1st ITB Centennial and 4th PlanoCosmo International Conference 2018

Transforming Beyond Borders, Starting the New Urban Agenda

IOP Conference Series: Earth and Environmental Science Volume 158

Bandung, Indonesia 3 - 5 April 2018

Editors:

Fikri Zul Fahmi Euginie Birch Tim Bunnell Delik Hudalah Haryo Winarso

ISBN: 978-1-5108-6398-9

ISSN: 1755-1307

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2018) by the Institute of Physics All rights reserved. The material featured in this book is subject to IOP copyright protection, unless otherwise indicated.

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

Table of contents

Volume 158

The 1st ITB Centennial and 4th PlanoCosmo International Conference

3-5 April 2018, Bandung, Indonesia

Accepted papers received: 13 April 2018

Published online: 1 June 2018

Preface

The 1st ITB Centennial and 4th PlanoCosmo International Conference

Peer review statement

Papers

Informal Urbanism and Inclusive Development

<u>Designing urban rules from emergent patterns: co-evolving paths of informal and formal urban systems - the case of Portugal</u>

Paulo Silva....1

An observation on the quality of interfaces in order to understand the complexity and coherence of informal settlement: A study on Tamansari Kampung in Bandung

S Sawira and T Rahman.....12

The Hidden Structure of Organic Informal-like Settlements in Jogjakarta City: An Investigation of Socio-Spatial Relationship in an Urban Kampung

I A W Hutama.....26

Exploring the Notion of the Family Friendly City

Riela Provi Drianda.....42

From Informal to	Formal:	Status	and	Challenges	of	Informal	Water	Infrastructi	<u>ures i</u>	n
Indonesia										

S Maryati, A N S Humaira and D M Kipuw.....52

Medan City: Informality and the Historical Global City

N Sudarmadji, B Tyaghita, P T Astuti and D Etleen....65

Urban and Land Housing Development

Comparison of place attachment influence on the level of happiness of people living near residential parks

I Nurhakim, E B Kurniawan and D K Wardhani.....83

Sustainable dimension adaptation measure in green township assessment criteria

R Yaman, S Thadaniti, N Ahmad, F M Halil and N M Nasir.....99

Gentrification and the Vulnerability of Betawi Community

Santy Paulla Dewi.....111

Whose Sense of Place? Re-thinking Place Concept and Urban Heritage Conservation in Social Media Era

Christin Dameria, Roos Akbar and Petrus Natalivan Indradjati.....123

<u>Land-Price Dynamics Surrounding Large-Scale Land Development of Technopolis Gedebage, Bandung, Indonesia</u>

A Hasanawi and H Winarso.....135

Becoming Heritage: A Place-Making Study of Old Neighbourhood Marketplace in Bandung

A S Ekomadyo, A Nurfadillah, A Kartamihardja and A J Cungwin.....148

Infrastructure and Transportation System

Community Participation on an Urban Sanitation Program: a Comparative Study

Ismu Rini Dwi Ari, I Nyoman Suluh Wijaya and Aditya Dewanto.....155

Spatial Equity in Trans Jogia Performance in the Yogyakarta Urbanized Area (YUA)

D P Ramadhani and Y Herwangi....164

Importance-Performance Matrix Analysis (IPMA) Of Transport Disadvantage Variables on Social Exclusion in a Rural Context

Ophilia Larasati and Dr.Eng. Puspita Dirgahayani.....186

<u>Train users' perceptions of walking distance to train station and attributes of paratransit service: understanding their association with decision using paratransit or not towards the train station</u>

R. Syafriharti, B. Kombaitan, I. P. Kusumantoro and I. Syabri.....197

Discrete-Choice Modeling Of Non-Working Women's Trip-Chaining Activity Based

Amelia Hayati, Pradono, Heru Purboyo and Sri Maryati.....207

Optimation of Operation System Integration between Main and Feeder Public Transport (Case Study: Trans Jakarta-Kopaja Bus Services)

M. Miharja and Y N Priadi.....222

<u>Development of Methodology to Evaluate TOD Feasibility in Built-up Environment (Case Study: Jakarta and Bandung, Indonesia)</u>

P Dirgahayani and D N Choerunnisa....235

<u>Determining the potential for Transit Oriented Development along the MRT Jakarta</u> corridor

W Budiati, A B Grigolon, M J G Brussel and S Y Rachmat.....252

Multimodal Freight Transport Regulations in Indonesia And Its Implementation (A Case Study of Tanjung Priok Port)

N Budisiswanto, M Miharja, B Kombaitan and P Pradono....267

Revenue management of air cargo service in theory and practice

S Budiarto, H P Putro, P Pradono and G Yudoko.....278

Developing a Probabilistic Model for Constructing Seaport Hinterland Boundaries

Russ Bona Frazila, Febri Zukhruf and Jzolanda Tsavalista Burhani....291

Exploring the Role of Online 'Ojek' In Public Transport Trips: Case of Jakarta Metropolitan Area Rail Users

A F Saffan and M Rizki.....298

Motorcycle dependency index at household level: case of Yogyakarta urbanized area

Y Herwangi, S P Putri and P S Ronita.....315

Environmental Planning and Management

Ecological Footprint and Ecosystem Services Models: A Comparative Analysis of Environmental Carrying Capacity Calculation Approach in Indonesia

R M Subekti and D S A Suroso....328

Satellite Imagery Data: Dynamic Systems Model for sustainable urban forest in area of Halim Perdana Kusuma, East Jakarta

D M Sundara, D M Hartono, E Suganda and JS H Haeruman....339

Spatial analysis related to the location characteristics of park supply. Case study: Music Park and Pendawa Park, Bandung City, Indonesia

A Malik, R Akbar, S Maryati and P Natalivan.....345

Natural Resource Management based on Gender Perspectives and Integrating Traditional Ecological Knowledge of the Tepera in Jayapura, Papua

W A Rumbiak and E V Wambrauw.....357

Stakeholder Participation in Marine Spatial Plan Making Process in Lampung Province

Asirin, A M Asbi and V H Pakpahan....367

Biogas Implementation as Waste Management Effort in Lembang Sub-district, West Bandung District

H A Alberdi, S A H Sagala, Y Wulandari, S L Srajar and D Nugraha.....380

Preferences mapping of household biodigester in Bandung

S Humaira, E Rianawati, S Sagala and M A Sasongko.....392

The Current Observation and Challenges of Tourism Development in Batur Global Geopark Area, Bali Province, Indonesia

A. Rosyidie, S. Sagala, M. M. Syahbid and M. A. Sasongko.....406

Who gets the benefits of geopark establishment? A study of Batur Geopark Area, Bali Province, Indonesia

S Sagala, A Rosyidie, M A Sasongko and M M Syahbid.....420

Disaster Risk Reduction

The Role of Community-Based Organization in Disaster Response at Mt. Sinabung

Y Wulandari, S A H Sagala and G B Sullivan.....435

<u>Does Social Protection on Education Increase the Capacity of Communities in Facing Disasters?</u>

D S A Suroso, S A Sagala, H A Alberdi and Y Wulandari.....446

Analysis of tsunami disaster resilience in Bandar Lampung Bay Coastal Zone

Alhamidi, V H Pakpahan and J E S Simanjuntak.....458

<u>Unraveling the impact of built-environmental self-modification of the local inhabitants in their attempt to reduce the urban flood impact in Grogol, Sukoharjo*</u>

M J Wanabakti, C R Susilo, M Nathania and C Y Putri.....470

Heritage planning and rethinking the meaning and values of designating heritage sites in a post-disaster context: The case of Aceh, Indonesia

Z D Meutia, R Akbar and D Zulkaidi.....488

Peri-Urbanization and Regional Policy

Beyond the Early Stage of Post-suburbanization: Evidence from Urban Spatial Transformation in Jabodetabek Metropolitan Area

E Sadewo, I Syabri and Pradono.....501

Infrastructure Provision by Residential Developers in The Peri-Urban Neighbourhoods of Metropolitan Bandung Raya

A Vitriana....517

Housing Development on the Urban Fringe and its Challenges to Sustainable Urban Growth

RWD Pramono.....530

<u>Logistics system as an effort of integration in the Mandalika Special Economic Zone and its surroundings</u>

T Suheri and W G Melinda.....543

Modelling Container Terminal Resilience Measurement by Considering Hinterland Losses

F Zukhruf and R B Frazila.....554

Regional Innovation and Smart City System

Towards	Smart and	Resilient	City: A	Concer	otual Mode	
Y Arafah	, H Winar	so and D S	S A Suro	so5	64	

Crowdsourced Smart Cities versus Corporate Smart Cities

Tooran Alizadeh.....583

<u>Delivering smart city system through experimental smart building concept. Design case of Nordhavn Community Centre, Denmark</u>

F Septiandiani and W Raharjo.....595

Planning in the Digital Era: Films and Social Media as Information Sources for Tourism Planning

N F Muslimah and S R Keumala.....607

The use of social media and open data in promoting civic co-management: case of Jakarta

Pritta A Widyanarko.....617

An Examination of Regional Competitiveness: Early Findings from Banten, Indonesia

Y M Holis, I Syabri and H Prabatmojo.....631

Assembling the Past and the Future of the City through Designing Coworking Facilities

Y A Lukman, A S Ekomadyo and A S Wibowo.....662

The Development of a Web-Based Urban Soundscape Evaluation System

A S Sudarsono and J Sarwono.....675

<u>Ride-sharing business model for sustainability in developing country: Case Study Nebengers, Indonesia</u>

Asirin Asirin and Danang Azhari.....686

Challenges on Java's small city spatial planning

B Wirawan and J R Tambunan.....694

Rural Transformation and Small Town Planning

Rural Industry Clustering Towards Transitional Rural-Urban Interface

P Nugroho.....706

<u>A Rural Transformation Model: The facts of rural development in the Surakarta Metropolitan Region</u>

D P Puspa Sari, I Asyifa, I F Derman, D R Jayanti and F Y Hanatya.....718