



ANNEX B

FACT SHEET: TRANSFORMING SINGAPORE INTO A CITY IN NATURE

At the start of Singapore's greening journey, the aim was to green up the island as quickly as possible for the purpose of providing shade and access to green spaces for all. The greening strategy then evolved to provide colour through the planting of flowering trees and shrubs. Parks were linked up by the Park Connector Network and developments were encouraged to incorporate skyrise greenery to help improve the living environment.

In more recent years, the National Parks Board (NParks) has adopted biophilic design in restoring habitats and has been engaging the community in our efforts to sustain our greening efforts. Increasing urbanisation, coupled with a rise in global temperatures and extreme weather conditions due to climate change, requires a response that retains and integrates greenery, as well as restores urban nature, to continue to provide Singaporeans with a high-quality living environment.

Therefore, Singapore is now moving towards becoming a City in Nature. This City in Nature vision is a key pillar of the Singapore Green Plan 2030, which is a whole-of-nation movement to advance Singapore's national agenda on sustainable development. The Green Plan will enable us to tackle the global challenge of climate change and charts out Singapore's firm actions to build a sustainable future. To take us forward, we will build upon what has been achieved and further restore nature into the urban fabric. Singapore's transformation into a City in Nature will be guided by four key strategies – extending our natural capital, intensifying nature in gardens and parks, restoring nature into the urban environment, and strengthening connectivity between Singapore's green spaces. These strategies will be supported by a community of nature stewards which NParks is actively engaging.

Extending our natural capital

Singapore's four nature reserves safeguard the country's most important representative and core ecosystems. In recent years, NParks has been establishing networks of nature parks around these reserves to protect them against the impact of urbanisation. These nature parks serve as buffers and complementary habitats for Singapore's native flora and fauna to thrive,

while enabling visitors to enjoy nature-based activities with minimal disturbance to the nature reserves.

Intensifying nature in gardens and parks

Landscapes in gardens and parks are also being curated to be more natural through the incorporation of nature-based designs, and a wider variety of planting schemes comprising a diversity of native plant species emulating Singapore's natural forests. In doing so, visitors can come closer to nature.

Therapeutic landscapes designed to bring respite to people with mental and physical health conditions will be incorporated in gardens and parks, and more nature playgardens will be built so that children can play within a natural setting and connect closer with nature through play, exploration and learning.

Waterways and waterbodies in gardens and parks, will be naturalised, where possible. Concrete canals will be transformed into naturalised rivers, while reservoirs will serve as naturalised lakes that catch and retain rainwater. Such nature-based solutions will enhance flood protection for nearby homes and properties, while supporting rich biodiversity.

NParks will also conserve more native plant and animal species. Ongoing habitat restoration and species recovery efforts have enabled Singaporeans to encounter and enjoy once-rare species of birds and plants in our green spaces, and we will continue to do more.

Restoring nature into the urban environment

Nature in the built environment will continue to be restored, cooling the urban environment and bringing the therapeutic effects of greenery directly to people in their homes and workplaces.

One key initiative is the implementation of skyrise greenery to soften the appearance of Singapore's buildings and infrastructure while advancing our status as a world leader in vertical greening. NParks is also working with various stakeholders to increase the total number of trees across industrial estates by almost three-fold. The intensified greenery will cool industrial estates, and help to improve air quality and beautify the surroundings.

Strengthening connectivity

NParks is incorporating multi-tiered planting along roads to create a forest-like structure that strengthen the ecological connectivity between Singapore's green spaces. This will also make Singapore's streets cooler and more comfortable for pedestrians, while enhancing resilience against the effects of urbanisation. Such roads are known as Nature Ways. In tandem, NParks will continue to expand the Park Connector Network to ensure that more communities can access nature easily.

Fostering community stewardship

The work to transform Singapore into a City in Nature requires the support of the community. Therefore, NParks will continue to work closely with the community through several key programmes to nurture stewards of nature.

The Friends of the Parks initiative enables the community to be involved in the design, development and management of our parks. Youth can become volunteers and stewards of our natural heritage through the Youth@SGNature initiative. The community can also help conserve our natural heritage through the Community in Nature initiative, support our greening efforts through the OneMillionTrees movement, or participate in gardening through the Community in Bloom programme.

For more information, please visit www.nparks.gov.sg/cityinnature

1960s: The vision for a Garden City

When the British arrived in Singapore in 1819, the island was covered with rainforests, swamps and mangroves. By 1900, more than 90% of the primeval forest had been cleared for timber extraction, agriculture, and the creation of settlements. While the British designated forest reserves and nature reserves, much of these areas were eventually replaced with plantations and agriculture, leaving only small reserves scattered across the island. It was not until the 1960s when the Garden City campaign was launched that Singapore started regaining some of this lost greenery.

Then, former Prime Minister Lee Kuan Yew envisioned Singapore as a tropical Garden City. He recognised that the introduction of greenery would soften the harshness of urbanisation and improve the quality of life in the city. A clean and green Singapore would differentiate itself from its neighbours and attract the international investment necessary for the state's growth.

On 16 June 1963, he launched Singapore's first nationwide tree-planting campaign by planting a Mempat tree, marking the start of efforts to green the city.

1970s to 1980s: Greening up infrastructure

The initial mandate given by Mr Lee was to green up the island as quickly as possible and to cover up bare concrete structures. Plants were grown on retaining walls, pedestrian overhead bridges, viaducts – it was a requirement that they had to be split in the middle to allow sunlight to reach the plants grown below – and surface car parks.

Open spaces were turned into parks and gardens, most of which were near to the city and residential neighbourhoods. Subsequently, flowering plants and fruit trees were added to Singapore's landscape.

From early on, the community was involved in the greening campaign. In 1971, the first annual Tree Planting Day was held; it is a tradition that continues to this day as part of Clean and Green Singapore.

As the scope of greening works expanded, the Parks and Recreation Department (PRD) was formed under MND in 1976. The first Commissioner of Parks was Mr Wong Yew Kwan.

In 1970, the Garden City Action Committee (GCAC) was created to provide a platform for agencies to coordinate their greening initiatives. Comprising representatives from various agencies involved in public infrastructure development, the GCAC has been instrumental in facilitating inter-agency collaboration to drive Singapore's greening efforts.

1990s: Greater emphasis on recreation and community involvement

In the 1990s, greening efforts moved beyond the greening of infrastructure towards a greater focus on recreation. Parks were further developed along different themes to provide more recreational options for park users. Sculptures were also installed within parks to promote an appreciation for the arts. In 1990, the National Parks Board was formed to manage the Singapore Botanic Gardens, Fort Canning Park and the nature reserves.

In 1996, to strengthen the overall planning and management of Singapore's parks, greenery and nature areas, the PRD merged with the former National Parks Board to create the National Parks Board (NParks) of today.

Initially proposed in the early 1990s, the first park connector was officially opened in 1992. It was envisioned that this green corridor would offer Singaporeans a new form of recreational space made up of linear parks connecting parks and nature areas, making it easier for people to access them.

2000s to 2010s: From "Garden City" to "City in a Garden"

Singapore evolved from a Garden City to a biophilic City in a Garden. The biophilic City in a Garden vision was one of Singapore as a city nestled within a large garden, compared to having gardens in a city.

A part of this vision was to establish world-class gardens. Singapore is in the unique position of having two in close proximity: the Singapore Botanic Gardens, founded in 1859, and Gardens by the Bay, opened in 2012. The former is a premier botanical institution which has garnered international accolades such as Time Magazine's "Asia's Best Urban Jungle" award and a three-star rating by the Michelin Green Guide. It was inscribed as a UNESCO World Heritage Site in July 2015. The latter showcases the best in horticulture and garden artistry.

Given Singapore's limited land space, new and innovative programmes were implemented to further extend greenery in our urban landscape. These initiatives aimed to create a Singapore that would remain lush and pervasive in greenery even as the demands of development grow. This included the development of a Round Island Route for Singapore. When completed, it would be a seamless 150 km green corridor that goes all round Singapore, linking up many major natural, cultural and historical attractions to our parks, park connectors, and intra-town cycling networks. Another initiative involved actively working with the community to promote skyrise greenery.

NParks worked closely with industry partners on a range of programmes to raise skills standards of industry workers. In 2007, NParks and the Singapore Workforce Development Agency jointly set up the Centre for Urban Greenery and Ecology (CUGE), a national training institution for the landscape industry.

NParks has actively reached out to all Singaporeans to enhance the appreciation of greenery and promote a gardening culture. In 2002, NParks established a charity called the Garden City Fund (GCF). The GCF's Plant-A-Tree programme, introduced in 2007, has enabled thousands of individuals and organisations to play a direct part in greening Singapore by planting saplings in our parks and nature reserves. The Community-in-Bloom programme, introduced in 2005, has successfully groomed a network of active community gardening groups amongst residents, students, and corporate organisations.

About National Parks Board (NParks)

The National Parks Board (NParks) is responsible for enhancing and managing the urban ecosystems of our City in Nature. We are the lead agency for greenery, biodiversity conservation, and wildlife and animal health, welfare and management. We are also working closely with the community to enhance the quality of our living environment.

NParks manages more than 350 parks, 3,347 hectares of nature reserves, the Singapore Botanic Gardens, Pulau Ubin and the Sisters' Islands Marine Park. Adding to this is the extensive network of Nature Ways, and the over 300 km Park Connector Network that links major parks, nature areas and residential estates island-wide. Every year, we run over 3,500 educational and outreach programmes across our various green spaces.

NParks has developed an urban biodiversity conservation model, which aims to conserve representative ecosystems in land-scarce Singapore. NParks also monitors and coordinates measures to enhance the presence of biodiversity in our urban landscape.

NParks is working closely with partners in the landscape, horticulture, veterinary and animal sectors to increase productivity, and provide training for all levels of the workforce. Enhancing competencies of the industry will support Singapore's vision of being a City in Nature.

For more information, visit www.nparks.gov.sg and www.facebook.com/nparksbuzz.