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Analysis of urban agriculture sustainability in Metropolitan Jakarta (case study: urban agriculture in Duri Kosambi)

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Abstract

The rapid process of urbanization and urban development in West Jakarta will surely cause various urban problems such as the insufficient provision of food. Urban agriculture in West Jakarta can be seen as one of the supply sources of food and alternatives to household food security, one of the productive activities of urban open space, source of income and employment opportunities, and improve the quality of urban environment. This paper aims to analyze the sustainability status of urban agriculture in Metropolitan Jakarta. Multi Dimensional Scaling (MDS) is used for the analysis of the sustainability status. The result showed that the sustainability status of urban agriculture in West Jakarta on the existing conditions in almost all dimension classified as less sustainable and only institutional and technological dimension is quite sustainable. This existing condition is necessary intervention in raising the sustainability status of urban agriculture in Metropolitan Jakarta.

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1. Introduction

Urbanization and urban development in Indonesia has occurred rapidly in recent decades. This is evident from the growth of the urban population in Indonesia is very rapid compared to the growth of the rural population. BPS population data indicate that the percentage of the urban population in 1990 reached 30.9%, in 2010 reached 49.8%,

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and this year has reached 56%. In Indonesia's Economic Vision 2025 is estimated at 65% of Indonesia's population live in cities.

Accordingly, Jakarta as the capital of the country and is one of the metropolitan city is also a process of urbanization and urban development is very rapid. Based on BPS data, the population of Jakarta in 2012 was as much as 9,932,063 people, compared with the total population in 2011 the population of Jakarta is as much as 9,761,992 inhabitants, has been an increase of 170 071 inhabitants or an increase of 0.98 percent, In the period 2000-2012, the population growth rate has increased by an average of 1.67 percent per year.

The acceleration of urbanization and urban development in Jakarta will certainly cause problems. Number of significant increase in urban population without the support and offset by the amount of the provision of food, employment, housing, infrastructure, law enforcement officers, and so forth is a problem that must be dealt with properly.

Poverty is one of the problems faced by Jakarta. Number of poor (people living below the poverty line) in Jakarta in September 2013 amounted to 375.7 persons (3.72%). Compared with March 2013 (354.19 thousand or 3.55%), the number of poor people increased by 21.51 thousand, an increase of 0.17 points. While compared to September 2012 the number of poor people amounted to 366.77 thousand (3.70%), the number of poor increased by 8.93 thousand, an increase of 0.02 points. Compared with the poor in March 2012 that amounted to 363.20 thousand (3.69 percent) means the number of poor people increased by 3.57 thousand, an increase of 0.01 points. From these data it can be said that the number of poor people in Jakarta tends to increase every year.

On the other hand, one of the phenomena that is currently happening in cities in Indonesia as well as in Jakarta is the development of urban agriculture. In the Report Rural Urban Agriculture Foundation (RAUF) in 2008, noted that the definition of urban agriculture (urban farming) is an agricultural activity that is present in and around urban areas. The most notable differences between urban agriculture with rural agriculture is the integration of urban agriculture into urban economic system and urban ecosystems. Integration can be seen from the existence of the urban poor as labor, resource use, urban (land sub-optimal as agricultural land, organic waste for composting, urban wastewater for watering plants), deal directly with consumers (the town), have a direct impact to the urban ecology (positive or negative), became part of the urban food system, competition in acquiring land with other urban functions, are affected by planning and urban policy, and others.

Activities of urban agriculture in general has a very important role because it is needed in support of food security with the availability of adequate food, the ability to access (including purchase) of food, and the dependence of food at any party, then the position of farmers in the activities of urban agriculture has a strategic position to support food security. This is because farmers are food producers and at the same time also the largest consumer group.

Urban agriculture in addition to having economic benefits, it also has social benefits and environmental benefits. This is in line with the results Slabinski Julie M. (2013) which concluded that urban agriculture could be one solution for not only making vacant land be useful but also provide cheap and flexible solution for people who struggle financially.

Results of research Hubert De Bon, et al (2010) concluded that agricultural activities will continue to be a major contributor to urban communities and rural farming differences with urban agriculture has declined. The function of the food supply for urban communities makes urban agriculture need to be considered by the population, the government, and farmers in urban areas. As well as the main issue is producing high quality agricultural products in densely populated areas and environmental pollution.

The development of urban agriculture should be conducted in the perspective of sustainable urban development. Li (2009), states that the development of sustainable agriculture seeks to achieve sustainability of agricultural production, rural economic sustainability and environmental sustainability in the long term). Based on the definition of sustainability, the development of sustainable urban agriculture in this research is the development of urban agriculture that integrates economic, social and environment in an integrated manner in order to achieve economic sustainability, social sustainability and environmental sustainability within the framework of the development of urban areas.

The purpose of this study was to identify the characteristics of urban agriculture in Metropolitan Jakarta and analyzing the sustainability of urban agriculture in Metropolitan Jakarta.

2. Methods

To achieve the research objectives, the phases of research that will be done are the preparation, data collection, and analysis. Preparation is done by compiling survey instruments, data requirements, and other preparations. The

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