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Sanitation is one of the critical infrastructure sectors in order to improve community health status. The Ministry of Public Works of the Republic of Indonesia to define that word sanitation include: domestic waste water management, solid waste management, rain water management (drainage management) as well as the provision of clean water. Surabaya city as the capital of East Java province and Indonesia's second largest city with a population of 2,853,661 inhabitants in 2014 (the

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PREFACE: The 3rd International Conference in The Era of Uncertainty (ICPEU)

In the spirit of achieving Sustainable Development Goals declared by the United Nations, the 3rd ICPEU looks at harmonizing contextual perspective associated with the innovation and creativity that still considers the economic, ecology, and social value to create sustainable nations. The journey towards achieving a sustainable nation requires recommendations and synchronization from a wide array of stakeholders including academics, private sectors as well as government officials to create inclusive, comfortable and sustainable places for living.

The Urban and Regional Planning Department at Universitas Brawijaya is one of the institutions which has been actively promoting sustainability in all its educational obligations. In the past years, the Department has established cooperation with international institutions, one of which is Kyoto University, to better resonate the awareness to a wider scale. The cooperation with Kyoto University has been extremely crucial for the organization of ICPEU.

For two days, copious data and hypotheses on urban and regional planning issues were discussed and exchanged. More than 200 outstanding intellectuals of the world participated in aiding those involved in such ventures solving any problem that occur. It is only natural that a considerable number of schemes as well as projections were constructed as the result, all assembled in this conference proceeding. It is to our highest expectation that all ideas expressed in this conference could participate and contribute in the global movement toward achieving sustainability.

The committee of the 3rd ICPEU would like to thank the Sixth Southeast Asia Network Forum for the collaboration and to all keynote speakers who participated:

- Prof. Kiyoshi Kobayashi of Kyoto University, Japan,
- Prof. Hans WestLund of Kungliga Tekniska Hogskolan (KTH) Royal Institute of Technology, Sweden,
- Prof. Masaaki Okamoto of Kyoto University, Japan
- Dr. Surjono of Universitas Brawijaya, Indonesia,
- Dr (HC) Tri Rismaharini (Mayor of Surabaya),
- Dr. Emil Elestianto Dardak (Mayor of Trenggalek), and
- Mr. John Taylor as the founder of “Kota Kita”.

See you at the next ICPEU in 2019.

Malang, 3-4 March 2017
Universitas Brawijaya
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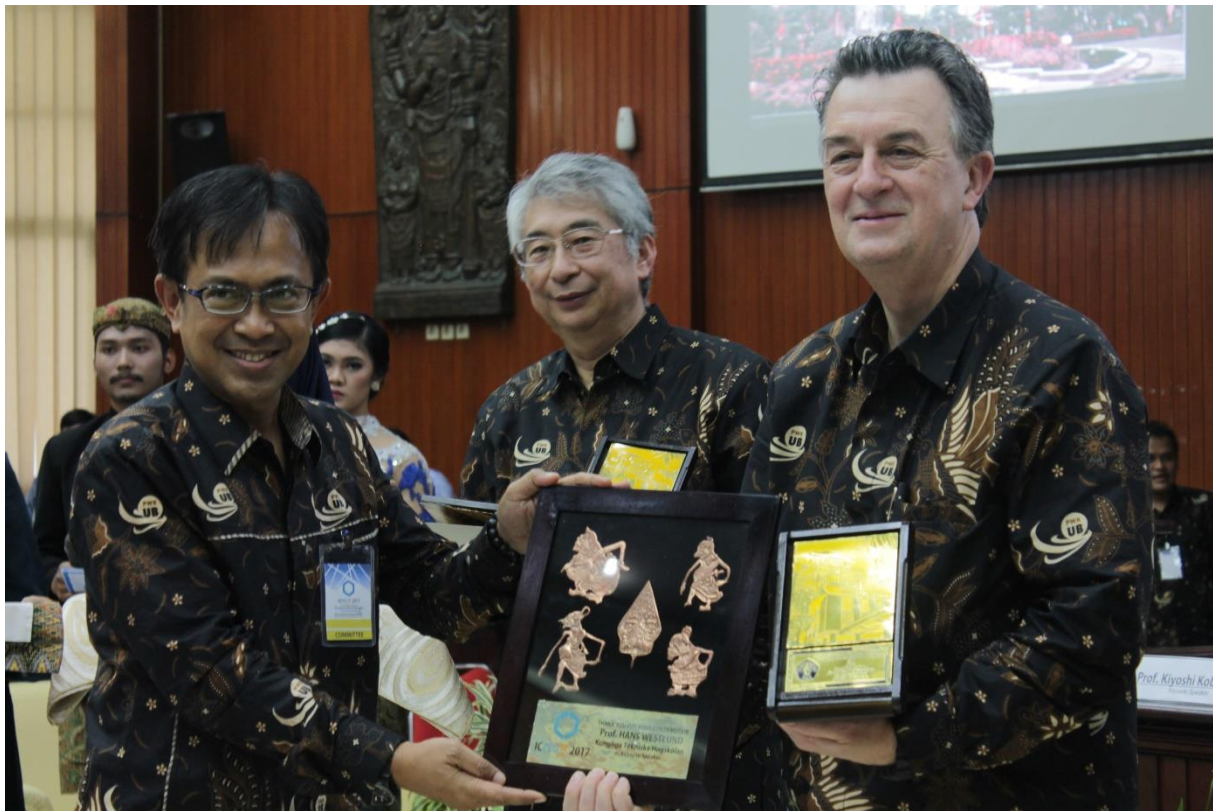


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Sustainability study of domestic communal wastewater treatment plant in Surabaya City

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Abstract. Sanitation is one of the critical infrastructure sectors in order to improve community health status. The Ministry of Public Works of the Republic of Indonesia to define that word sanitation include: domestic waste water management, solid waste management, rain water management (drainage management) as well as the provision of clean water. Surabaya city as the capital of East Java province and Indonesia's second largest city with a population of 2,853,661 inhabitants in 2014 (the second largest after Jakarta), but the people who have been served by the sanitation infrastructure systems were expected at 176,105 families or about 26.95 % of the population of the city is already using sanitation facilities. In the White Book Sanitation of Surabaya City in 2010, Surabaya City sanitation development mission is to realize the wastewater management of settlements in a sustainable and affordable by the community. This study aims to assess the sustainability of the wastewater treatment plant (WWTP) domestic communal in the city of Surabaya. The method in this research is quantitative method through observation, structured interviews and laboratory testing of the variables analyzed. Analyses were performed using a technique Multidisciplinary rapid appraisal (Rap-fish) to determine the level of sustainability of the management of communal WWTP based on a number of attributes that easy scored. Attributes of each dimension includes the technical, environmental quality, institutional, economic, and social. The results of this study are sustainability index of environmental quality dimension at 84.32 with highly sustainable status, technical dimension at 62.61 with fairly sustainable status, social dimension at 57.98 with fairly sustainable status, economic dimension at 43.24 with less sustainable status, and institutional dimension at 39.67 with less sustainable status.

1. Introduction

Today there are many people in Indonesia who have difficulty accessing clean water and sanitation due to the limitations of the existing infrastructure. In accordance with the Millennium Development Goals (MDGs), the Government has set a target in 2015 that as many as 68.87% of the total Indonesian population should have access to improved drinking water sources, while access to adequate sanitation facilities is as much as 62.41% [1]. Based on data from the Central Statistics Agency (BPS), for the period 2011 to 2014 Q1, the proportion of households to sanitation is 61.04% for basic sanitation in urban and rural areas. But it is merely a quantity not quality. When viewed from the quality is still

