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The morphology of fringe areas: A case study of Semarang city-Indonesia

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Abstract— Many empirical researches of fringe areas have been carried out in megapolitan cities like Jakarta, Surabaya, and Bandung. Most theoretical studies in this particular problem have been concerned about the expanding urban areas. This study differs firstly, concerning urban sprawl in fringe areas of a metropolitan city named Semarang, and secondly using historical reading method as a different approach which presenting an opportunity to explore whether the morphology of fringe areas is specific. This paper also discusses the importance of understanding the fast growth of sprawl settlements on the urban fringe areas. The integration process of several types of settlements will shape the urban form's future. A lesson learnt from western urban growth is always trigger vast urban sprawl and drive urban chaos, which leads to the borderless city and inefficient of urban infrastructure. The productive land in the fringe areas will rapidly changed on to "dormitory suburbs" which occupied by almost the entirely white collar middle and high classes. The city might be segregated by race and income, both could boost crucial social problem.

Base on satellite image and old map evaluation, Semarang urban fringe areas indicated dualistic characteristics, a mixing of formal and informal, modern and traditional, planned and un-planned settlements. These conditions raise complicated social problems. Planned and un-planned settlements spread out unstructurally do not lead to the proper urban spatial configuration. This phenomenon in the future will shape chaos urban shape, difficult to be adjusting into the sustainability issues, in order to make liveable city.

Keywords: dormitory suburbs, dualistic character, spatial configuration.

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Introduction

In the global context, urban population growth has become a strategic issue. During the period of 1920 - 1980's world urban population increased by fifth fold from 360 million to 1.807 million people. By the end of 2000, the urban population reached 78 percent became 3.208 million. In the same period, urban population in developed countries rise up to 300 percent, however urban population in developing countries increased nearly 1000 percent from 100 million to 972 million people. The United Nation estimates the urban population of the developing countries in the year of 2020 will reach 2.116 million people (Hauser, 1982).

According to Janice Pearlman (Firman, 1991), the increasing urban population percentage in the world follows four transformation phenomena of global settlement during 21st century. They are: [1] transforming from rural to urban. [2] Transforming from developed to developing countries. [3] Transforming from formal socio economic activity to the informal one. [4] Transforming from cities to megacities. The United Nation has been predicted by the year of 2015, it will be 358 million cities in the world and 153 million cities are located in Asia. Urban area development is very rapid and it grows horizontally, occupied rural surrounding areas. City has gigantic scale cover hundred kilometres square and very hard to distinguish the border between rural and urban area, called "the borderless city".

Year 2008 URBAN POPULATION > RURAL POPULATION

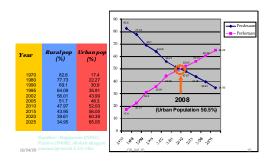


Figure 1: Urban vs Rural Population trend. Source: Dirjen Penataan Ruang, Departemen Pekerjaan Umum

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