



ECOSOC • Integration Segment (27–29 May, 2014)
SUSTAINABLE URBANIZATION

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SINGAPORE

Contribution to the 2014 United Nations Economic and Social Council (ECOSOC) Integration Segment

Urbanisation as a Priority. Singapore in the 1960s was plagued by high unemployment, urban slums, congested roads, lack of sanitation, pollution, and other challenges faced by many developing cities. With a population of about 1.7 million, urbanisation was the government's top priority to address Singapore's then economic, social and environmental woes.

Singapore's successful transformation from a fledgling nation into a thriving global city in the space of 40-50 years have drawn considerable interest worldwide to learn how Singapore has managed to achieve this despite the initial difficult conditions and scarce resources. The Centre for Liveable Cities (CLC), Singapore was established in 2008 to distil the key learning points from Singapore's development experience, and this led to the development of the CLC Liveability Framework.

The Framework explains that the underlying systems of integrated master planning and development, and dynamic urban governance are key elements to achieve the three outcomes of a liveable and sustainable city – Competitive Economy, Sustainable Environment and High Quality of Life. The respective implicit principles underpinning Singapore's integrated master planning and development, and dynamic urban governance are:

- (A) **Integrated Master Planning and Development:** (1) Think Long Term; (2) Fight Productively; (3) Build in Some Flexibility; (4) Execute Effectively; (5) Innovate Systematically.
- (B) **Dynamic Urban Governance:** (1) Lead with Vision and Pragmatism; (2) Build a Culture of Integrity; (3) Cultivate Sound Institutions; (4) Involve the Community as Stakeholders; (5) Work with Markets.

(A) Integrated Master Planning and Development. Singapore's integrated master planning system has enabled the government to create and manage urban systems that balance the city's different priorities. Integrated master planning goes beyond the drafting of physical plans, by optimising planning decisions such that the outcomes for the environment, economy and quality of life can be balanced, especially in situations where there are competing demands for the same resources. Policies and plans have to meet short-term and long-term needs and respond to the changes of a dynamic political, economic and social environment. They have to be implementable.

At the heart of the integrated master planning approach is **Singapore's Concept Plan**. Strategic and long-term in nature, the plan looks at the country's land use over a time horizon of up to 50 years. To prioritise the competing demands and optimise limited land resources, the Concept Plan is developed through inter-agency efforts based on a whole-of-government approach, to ensure key land use requirements for the city are carefully met and essential urban systems like transport, water or public housing are well-integrated. In particular, transport and infrastructure planning are integrated to effectively link housing estates to sites of employment, services, and recreation. The Plan is reviewed every 10 years and, when necessary, there would be a mid-term review. Developers from the public and private sectors ensure that their projects align with land use requirements, given Singapore's land constraint which could not afford haphazard implementation.

(B) Dynamic Urban Governance. Singapore's geographical scale and structure of government have allowed for efficiency in policy formation and implementation, and the city-state has been able to achieve economic and institutional development. At the same time, Singapore's size and lack of resources has made it perennially vulnerable to changes in the external political and economic environment. In this context, Singapore adopts a dynamic

urban governance approach that allows its leaders to make optimal decisions and choices in an unpredictable, complex and constantly changing environment as well as facilitate its society to develop the capacity to deal with challenging situations.

Three Liveable Outcomes. To achieve a highly liveable and sustainable city, Singapore actively and consistently pursues three strategic outcomes: i) A competitive economy in order to attract investments and provide jobs; ii) A sustainable environment because the city has to survive with limited natural resources, especially in terms of land and water; and iii) A high quality of life, including the social and psychological well-being of the population. The strategies and plans are put in place to achieve these outcomes in an integrated manner, to ensure sustainable development. In solving an urban challenge to achieve one outcome, Singapore inadvertently created opportunities to contribute to another outcome. Two notable examples illustrate the integrated urban solutions which Singapore invested in, to achieve three-fold outcomes of sustainable development.

1. Integrated Water Management. To meet its drinking and industrial needs, Singapore adopted an integrated water management approach, including collecting water through reservoirs, desalination of seawater, and cutting-edge membrane technology to reclaim waste water into high-grade, ultra-clean water. This has created opportunities for the development of a niche sector of locally-based, specialised companies providing services along the value chain for reclamation of used water and desalination. With the government's commitment to support the research and development of this sector, it is expected that more jobs would be created which further adds value to Singapore's economy.

Singapore has also proactively ensured that water plays a key role in the larger scheme of ensuring environmental sustainability and improving quality of life, under the ambit of the Active, Beautiful and Clean Waters (ABC Waters) Programme. In this regard, functional concrete drains and canals were given a new life and made into streams and rivers to make the environment more aesthetically pleasing for residents. Streams and rivers became part of the landscape and formed venues for community activities and water sports. Although the main goal was environmental sustainability, the programme has improved the quality of life for residents and made an economic impact by adding value to the surrounding land. The ABC Waters programme is an important initiative that has demonstrated the strong partnership between the government and the industry in developing an innovative, out-of-the box solution to address urbanisation issues like water.

2. Innovative Waste Management. To fulfil the city-state's solid waste needs beyond 2040, an offshore landfill, the Semakau landfill, was created in 1999. Persistent efforts have been made to preserve the area surrounding the landfill which is rich in biodiversity, to the extent that part of Semakau was able to open up in 2005 for nature lovers to visit. In addition, Singapore also built a deep tunnel sewerage system, which was subsequently awarded the Water Project of the Year at the Global Water Awards 2009. Our efforts in waste management and recycling also has spill-over value add to the economy, as the sector generated S\$4.5 billion turnover annually and about 9,000 jobs.

Concluding Remarks

The Singapore we have today did not come about by chance. It is a result of careful, long-term planning and vision, as well as practical and flexible adaptation along the way. It is also the result of the hard work of many of our pioneers and citizens, working together and with the government to create a place we can call home.

We hope that you have found the above to be useful. Thank you for your kind attention.

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