LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : *PROSIDING*

Judul karya ilmiah (paper) : Modeling the Dynamic Interrelations between Mobility, Utility, and Land Asking Price
Jumlah Penulis : 4 orang
Status Pengusul : E Hidayat, **I Rudiarto,** F Siegert, W D Vries.

Identitas prosiding :
a. Judul Prosiding : IOP Conference Series:Earth and Environmental Science
b. ISBN/ISSN : 1755-1315
c. Tahun Terbit/tempat pelaksanaan : 2018
d. Penerbit/organiser : IOP Publishing
e. Alamat repository PT/web :http://iopscience.iop.org/article/10.1088/1755-1315/123/1/012019
f. Terindeks di (jika ada) : SJR 0,175 (2019) dan SNIP 0,514 (2019)

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b. Ruang lingkup dan kedalaman pembahasan (30%)	9		8,0
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d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		8,0
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Nilai = (40% x 26 : 3)			3,47

Catatan Penilaian paper oleh *Reviewer*:

a. Unsur isi lengkap dan penulisan komponen sudah mengacu kepada petunjuk penulisan makalah yang disediakan. Benang merah antara judul dan IMRad sudah sesuai pada pembahasan hubungan antara *mobility*, *utility*, dan *land asking price*.

b. Pembahasan cukup baik dimana perumusan variable mobility dan utility yang digunakan dilakukan dari berbagai sumber. Makalah sesuai dengan bidang ilmu penulis terutama dalam konteks harga lahan untuk perencanaan kota. Pembahasan dalam makalah menggunakan sebanyak 12 sumber pustaka (50%) dari total 24 pustaka yang digunakan.

c. Makalah didukung oleh total 24 sumber pustaka dimana terdapat 19 pustaka dari artikel jurnal dan 21 diataranya (87,5%) merupakan terbitan dalm 10 tahun terakhir. Data dan metode cukup mutakhir yang didapat dari pengolahan sumber primer melalui wawancara yang kemudian diolah dengan membandingkan dari berbagai model seperti; model dari singapura, Hankou-china model, Labuan-Malaysia model.

d. Prosiding terindeks *Scopus* (IOP Series – *earth and environmental science*) dengan SJR 0,175 tersedia *online* dan *open acces*s. Prosiding dilengkapi dengan ISBN dengan tautan DOI dan terkategori prosiding internasional.

Semarang, 20-02-2020

Reviewer 1,

Prof. Dr.rer.nat. Imam Buchori, ST
NIP. 197011231995121001
Departemen PWK, FT. Undip

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d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		9,0
Total = (100%)	**30**		28,0
Nilai = (40% x 28 : 3)			3,73

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a. Kesesuaian isi lengkap dan penulisan substansi sudah merujuk kepada petunjuk penulisan yang disediakan. IMRaD dan judul yang diangkat sudah sesuai dengan poin pembahasan pada keterkaitan mobiltas dan utilitas dalam konteks peningkatan harga lahan.

b. Pembahasan *paper* menekankan pada pengembangan model transportasi yang berkaitan dengan mobility, utility, dan harga lahan di wlayah perkotaan. Makalah sesuai dengan bidang ilmu penulis terutama dalam perencanaan kota yang berhubungan dengan aspek transportasi. Pembahasan dalam artikel menggunakan sekitar 50% referensi dari total 24 referensi yang digunakan.

c. Makalah memiliki nailai kebaruan cukup dengan total 24 referensi dimana 87,5% diantaranya merupakan sumber referensi yang terbit ≤ 10 tahun terakhir. Metode penelitian sudah baik dengan membandingkan beberapa model dari berbagai sumber untuk melihat kelebihan dan kekurangan model yang digunakan sehingga memiliki unsur *novelty* yang baik.

d. Prosiding diterbitkan oleh IOP Publishing dan terindeks scopus dengan SJR 0,17 dan ber-ISBN. Prosiding internasional dan tersedia *online* dengan system *open access* yang dilengkapi dengan tautan DOI.

Semarang, 03-03-2020

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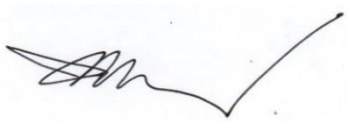

Prof. Dr. Ir. Nany Yuliastuti, MSP
NIP. 195407171982032001
Departemen PWK, FT. Undip

LEMBAR
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Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a.Kelengkapan unsur isi paper (10%)	2,0	3,0	2,5
b.Ruang lingkup dan kedalaman pembahasan (30%)	8,0	7,0	7,5
c.Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	8,0	9,0	8,5
d.Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	8,0	9,0	8,5
Total = (100%)	26,0	28,0	27,0
Nilai = (40% x 27 : 3)			3,6

Semarang, 09-03-2020

Reviewer 1,

Prof. Dr.rer.nat. Imam Buchori, ST
NIP. 197011231995121001
Departemen PWK FT.Undip

Reviewer 2,

Prof. Dr. Ir. Nany Yuliastuti, MSP
NIP. 195407171982032001
Departemen PWK FT.Undip

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2nd Geoplanning - International Conference on Geomatics and Planning; Surakarta - Central Java; Indonesia; 9 August 2017 through 10 August 2017; Code 134955

Modeling the Dynamic Interrelations between Mobility, Utility, and Land Asking Price (Conference Paper) (Open Access)

Hidayat, E.[a], Rudiarto, I.[b], Siegert, F.[c], Vries, W.D.[c]

[a]Institute of Rd. Engineering, Indonesia
[b]Department of Urban and Regional Planning, Diponegoro University, Indonesia
[c]Technische Universitat Munchen, Germany

Abstract

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Limited and insufficient information about the dynamic interrelation among mobility, utility, and land price is the main reason to conduct this research. Several studies, with several approaches, and several variables have been conducted so far in order to model the land price. However, most of these models appear to generate primarily static land prices. Thus, a research is required to compare, design, and validate different models which calculate and/or compare the inter-relational changes of mobility, utility, and land price. The applied method is a combination of analysis of literature review, expert interview, and statistical analysis. The result is newly improved mathematical model which have been validated and is suitable for the case study location. This improved model consists of 12 appropriate variables. This model can be implemented in the Salatiga city as the case study location in order to arrange better land use planning to mitigate the uncontrolled urban growth. © Published under licence by IOP Publishing Ltd.

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PREFACE

The 2nd Geoplanning - International Conference was held on 9-10th September, 2017 in Solo, Central Java, Indonesia. Geoplanning is an international conference covering research and development in the field of applied geomatic's technologies for spatial planning, including GIS, Remote Sensing, and Satellite Image Processing. More than 132 abstract were submitted and after an initial review 80 papers were presented. Through peer review process, 50 papers were accepted for publication in the Geoplanning Conference Proceeding.

The present volume is highlighting major issue of Sustainable Development with focusing topic on "Geomatic's Application for Disaster Management and Spatial Planning." Furthermore, the topic was divided into four themes;

Theme 1: Disaster Modelling & Management

Theme 2: Infrastructure and Settlement

Theme 3: RS-GIS for Spatial Modelling

Theme 4: Urban and Regional Planning

We would like to thank all the reviewers for their time and effort in reviewing the documents. The published papers have passed the process of improvement accommodating the discussion during the conference as well as the reviewers' comments who have guided any necessary improvement. Finally, we would like to thanks to all of the proceeding team who have dedicated their constant support and countless time to bring these scratches into a book.

Chair Committee of Geoplanning

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Sensitive Land Use Planning, Malinao, Albay, Philippines

A M R Abante[1] and C G R Abante[1]

[1]Bicol University, Philippines

email: anamarie.abante@bicol-u.edu.ph

Abstract. This paper reviews the hazard zone as defined in the zoning ordinance of the Local Government of Malinao. The zonification was completed in accordance with the approved Comprehensive Land Use Plan stipulating the allowed use and regulations of zones to control future land development. This paper brings together an examination of human exposure as well as spatial situations and conditions of their houses within the hazard zone playing with flood risks. *The* purposive selection sample households were based on characteristics of people residing within it, in which the site concurs with the flood forecasted frequent every 5, 25 and 100 years turned to be significant to better understanding 'risks computing' were variables retrieved from the intersecting spaces fused to get the complex interrelationship of the sets of flood hazard, vulnerability and exposure of inhabitants and their place of residence weighted against capability of individual family or household to withstand effects of flooding. The Risk Quotient Object and Field Bases Model were tested in specific location in Malinao. The sample households' individual risk location quotient varies from high to a very high risk distributions ranging from 8 to 125 numerical values. As Malinao stays on to experience flood hazards, changing climate and other natural calamities, the need to understand the six elements of disaster risk computing at household level is becoming crucial in risk reduction meeting the targets and priorities for action as specified in the Sendai Framework.

Keywords: Zoning, Exposure, Risk Computing, Risk Quotient, Household

1. Introduction

The prevailing principle of the Habitat I which was held in Vancouver in 1976 provides importance to water for life and adopt programs for the sanitary disposal of waste water. Similarly the prevailing principles of the Habitat II which was held in Istambul in 1996 arrest the deterioration of global human settlements conditions and ultimately creates the conditions for achieving improvements in the living environment of all the people on sustainable basis. In October 2016, the Habitat III held in Quito, the prevailing principles focus on Housing [1] and Sustainable Urban Development to adopt a New Urban Agenda. This work is seen significant in regulating the use of the land and activities in hazard zones particularly those families within the immediate vicinity of rivers and other waterbodies as well as providing guidance to the residents at risk and decision making in land management, land use planning and monitoring local developments [2,3].

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IOP Conf. Series: Earth and Environmental Science **123** (2018) 012019 doi:10.1088/1755-1315/123/1/012019

Modeling the Dynamic Interrelations between Mobility, Utility, and Land Asking Price

E Hidayat[1], **I Rudiarto**[2], **F Siegert**[3], **and W D Vries**[3]

[1]Institute of Road Engineering, Indonesia
[2]Department of Urban and Regional Planning-Diponegoro University, Indonesia
[3]Technische Universitat Munchen, Germany

Email: edwin.hidayat@pusjatan.pu.go.id

Abstract. Limited and insufficient information about the dynamic interrelation among mobility, utility, and land price is the main reason to conduct this research. Several studies, with several approaches, and several variables have been conducted so far in order to model the land price. However, most of these models appear to generate primarily static land prices. Thus, a research is required to compare, design, and validate different models which calculate and/or compare the inter-relational changes of mobility, utility, and land price. The applied method is a combination of analysis of literature review, expert interview, and statistical analysis. The result is newly improved mathematical model which have been validated and is suitable for the case study location. This improved model consists of 12 appropriate variables. This model can be implemented in the Salatiga city as the case study location in order to arrange better land use planning to mitigate the uncontrolled urban growth.

Keywords: Modeling, Land asking price, Urban growth, Salatiga City

1. Introduction

Regarding the future interest, planning a city should consider sustainable development. The challenge is to linking economic activities, social issues, and environmental impacts. One way to achieve sustainable development is by using land use planning to control economic and social activities, so as a result, allocation of land should fit particular uses. Land use is very important as a benchmark for parceling mechanisms, also as a benchmark for zoning the urban environments. Zoning has a function to evaluate the environmental consequences, as well as to support the future decision making in order to mitigate the negative effects of urban development [1].

Urban development is influenced by population growth and rapid urbanization process. These cause urban sprawl which leads to unsustainable practices that cause ecological, social and environmental problems [2]. Furthermore, population growth triggers a rapid land use change particularly converting farmland into housing areas. The increase of population is equal to the increasing demand for housing. While, a high density of housing areas evokes new issues, like the probability of hazards, such as fire hazards, an increasing need of water, and the high impacts of houses on ecosystem function [3]. Moreover, high population density and the establishment of new settlements may entail serious problems in water supply, energy provision, and utilities [4]. Similar findings by Mohammady [5] show that the expansion of urban areas results in a lack of infrastructure, increase of environmental pollution, and limits urban services. Eventually, unplanned urban growth

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Spatial Distribution of Socioeconomic Characteristics in Rural's Java: A Case from Three Different Rural Areas in Central Java

I Rudiarto [1], W Handayani [1], H B Wijaya [1], and T D Insani [1]

[1] Department of Urban and Regional Planning, Diponegoro University, Semarang, Indonesia

Email: iwan.rudiarto@undip.ac.id

Abstract. The intention of this paper is to combine the socio economic development into spatial aspect with the fact that the divided sub study areas are differed in its socio-economic characteristic. The research was conducted in three different rural areas, i.e.; coastal area in Sayung sub district – Demak Regency, plain area in Delanggu sub district – Klaten Regency, and mountain area in Kledung sub district – Temanggung regency. Spatial interpolation technique has been applied in order to identify the spatial distribution of socioeconomic data. The results show that socioeconomic characteristic in plain area and coastal area is more varied and regularly distributed as compared to the mountain area. Educated people are less found in the plain area while in coastal and mountain area the condition is better. Coastal area is identified as the prone area to the disaster issues and therefore socioeconomically vulnerable. The result of this research is very important to the development policies that need to undertake regarding to socioeconomic development in each associated location.

Keywords: Socioeconomic, Spatial Interpolation, Household, Rural Area, Central Java

1. Introduction

Socioeconomic characteristics in a rural area is very much related to the resource use owned by the farming families as well as the location where the family lives [1–4]. In the socioeconomic development, the location of the rural's family is indicated by the settlement distribution in a specific place. Generally, rural settlements are in high pressure of the urbanization and have been significantly transformed into a more urbanized area [5]. The existence of settlements in rural area is a central unit as it may reveal the relationships between land and the people, the historical background of a community, as well as the socio-political connections [6,7]. Therefore, the settlement distribution in rural area will also show the socioeconomic conditions of the people. On the other hand, resource use in the rural area indicates the relationship between economic and environmental aspect. Income gain by the farming family represents the economic aspect while land resource utilisation represents the environmental aspect. Farming families are the main player between those two aspects where the decision on how to utilise the resource very much depends on the family [8].

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