "positive incentive" element of Target 3 in Strategic Goal A - **Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society**. Funds for nature conservation, sustainable agriculture and fisheries, and sustainable development are provided by the HKSARG.

However, no targets under Strategic Goal B - **Reduce the direct pressures on biodiversity and promote sustainable use** - have been achieved. The policies of different Government departments are not well aligned. AFCD and Environment Bureau promote the conservation of biodiversity, while the Development Bureau has rezoned agricultural land, and Green Belt, and tried to open parts of the Country Parks for development. The current BSAP and policies have not alleviated the pressures on biodiversity at either species or habitat level. There is also limited understanding of the ecosystem services and genetic diversity in Hong Kong, thus no targets under Strategic Goal D - **Enhance the benefits to all from biodiversity and ecosystem services** - have been achieved.

TABLE 1 Summary of Hong Kong's progress in meeting the Aichi Biodiversity Targets under the CBD

All Aichi Biodiversity Targets Icons: Copyright BIP/Secretariat of CBD

 Not achieved (none of the target elements has been achieved) Partially achieved (at least one target element has been achieved) Achieved











































STRATEGIC GOAL A	Aichi Biodiversity Target	Progress	
Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society	 Awareness of biodiversity increased	NOT ACHIEVED	
	 Biodiversity values integrated	NOT ACHIEVED	
	 Incentives reformed	PARTIALLY ACHIEVED	
	 Sustainable production and consumption	NOT ACHIEVED	
STRATEGIC GOAL B	Aichi Biodiversity Target	Progress*	
Reduce the direct pressures on biodiversity and promote sustainable use	 Habitat loss halved or reduced	NOT ACHIEVED	
	 Sustainable management of aquatic living resources	NOT ACHIEVED	
	 Sustainable agriculture, aquaculture and forestry	NOT ACHIEVED	
	 Pollution reduced	NOT ACHIEVED	
	 Invasive alien species prevented and controlled	NOT ACHIEVED	
	 Ecosystems vulnerable to climate change	NOT ACHIEVED	
STRATEGIC GOAL C	Aichi Biodiversity Target	Progress*	
Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity	 Protected areas	PARTIALLY ACHIEVED	
	 Reducing risk of extinction	NOT ACHIEVED	
	 Safeguarding genetic diversity	NOT ACHIEVED	
STRATEGIC GOAL D	Aichi Biodiversity Target	Progress*	
Enhance the benefits to all from biodiversity and ecosystem services	 Ecosystem services	NOT ACHIEVED	
	 Ecosystem restoration and resilience	PARTIALLY ACHIEVED	
	 Access to and sharing benefits from genetic resources	NOT ACHIEVED	
STRATEGIC GOAL E	Aichi Biodiversity Target	Progress*	
Enhance implementation through participatory planning, knowledge management and capacity building	 Biodiversity strategies and action plans	PARTIALLY ACHIEVED	
	 Traditional knowledge	PARTIALLY ACHIEVED	
	 Sharing information and knowledge	PARTIALLY ACHIEVED	
	 Mobilizing resources from all sources	NOT ACHIEVED	

TABLE 2 Assessment of Hong Kong's progress towards the Aichi Biodiversity Targets under CBD


All Aichi Biodiversity Targets Icons: Copyright BIP/Secretariat of CBD

 Not achieved (none of the target elements has been achieved) Partially achieved (at least one target element has been achieved) Achieved**STRATEGIC GOAL A:****Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society**

Aichi Biodiversity Target 1	Progress						Summary of Progress	
 <p>By 2020, at the latest, people are aware of the values of biodiversity (1) and the steps they can take to conserve and use it sustainably (2).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	<p>Hong Kong people are generally more aware of the natural environment, as indicated by the significant increase in the complaints of unauthorized activities in rural areas received by the Planning Department (PlanD). Various educational programmes on wildlife and biodiversity conservation were organized by AFCDC to the public, schools and business sector under the BSAP. However, the values of biodiversity and its sustainable uses are still not well known among the general public²⁰; more promotion is needed to increase awareness and to further transform awareness into action.</p>
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	


Related Headline Indicators by HKBWS: 1.1 & 4.1

 **THE TARGET HAS NOT BEEN ACHIEVED.**

Aichi Biodiversity Target 2	Progress						Summary of Progress	
 <p>By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies (1) and planning processes (2) and are being incorporated into national accounting (3), as appropriate, and reporting systems (4).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	<p>Biodiversity and conservation are incorporated into the planning and development process, such as the Terrestrial Development Strategy Hong Kong 2030+, the review of Hong Kong Planning Standards and Guidelines, the Computer Aided Sustainability Evaluation Tool, and the addition of ecological elements in water and drainage works. However, this has not always led to effective protection of sites of high ecological value or deterrence of unauthorized activities. Apart from implementation reports and funds earmarked for BSAP, biodiversity is currently not integrated or incorporated in existing accounting and reporting systems in Hong Kong.</p>
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(4)	Exceed	On track	Some progress	No change	Moving away	Unknown	


Related Headline Indicators by HKBWS: 1.1, 3.1, 3.2 & 3.3

 **THE TARGET HAS NOT BEEN ACHIEVED.**

Aichi Biodiversity Target 3	Progress						Summary of Progress	
 <p>By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts (1), and positive incentives for the conservation and sustainable use of biodiversity are developed and applied (2), consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	<p>Steps were not taken to identify or eliminate incentives that harm biodiversity, such as trashing of vegetated lands and reclamation for development. Funds for nature conservation, sustainable agriculture and fisheries, and sustainable development are provided by the HKSARG. There are also subsidies for decarbonisation and green technology.</p>
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicators by HKBWS: 3.1 & 4.2


 **THE TARGET HAS BEEN PARTIALLY ACHIEVED.**

Aichi Biodiversity Target 4	Progress						Summary of Progress	
 <p>By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption (1) and have kept the impacts of use of natural resources well within safe ecological limits (2).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	<p>Studies and some small-scale projects on sustainable consumption were conducted with Government funds for sustainable development. However, the scale of implementation is still far from reversing Hong Kong's increasing ecological footprint, which continues to exceed the Earth's available resources.</p>
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicator by HKBWS: 4.1


 **THE TARGET HAS NOT BEEN ACHIEVED.**

STRATEGIC GOAL B:**Reduce the direct pressures on biodiversity and promote sustainable use**

Aichi Biodiversity Target 5		Progress					Summary of Progress
 <p>By 2020, the rate of loss of all natural habitats (2), including forests (1), is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced (3).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown


Related Headline Indicators by HKBWS: 1.1, 3.1, 3.2 & 3.3

 **THE TARGET HAS NOT BEEN ACHIEVED.**

Aichi Biodiversity Target 6		Progress					Summary of Progress
 <p>By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably (1), legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species (2), fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems (3) and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits (4).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(4)	Exceed	On track	Some progress	No change	Moving away	Unknown


Related Headline Indicators by HKBWS: 2.1 & 3.1

 **THE TARGET HAS NOT BEEN ACHIEVED.**

Aichi Biodiversity Target 7		Progress					Summary of Progress
 <p>By 2020 areas under agriculture (1), aquaculture (2) and forestry (3) are managed sustainably, ensuring conservation of biodiversity.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown


Related Headline Indicators by HKBWS: 3.1 & 3.2

 **THE TARGET HAS NOT BEEN ACHIEVED.**

Aichi Biodiversity Target 8		Progress					Summary of Progress
 <p>By 2020, pollution (1), including from excess nutrients (2), has been brought to levels that are not detrimental to ecosystem function and biodiversity.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown


Related Headline Indicators by HKBWS: N/A

 **THE TARGET HAS NOT BEEN ACHIEVED.**

Aichi Biodiversity Target 9		Progress					Summary of Progress	
 <p>By 2020, invasive alien species (1) and pathways (2) are identified and prioritized, priority species are controlled or eradicated (3) and measures are in place to manage pathways (4) to prevent their introduction and establishment.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	Some invasive alien species are managed under different management plans. AFCD is successfully controlling House Crows; yet other species, such as <i>Mikania</i> , Apple Snails and <i>Sonneratia</i> mangroves, persist more or less unchecked. There is no restriction in importing plants, plant pests or soil from any place in China ²³ , which may lead to introduction of invasive alien species such as Red Fire Ants. A protocol for the risk assessment of invasive alien species in Hong Kong was developed and a risk assessment on alien herpetofauna was conducted under the BSAP.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(4)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicator by HKBWS: 3.4

THE TARGET HAS NOT BEEN ACHIEVED.


Aichi Biodiversity Target 10		Progress					Summary of Progress	
 <p>By 2015, the multiple anthropogenic pressures on coral reefs (1), and other vulnerable ecosystems (2) impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	Coral bleaching in Hong Kong is not widespread but there were some localized incidents. Abandoned fishing nets and coral damage by anchoring were found. Commercial fishing in four marine parks would be banned with a 2-year transitional period from 1 April 2020. However, the impacts of climate change and ocean acidification remain unknown.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicator by HKBWS: 3.1

THE TARGET HAS NOT BEEN ACHIEVED.


STRATEGIC GOAL C:

Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Aichi Biodiversity Target 11		Progress					Summary of Progress	
 <p>By 2020, at least 17 per cent of terrestrial and inland water areas (1) and 10 per cent of coastal and marine areas (2), especially areas of particular importance for biodiversity and ecosystem services (3), are conserved through effectively and equitably managed (4), ecologically representative (5) and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape (6)</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	Forty percent of Hong Kong's terrestrial area is within the protected area network; however, only 2% of the marine area is protected. The Inner Deep Bay wetlands are protected under various ordinances and biodiversity management plans. However, this and other sites of high conservation concern are also facing imminent development threats under the Government's land supply policy. There are no biodiversity management plans for country parks and marine parks, except for Hong Kong Wetland Park and one promised for the new Robin's Nest Country Park. Some protected areas are poorly ecologically connected.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(4)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(5)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(6)	Exceed	On track	Some progress	No change	Moving away	Unknown	


Related Headline Indicators by HKBWS: 3.1

THE TARGET HAS BEEN PARTIALLY ACHIEVED.

Aichi Biodiversity Target 12		Progress					Summary of Progress	
 <p>By 2020 the extinction of known threatened species has been prevented (1) and their conservation status, particularly of those most in decline, has been improved and sustained (2).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	Species action plans were prepared for some priority species. However, existing threats are still impacting some species (e.g. impacts of coastal development and reclamation on Chinese White Dolphin). An ordinance was amended in 2018 to tighten the control of transportation of threatened species across borders.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicators by HKBWS: 2.1, 3.5 & 3.6

THE TARGET HAS NOT BEEN ACHIEVED.


Aichi Biodiversity Target 13	Progress						Summary of Progress
 <p>By 2020, the genetic diversity of cultivated plants (1) and farmed and domesticated animals (2) and of wild relatives (3), including other socio-economically as well as culturally valuable species(4), is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity(5).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(4)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(5)	Exceed	On track	Some progress	No change	Moving away	Unknown

Related Headline Indicator by HKBWS: N/A

THE TARGET HAS NOT BEEN ACHIEVED.


STRATEGIC GOAL D:

Enhance the benefits to all from biodiversity and ecosystem services

Aichi Biodiversity Target 14	Progress						Summary of Progress
 <p>By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded (1), taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.(2)</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown


Related Headline Indicators by HKBWS: 3.2 & 3.3

THE TARGET HAS NOT BEEN ACHIEVED.

Aichi Biodiversity Target 15	Progress						Summary of Progress
 <p>By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration (1), including restoration of at least 15 per cent of degraded ecosystems (2), thereby contributing to climate change mitigation and adaptation and to combatting desertification.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown

Related Headline Indicators by HKBWS: 1.1, 3.1, 3.2 & 3.3

THE TARGET HAS BEEN PARTIALLY ACHIEVED.


Aichi Biodiversity Target 16	Progress						Summary of Progress
 <p>By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force (1) and operational, consistent with national legislation (2).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown

Related Headline Indicators by HKBWS: N/A

THE TARGET HAS NOT BEEN ACHIEVED.


STRATEGIC GOAL E:

Enhance implementation through participatory planning, knowledge management and capacity building

Aichi Biodiversity Target 17		Progress						Summary of Progress
 <p>By 2015 each Party has developed (1), adopted as a policy instrument (2), and has commenced implementing (3) an effective, participatory and updated national biodiversity strategy and action plan.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	Hong Kong published the first city-level BSAP in late 2016 and earmarked HK\$150 million for implementation. Implementation progress is reported annually to the Advisory Council on the Environment. As significant aspects of Hong Kong's responsibility under the CBD have not been addressed and there is little public participation, the effectiveness of the BSAP is limited.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown	


Related Headline Indicator by HKBWS: 5.1

 THE TARGET HAS BEEN PARTIALLY ACHIEVED.

Aichi Biodiversity Target 18		Progress						Summary of Progress
 <p>By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected (1), subject to national legislation and relevant international obligations, and fully integrated (2) and reflected in the implementation of the Convention with the full and effective participation (3) of indigenous and local communities, at all relevant levels.</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	Some traditional knowledge and practices are conserved and promoted under several Management Agreement projects, such as traditional wet crop agriculture in Long Valley and Lai Chi Wo, and fishpond drain-down practices in the Deep Bay fishponds. However, there is no long-term policy or strategic direction to preserve the traditional wisdom in conservation and sustainable use of biodiversity.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown	


Related Headline Indicator by HKBWS: N/A

 THE TARGET HAS BEEN PARTIALLY ACHIEVED.

Aichi Biodiversity Target 19		Progress						Summary of Progress
 <p>By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved (1), widely shared and transferred, and applied (2).</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	There are continuous monitoring plans for various target species or taxa groups, and species lists are updated from time to time. Assessment of priority taxa groups and a data-sharing platform / protocol are still underway. However, the transfer and application of biodiversity knowledge in the decision making process is limited.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicators by HKBWS: 2.1, 3.5 & 3.6

 THE TARGET HAS BEEN PARTIALLY ACHIEVED.

Aichi Biodiversity Target 20		Progress						Summary of Progress
 <p>By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011–2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. (Specific targets: (1) to double international financial flows to developing countries; (2) to include biodiversity in national priorities or development plans; (3) to report on domestic spending, needs, gaps, priorities; (4) to prepare national finance plans and assess the multiple values of biodiversity; and (5) to mobilize domestic financial resources.)</p>	(1)	Exceed	On track	Some progress	No change	Moving away	Unknown	The Government earmarked HK\$150 million for the first three years of BSAP implementation. However, there is no financial report on the expenditure, needs, gaps and priorities in BSAP. It is uncertain how the funding supported the various deliverables under the BSAP, and what budget from other Government departments also contributes to biodiversity conservation.
	(2)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(3)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(4)	Exceed	On track	Some progress	No change	Moving away	Unknown	
	(5)	Exceed	On track	Some progress	No change	Moving away	Unknown	

Related Headline Indicator by HKBWS: 5.1

 THE TARGET HAS NOT BEEN ACHIEVED.

3

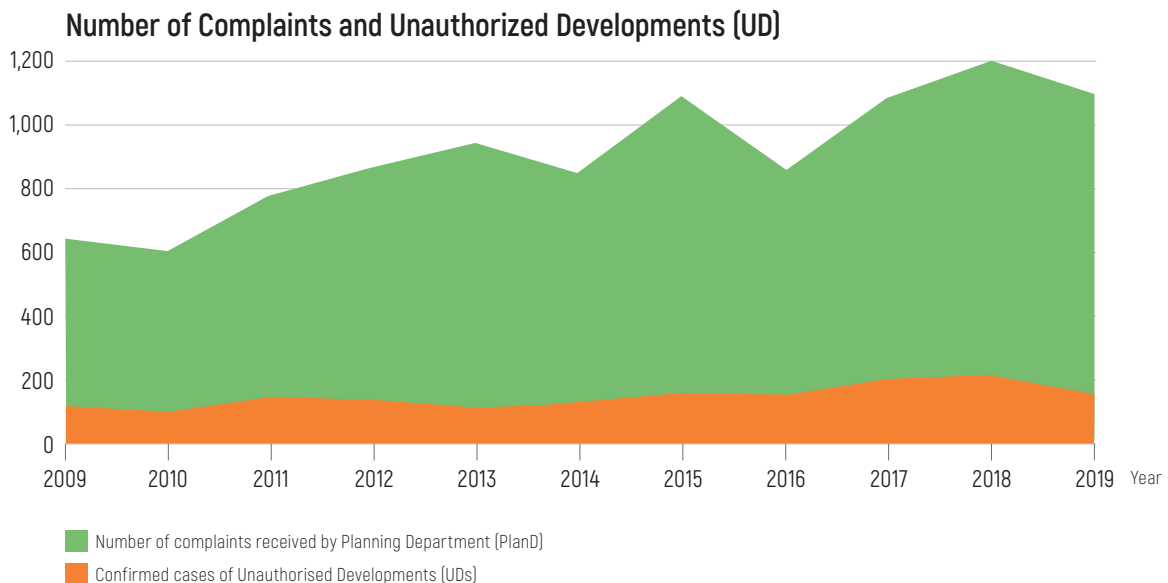
OVERVIEW OF HONG KONG'S CONSERVATION PERFORMANCE IN THE PAST DECADE

In 2011, Civic Exchange proposed a new framework for nature conservation in Hong Kong²⁵ based on the global best practice and principles set out under the CBD. A workshop was organized to develop a set of indicators under this framework that would monitor and provide a broad overview of the status of biodiversity and nature conservation in Hong Kong. About

10 years of data has been collected using these indicators. A summary of the major findings over the past decade can be found below. For more detailed background and information on these data, please refer to the reports in the Hong Kong Bird Watching Society's "Hong Kong Headline Indicators for Biodiversity and Conservation" series²⁶.

HEADLINE INDICATOR 1: COMMUNITY-BASED CONSERVATION

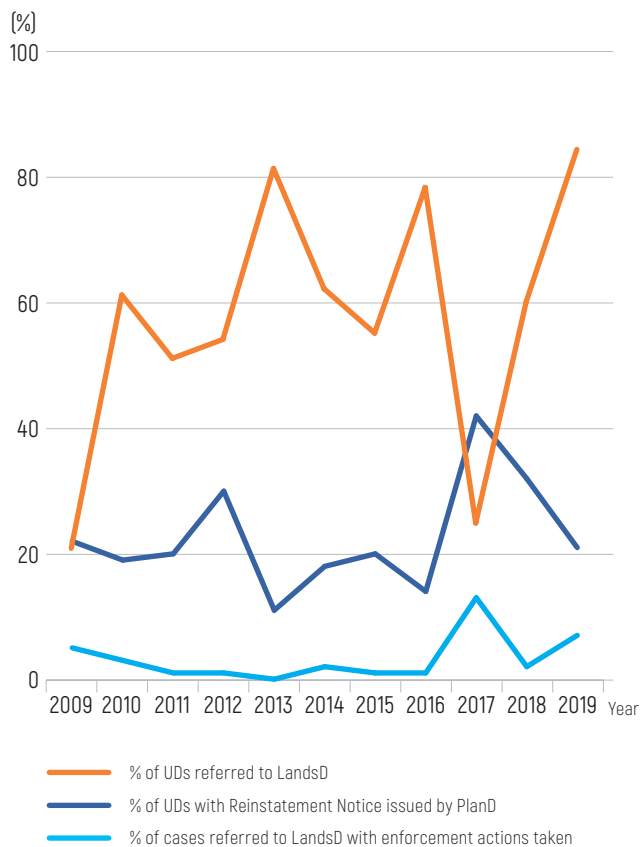
1.1 Percentage of instances of illegal/unauthorized activity (trashing, trapping, collection, etc.) reported per year by environmental NGOs and verified sources (e.g. media and websites) where enforcement action led to a) successful prosecution and b) restoration of ecological function



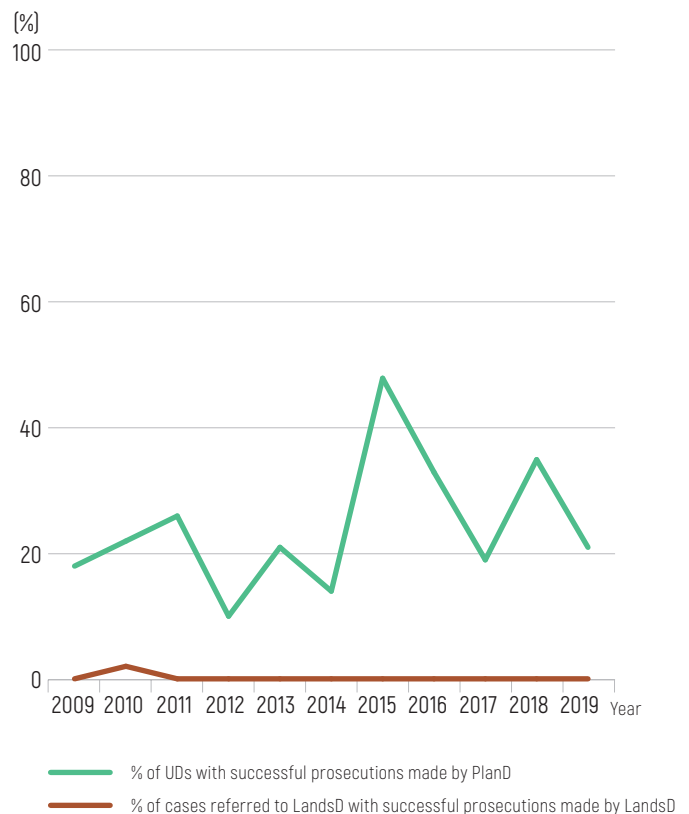
- The number of complaints of unauthorized activities in rural areas received by the PlanD increased by two-thirds to over 1,000 per year. This may be due to the increase in public awareness and engagement in reporting unauthorized activities, or an increase in destructive activities caused by increased development pressure. However, the number of unauthorized developments (UD) confirmed by PlanD remained stable at around 18% of total complaints received.
- Among UD confirmed by PlanD, the percentage of cases undergoing different stages of enforcement or prosecution actions increased from 44% during 2009 – 2011 to 55% during 2017 – 2019. Although the percentage of successful prosecutions by PlanD increased slightly, it is still largely below 10%.
- The percentage of UD referred to Lands Department (LandsD) increased significantly from 50% to over 90%, indicating that more cases involved in Government land or a welcome increase in interdepartmental collaboration for these unauthorized activities. However, the percentage of cases with land control or lease enforcement actions taken by LandsD remained at around 25%, while only one case (in 2010) was successfully prosecuted in the past decade.
- The percentage of UD for which a Reinstatement Notice was issued increased by more than half from 20% during 2009 – 2011 to 32% during 2017 – 2019. As in the cases reported by environmental NGOs, it was not until 2016 that ecological function was restored to any impacted sites. It is noteworthy that these reinstatement actions were mainly performed by Government departments on Government land.
- Despite improvements in successful prosecution and reinstatement rates in the past decade, it is clear that the current practice of enforcement is not an effective deterrent to unauthorized activities and sites of high ecological value are not adequately protected.
- As for illegal activities within Country Parks, the number of reported case of illegal felling of Incense Tree peaked in 2014 with over 20% of the cases prosecuted. Reports fell by over 75% in 2019 but there have been no further successful prosecutions.
- No action under the BSAP is related to this headline indicator.

Data source: AFCED, Environmental NGOs, LandsD, PlanD, TPB Statutory Planning Portal

UDs handled by PlanD

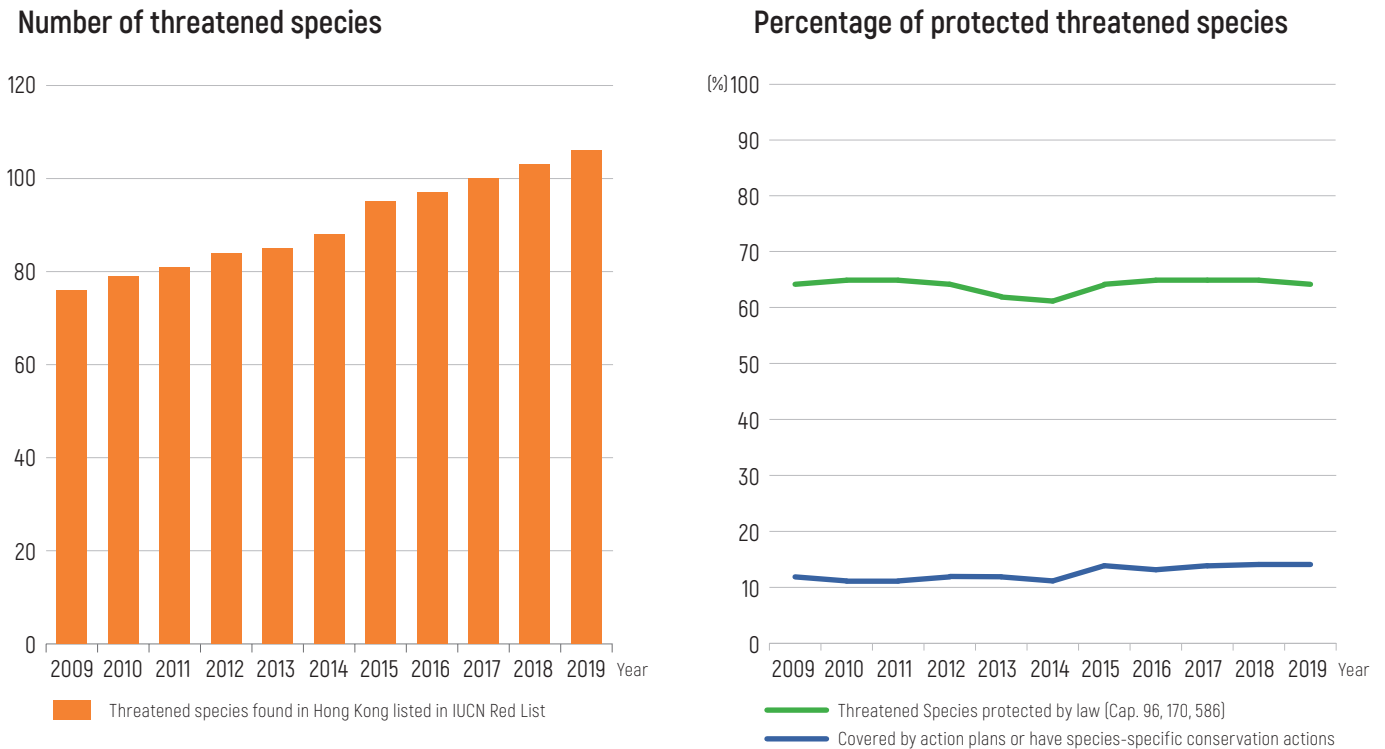


UDs referred to LandsD



HEADLINE INDICATOR 2: ESTABLISH (AND STRIVE TO IMPROVE UPON) ACCEPTED GLOBAL BEST PRACTICES FOR THE CONSERVATION AND SUSTAINABLE USE OF BIOLOGICAL DIVERSITY IN HONG KONG

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



- The number of threatened species in Hong Kong with conservation status of “Critically Endangered”, “Endangered” and “Vulnerable” listed in the International Union for Conservation of Nature’s Red List of Threatened Species (i.e. IUCN Red List) increased by almost 40% to 106 species. Yet, the percentage of legally protected threatened species remained at around 65%, likely because the newly added species are already protected under existing legislation. However, many threatened plants, marine fish, soft corals and gorgonians species are still not protected, including the critically endangered Chinese Bahaba and Small Persimmon.
- The percentage of threatened species covered by species action plans (SAPs) remains low at around 15%. The increase in SAP numbers was mainly due to the addition of threatened species covered by existing conservation actions, rather than formulation of new SAPs. Under the BSAP, four of the six new SAPs are still under preparation, while five existing SAPs are under review.
- One major achievement under the BSAP is the formulation of the Hong Kong Red List of Threatened Species to guide conservation actions and enhance the protection of these species²⁷. While assessments for amphibians and reptiles, bats, water birds and marine mammals will be finalized soon, more time is required (no schedule has been set) before a comprehensive Red List can be published.

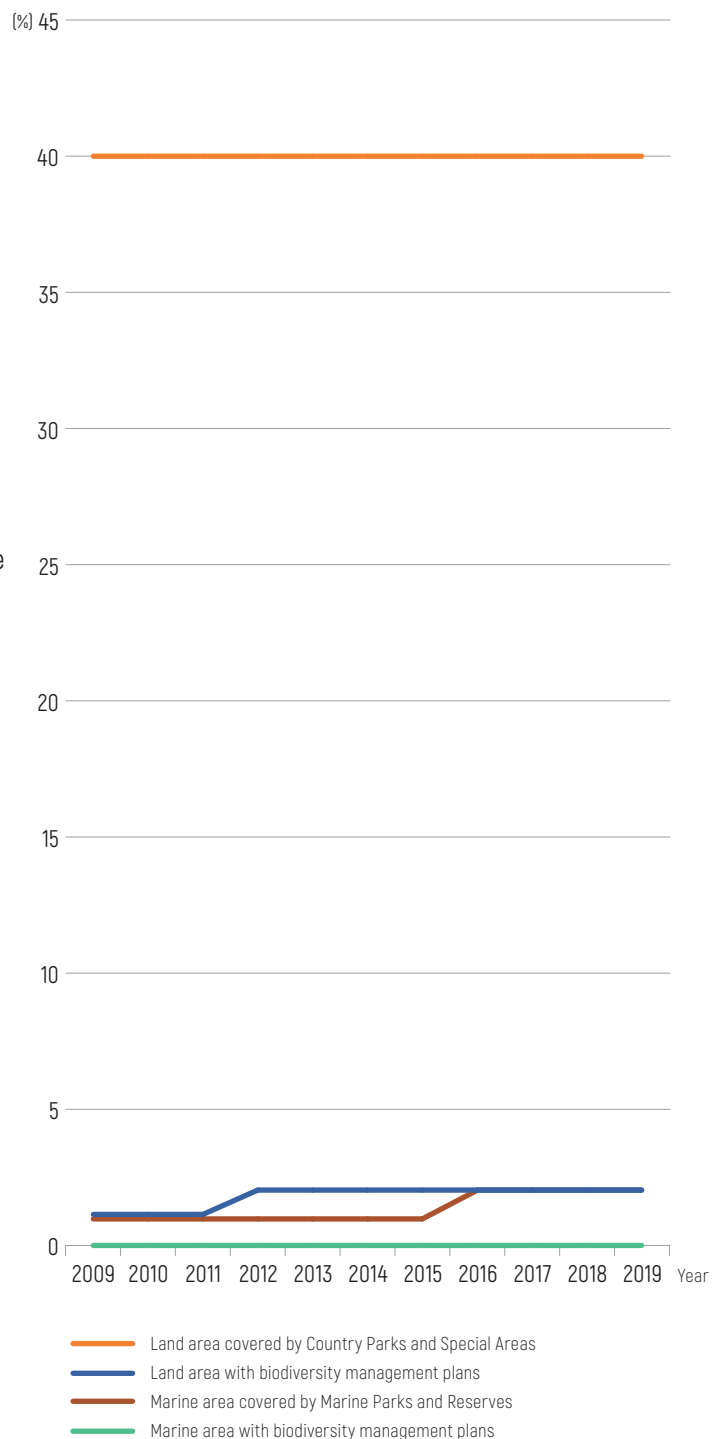
Data source: AFCD, IUCN Red List

HEADLINE INDICATOR 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

Terrestrial areas

- In the past decade, the area of Country Parks and Special Areas increased by less than 1% and remains at around 40% of the total land area in Hong Kong. The increase in protected areas came from the designation of five geologically important sites as Special Areas in 2011²⁸. The inclusion of country park enclaves into the system was slow, and the designation of Hong Kong's 25th Country Park at Robin's Nest has been delayed.
- In the 2010 Policy Address²⁹, the Government promised to provide better protection to Country Park enclaves – areas of high biodiversity value outside but abutting or surrounded by Country Parks. Up till 2020, 52 of the 77 enclaves were covered by statutory plans and six were incorporated into the Country Park system, leaving 19 enclaves still unprotected.
- Apart from the development pressure on the country park enclaves, there were no apparent development threats within Country Parks until the Government proposed in the January 2017 Policy Address that the “periphery” of Country Parks could be used for public housing under the land supply strategy³⁰. The public consultation on land supply revealed a clear view of the public that Country Parks should not be rezoned for housing and development, which resulted in the withdrawal of this initiative by the Government.



Published, resourced and active biodiversity management plans

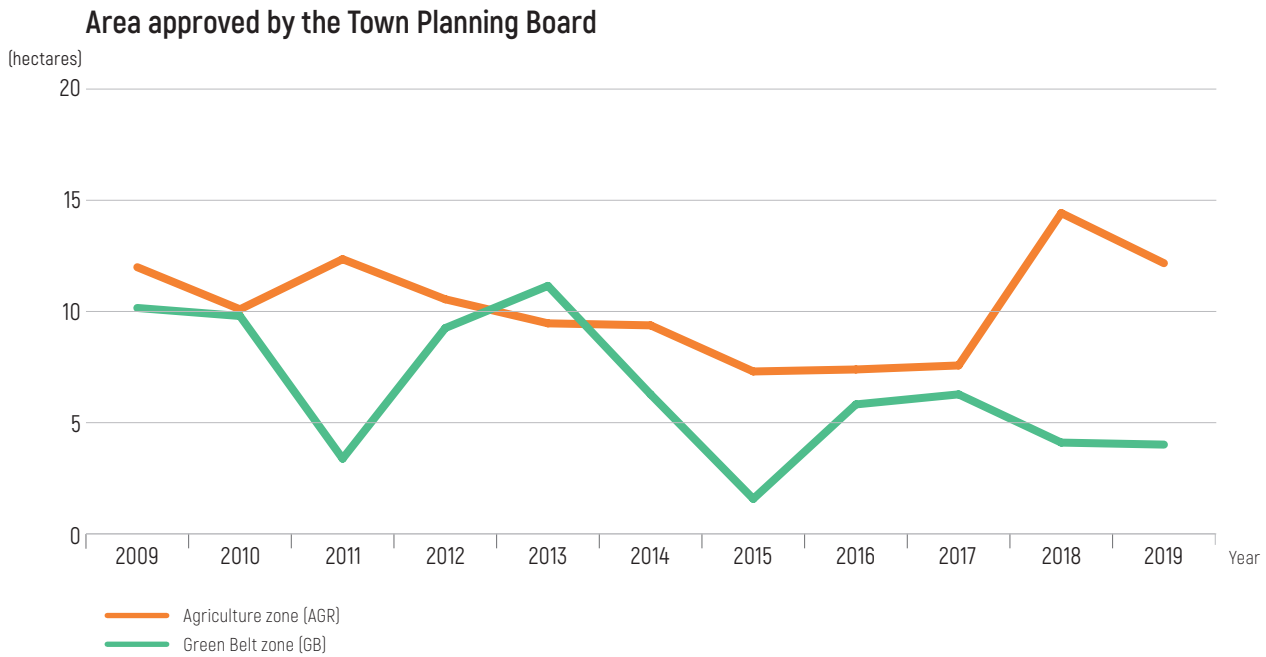
- Although tree planting and hill fire prevention works have long been conducted in country parks, there are still no biodiversity management plans for country parks, apart from one promised for the proposed Robin's Nest Country Park, which is still under formulation.
- Hong Kong Wetland Park, Mai Po Nature Reserve and Mai Po Inner Deep Bay Ramsar Site have detailed and published biodiversity management plans. The management and monitoring plans for Sites of Special Scientific Interest were updated but not published. Other sites of about 260 hectares in total, including Kadoorie Farm and Botanic Garden, Long Valley, Lok Ma Chau Ecological Enhancement Area, and West Rail Compensation Wetlands, are already managed by Government, environmental NGOs, or as mitigation requirements under the Environment Impact Assessment Ordinance (Cap. 499).
- There has been about 20% increase in the area (about 378 hectares) covered by biodiversity management plans in the past decade, including the fishponds in the Deep Bay area (2012), Lai Chi Wo (2014), Sai Wan (2017), and Sha Lo Tung (2018) under the Management Agreement schemes that are funded by the Environment Conservation Fund. Yet, the total terrestrial area covered by biodiversity management plans only accounts for about 2% of the land area in Hong Kong.

Marine areas

- With only 2% marine protected area, Hong Kong is still far behind Aichi Biodiversity Target 11 of protecting at least 10% of coastal and marine areas by 2020 as set under the CBD. There are no published targets or plans for the designation of marine protected areas in Hong Kong.
- Most of the existing Marine Parks and Reserves were designated on or before 2001. The Brothers Islands Marine Park was designated in 2016, as a compensatory measure for the Hong Kong-Zhuhai-Macau Bridge project, and was established once the reclamation was completed when most of the Chinese White Dolphin has already left the area. Several upcoming new marine parks will serve as compensation for development projects, such as the airport's Three Runway System and the Integrated Waste Management Facilities at Shek Kwu Chau.
- A Fisheries Management Strategy was implemented in 2019 in which commercial fishing will be banned in four marine parks³¹. However, there are no biodiversity management plans for Marine Parks.
- A major achievement in the management of marine resources that falls outside the scope of the indicators is the introduction of the trawl ban in Hong Kong waters in December 2012³².

Data source: AFCO, Environmental NGOs, LandsD

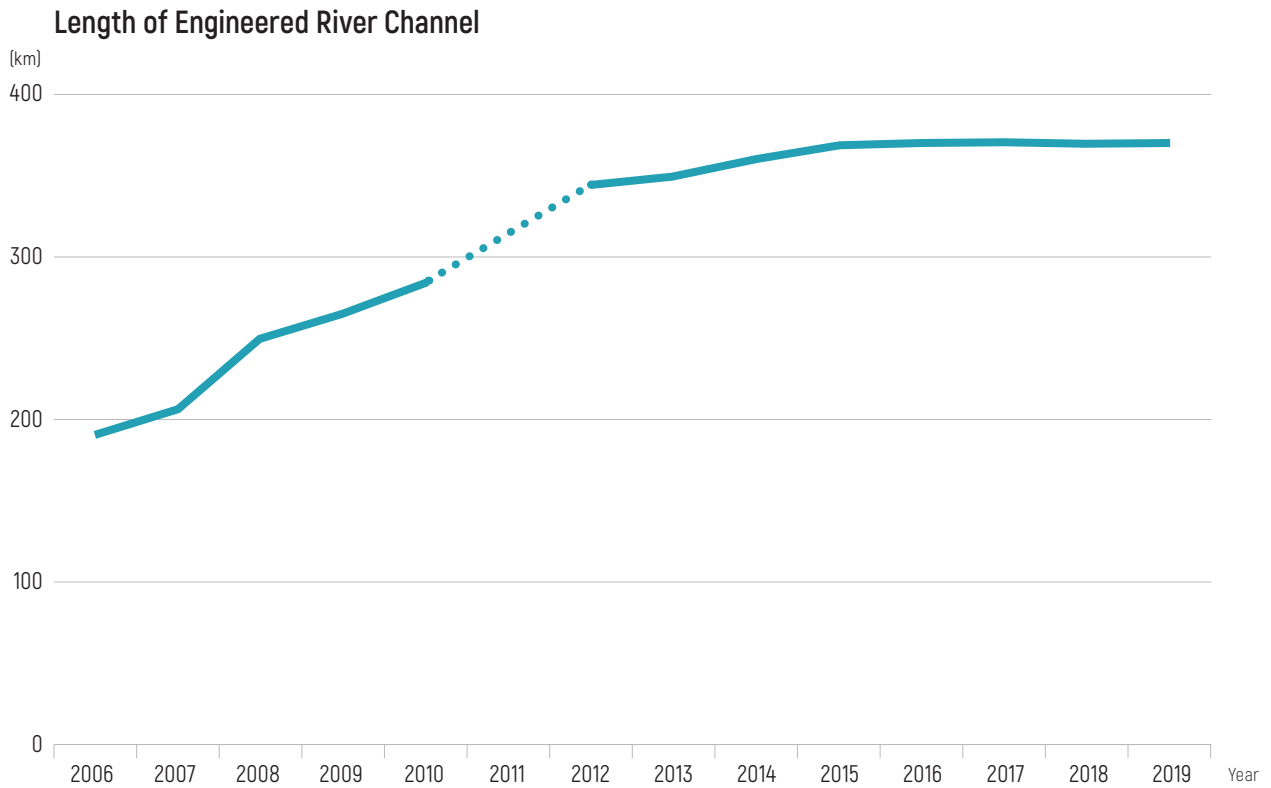
3.2 Total area impacted by planning proposals that involves conservation and agricultural zonings



- Agriculture (AGR) and Green Belt (GB) zones face the greatest development pressure among the conservation and agricultural zonings under the Town Planning Ordinance (TPO). There is a decreasing trend in the area of application sites within GB zones that are approved by the Town Planning Board (TPB), while for that in AGR zones remained high with no trend observed.
- Over half of the applications approved in GB and AGR zones were related to small house developments that do not meet the planning intention of these zonings. However, these account for just one-tenth of the total area of approved applications. Recreational uses, open storage and industrial uses – which likewise do not match the planning intention – took up more than half of the area approved in GB and AGR zone.
- The Government's land policy, which seeks to identify land for public and private housing, has increased development pressure on GB and AGR zones, for uses that conflict with the statutory planning intention and other policy commitments relevant to these zonings. Since 2011, the Government has rezoned "devegetated, deserted and formed" GB zones for development³³. From 2013, some well vegetated GB zones still with buffering effect were also rezoned, which was not in line with the Government's promise of only taking GB zones of "insignificant buffering effect and relatively low conservation value"³⁴. During the public engagement on Land Supply in 2018, taking GB zone for housing development was presented as a "current land supply strategy and ongoing initiatives"³⁵. All of the above suggests the Government is ignoring the current state and functions of well-vegetated GB land and neglecting the original good intentions behind designating GB as a buffer zone in urban and sub-urban areas.
- Even though "Agricultural Priority Areas" (APAs) were proposed in the New Agriculture Policy in 2016 in order to secure land for long-term agriculture use³⁶, there is no published timeframe for completion of the consultancy study for the identification of quality agricultural land³⁷. Conversely, the Government announced new strategies to release the development potential of agriculture land through the Land Sharing Pilot Scheme^{38,39}. This scheme provides incentives and policy support to justify non-agricultural uses within the AGR zone, or even rezoning AGR to development zonings, thus setting an undesirable precedent for landowners to destroy quality farmlands to favour future development.

Data Source: PlanD, TPB Statutory Planning Portal, TPB minutes, TPB papers

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

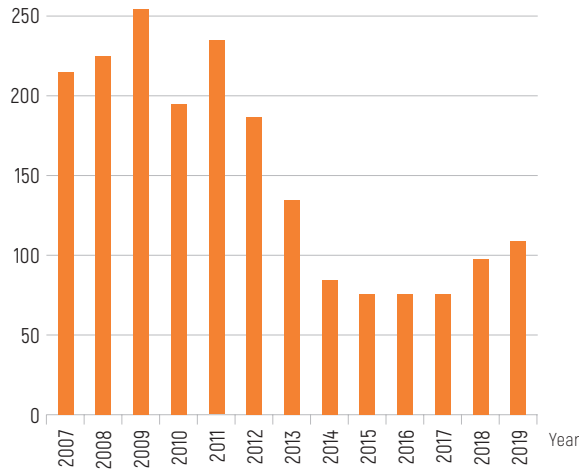


- Information on length of natural streams is not available.
- The length of engineered channels increased by about 24 km per year before 2011. During this ten-year period, the rate of increase dropped to 6 km per year and the total channelized length leveled off at 363 km from 2016. Upcoming drainage channelization in Ping Che/Ta Kwu Ling area will further impact natural streams.
- Drainage Services Department and Water Supplies Department are taking the lead in mainstreaming nature conservation into their work by adopting ecologically friendly designs in drainage channels and catchwaters at selected sites. A new set of guidelines on environmental and ecological considerations for river channel design was published by Drainage Services Department in 2015.
- On average 84% of the river water quality monitoring stations maintained their Water Quality Index at "Good" or "Excellent" over the past 10 years. However, one-third of the stations are still "High" or "Very High" in E. coli levels, indicating that water contamination from untreated sewerage still exists.

Data source: Drainage Services Department

3.4 Trends in number and populations of known invasive alien species

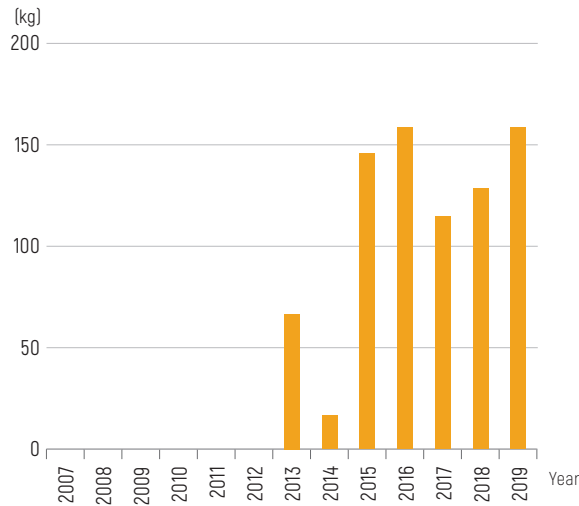
House Crow population



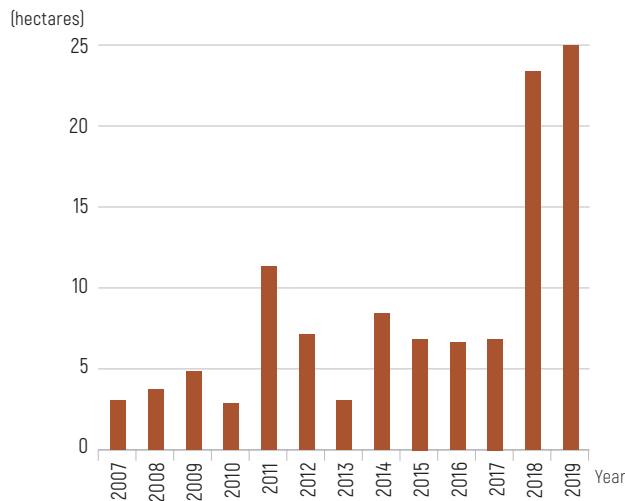
- AFCD's efforts to control House Crows achieved great success, reducing the population from over 200 individuals 10 years ago to around 100 individuals in recent years.
- The amount of Apple Snails and area of *Mikania* removed continue to increase, due to the increase of management plans in which some other invasive alien species are also managed. However, the current effort is still far from eradicating these species from the territory.
- A protocol for the risk assessment of invasive alien species in Hong Kong was developed and a risk assessment on alien herpetofauna was conducted under the BSAP.

Data Source: AFCD, WWF – Hong Kong, Environmental Association, Policy for Sustainability Lab and School of Biological Sciences of HKU, The Conservancy Association, and Green Power

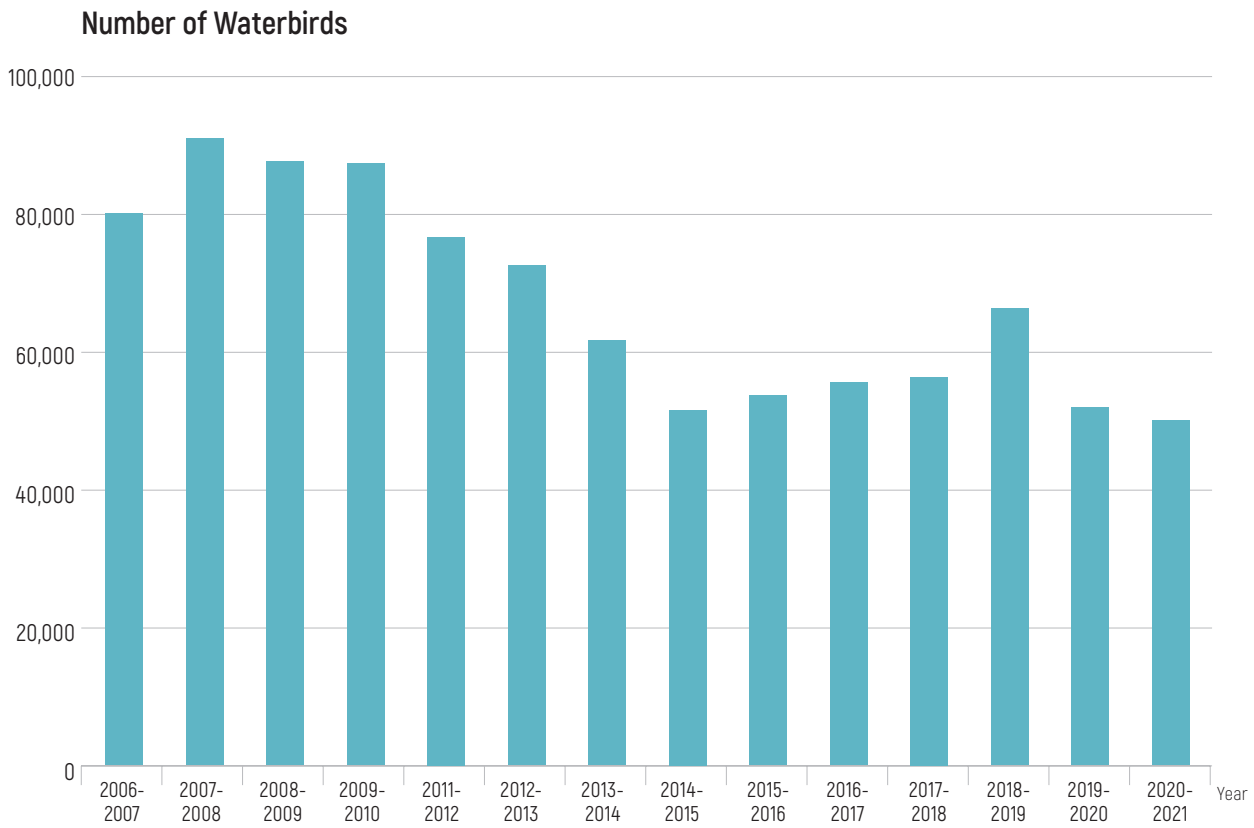
Apple Snail Removed



Area of Mikania removed



3.5 Trends in abundance and diversity of waterbirds

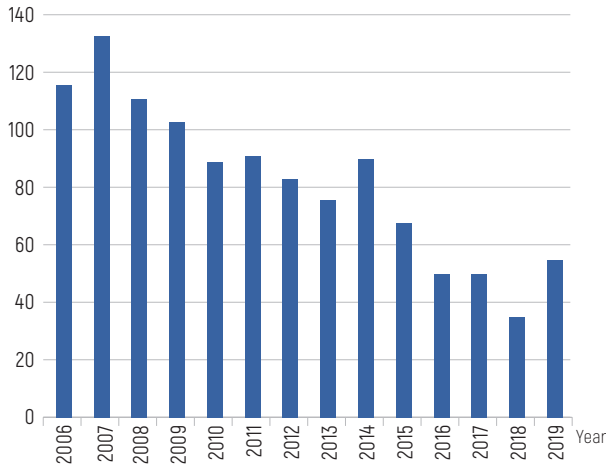


- The total peak count of waterbirds dropped by over 40% in the past decade, yet the causes are difficult to understand as the populations of these migratory birds are affected by factors both inside and outside Hong Kong. The population trends differ for specific waterbird species. For instance, Tufted Duck, Pied Avocet and Great Cormorant continued to increase in the past decade, but Dalmatian Pelican (last record in 2009-10⁴⁰), Common Shelduck and Eurasian Teal decreased significantly. The diversity of species of waterbirds in the Inner Deep Bay area remained stable at around 70 over the past decade.
- There has been little change in local conservation action in the Deep Bay area in recent years, while on-going local development threats still linger. In the past five years, a number of applications to increase the development intensity of private sites in Deep Bay were submitted to the TPB, ostensibly in line with Government's initiative and policy direction for seeking additional housing supply.

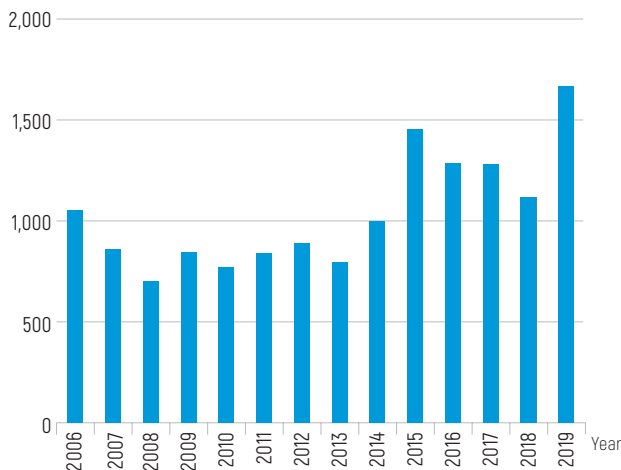
Data source: AFCD - Mai Po Inner Deep Bay Ramsar Site Waterbird Monitoring Programme

3.6 Trends in populations of flagship and umbrella species

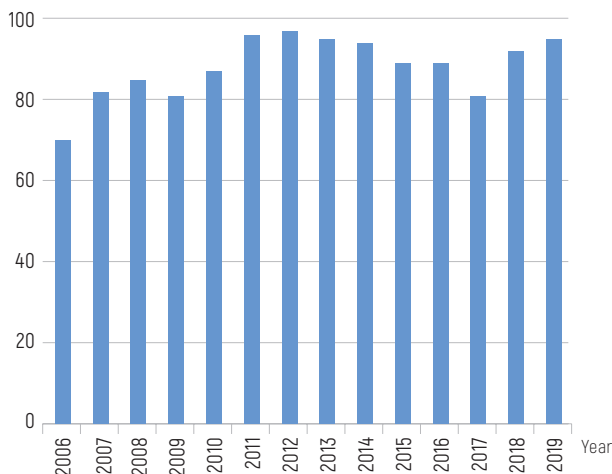
Chinese White Dolphin
(abundance estimate in Lantau)



Breeding Egrets and Herons
(number of nests)



Dragonfly Diversity
(number of species recorded)

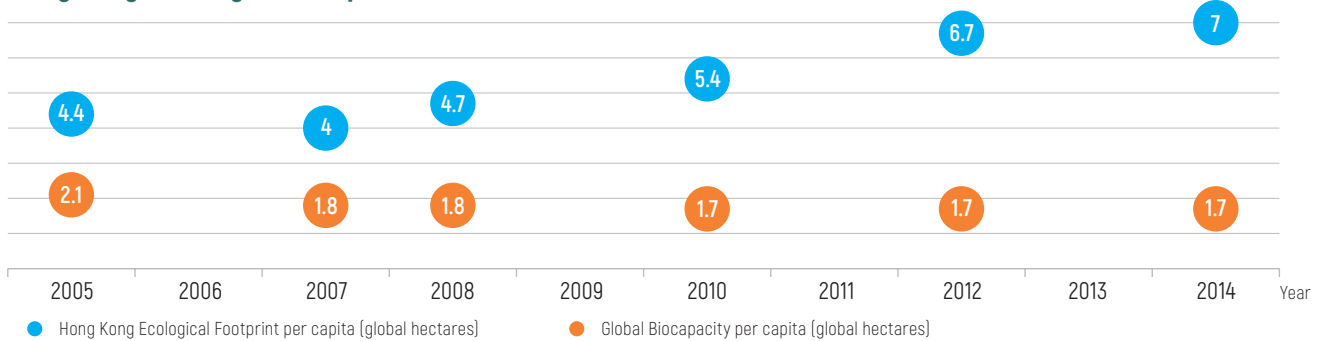


- The abundance estimate of Chinese White Dolphin in the waters around Lantau dropped by half in the past decade, with the number in Northeast Lantau waters falling to zero since 2015. The major threats to the Chinese White Dolphin population include habitat loss and degradation from reclamation and associated works in North Lantau waters since 2012, prey depletion, underwater noise disturbance and vessel traffic.
- The number of breeding egrets and herons generally increased. However, the breeding population of Eastern Cattle Egret dropped by two-thirds, likely due to the loss in farmland habitats caused by development pressure^{42,43}.
- The number of dragonfly species recorded increased slightly. Species associated with forest habitats are relatively well-protected within the Country Park and protected areas network, but not for pond-associated species, which depend on habitats that fall outside the protected area network.
- There are no publicly available data or systematic monitoring programmes for Big-headed Turtle, Buddhist Pine, and Grassland Orchid. However, poaching threat of Big-headed Turtle is still detected, even within protected areas^{44,45}.

Data Source: AFCD - Monitoring of Marine Mammals in Hong Kong Waters, Egretty Counts in Hong Kong with particular reference to the Mai Po Inner Deep Bay Ramsar Site, and through application for access to information

HEADLINE INDICATOR 4: REVERSING IMPACTS ON GLOBAL BIODIVERSITY

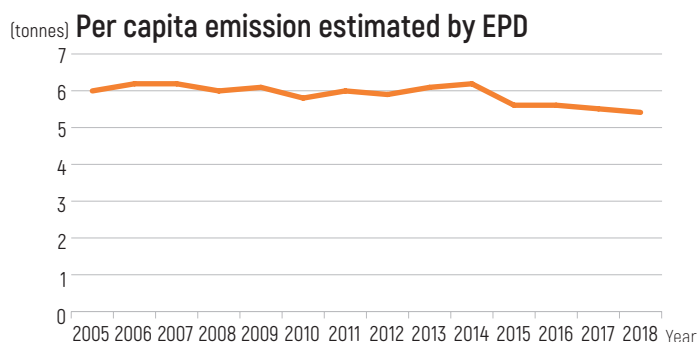
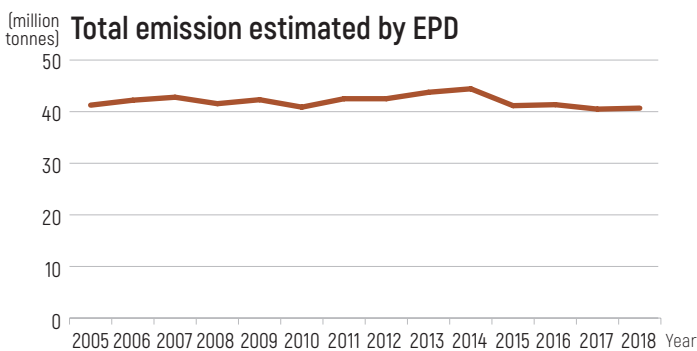
4.1 Hong Kong's Ecological Footprint



- Hong Kong has long been running an ecological deficit. While the global renewable resources per capita remained at about 1.7 – 2.1 global hectares for the past decade according to the latest WWF – Hong Kong's Ecological Footprint Report⁴⁶, the ecological footprint per capita in Hong Kong was 4.4 global hectares in 2005 and almost doubled to 7.0 global hectares in 2014.
- Since the amendment of the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) and the increase in penalties in 2018, the penalties and sentencing imposed on offenders were heavier than before as illustrated in cases smuggled by carriers or mules.
- Private sector efforts were made to regulate the seafood trade and consumption for which Hong Kong plays a significant role that impacts numerous species beyond its borders, such as the ban on shark fin cargo or shipment by many airlines and shipping companies, restaurants providing shark fin-free menus, the introduction of the sustainable seafood guide by WWF – Hong Kong⁴⁷, and the establishment of the Hong Kong Sustainable Seafood Coalition by the seafood industry⁴⁸.

Data source: WWF – Hong Kong

4.2 Change in greenhouse gas emissions attributable to Hong Kong



- Hong Kong's greenhouse gas emission level fluctuated around 42.0 million tonnes per year, but the per capita emission began to decrease slightly after 2013.
- The ratio of greenhouse gas emission between sectors remained stable, with electricity and town gas generation accounting for about two-thirds of the total emission, while transportation consistently contributed a little less than 20%.
- Due to the new 15-year Scheme of Control Agreements signed between the Government and the two power companies in 2017, carbon intensity was reduced by about 20% in 2020⁴⁹.
- In late 2020, the Government announced a new target to achieve carbon neutrality by 2050⁵⁰.

Data source: Environmental Protection Department and WWF – Hong Kong

HEADLINE INDICATOR 5: PLANS AND 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?

- In 2013, the Government set up a steering committee to formulate Hong Kong's first BSAP. Various experts, academics, representatives from green groups, private and public sectors were invited to participate in the 2-year participatory process.
- The first BSAP was published in late 2016, with HK\$150 million earmarked for the first three years of implementation. This is a key milestone since China extended the CBD to Hong Kong in 2011.
- Without a high-level interdepartmental committee under the Chief Executive to steer and co-ordinate actions between different departments and bureaux, deepening the mainstreaming of biodiversity conservation across Government departments by Environment Bureau and AFCD has not proven effective.
- The current BSAP has not initiated major changes of policy or legislation, leaving long-running loopholes unattended.
- No specific targets and indicators for monitoring were set for the BSAP.

4

LESSONS LEARNED AND RECOMMENDATIONS

Commitment to the CBD

The formulation of Hong Kong's first BSAP is a significant first step towards meeting Hong Kong's responsibilities under the CBD. It demonstrated Hong Kong's commitment to biodiversity conservation as laid out in the proposed BSAP actions and corresponding deliverables. It also secured financial resources and manpower for biodiversity conservation and provided policy support for a number of new initiatives and opportunities for change. While some targets were met or exceeded – the size of Hong Kong's terrestrial protected area network already far exceeded the Aichi Targets, and has provided a fine framework for the progressive regeneration of Hong Kong's forest ecosystems – and a number of new actions were initiated, there remain significant gaps in Hong Kong's response to its responsibilities under the CBD. Some of these reflect a lack of progress in addressing long-standing challenges, especially around enforcement of conservation-focused legislation and mainstreaming of biodiversity into policy and legislation, while others indicate visibly deteriorating attitudes towards biodiversity conservation, particularly around land use planning. Recognizing China's emphasis on the primacy of the United Nation for shaping its international responsibilities, it is expected that closer adherence to the CBD's expectations will be a key guiding principle in the formulation of the second BSAP.

RECOMMENDATIONS

1. Recognizing the breadth of issues covered by the CBD and the inability of the current BSAP for AFCD and Environment Bureau to effectively address all of these, **there is an urgent need for the HKSARG to articulate a comprehensive biodiversity conservation policy framework that puts meeting its CBD responsibilities at the core.**
2. **This policy framework should reflect the intention of Hong Kong to support the achievement of China's wider responsibilities under the CBD, and particularly the Post-2020 Biodiversity Framework, which will be adopted at the next COP.**
3. **It should also seek to draw from and align with China's national development framework, Ecological Civilization, which places significant emphasis on environmental and biodiversity conservation and restoration, and provides a fine model for mainstreaming biodiversity into the wider development agenda. Reference should be made to China's key policy and regulatory frameworks** such as the Ecological Red Line, Ecological Security, and the ecological plans for the Greater Bay Area.
4. Since the implementation phase of Hong Kong's first BSAP will expire at the end of 2021, **a new/revised BSAP should be prepared for the following five years.** Building on Hong Kong's existing strengths in biodiversity conservation, the progress made in the first BSAP, developments in China's framework for biodiversity conservation and recognizing that significant gaps still exist in meeting Hong Kong's commitments under the CBD, **the new/revised BSAP should demonstrate how the biodiversity conservation policy objectives will be fulfilled.** This will require the development of specific time-bound targets that include quantitative elements, identification of responsible parties, and corresponding indicators for effective and accountable implementation, monitoring and reporting, as demonstrated in Chapter 2 of this review. A finance and manpower plan should be included to ensure that adequate resources are allocated for the long-term implementation of the BSAP.

5. Recognizing the importance of public participation emphasized by the CBD, **development of the second BSAP should involve significant engagement with relevant experts and the wider public.** This could include a review of the recommendations raised during the public consultation for the first BSAP.

Mainstreaming biodiversity

In order to achieve the global targets under the CBD it is important that the value of biodiversity is reflected in everyday decisions taken by the HKSARG, all sectors of society and the general public. HKSARG considered that mainstreaming biodiversity should be the priority of Hong Kong's first BSAP, and it is observed that much effort was put into public education and awareness raising.

RECOMMENDATIONS

6. **The current momentum in public education should be maintained and enhanced.**
7. **Efforts to mainstream biodiversity and engage all sectors and relevant stakeholders should be continued and further improved, such that conservation of biodiversity does not only** lie in the hands of the Environment Bureau, AFCD, Environmental Protection Department, and environmental NGOs, but also in the hands of other bureaux, works departments, and the private sector. **Mainstreaming of biodiversity within Government departments is still needed to truly conserve biodiversity in Hong Kong, and for more inter-departmental collaboration in policy making or efforts in biodiversity conservation.**
8. As Hong Kong's ecological footprint continues to increase, it is important for the Government to **facilitate and encourage sustainable living through education and provision of corresponding measures, facilities and socioeconomic incentives** in every aspect of daily life (e.g. food, living space, clothing and travel).

Biodiversity loss

Hong Kong performed the weakest in reducing direct pressures on biodiversity. Even though some nature conservation elements were integrated into the planning and development process, mainstreaming and implementation of biodiversity conservation remains difficult when there are conflicting

economic and development issues at play, particularly as most developments projects and plans are outside the jurisdiction of the Environment Bureau and AFCD.

RECOMMENDATIONS

9. **Review and close long-running deficiencies and loopholes in existing policies, legislation and planning processes** that have been causing the continuous ecological degradation of important habitats and hindrance of effective enforcement. These include:
- amendment of the Town Planning Ordinance (Cap. 131) to allow enforcement by Planning Department in all rural areas of Hong Kong;
 - resolving the conflict of interest in the administration of the Environmental Impact Assessment Ordinance (Cap. 499);
 - the ecological value of the site should be considered before the approval of waste dumping in private land under the Waste Disposal Ordinance (Cap. 354);
 - ordinances for the protection of wild animals and plants should also be updated such that threatened species which are currently not protected by the law can be included.
10. **Prioritise the principle of environmentally and ecologically sustainable use of resources in the use of land for development in Hong Kong.** Degraded or formed land, such as brownfields, vacant land in urban areas and sites under private recreational leases, should be used first. Land supply options which will inevitably accelerate the rate of ecological loss, such as the use of agricultural lands, Green Belts, other conservation zonings, Country Parks and reclamation, should only be adopted as the solution of last resort when all other options are shown to have been exhausted, a public consensus is reached, and under rigorous application of all relevant legislation and international best practices.
11. **Hong Kong should strengthen the regulatory framework and enforcement regime governing the trade in live and dried seafood** including live coral reef fish, shark fin and many other marine species, as well as education to consumers, in order to limit the impacts on the environment beyond its border as required under the CBD⁵¹. As a global centre of this trade, regulation in Hong Kong has significant potential to increase the sustainability of the species traded, the ecosystems worldwide from which they are harvested and the livelihoods of people living in those regions.

Protected area network

Hong Kong is among the world's leaders in protected area network, with country parks and special areas covering about 40% of the total land area. However none of Hong Kong's Country Parks have a habitat management plan, despite the fact that protecting biodiversity is one of the key purposes for which Country Parks were established⁵². Terrestrial protected areas were subjected to increasing attempts by the Government to rezone conservation zonings for other non-compatible uses, which run counter both to China's national trends in protecting biodiversity and the intent of the CBD. In addition, only about 2% of Hong Kong's marine area is protected, which is far below the Aichi target of 10%.

RECOMMENDATIONS

12. **Set specific targets with timeframes appropriate to the CBD's Post 2020 Framework for establishing new terrestrial and marine protected areas**, taking into account the importance of protecting cross-border terrestrial and marine ecological corridors.
13. **Publicly accessible biodiversity management plans for all protected areas should be prepared** so as to increase public participation in biodiversity conservation, increase the transparency and accountability of the management authority, and help to highlight constraints (e.g. insufficient resources and manpower) for implementation and improvement^{53,54}.
14. **Incorporate the best lessons from China's implementation of the ecological Red Line and the principles of ecological security and other environmental policies into protecting existing protected areas, designating new protected areas, controlling of invasive alien species, pest and disease outbreak, and framing an ecosystem services inventory for Hong Kong.**

5

LOOKING FORWARD – THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

As we continue to monitor Hong Kong's conservation progress under the CBD in the years to follow, reference must be made to new developments under the CBD. Building on the Strategic Plan for Biodiversity 2011-2020, a draft of the Post-2020 Global Biodiversity Framework was prepared by the secretariat of CBD and was updated in August 2020⁵⁵. The Post-2020 Framework is currently still under development and the final draft will be adopted in the next COP, which is currently scheduled for October 2021 in Kunming, China.

In order to achieve the CBD's vision of *"living in harmony with nature by 2050"*, the Post-2020 Framework aims to stabilize biodiversity loss in the next 10 years (i.e. by 2030) and allow natural ecosystems to recover in the following 20 years. Besides setting the vision and goals for 2050, 20 action targets for 2030 were also established under three main themes: 1) reducing threats to biodiversity; 2) meeting people's needs through sustainable use and benefit-sharing; and 3) tools and solutions for implementation and mainstreaming. These targets are similar but more ambitious than the previous Aichi Biodiversity Targets, and are expected to be ratified in Kunming in October 2021.

A few enabling conditions have been suggested in the Post-2020 Framework for effective implementation. Perhaps most relevant for Hong Kong is the requirement for *"inclusive and integrative governance and whole-of-government approaches to ensure policy coherence and effectiveness for the implementation the framework"* and *"political will and recognition at the highest levels of government of the urgent need to halt biodiversity loss"* – both of which are key components of mainstreaming. The HKSARG should make reference to the Post-2020 Biodiversity Framework during the preparation of the next BSAP, so as to ensure Hong Kong's effort in biodiversity conservation aligns with the Post-2020 Framework, and the progress can be effectively monitored.

HKBWS will also conduct a comprehensive review and update of the headline indicators used in the *"Hong Kong Headline Indicators for Biodiversity and Conservation"* series. The new indicators will serve the same purpose – to monitor and report on Hong Kong's conservation progress in relation to the new global targets under the CBD. This will involve seeking input from a wide range of biodiversity and conservation experts in a process similar to that conducted by Civic Exchange in the development of the original headline indicators⁵⁶.

GLOSSARY AND REFERENCES



GLOSSARY (Acronyms and Abbreviations)

AFCD	Agriculture, Fisheries and Conservation Department	HKBWS	Hong Kong Bird Watching Society
AGR	Agriculture, a land use zoning in statutory plans under the TPO, which intends to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes, and retain fallow arable land for cultivation and other agricultural purposes.	HKSARG	Hong Kong Special Administrative Region Government
BSAP	Biodiversity Strategy and Action Plan	IUCN	International Union for Conservation of Nature
CBD	Convention on Biological Diversity	LandsD	Lands Department
DSD	Drainage Services Department	NGOs	Non-governmental Organizations
GB	Green Belt, a land use zoning in statutory plans under the TPO, which intends to conserve the natural environment for its buffering function in the city and as a passive recreational outlet. There is a general presumption against development in this zone.	PlanD	Planning Department
GM	genetically modified	SAP	species action plan, a document which determines the conservation objectives and actions for a single or multiple species. In Hong Kong, these plans are often formulated and coordinated by AFCD, in consultation with relevant experts and Government departments.
		TPB	Town Planning Board
		UD	Unauthorized Development

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