INSTITUTE OF LANDSCAPE ARCHITECTS MALAYSIA (ILAM)

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# LAND. SCAPE.

MALAYSIA & REGIONAL LANDSCAPE ARCHITECTURE INDUSTRY UPDATES

FEATURE 5 Nature As Designer PORTFOLIO Ceylonz George Town Esplanade Waste to Wealth PERSONALITY YossaponBoonsom LAr. Zainul Hakim Mohd. Zain Published By:

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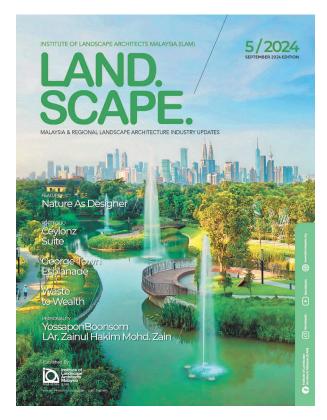
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#### ON THE COVER

#### **Urban and Nature-Based Solutions**

SkySanctuary Park is more than just an urban recreational space. Designed as a multifunctional area, it also serves as a stormwater retention system, helping to manage city flooding. Beyond that, it supports biodiversity by acting as an urban forest habitat, blending nature with modern city living to create a sustainable, resilient environment.

Photo Credit: SkyWorld Development Berhad

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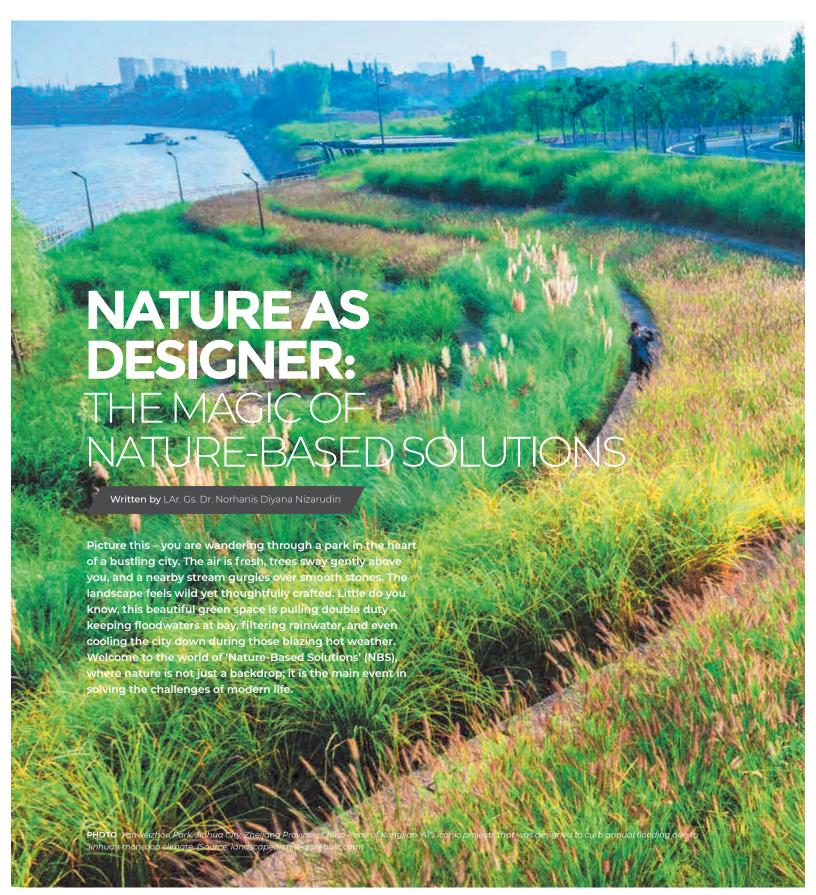
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#### The Buzz About NBS?

Imagine nature as a high-tech toolkit. Instead of using concrete, pipes, and chemicals to solve problems, NBS taps into what nature already does best. Whether it is soaking up water, cleaning the air, or providing homes for wildlife, nature is a pro at getting the job done. NBS design takes those skills and supercharges them in our cities and landscapes. From green roofs that double as rainwater catchers to wetlands that clean water better than any filter - NBS design is about working with nature, not against it. Rather than bulldozing through natural processes, we are now learning to let them lead the way. The result? Greener, more resilient cities and landscapes that look and feel like a breath of fresh air.

#### Nature as the Ultimate Problem Solver

NBS design is like the ultimate collaboration project between humans and the planet. Picture a city where rainwater is naturally absorbed by rain gardens and green spaces. Or a coastal town where restored wetlands protect homes from storm surges while providing a home for wildlife. These are the kinds of win-win scenarios NBS design thrives on.

Take green roofs, for example. They are not just about pretty flowers and grasses on top of buildings. These living roofs soak up rain, keeping water out of the streets and helping to cool buildings naturally - which reduces the need for air conditioning. In the same vein, rain gardens planted in urban spaces absorb stormwater, preventing flooding and creating pockets of greenery for the community to enjoy.

Then, there is the superstar of NBS design namely wetlands. These natural filters do wonders for cleaning water—absorbing pollutants, trapping sediment, and even breaking down harmful chemicals. By restoring or creating wetlands, communities can wave goodbye to hefty water treatment bills and say hello to vibrant ecosystems teeming with life.





#### Why Should We Care About NBS Design?

Here is the kicker – NBS are not just good for the planet; they are good for people too. First off, they are cost-effective. Unlike traditional infrastructure that needs constant upkeep, NBS projects often get stronger over time. For instance, once a wetland is restored, it keeps doing its thin – filtering water and preventing flood with minimal human help. It is like having an all-in-one natural service provider that never sends you a bill.

NBS also boosts biodiversity, which is science-speak for keeping nature's variety of plants, animals, and ecosystems alive and well. When we create more green spaces, we are not just adding pretty scenery; we are building homes for all sorts of critters, from bees to birds, that help keep our ecosystems in balance.

On another note, let us not forget the human side of things. Green spaces make cities healthier and happier. Many studies have shown that people who live near parks and gardens tend to be less stressed, more active, and even live healthier. Plus, these spaces encourage social interaction, bringing communities together in ways that grey lifeless concrete never could.

#### NBS in Action

Curious where NBS is already making waves? Look no further than Copenhagen. This stylish city has embraced NBS with open arms, transforming itself into a climate-resilient wonderland. Think green roofs, public rain gardens, and entire streets that have been redesigned to channel stormwater into natural reservoirs instead of overloaded drainage systems. To ease the load on its old-school sewage system and turn stormwater into a valuable asset, Copenhagen went all in on green spaces—expanding permeable areas, adding lush wetlands, and crafting drainage corridors that soak up rainwater after those heavy downpours.

Over in China, they are taking things to the next level with the "Sponge City" initiative. No, they are not turning cities into giant sponges, but they are redesigning urban areas to soak up and reuse rainwater, just like a sponge would. The goal? Reduce flooding, clean water, and create greener liveable spaces. As the man behind this initiative – a prominent landscape architect named Kongjian Yu says, "You are actually playing tai chi with nature, not boxing with nature". This basically means urban landscapes are designed to be softer, soaking up water like a sponge.



LEFT Tåsinge Square, Copenhagen, Denmark –

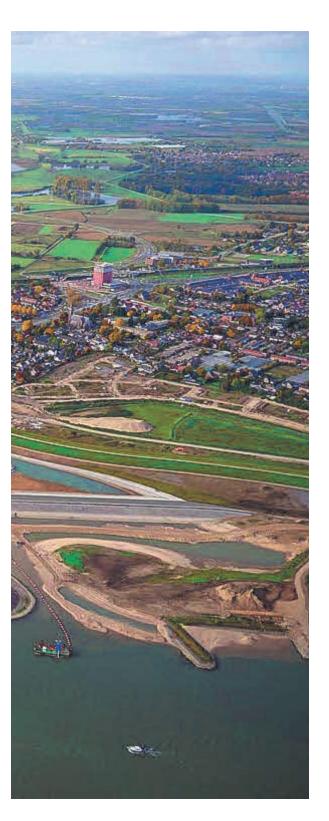
this square garden was designed to collect and store rainwater in overcoming the  $frequent\ flooding\ at\ the\ basements\ of\ the\ neighbourhood\ premise.$ (Source: Publicspace.org)

**BELOW** Yanweizhou Park, Jinhua City, Zheijang Province, China – one of Kongjian Yu's iconic projects that was designed to curb annual flooding due to Jinhua's monsoon climate.

(Source: landscapearchitecturebuilt.com)







Then, there is the Netherlands – where they have rethought their relationship with rivers. Rather than just building bigger and stronger dikes to hold back water, they have embraced NBS with their "Room for the River" project. By giving rivers more space to overflow naturally in designated areas, they are reducing flood risks and reviving natural wetlands at the same time.

#### The Challenges (and Opportunities!) Ahead

Now, do not get me wrong - NBS are not without their hurdles. One of the biggest? - convincing decision-makers that nature can do the job as well (if not better) than traditional infrastructure. For years, concrete and steel have been the go-to for solving environmental problems because they come with clear costs and timelines. But how do you put a price tag on a forest's ability to filter water or a wetland's knack for absorbing floods?

There is also the challenge of getting different experts - urban planners, ecologists, architects, and engineers to work together with us, the landscape architects. NBS design is not a one-size-fits-all solution. It requires creativity, collaboration, and a long-term vision. But the payoff? A more sustainable and adaptable future where humans and nature thrive side by side.

The future of NBS design is bright. As cities grow and the climate continues to change, the need for solutions that are both sustainable and adaptable has never been greater. 'Nature-Based Solutions' provide a way to not just protect the environment but to enhance it, creating places where both people and nature can flourish together.

So, next time you walk through a park or pass by a green roof, remember - you are witnessing the future of design in action. Nature, as it turns out, is not just our playground; it is also our greatest ally in building a greener and more resilient world.

LEFT Waal River, Nijmegen, The Netherlands - Nijmegen's innovative Urban River Park blends flood protection with river dynamics, while seamlessly integrating history and archaeology into a multifunctional space for events and exhibitions.

(Source: urbannext.net)

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