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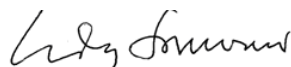
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d. Kelengkapan unsur dan kualitas penerbit (30%)	4,12	4	4,06
Total = (100%)	17,88	18	17,93

Reviewer 2



Prof. Dr. Edy Soewono
NIP. 195206261980031003
Unit kerja : Departemen Matematika FMIPA ITB

Semarang, 24-9- 2018

Reviewer 1



Prof. Dr. Widowati, MSi
NIP. 196902141994032002
Unit kerja : Departemen Matematika, FSM UNDIP

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Total = (100%)	20,00			17,88
Nilai Pengusul = 60% * =				

Catatan Penilaian artikel oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi jurnal:**

Unsur isi jurnal baik.

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Kedalaman pembahasan tentang LAF system baik.

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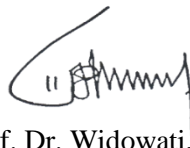
Metodologi dan data cukup mutakhir.

4. **Kelengkapan unsur dan kualitas terbitan:**

Terdapat 10 referensi kedaluwarsa (lebih dari 10 tahun) dari 16 referensi yang digunakan. Kualitas penerbit cukup baik.

Semarang, 16-8- 2018

Reviewer 1



Prof. Dr. Widowati, MSi

NIP. 196902141994032002

Unit kerja : Dept. Matematika FSM Undip

**LEMBAR
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h. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	6,00			4
Total = (100%)	20,00			18
Nilai Pengusul = 60% * =				

Catatan Penilaian artikel oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi jurnal:

Materi kajian sesuai judul artikel. Referensi cukup banyak, hanya sedikit yang up to date.

2. Ruang lingkup dan kedalaman pembahasan:

Lingkup kajian meliputi pemodelan BOD load dari WWTP Sewon. Analisis berbasis data lapangan dilakukan cukup rinci.

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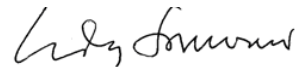
Metodologi ditunjang dengan data dan dilakukan dengan metode baku baku yang lazim dipakai.

4. Kelengkapan unsur dan kualitas terbitan:

Artikel terbit di journal international yang relatif baru.

Semarang, 24/9/ 2018

Reviewer 2



Prof. Dr. Edy Soewono
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Environmental Management and Sustainable Development, Vol. 2, No. 2,
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Irreversibility, Option Demand and Environmental Preservation

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Abstract

The purpose of this article is to analyze the government's choice between preservation and irreversible development when there is a willingness to pay for retaining the option to use the environmental site. Extending the model used by *Mäler & Fisher*, I show that in the context of uncertainty about future benefits, the government would choose to preserve the land when there is an option demand to refrain from using it.

Keywords: irreversibility; uncertainty; option demand; environmental preservation

1. Introduction

The purpose of this paper is to analyze the government's choice on whether to preserve or to construct a hydroelectric dam when there is a willingness to pay for retaining the option to use the environmental area. Extending the model used by *Mäler & Fisher* (2005) to explore the problem of choosing whether to preserve or to develop a tract of land, I show that in the context of uncertainty about future benefits, the government would choose to preserve the land when there is an option demand to refrain from using the environmental site.

Cameroon's government has launched in June 2012, for a value of US \$ 840 million, the construction of a hydroelectric dam in Memve'ele waterfalls in order to boost the electricity supply. Memvele'ele waterfalls are one of the richest biodiversity areas of the Campo-Ma'an landscape. The Campo-Ma'an is located in the southwestern corner of Cameroon bordering to the west by the Atlantic Ocean. The Campo-Ma'an features a National park containing 80 animal mammals such as forest elephants, leopards and gorillas; 302 bird species; 122 reptile species and 250 fish species. The Campo-Ma'an also contains a coastline of 65 km with attractive beaches, diverse ethnic groups with different cultural heritage and archaeological sites.

Water Transmission Protocols and Sustainable Development in Face of Climate Change.

Case study: Urban water supply in Dez to Qomrood Water Transmission Project, Iran

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Abstract

Central area of Iran is located in a dry- semi dry region which suffers from fresh water scarcity. Since water shortage has been known as the most important factor that threatens sustainable development, this area faces serious problem in this matter. Furthermore, growing rate of population exacerbates this critical condition. As a solution, several inter-basin water transfer projects, such as under construction Dez to Qomrood water transmission project, have been considered to overcome this difficulty. Three water allocation protocols are supposed in this project: Proportional Allocation (PA), Fix Upstream allocation

Flood Flow Modeling in a River System Using Adaptive Neuro-Fuzzy Inference System

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Abstract

This paper presents the application of a data-driven model, Adaptive Neuro-Fuzzy Inference System (ANFIS) in forecasting flood flow in a river system. ANFIS uses neural network algorithms and fuzzy reasoning to map an input space to an output space. In the present study, ANFIS models are used to forecast common downstream flow rates and flow depths in a river system having multiple inflows. Three different ANFIS model forms: (i) depth-depth (H-H) model, (ii) depth-discharge (H-Q) model and (iii) discharge-discharge (Q-Q) models are considered in this study. The models are used for forecasting one-hour ahead common downstream flow rates and flow depths in a river system based on past upstream flows. The flow and flow depths data are divided arbitrarily into different categories (2, 3, 4, 6) and different number of membership functions (Triangular, Gaussian, Trapezoidal and Bell) selecting two categories with Gaussian input and constant output membership functions based on trial and error. Performances of the ANFIS model with selected categories and membership functions are tested and verified by applying a time-series model, Autoregressive Integrated Moving Average (ARIMA) to the same river system. ARIMA has been successfully used in time-series forecasting leading to satisfactory performances. A further validation of the ANFIS model has been done by applying it to another river basin, Tar River Basin in USA. The results evaluated on the basis of standard statistical criteria showed improved performances by the ANFIS depth-depth forecasting models. The results also indicate that performances of the ANFIS models with multiple inflows are more satisfactory and closely follow performances of the ARIMA models. The study demonstrates applications of the multiple inflows ANFIS models in forecasting downstream flood flow and flow depth in a river system.

Keywords: ANFIS, ARIMA, flow depth, discharge

Economic Analysis of Biodigestion as an Appropriate Waste-to-Energy Technology in the Developing World with Case Study

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Abstract

The study explores the economic benefits of biodigestion systems as a waste-to-energy conversion technology on individual farms in the developing world. The design components are discussed, including an analysis of the various social, economic and technical factors that