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## INCLUSION OF URBAN SUSTAINABILITY PILLARS IN 11th MALAYSIAN PLAN USING CPI FRAMEWORK

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### *Abstract*

The global pace of urbanisation is increasing rapidly. Nevertheless, without considering the pillars of sustainability, such rapid urbanisation might be a negative force for development. The goal of urban development is sustainability, ensuring that a state of ongoing development. Malaysia is dedicated to supporting and implementing the Sustainable Development Agenda 2030. The aim of this study is to explore the integration of the sustainable urban development pillars—social development, economic development and environmental protection—with respect to the current Malaysian plan. This study employs a qualitative approach, using content analysis to evaluate the 11th Malaysian Plan (MP11) against the themes and subthemes and indicators of the City Prosperity Index (CPI). The CPI is a powerful tool for measuring city sustainability, helping countries and cities to identify, quantify, evaluate, monitor and report on progress made toward achieving Sustainable Development Goal 11 (SDG 11) and one compliance with the New Urban Agenda (NUA).

*Keywords:* Urbanization, Sustainable Urban Development, City Prosperity Index, New Urban Agenda, Malaysia Plan 11.



## **1. Introduction**

With the global population reaching 7 billion people in 2011, conservative estimates suggest that the population will likely reach 9.2 billion by 2050. In addition, not only is the global population increasing at an unparalleled scale, but so too is the pace of urbanization worldwide. The United Nations (UN) defines urbanization as the movement of individuals from rural to urban regions (United Nations Development Program, 2004). In 1800, only about 5% the world's population were urbanized. The 1900s saw a marked spike in the pace of urbanization, particularly in the industrialized countries; nevertheless, this spike saw less than 15% of the world's population becoming urbanized. It would seem that that sustainable urban development (SUD) has become a common goal shared by both developed and developing countries alike (May et al., 2000). Therefore, a number of international organizations and authorities have sought to highlight the importance of urban sustainability (Briassoulis, 2001; Davidson, 1996).

## **2. Problem Statement**

Several developing countries, such as Malaysia, have sought to implement SUD goals (Liu, Zhou, Wennersten, & Frostell, 2014; Shamsuddin & Rashid, 2013). Malaysia is dedicated to promoting sustainability, as reflected in the current 5-year development plan: the 11th Malaysia Plan (MP11). This plan was formulated in collaboration with all branches of government to reflect the multidimensionality of the Sustainable Development Goals (SDGs). To this end, the plan relies on six strategic forces for the advancement of the economy (Ministry of Urban Wellbeing Housing and Local Government, 2016). Nevertheless, Malaysia lacks the necessary documentation with which to provide evidence of the SUD implementation process. This paper, therefore, aims to investigate the degree to which to SUD pillars have been included in MP11.

## **3. Research Question**

The question of this research is formulated as follows:

What SUD pillars are included in MP11?

## **4. Sustainable Urban Development**

The first UN Conference on Stockholm Humanities in 1972 established the concept of sustainable development (Whitehead, 2003). This defining moment led to the subsequent creation of the SUD concept, which at the time was primarily discussed in relation to the

world's developing nations in order to respond to the problems of urban transition, rapid population growth, urban poverty, as well as cultural and environmental change (Hassan & Lee, 2015; Rasoolimanesh, Badarulzaman, & Jaafar, 2012). The three pillars of Malaysia's SUD are economic development, social development and integration, and environmental protection (Hassan & Lee, 2015; Sachs, 2012). Achieving these goals, however, requires an understanding of the complex interaction between the social, economic, environmental, and the urban development components of MP11 (Sachs, 2015). Cities across the developing world should be improved and inequalities reduced (Rasoolimanesh, Badarulzaman, Abdullah, & Behrang, 2019). In addition, these developments should avoid environmental distress, drawing upon the natural capital of the city's resources while promoting the advancement of various social groups, especially the poor (Abu-Ghazalah, 2008; Sachs, 2012).

## **5. Sustainable Development Goal 11 (SDG11)**

Following the 2012 Rio+20 conference, several UN member states have moved to propose a number of sustainability objectives looking forward to 2030 (Rasoolimanesh et al., 2019). These SDGs were subsequently adopted at the 70th Assembly of the UN in 2015. The SUD concept features prominently in SDG11. This SDG aims to "make cities and human settlements inclusive, safe, resilient, and sustainable" (UN, 2017).

## **6. New Urban Agenda (NUA)**

The UN Housing and Sustainable Urban Development Conference (i.e., Habitat III) in 2016 saw the introduction of the New Urban Agenda (NUA), which seeks to promote SUD by focusing on SDG11 and its interrelationship with other SDGs (United Nations Human Settlements Programme, 2017). The NUA outlines a common view for a stronger and viable world in which everyone enjoys equal and fair access to the advantages and opportunities of globalized urban centres. As such, the NUA represents a paradigm shift born of urban science. The NUA spans the five primary components of city planning, construction, development, management, and improvement along with its five main pillars which are national urban policies, urban legislation and regulations, urban planning and design, local economy and municipal finance, and local implementation (United Nations Human Settlements Programme, 2017).

## **7. City Prosperity Index (CPI) a Tool Supporting the SDG 11**

In 2012, UN-Habitat established an instrument for measuring urban sustainability. The City Prosperity Index (CPI) was designed based on a comprehensive, integrated and systematic

view of the city. In the year 2013, the CPI was transformed and modified into a worldwide project to notify local and central government policies in related to problems of space, population, the economy, society and the environment, including governance. As such, the CPI offers city and local stakeholders the opportunity to develop better-informed strategies (UN-Habitat, 2016; UN Human Settlements Programme, 2017). The CPI is a composite index made of six dimensions namely infrastructure, productivity, quality of life, equity, environmental sustainability and governance. The above dimensions and related indicators are customizable, thus allowing for monitoring by local and international bodies.

Productivity and the development of infrastructure are ultimately dependent upon economic development. The measurement of productivity involves indices used to assess urban assets and the contributions of a town or urban centre to economic growth, revenue creation, employment distribution and equal opportunities. The measurement of infrastructure development involves indices used to evaluate the availability of essential urban infrastructure, such as sanitary facilities, highways, roads, clean drinking water as well as information and communication technology. Quality of life, equity and social inclusion are related to the social development and inclusion pillar of SUD. Quality of life is measured based on indices such as the overall wellbeing and happiness of residents. Fairness and social inclusion, on the other hand, are measured using indicators of the fair distribution of benefits, poverty reduction, the rebuilding of slums, efforts to ensure the rights of minority groups, improved gender equity, and ensure the equitable participation of all in society. The environmental sustainability dimension covers the environmental protection pillar of SUD and includes indicators used to ensure the protection of the urban environment. The urban governance and legislation dimension is concerned with the notion of good governance and includes indicators used to measure the level of urban governance in cities (Rasoolimanesh et al., 2019; United Nations Human Settlements Programme, 2017).

**Table 1.** CPI Dimensions and Sub-Dimensions

Dimensions	Sub-Dimensions
Productivity	1.Economic Strength 2.Economic Agglomeration 3.Employment
Infrastructure	1. Housing Infrastructure 2. Social Infrastructure 3. Information and Communication Technology 4. Urban Mobility 5. Urban Form

Quality of Life	<ol style="list-style-type: none"> <li>1. Health</li> <li>2. Education</li> <li>3. Safety and Security</li> <li>4. Public Space</li> </ol>
Equity and Social Inclusion	<ol style="list-style-type: none"> <li>1. Economic Equity</li> <li>2. Social Inclusion</li> <li>3. Gender Inclusion</li> <li>4. Urban Diversity</li> </ol>
Environmental Sustainability	<ol style="list-style-type: none"> <li>1. Air Quality</li> <li>2. Waste Management</li> <li>3. Energy</li> </ol>
Governance and Legislation	<ol style="list-style-type: none"> <li>1. Participation</li> <li>2. Municipal Financing and Institutional Capacity</li> <li>3. Governance of Urbanization</li> </ol>

## 8. Research Methods

This study employs thematic content analysis to evaluate the MP11. Content analysis is a method of coding and data encryption used to explore large amounts of textual information. (Vaismoradi, Turunen, & Bondas, 2013). In our study, content analysis is framed by the themes and sub-themes of the CPI framework, as described above. As suggested by Vaismoradi et al. (2013), thematic content analysis is appropriate for researchers who prefer to use relatively small levels of interpretation as opposed to the greater levels of interpretive complexity required in grounded theory or hermeneutic phenomenology. As such, we transferred the MP11 document to ATLAS.ti 8 (software for the qualitative analysis of large bodies of textual data) to explore the inclusion of the CPI framework themes and sub-themes (i.e., SUD pillars).

## 9. Findings and Discussion

This paper surveys the inclusion of urban sustainability pillars in the MP11 using the CPI framework; as such, we surveyed six themes and 22 sub-themes. We present here our preliminary analysis of MP11, commenting on overlapping and omitted themes vis-a-vis the six CPI themes. This is followed by an analysis of the strengths and apparent shortcomings of MP11.

### 1) *Productivity* (Economic Strength, Economic Agglomeration, and Employment)

MP11 is expected to improve economic resilience by adopting a further diversified economic base, larger domestic savings, balanced fiscal position, low inflation, full employment and the implementation of a sound financial system. Initiatives to leverage the productivity at the national, industry and enterprise levels will eventually assist to boost

growth. This will go along with the higher national per capita and household incomes, as well as the improved wellbeing of the Malaysian population, with these objectives being consistent with a focus on the people economy (Economic Planning Unit, 2016, p. 61). Including and applying some successful employment programs, such as the *Program Pengeraju Skil* under *Yayasan Pengeraju Pendidikan Bumiputera*, will improve the skills of the *bumiputera*. It is anticipated that the participation of bumiputera in skilled occupation categories may reach at least 60% by the year 2020 (Economic Planning Unit, 2016, p. 95).

**2) *Infrastructure*** (Housing Infrastructure, Social Infrastructure, Information and Communication Technology, Urban Mobility, and Urban Form)

MP11 has a larger focus on Information and Communication Technology and Urban Form as compared with Housing Infrastructure, Social Infrastructure, and Urban Mobility. MP11 aims to provide quality and sufficiently affordable housing for low (i.e., poor) to middle-income households. Concerning the adoption of Information and Communication Technology, MP11 intends to increase access to information pertaining to agriculture, business, education, and health, with the goal being to expand the business and income-earning opportunities of Malaysians to improve their wellbeing. These objectives will be achieved through such programs such as eRezeki and eHealth.

Given the priority for Urban Form by 2020, it is expected to see a series of progressive changes in economic growth, importance as talent hubs, and liability in four major Malaysian cities. These major cities, as pioneers, are selected according to their strong fundamentals. In addition, over time the transformation will be gradually expanded to the other cities. The perspective is shifting from “Uncontrolled and automobile-focused sprawl” to “Transit-oriented development”, thus increasing the use of public transportation and reducing people’s dependence on personal vehicles (Economic Planning Unit, 2016, p. 271).

**3) *Quality of life*** (Health, Education, Safety and Security, and Public Space)

MP11 addresses all four sub-themes related to the quality of life theme. The government will improve access to quality healthcare services for all Malaysians, regardless of socioeconomic background or geographic location, by upgrading infrastructure, enhancing the capacity of healthcare personnel, promoting healthy lifestyles, and extending nationwide preventive care programs. These efforts are aimed at increasing life expectancy and reducing infant and maternal mortality. Moreover, under MP11, the government will also continue to focus on reducing school dropouts, providing appropriate support facilities (e.g., hostels,

transportation, and financial aid for students in rural and remote areas to enable them to complete primary and secondary education (Economic Planning Unit, 2016, p. 79). MP11 will also push a safety and security agenda aimed at promoting crime awareness for effective prevention. As a result, Malaysians will feel more secure not only in their local environment but also on the streets and in public spaces since crime prevention efforts will decrease and eventually eradicate violence and property crime.

**4) *Equity and social inclusion*** (Economic Equity, Social Inclusion, Gender Inclusion, and Urban Diversity)

MP11 emphasizes the creation of a more conducive working environment, as well as increasing the number of women in decision-making positions. The aim is to increase female participation in the labour market through more family-friendly employment strategies (Economic Planning Unit, 2016, p. 145).

**5) *Environmental sustainability*** (Air Quality, Waste Management, and Energy)

MP11 describes for the management of all seven types of waste (i.e., solid, agricultural, construction, radioactive, mining, sewage, and scheduled waste), recognizing the types and volume of waste are strongly correlated with the evolving nature of the urban environment. To this end, MP11 aims to increase the rate of recycling and waste recovery, and to improve the management of landfills in order to diminish the amount of waste and pollution. MP11 reflects the fundamental shift in Malaysia towards green growth. It also prioritizes the role of natural resources and the environment in the nation's socioeconomic development while protecting both development achievements and biodiversity simultaneously. To pursue green growth, the enabling environment will be reinforced, specifically in terms of policy and regulatory frameworks, human capital, green technology investment, and financial instruments. This transformation will confirm the sustainability of the nation's natural resources, minimize pollution, and strengthen energy, food and water security. Moreover, preserving biodiversity, will enable Malaysia to strengthen the continuity of their function as a natural buffer against climate change and natural disaster.

**6) *Governance and legislation*** (Participation, Municipal Financing, and Institutional Capacity, and Governance of Urbanization)

Strategy F5 in MP11 focus on strengthening collaboration through a whole society approach by encouraging broader participation across government and non-governmental organizations, thus promoting the roles of organizational and community leaders in the delivery

of social services. These actions are intended to increase accountability, with a greater focus on transparency and outcomes. Continuous efforts to uphold integrity and eradicate corruption will also enhance public perceptions concerning the integrity of the public sector, as well as improve Malaysia's position in international rankings. Nevertheless, MP11 tends to gloss over issues pertaining to municipal financing, institutional capacity, and the governance of urbanization

## 10. Conclusion

To the best of the authors' knowledge, this is one of the first studies to investigate the inclusion of the SUD pillars in MP11. The findings of this study can help stakeholders and decision-makers to better understand the relative weaknesses and strengths of MP11 with respect to SUD. However, the finding of this study should be considered in light of its limitations, namely that this research was limited to the MP11 document, ignoring the myriad of other Malaysian planning documents. A more comprehensive analysis inclusive of these other Malaysian plans might provide new insights with respect to understanding development trends in Malaysia.

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