Can Physical and
Economic Planning
Be Done Beyond State
and National
Boundaries?
The Case of Penang

Khazanah Research Institute

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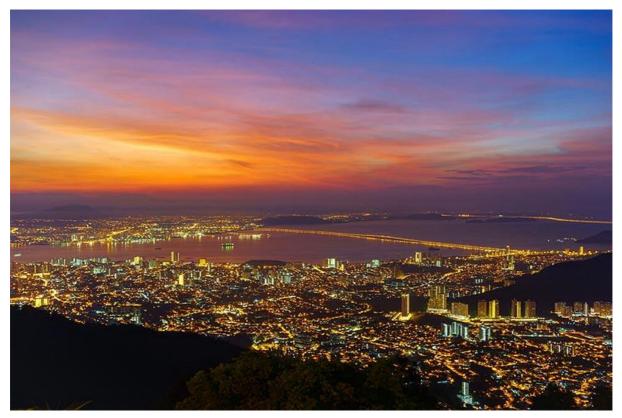
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# **Views**



Cities sit within a hierarchy (from global to local scales) as measured by factors that can include the gross domestic product (GDP) and population size, the level of commercial services, and the density of international linkages by sea and air freight.

A city's position in this hierarchy is dynamic, depending on its wealth and the most effective manner it performs through population and demographic change/indicators (Glaeser, 2008). There is an emerging concept of "global city region" where the most productive locations (especially in manufacturing, research and development /R&D and logistics) are associated with seaport container terminals or airports and are connected together by high capacity road and rail networks (Scott, 2001). This concept has changed the national and regional urban planning approaches since it focuses on several interlinked settlements and sub-regions rather than the conventional concept of core and periphery urban settlements used in the past.

#### **PENANG**

The physical planning of a city is better seen from a sub-region (conurbation) perspective and is based on the existing strengths of urban centres within the conurbation area as developed over time. We take the example of the state of Penang. Penang has a population of 1.56 million, with approximately 722,000 people residing on the island and the remaining 838,000 on the mainland (Seberang Perai). It covers an area of 1,021 square km and a built up area of 350 square km (approximately 34 %). This relatively low percentage of built area is contributed by the fact that there is a significant amount of land that has been gazetted by the Penang State Government as forest reserve, hill land, national and major parks, water catchment areas and agriculture centres.

The State is divided into five districts, two on the island (North-East and South-West districts) and three on the mainland (Seberang Perai North, Middle and South districts). George Town sits in the North East district and this district has the highest population density of 4,299.52 persons per square km. The lowest population density is in Seberang Perai South district with a density of 703.88 persons per square km.<sup>4</sup>

Sungoi Pelani

Kepala Batas

Batu Ferringhi

Bukir thertagan

Bukir thertagan

Nitrong Tebal

Figure 1: Urban Centers in the Penang conurbation

Source: Think City & Fundacion Metropoli. (2010)

#### THE ILL-EFFECTS OF SPRAWL

Over the last few decades the growth pattern of the Penang conurbation has been characterized by sprawl (as depicted by Figure 1 above), which has negative consequences ranging from environmental degradation due to more intensive land and automobile use as well as economic challenges brought about by increased distance to jobs, goods and services markets.<sup>5</sup> As distances between these markets and the people who both need and serve them grow (in the case of sprawl), it would be more difficult to achieve agglomeration economies, ie the economies of scale created when firms and people locate near each other in urban areas and industrial clusters.

# DEVELOP STRONG INTERNAL CONNECTIONS OF URBAN NODES BEYOND STATE AND NATIONAL BOUNDARIES

The suggested solution to alleviate these adverse effects where sprawl already exists is to develop strong internal connections between the existing industrial, commercial and residential areas in suburban zones and in smaller towns, well beyond state boundaries. The second objective is to then contextualize the Penang conurbation in its wider context of South East Asia (region) and how best it is connected to the local economy spatially. The existing competitive edge achieved at the local level by the agriculture, manufacturing, tourism, logistics, education and amenities sectors (Kharas et al, 2010; Yusuf, 2009; Department of Statistics, 2007) are considered in the analysis of spatial development and economic opportunities. The regional opportunities of being situated within Indonesia Malaysia Thailand Growth Triangle (IMT-GT), and the opportunities of a transport/logistics hub linking Thailand and Vietnam with the Bay of Bengal should also be considered. 910

This is the 'new scale of planning' proposed for the Penang conurbation.<sup>11</sup> This new scale represents the functional model for the territory, discovering the relationships of urban morphology and population centers through geographic proximity, time and distance. Therefore the analysis conducted crosses municipal and state boundaries and attempts to give an accurate description of how the territory operates and serves its inhabitants.

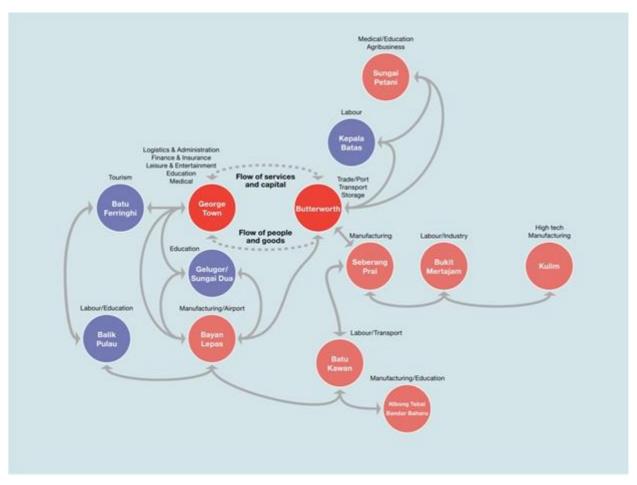
#### FOCUS ON EXISTING COMPONENTS OF EXCELLENCE

This methodology has the ability to identify the 'components of excellence' in each city or region that intrinsically possessed the highest potential of innovation and transformation for the urban built form. <sup>12</sup> These components of excellence comprise social, economic, environmental and

urban components. The underlying premise of the research is that in a world of cities, globalization and competition, the only projects with the ability to succeed and reveal competitive advantage are those that are based on the specific strengths and unique characteristics of the territory. Successful urban transformations are rarely driven by projects which only address the deficits or limitations of a place but rather those which build on the singularities and distinct urban profiles of cities and regions.

## **CONURBATION PLAN**

Figure 2: The George Town Conurbation Urban Centres Network



Source: Think City (2011)

The George Town/ or the "Penang" Conurbation Plan (2011) identifies a spatial model that is based on a network city model approach due to the existing conditions of distinct nodes of urban vocations situated in different areas within the conurbation area. <sup>13</sup> The polycentric concept emphasizes better designed, faster and a more efficient metropolitan transit and higher density at the transit nodes and interchanges, otherwise known as Transport-Orientated-Development

(TOD). The George Town Conurbation Plan identifies the following nodes of specializations (see Figure 2):

## **CONCLUSION**

So can physical and economic planning be done beyond state and national boundaries? The answer is 'yes, it can'. This new scale of planning for George Town's conurbation is aimed at overcoming the interconnected challenges of sprawl and low population density at different urban centres which threaten to stymie Penang's potential for achieving agglomeration economies as well as contribute to environmental degradation. The problems of executing the hierarchy of cities within the territorial model logic arises not from the technological know-how but more on the acceptance on the importance of cities that are within the state boundaries by state governments. Indeed the creation of regional corridors development authorities is a step in the right direction. Is Kulim part of George Town/ Penang's conurbation? Or can the Northern conurbation be anchored solely on George Town/Penang's economic growth? Should we put resources based on the hierarchy of cities OR on the development of all cities? We propose the former.

## **ENDNOTES**

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