Cities to get biodiversity index

It will serve as a global tool for cities to manage flora and fauna in urban areas

BY VICTORIA VAUGHAN

CITIES might not seem the obvious place to seek nature but Singapore has established a city biodiversity index which it hopes will become a global tool to measure the amount of flora and fauna existing in urban areas.

The index is being finalised today by a panel of experts from around the world and it is hoped it will be adopted at the 10th Conference of the Parties to the Convention on Biological Diversity to be held in Nagoya, Japan, in October.

The Singapore Index on Cities' Biodiversity has 25 indices looking at native biodiversity, ecosystem services and governance among other things, with four points allotted to each one.

Although the index is still being finalised, it will not be used to rank countries, said Dr Lena Chan, deputy head of the centre for biodiversity at the National Parks Board and the force behind the index. “I hope it will be used as a diagnostic tool for cities, helping them to protect native biodiversity and know where to spend their money,” she said.

In a preliminary test of the index, Singapore scored 80 out of 100. It was strong in governance but weaker in ecosystem services – the functions biodiversity performs within a city such as trees’ absorption of carbon – particularly in freshwater supplies, as there are not many large areas of soil through which water can filtrate and be cleaned.

Dr Chan said other global indices do not focus on biodiversity or they look at country comparisons which are not easily applied to Singapore. “This is a positive index, which does not look at how many species are extinct or what we have lost but what cities are doing and what they have,” she said.

The native biodiversity section takes into account natural and semi-natural areas such as Sungei Buloh and parks, as well as the diversity of ecosystems; for example, Singapore has wetlands and rainforest.

It also looks at five different native species: plants, birds and butterflies, and two others left free for a city to nominate to make it a fair measuring system.

Governance looks at the policy and plans around biodiversity, education and partnerships with businesses and charities.

Ms Machtedt Gryseels, director of the nature, water and forest division in Brussels’ regional environment administration in Belgium, who is in Singapore to help finalise the index, said it has highlighted a lack of biodiversity planning in her city.

“For the last 20 years, we have been looking at biodiversity, so we had a lot of data on that. But it showed we lacked precise data on how many programmes and visits to nature areas that we have, which is part of the ecosystem service component,” said Ms Gryseels, adding that Brussels had scored about 75 in the index.

Mr Alfredo Vincente de Castro Trindade, technical coordinator for flora and fauna in Curitiba, Brazil, said it was important to take action at a city level.

“It doesn’t matter what governments do if the cities don’t implement it. Life happens in cities; it is where change happens,” he said, adding that Curitiba scored about 80 on the index.

The index has the potential to guide cities in the management of flora and fauna. This is becoming increasingly important as 70 per cent of the world’s population is expected to live in cities by 2050, up from 50 per cent in 2008.

Mr Ahmed Djieghaf, executive secretary of the Convention on Biological Diversity, said that measuring biodiversity and forming plans at a national and local level was the way forward following the failure to hit this year’s target on reducing loss of biodiversity.

The idea of the index was tabled in May 2008 by Minister for National Development Mah Bow Tan at the 9th Conference of the Parties to the Convention on Biological Diversity in Bonn, Germany.

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