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Procedia - Social and Behavioral Sciences 227 (2016) 202 – 209

Procedia
Social and Behavioral Sciences

CITIES 2015 International Conference, Intelligent Planning Towards Smart Cities, CITIES 2015, 3-4 November 2015, Surabaya, Indonesia

(Adaptive) Networks in strategic areas in Indonesia

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Abstract

To develop and structure its areas, Indonesia under the national spatial plan has developed strategic areas. (National) strategic area is an area whose spatial arrangement is one of the priorities of the national interests. This paper is an exploration of the interactions and networks existing between two existing models of strategic areas in Sambas regency: Sambas district and Temajuk village. Besides, this paper also raises a concept “adaptive” which can developed from the existing networks’ characters. This study used network analysis approach and the exploration of “adaptive” concept. From both explorations, it is known that strategic areas tend to be oriented inside its own area and only spread to other near advanced areas/cities. This makes the relationship between the areas tend to be imbalanced. To develop a balanced/appropriate interaction, adaptive concept can be applied by strengthening the database, doing benefit-cost-risk analysis, identifying potential conflicts, making priorities, scenarios and corrective actions, as well as involving public.

Peer-review under responsibility of the organizing committee of CITIES 2015

Keywords: network; strategic; adaptive; Indonesia

1. Introduction, Setting, and Issues

Spatial planning in Indonesia is classified into several bases, namely area system and urban, function of area, administrative area, activities, and strategic value. Related to strategic value, a term “strategic area” arises which means that this area is prioritized due to its very important influence. In the spatial plan of Indonesia, "strategic value" of a region can be found in some plans, such as inside urban system, river basin, and national strategic area. Strategic areas have many perspectives and dimensions. In the national urban system, strategic value of an area is

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Peer-review under responsibility of the organizing committee of CITIES 2015
doi:10.1016/j.sbspro.2016.06.063

known as “national strategic activity center” which means that the area is designated to encourage the development of border area. So far, there are around 26 national strategic activity centers spread across Indonesia. This paper employed a case study in West Kalimantan strategic area, specifically in Sambas regency which has two border areas, Paloh and Aruk. Sambas regency was selected as a case study because it had unique condition that had two models of strategic areas, those were (1) national strategic activity center in Paloh and Aruk (also as a border area), and (2) national tourism strategic areas in Sambas district and surrounding. In this condition, one of the aims of this paper is to explore and find out the relation or interaction between two strategic areas. Specifically, we decide Sambas district as a regency capital city (tourism strategic) and Temajuk village (border and strategic activity center) as detailed case study.

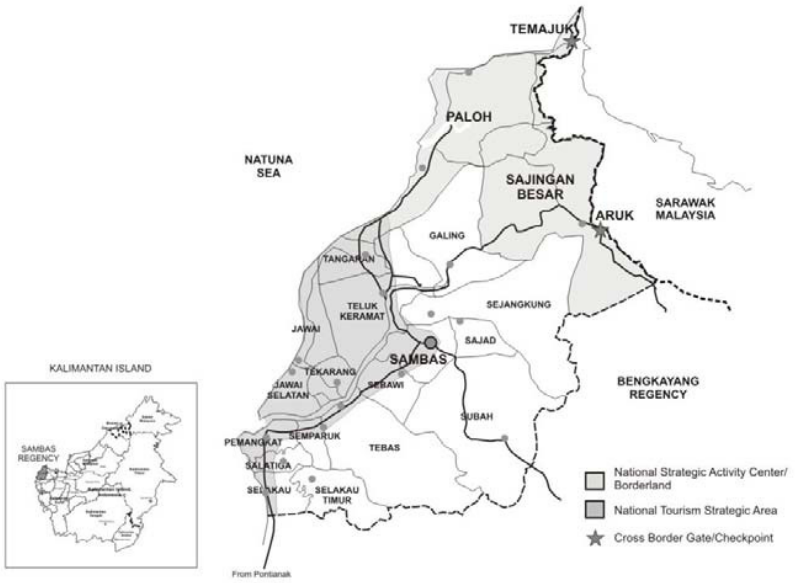

Fig. 1. Sambas Regency (Kabupaten Sambas)
Source: Author, 2015

From the interaction among strategic areas, it is not infrequent to find “melting points” between “networks" that influence each other in several aspects, such as economy, social, environment, cooperation, etc. Developed areas sometimes become a “magnet” for less developed areas which might create imbalanced mutual relationship or interaction among areas. One of the approaches that can be used in exploring the interaction among areas is network analysis. This approach is popular with representation of the relationship between links and vertices which is described by graph (Rutherford, 2007; Iacobucci in Wasserman and Faust, 1994). The advance of network analysis is also known as “metaphor” (Clarke, 2009), where network analysis has entered into various fields of science including urban planning. A city/urban area may consist of several series of network systems/components (Beaureagrd in Albrechts and Mandelbaum, 2005), thus, the term of urban networks describe network of city which has function in the global economy and infrastructure (Clarke, 2009). According to Erickson (2012), there are three different types of network (as metaphor), those are technical, transactional, and socio-technical. Dupuy (2008) also mentions that there are also levels of networks in terms of diagrammatic exposition on network level within the city/urbanism and three criterions. He distinguishes three interacting levels of operators, including technical networks, functional networks, and network user. In addition, urban network is characterized by three principle criteria, namely topological, kinetic, and adaptive.

As we highlight the adaptive criterion, the global changes occur; the adaption should be carried out. The process of change continues to occur and sometimes becomes faster, thus, creates new possibilities that need to adapt with (Graaf, 2012). In urban network concept, there is what so-called adaptive criterion, which includes the notion of multiple choices with regards to connections (Dupuy, 2008). Network should be able to modify its own structure of