



1 | Background

1.1 What is biodiversity?

“Biodiversity” is a word created from two words, “biological”, meaning living, and “diversity”, meaning variation. Biodiversity embraces the variety of genes, species and ecosystems that constitute life on earth. In summary, we use this word, “biodiversity”, to refer to different plants, animals and microorganisms, genetic information they contain and ecosystems they form.

Biodiversity is usually explored at three levels - genetic diversity, species diversity and ecosystem diversity. These three levels work together to create the complexity of life in the biosphere on earth.

BOX 1

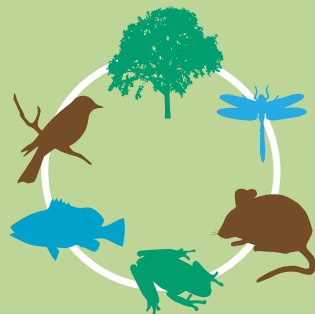
Three levels of biodiversity

1 Genetic diversity refers to the variety present at the level of genes. Genes carry the DNA of an organism. DNA determines all the physical characteristics of an organism, including how well it can live under different conditions. During reproduction, genes combine in different ways creating slight variation in the characteristics of the offspring. Thus, genetic diversity represents the ability of a species to adapt to changes in the environment over

generations. If there are more slightly different combinations of genes in individuals of a species, then it is more likely that one of those combinations may adapt to the change, survive and reproduce. In other words, greater genetic diversity means greater chance of survival for the species when physical conditions change.



2 Species diversity means the number of different organisms in a habitat or a region. It includes every kind of plant and animal, from microbes in the soil to human beings. These species are related to each other in often complex relationships. They depend on each other for food, protection and shelter, making use of and contributing to nutrient, oxygen and water cycles.



3 Ecosystem diversity refers to the number of different communities of organisms and their interacting physical environments within a given area. Forest, grassland, seaside, mangrove—even urban area— all are different ecosystems. They have a specific physical environment, sea water, fresh water, hard rock or soft soil for example; and specific communities of plants and animals that interact with these environments and survive.



BOX 2

What are “ecosystems”?

“Ecosystem” refers to all the organisms and the physical and chemical environment of a particular place, and it embodies all the interactions of the living organisms with each other and with their surrounding environment. An ecosystem could cover a large area, such as a woodland, or a small area, such as a log. Thus, the meaning of the word is also dependent on the context: we may say there are ecosystems within ecosystems, just as a log is also part of a woodland.

1.2 Why is biodiversity important?

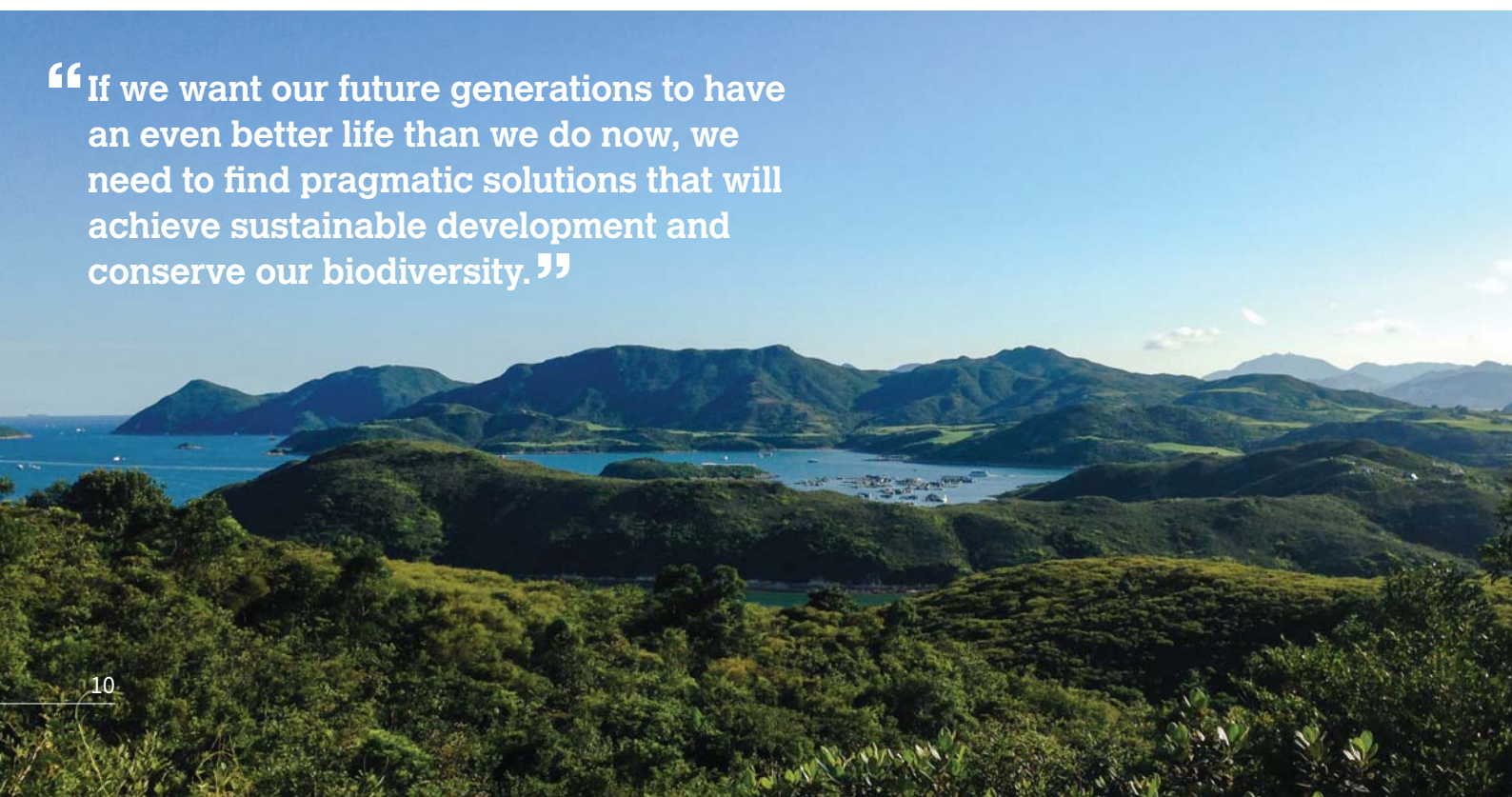
Biodiversity is important because it is a measure of how stable ecosystems are, particularly when physical conditions change. At the same time, biodiversity is more than plants, animals, microorganisms and their ecosystems – it is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live. This might not be immediately apparent. For example, the death of honeybees due to excessive use of chemicals on crops might not seem important or even relevant to city dwellers, until they realise that if bee colonies are collapsing and there are not enough pollinators to support food production, then they might not get any crops. Our health and wellbeing is completely dependent on the health and wellbeing of our ecosystems. Biological diversity underpins ecosystem functioning and every species in an ecosystem has a function, with their relationships complex yet delicate.

1.3 Why are we talking about this now?

People around the world are concerned about biodiversity because scientists notice an alarming deterioration in natural environments. They know how important biodiversity is to the health of life on our planet. People in Hong Kong are concerned about biodiversity because we have exceptionally attractive natural assets that we need to conserve, even as we continue to develop economically.

Today, Hong Kong is valued not only as a financial, commercial and logistics centre, but also as a place with magnificent natural assets and ample outdoor enjoyment opportunities, just a remarkably short distance from urban centres. We have extraordinary biodiversity for a city of this population size. This richness is a valuable asset and the fruit of decades of hard work (described more fully in Chapter 2). But, our biodiversity is facing great challenges today too. There is a tremendous need for land and financial resources to meet the housing aspirations of our citizens and to provide the infrastructure necessary for a global financial and commercial hub. We have a huge demand for food and consumables. We also have a significant ecological footprint like other major cities. If we want our magnificent natural assets to be passed on to our future generations and if we want those generations to have an even better life than we do now, we need to find pragmatic solutions that will achieve sustainable development and conserve our biodiversity.

“If we want our future generations to have an even better life than we do now, we need to find pragmatic solutions that will achieve sustainable development and conserve our biodiversity.”



1.4 What is being done: Convention on Biological Diversity

Nations around the world recognise the importance of biodiversity. At the “Earth Summit” in 1992 (Rio de Janeiro, Brazil), many countries signed the CBD. The Convention has three objectives: conservation of biological diversity, sustainable use of the components of biological diversity, and fair and equitable sharing of benefits arising out of the utilisation of genetic resources. It provides overall goals and general obligations to guide countries to implement the CBD. For example, Article 6 of the CBD provides that countries that have ratified the CBD should develop national strategies, plans or programmes for conservation and sustainable use of biodiversity or equivalent measures, or adapt existing ones for this purpose, according to their particular conditions and capabilities. To date, 196 countries and organisations have ratified or accepted the CBD, and become “Parties to the CBD”.

In 2010, Parties to the CBD adopted a *Strategic Plan for Biodiversity 2011-2020* with the aim of inspiring action in support of biodiversity over the next decade by all countries and stakeholders. The Strategic Plan is a ten-year framework consisting of a shared vision and mission, five general goals and 20 specific global targets. Each country was to, based on its conditions and what is feasible in the country, set goals and take actions to contribute to global efforts in halting the loss of biodiversity.

1.5 What is being done: China’s national BSAP 2011 – 2030

The People’s Republic of China joined the CBD in 1993. It updated its national BSAP in 2010 to identify strategic goals, tasks and priority areas for biodiversity conservation in China for the next two decades. It has also published five annual reports on its progress. The 200-page Fifth National Report was published in March 2014¹.

The Central People’s Government extended the CBD to the Hong Kong Special Administrative Region (HKSAR) in 2011.

1. Available through the CBD website: www.cbd.int

1.6 What is being done: A city-level BSAP for Hong Kong

While Hong Kong is not itself a Party to the CBD, as a world city and a part of China, we want to contribute to the achievement of global targets and China's national BSAP according to the particular conditions and capabilities of Hong Kong. We will also assist the Central People's Government in fulfilling its obligations under the CBD. At the same time, we are aware of other aspirations of the society to develop the city and to remain globally competitive.

It is against this background that the work on formulating the first city-level BSAP for Hong Kong began in 2013. By formulating a BSAP and re-visiting it after the first period of implementation, we aim at taking reasonable steps at a time to bring different minds in the society to better understand biodiversity conservation and how people can participate. In this way, the society as a whole can make wise choices to step up biodiversity conservation and support sustainable development.

We formed a steering committee on formulating the BSAP. Committee members have diverse backgrounds and expertise, including biodiversity experts, academics and representatives from professional bodies, rural communities, public and private sectors and relevant government departments.

The committee has made a set of recommendations for the Government to consider after 18 months of stakeholder engagement and deliberation (described more fully in Chapter 3). Based on these recommendations, views collected during public engagement activities held in the past two years, experiences of other city-level BSAPs and local circumstances, we have identified four areas for action in the next five years under the BSAP. These areas are: to conserve biodiversity; to bring considerations for biodiversity into planning and decision-making; to enhance knowledge about biodiversity and its importance; and to engage the public in implementing changes.

The next step is to receive public views on the proposals described herein. The Government's aim is to finalise the BSAP for Hong Kong as soon as practicable, for implementation in the next five years.