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Bambang Susantono is the Chairman of Nusantara Capital Authority (OIKN) of the Republic of Indonesia, which is a ministerial-level agency in charge of planning and constructing Indonesia's new capital. Professor Bambang is also responsible for overseeing the government's transition to the new city and eventually becoming its administrator.

Building a Liveable and Lovable City: Nusantara's **Urban Transformation**



Moving the Capital City from Jakarta to Nusantara Image: Nusantara Capital Authority (2022)

and increased environmental concerns.

The relocation of the capital city to Nusantara is a strategic solution to alleviate the pressures on Jakarta.

There is therefore a pressing need people in 2022 (Statistics Indonesia, for strategic urban planning and 2024), Jakarta is experiencing integrated urban development several ongoing issues, including approaches, particularly in Asia. traffic congestion, overcrowding, Asia had the highest urban and land subsidence. population globally in 2018; its 2.3 billion people represented over 50% The relocation of the capital city to of the world's total population. This Nusantara is a strategic solution to number is projected to rise to 3.5 alleviate the pressures on Jakarta. billion by 2050 (UN, 2019).

In Indonesia, the current capital city of Jakarta faces significant urban challenges. With over 10 million

Cities are rapidly expanding. Driven by the promise of economic and social prospects, cities often attract a high influx of people. While urbanisation brings enhanced economic opportunities, better access to healthcare and education, and improved living standards, fast urban growth presents its own set of challenges, such as widened economic disparities, diminished social cohesion,

The idea of a 'liveable' city places people and community welfare at the centre of urban development and devision-making.

Nusantara as an **Economic Centre**

opportunities for all.

Nusantara aims to become the world's first sustainable forest city while also embodying national identity. Nusantara seeks to be a new economic growth centre in Indonesia, bridging the gap between the western and eastern regions of the country and providing economic

Besides its primary function as the government centre, Nusantara has several economic generators, such as renewable energy, innovation and research.

Nusantara's Urban Transformation

To build the liveable and lovable city we envision, we need to create in Nusantara functional urban environments that cultivate a sense of belonging.

The concept of "liveability" in urban contexts is widely understood to refer to the quality of life and well-being of a place with robust governance systems and equitable access to efficient urban services and quality infrastructure. The idea of a liveable city places people and community welfare at the centre of urban development and decision-making.



Nusantara's economic generators. Image: Nusantara Capital Authority (2022) In transforming Nusantara, we take a 5D approach to incorporating five important aspects into city planning:

Design	Spatial design need decentralised and re climate change sho
Density	There needs to be a density in an area, s efficiency.
Diversity	Efforts are needed t encouraging the dev walkable cities and
Digitalisation	Digi-life becomes th opportunities for the
Decarbonisation	The importance of k cities must have spe tackle climate chang

5D approach for a sustainable liveable city. Image: Susantono (2023)

A 'lovable' city goes beyond mere functionality by embracing cultural diversity, fostering vibrant social interactions, and nurturing a sense of belonging.

In addition to being a liveable city, a The forest city concept is based on "lovable" city must go beyond mere the idea that developing Nusantara functionality by embracing cultural and preserving the environment can diversity, fostering vibrant social coexist. The principles of Nusantara interactions, and nurturing a sense as a forest city include: of belonging that cultivates a deep emotional connection between Zero deforestation citizens and their surroundings. Biodiversity Deloitte (2021) describes a lovable Conservation city as a humane city, emphasising · Carbon stock increase inclusion, connection, attachment, · Indigenous and local stimulation, freedom, and agency as community involvement Sustainable forest management key aspects. Governance Nusantara's transformation into a Land use improvement world-class city for all is based on its unique concepts of a forest city,

sponge city, and smart city.

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is to be reviewed to make it more esilient to economic, financial, health and cks.

new balance for ideal population supported by technology that encourages

o maintain inclusivity, such as velopment of mixed-use buildings, 10-minute cities.

e new normal and opens new economy, education, health, and work.

ow-carbon living is increasingly felt, and ecific and measurable action plans to

Forest City

Nusantara's transformation into a world-class city for all is based on its unique concepts of a forest city, sponge city, and smart city.

Archipelago City



The three principles of the sponge city. Image: Nusantara Capital Authority (2022)

Forest City as a Nature-Based Solution

Social Economic Create green job opportunities Mitigate climate change Strengthen unity Encourage outdoor activities Increase biodiversity Reduce energy costs Reduce illnesses Maintain urban microclimates · Increase property value · Reduce air pollution Attract tourists Boost immunity Reduce depression through forest bathing/healing Reduce disaster costs · Preserve water quality Reduce healthcare costs Obtain financing opportunities

The benefits of a forest city concept. Image: Presidential Regulation Number 63 of 2022

The forest city concept is a naturebased solution, with a land use plan allocating nearly 200,000 hectares (2,000 km²) (around 65%) of the area to natural forests and marine reserves which comprise green (terrestrial) and blue (aquatic) zones. Around 10% of Nusantara's land will be dedicated to sustainable food production while only 25% will be designated as highly-controlled urban areas to minimise carbon footprint and emissions. The remaining 75% will be earmarked as green spaces, with 65% of those to be made up of tropical forests.

The forest city concept can be achieved by optimising knowledge and technology, involving communities and the forging of collaboration by diverse stakeholders to offer numerous economic, social, and environmental advantages. These include the creation of green employment opportunities, increased resilience to climate change, and the conservation of biodiversity. The benefits offered by Nusantara's forest city concept are diverse, ranging from economic and social to environmental.

Environment

Sponge City

A sponge city is able to restore and maintain the natural water cycle which changes with alterations in land cover and function.

Implementing the sponge city concept will yield several benefits, including water purification, ecological preservation, increased water availability and reduced flood risks, and economic, social, and cultural advantages for society. Nusantara's sponge city concept is based on the principles of an archipelago city, absorbent city, and integrated city.

Archipelago City

Green and blue open spaces form the foundation of the city and allow for greater connectivity with and integration of nature into its urban design to maintain and preserve biodiversity.

from forest-based carbon

trading





Absorbent City

Green and blue open space corridors are designed to capture rain runoff, which is then collected and channelled to city parks. By acting like sponges, the parks allow rainwater to be absorbed and filtered to replenish aquifers (underground layers of water-bearing material), thereby maintaining balance in the ecosystem.

Integrated City

The sponge city integrates different levels of city planning, ranging from the smallest scale of individual buildings and neighbourhoods to the broader urban scale. This approach will more effectively help restrain water flow, harvest rainwater, and increase rainwater absorption into the soil.

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Smart City

As a smart city, Nusantara seeks to harness digital innovations and data-driven solutions to redefine urban living, fostering an interconnected city centred around its citizens. Nusantara aims to do this by incorporating multiple domains of a smart city that include: • Smart governance-Nusantara prioritises effective and transparent governance through features such as digital identity, integrated operation centres, citizen-reporting systems, and smart administration. These features provide citizens access to government services and enable city authorities to make informed decisions, paving the path for a more responsive and accountable administration.



across Asia.

 Transportation and mobility the Intelligent Transport System consists of an autonomous driving system, urban air mobility, and an advanced traffic management system that will improve safety, reduce congestion, and optimise traffic management. Efficient smart logistics systems utilising advanced digital technology will streamline the movement of goods, leading to faster and more sustainable supply chains.

- Smart living—initiatives focusing on citizen well-being aim to enhance quality of life through smart features, providing services for public safety, health, culture, and leisure.
- Smart natural resources and **energy**-this domain delves into the role of technology in reshaping the utilisation of natural resources. Natural resources encompass materials or components found in nature that humans harness to fulfil our needs. This domain focuses on

ensuring sustainability in water resource management, waste recycling, renewable energy, and biodiversity monitoring.

 Smart industry and human resources development-

promotes innovation and skills enhancement by supporting economic growth through small and medium-sized enterprise (SME) platforms, technology centres, and citizen living labs. The application of advanced technology in the industrial sector aims to boost operational efficiency and offer more flexible responses to market changes. The human resources domain adopts an upskilling approach to prepare our workforce to navigate the industrial landscape.

 Smart built environment and infrastructure improvementthis domain includes facility management systems, internet access propagation and smart infrastructure systems to enhance liveability and sustainability.

Nusantara not only seeks to overcome its challenges, but also endeavours to set a precedent for urban development

Conclusion

Asian cities are grappling with the challenges caused by rapid urbanisation. Jakarta, the current capital city of Indonesia, is no exception. By relocating our capital to Nusantara, we hope to create a city that is both liveable and lovable. Nusantara not only seeks to overcome its challenges, but also endeavours to set a precedent for urban development across Asia. 🔎

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