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OCTOBER 29-30, 2018

BOOK OF CONFERENCE PROCEEDING

International Conference and
Global Forum on
Multidisciplinary Research
towards Social Value Creation

Abstract Proceeding Book
of
International Conference
and Global Forum on
Multidisciplinary Research
towards Social Value
Creation (ICMRES)

October 29 - 30, 2018

Melbourne, Australia



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FOREWORD

Research Synergy Foundation is the 1st Indonesian social enterprise platform that focus on developing collaborative networks among both researchers, lecturers, scholars, and practitioners globally for the realization of an equal quality of knowledge acceleration between developed and developing countries. We focus on opening the gates of research collaboration between countries. We introduce and encourage scientific publications from developing countries. We create scientific forums in order to boost the creation and diffusion of new knowledge.

Known as a catalyst and media collaborator among researchers around the world is the achievement that we seek through this organization. By using the media of International Conference which reaches all researcher around the world we are committed to spread our vision to create opportunities for promotion, collaboration and diffusion of knowledge that is evenly distributed around the world.

Our Vision:

Our vision is to be world class organization that encourage acceleration quality of knowledge in developing country.

Our mission:

First, promoting scientific journals from developing countries as an equitable distribution tools of knowledge. Second, opens research collaboration opportunities among countries, educational institutions, organizations and among researchers as an effort to increase capabilities. Third, create a global scientific forum of disciplinary forums to encourage strong diffusion and dissemination for innovation.

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Research Synergy Foundation

CONFERENCE CHAIR MESSAGE

We are delighted to welcome you to the International Conference and Global Forum on Multidisciplinary Research towards Social Value Creation (ICMRES) by Research Synergy Foundation and Scholarvein as official partner held on October 29 – 30, 2018 at Hotel Grand Chancellor – Melbourne, Australia.

The aim of Conference is provide global forum for academician, researchers and scholars to exchange and share their experiences and multidisciplinary research results in business, management, social science, humanities, life science, engineering, and health science all aspects of towards social value creation. ICMRES 2018 International Conference shows up as a cutting-edge Social Research platform to gather presentations and discussions of recent achievements by leading researchers in academic research.

It has been our privilege to convene this conference. Our sincere thanks, to the conference organizing committee; to the Program Chairs for their wise advice and brilliant suggestion on organizing the technical program and to the Program Committee for their through and timely reviewing of the papers. Recognition should go to the Local Organizing Committee members who have all worked extremely hard for the details of important aspects of the conference programs and social activities.

We welcome you to Melbourne, Australia and hope that this year's conference will challenge and inspire you, and result in new knowledge, collaborations, and friendships.

Best regards,

Dr. Hendrati Dwi Mulyaningsih
Co-Conference Chair of ICMRES 2018

KEYNOTE SPEAKER



Prof. Dr. H. Sutarto Hadi, M.Si, M.Sc is Professor of Mathematics Education, Lambung Mangkurat University and Rector of Lambung Mangkurat University 2018 - 2022. He holds Master degree in mathematics from Gadjah Mada University in 1996 before taking another Master degree in Educational

and Training Systems Design from Universiteit Twente in 1999. He holds a PhD in Mathematics Education from Universiteit Twente in 2002. He is also Vice Chairman Indonesian Rector Forum (FRI) 2018, member of regional council in research for South Kalimantan Province, member of the Indonesian Mathematical Society, and member of editorial board Journal of Science and Mathematics Education in Southeast Asia.

His contribution to mathematics education is recognized internationally. He deliver regular lecture at International Congress on Mathematical Education (ICME-12) in Seoul, 2012. He was appointed as fellow of the society at The International Society for Design and Development in Education (ISDDE). He was Keynote Speaker for International Congress on School Effectiveness and Improvement (ICSEI-27) in Yogyakarta. His latest article entitled “*Developing students’ mathematical literacy: PMRI Schools Revisited*” was presented at ICSEI-27.

KEYNOTE SPEAKER



Dr Mali Abdollahian is an academic in the School of Science. Her research interests are mainly in the areas of statistical quality control and quality assurance and statistical modelling. Mali received her Master in Applied Mathematics and Astronomy and PhD in Statistical Quality Control from University College Cardiff in UK. Her research

interests are mainly in the area of; univariate and multivariate statistical quality control and quality assurance and Statistical modelling, but also include the design of sampling strategy for compliance testing and benchmarking, performance analysis and quality control monitoring of health and environment trends.

Much of her research involved developing optimal quality control and quality assurance procedures for monitoring and improving the quality of products and services in a cost effective manner. She has been extensively involved in consulting projects and delivery of short courses to different industries. His current research interest “*Optimal profile limits for maternal mortality rate (MMR) in South Sudan*” was published in BMC pregnancy and childbirth Journal.

KEYNOTE SPEAKER



Prof. Ahmad Rozelan Yunus, PhD. is an associate professor of Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia. He holds a PhD in Guidance and Counseling from Universiti Putra Malaysia (UPM). He is also a Registered Counselor (Malaysian Counsellor Act), a

Certified Trainer of Human Resources Development Fund, Malaysia, TAJMA Personality Practitioner, Assessor for Malaysian Qualification Agency (MQA) for Counseling Psychology Field, a Member of American Psychological Association and Malaysian Psychology Association.

He receive Book Publication Award (2013) and a Bronze Medal Award (2012) from UTeM, Melaka. On Sultan of Pahang's birthday in 2011, he was among those who received Setia Ahmad Shah Pahang awards. His current research interest in the field of guidance and counseling, psychometrics, organizational behavior, human development and entrepreneurs.

CONFERENCE PROGRAM

Day 01- Monday | October 29, 2018
 Venue : Chancellor two
 Hotel Grand Chancellor – Melbourne, Australia

Time	Duration	Activities
09.00 - 10.00	60'	Welcome Reception and Registration
10.00 - 10.10	10'	Welcoming MC
10.10 - 10.25	15'	Welcome Remarks
		Dr. Hendrati Dwi Mulyaningsih
		Co-Conference Chair ICMRES 2018 & Founder of Research Synergy Foundation
10.25 - 10.40	15'	Coffee Break
10.40 - 11.00	20'	Keynote Speech: “ULM: towards a leading and competitive university in wetlands environment studies”
		Prof. Sutarto Hadi
		Rector of Lambung Mangkurat University, Indonesia
11.00 – 11.20	20'	Keynote Speech: “Research with Impact on Solving Real World Problems”
		Dr. Mali Abdollahain
		Senior Lecturer at School of Science RMIT University, Australia
11.20 - 11.40	20'	Keynote Speech: “Personnel Personality Profiling in the Era of Industrial Revolution 4.0”
		Prof. Ahmad Rozelan Yunus, Ph.D
		Professor at Faculty of Technology Management and Technopreneurship Universiti Teknikal Malaysia Melaka
11.40 - 12.00	20'	Award Ceremony & Group Photo

Time	Duration	Activities
12.00 - 13.00	60'	Lunch Break
13.00 - 16.00	180'	Parallel Session
16.00 - 16.10	10'	Closing Speech
		Prof. Sutarto Hadi
		Rector of Lambung Mangkurat University
16.10 – 16.20	10'	Closing Speech
		Dr. Ismi Rajjani
		Advisory Board of Research Synergy Foundation
16.20 - 16.40	20'	Award Ceremony
16.40 – 16.45	5'	Closing MC

Day 01

Chancellor Two

Monday, 29 October 2018

Session 1 (13.00 – 14.00)

Session Chair : Prof. Ahmad Rozelan/ Dr, Muhammad Hudaya

Track Sosial Science

Paper ID	Author	Media	Paper Title
ICM18107	Mirza Satria Buana	Oral Presentation	The Rise of Ethnic-Religious Populism in Indonesia: The Challenge of Multiculturalism Democracy in Approaching the 2019 Presidential Election
ICM18108	Ifrani	Oral Presentation	Forest Management Based on Local Culture of Dayak Kotabaru in the Perspective of Customary Law to Maintain Forest Sustainability
ICM18120/ ICM18153	Andi Tenri Sompia/ Varinia Pura Damaiyanti	Oral Presentation	Relations between Bureaucracy and Private Sector in Coal Mining Business in Tanah Bumbu Regency
ICM18148	Yuanita Setyastuti	Oral Presentation	Facebook Addict Tendency of Housewife with toddler
ICM18151	Ersis Warmansyah Abbas	Oral Presentation	Social Life of Santri in the Bank of Martapur River as the Learning Sources of Social Science Studies

Day 01

Chancellor Two

Monday, 29 October 2018

Session 1 (14.00 – 14.30)

Session Chair : Prof. Ahmad Rozelan/ Dr, Muhammad Hudaya

Track Health Science

Paper ID	Author	Media	Paper Title
ICM18127	Rosihan Adhani	Oral Presentation	Lactobacillus sp. Identification in Caries-Affected Students in SMP Negeri 1 Sungai Pinang Kabupaten Banjar
ICM18132	Ratna Setyaningrum	Oral Presentation	The influence of tenure and quantity of fluid intake to core body temperature among workers in scalding work environment (Analytical Observational Study in Heavy Equipment Repair and Maintenance Department in Sebuku Iron Lateritic Ores (SILO) Company)

Coffee Break 15 Minutes

Day 01

Chancellor Two

Session 1 (14.45 – 15.45)

Monday, 29 October 2018

Session Chair : Dr. Mirza Satria Buana / Dr. Rosihan Adhani

Track Business

Paper ID	Author	Media	Paper Title
ICM18119	Muhammad Hudaya	Oral Presentation	Exploring accountability system in the public sector: A review of literature
ICM18122	Arief Budiman	Oral Presentation	Blood Donating Behavior in Indonesia: Theory of Planned Behavior Perspective
ICM18124	Tinik Sugiati	Oral Presentation	Product Knowledge, Loyalty Program and Customer Satisfaction Study on Alfamart's Customer In Banjarmasin, South Kalimantan
ICM18155	Benny Hutahayan	Oral Presentation	Entrepreneurial Intention of Jakarta Citizen
ICM18141	Nur Widyawati	Oral Presentation	Readiness for loading and unloading equipment, weather and time Arrival of Dry Bulk Ship Against Waiting Time Berth at Terminal Jamrud Tanjung Perak Branch
ICM18142	Meyti Hanna Ester Kalangi	Oral Presentation	Analysis of Brand Image and Service Quality on Brand Trust Honda Motor
ICM18138	Rizki Nurannisa Heryanti	Oral Presentation	Education Analysis, Work Experience, and Training on Work Productivity
ICM18143	Kajanto	Oral Presentation	Corporate Social Responsibility on Company Image in PT Meiko Ekspres Surabaya
ICM18146	kadek Pusparini	Oral Presentation	Analysis of Product and Quality Personal Selling on Purchase Decisions
ICM18139	Soedarmanto	Oral Presentation	The Modification Information System Model in Indonesian Tax Information System
ICM18144	Juli Prastyorini	Oral Presentation	Company and Corporate Social Responsibility Image to Loyalty of Service Users PT. Pelindo III
ICM18147	Iwan Sabatini	Oral Presentation	Analysis of Receivables and Current Debt on Profitability in PT. Java Shipping Lines Surabaya
ICM18140	Wulyo Raharjo	Oral Presentation	Labor Gang Number and Equipment Capacity on Loading and Unloading

Paper ID	Author	Media	Paper Title
			Performance
ICM18145	Indriana Kristiawati	Oral Presentation	Company Image and Customer Satisfaction on Customer Loyalty of PT. Ambra Logistik Mandiri

Day 01

Chancellor Two

Monday, 29 October 2018

Session 1 (15.45 – 16.00)

Session Chair : Dr. Mirza Satria Buana / Dr. Rosihan Adhani

Track Management

Paper ID	Author	Media	Paper Title
ICM18136	Randy Kurniawan	Oral Presentation	Shaping Organizational Agility through Complete Market-Oriented Product Development, Networking Capability, and Nimble Organizational Structure in Cloud Computing Era

Day 01

Chancellor Four

Thursday, 2 August 2018

Session 1 (13.00 – 14.15)

Session Chair : Dr. Ismi Rajiani / Dr. Agung Nugroho

Track Life Science

Paper ID	Author	Media	Paper Title
ICM18103	Oski Illiandri	Oral Presentation	Phenyl Butyrate Acid Inhibit TNF-Alpha-Induced Nuclear ATF6 Expression in Endothelial Cells
ICM18114	Ahmad Kurnain	Oral Presentation	Role of forest canopy on the proton budget of selectively logged peat swamp forest in Central Kalimantan, Indonesia
ICM18115	Yudi Firmanul Arifin	Oral Presentation	Site Quality and Growth Performance of Acasia (Acacia sp.) and Sengon (Paraserientes falcataria) on Post-mining Areas in South Kalimantan, Indonesia
ICM18130	Maulana Khalid Riefani	Oral Presentation	Waterbirds in The Reclamation Area of PT Adaro Indonesia, South Kalimantan
ICM18125	Mrs. Sasi Gendro Sari	Oral Presentation	Ethnobotanical survey of Wild Swamp Vegetables Consumed by Banjarese in Banjar Regency, South Kalimantan

Day 01

Chancellor Four

Monday, 29 October 2018

Session 1 (14.15 – 14.45)

Session Chair : Dr. Ismi Rajiani / Dr. Agung Nugroho

Track Engineering

Paper ID	Author	Media	Paper Title
ICM18104	Muthia Elma	Oral Presentation	Coagulation, Flocculation and filtration Processes for Wetland Water Treatment
ICM18150	Noordiah Helda	Oral Presentation	Assessment of Land Use Changes using EEFlux Approach

Coffee Break 15 Minutes

Day 01

Chancellor Four

Monday, 29 October 2018

Session 1 (15.00 – 16.00)

Session Chair : Arief Budiman, Ph.D / Dr. Muthia Elma

Track Applied Science

Paper ID	Author	Media	Paper Title
ICM18111	Agung Nugroho	Oral Presentation	HPLC Quantitative Analysis of Flavonoid Glycosides in the Leaves of Five Different Varieties of <i>Carica papaya</i> L.
ICM18117	Ahmadi	Oral Presentation	The Interconnection of Capture Fishery, Fish Processing Business and Fish Farming Prospect for the Featherback (<i>Notopterus chitala</i>) in Barito Kuala District, Indonesia
ICM18134	Dewi Erika Adriani	Oral Presentation	Genotype Performance of M6 of Local Rice Mutant Lines on Tidal Swamp by Crop Modelling Approach
ICM18131	Liling Triyasmono	Oral Presentation	FTIR and Chemometrics Application on Determination of Total Flavonoid Content of Pasak Bumi Root Extract (<i>Eurycoma longifolia</i> Jack.)

Day 02

Tuesday (October 30, 2018)
City Tour and Shopping Day

All respective guests are free to conduct their own sightseeing and tour. The second day of the event is reserved for this memorable purpose

Track: Social Science Research

The Rise of Ethnic-Religious Populism in Indonesia: the Challenge of Multiculturalism Democracy in Approaching the 2019 Presidential Election

Mirza Satria Buana¹, Ellisa Vikalista²

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¹mirza.buana@ulm.ac.id

Abstract

Background - *This paper examines Indonesia's transitional democracy process. It has experienced many political debacles. One of the worst was the 2014 Presidential Election, in which the nation divided into two groups: reformist and neo-authoritarian groups. The reformist group is represented by Joko Widodo, the current President of Indonesia. The second group is Prabowo Subianto, a former military general who has linked to the former authoritarian kingpin, Suharto. However, politics is never black and white. Now, for the sake of pragmatic coalition government, some former generals who involved in Suharto's regime have supported Jokowi's administration. Golkar Party has also announced its support to Jokowi for his second term as a President in the 2019 Presidential Election. Approaching the year of politics in 2019, this political contest still manifests. Several issues have been politicized. Issues are raging from the blasphemy case of the Chinese-Christian former Jakarta's Governor Ahok, and Conservative groups rally. Those issues are presumably political aiming to create public unrest prior to the elections. These issues are dangerous for Indonesia's multiculturalism democracy.*

Purpose – *This paper aims to scrutinize Indonesia's transitional democracy by discussing arguments on how to emancipate multicultural democracy from both liberal and ethnic democracies' influences. Liberal democracy is vested in individuals, not in collectivities, thus the state is neutral from all other collectiveness. On the other hand, ethnic democracy is associated with one or more collectiveness to the partial exclusion of others.*

Design/methodology/approach – *This is a socio-legal research. It is exercised by analyzing authoritative documents, not only in the present but also in past, such as the Constitutions and Acts relating to the relationship between state and religions in general, and the crucial role of religions in particular. The aim of this method is to understand and analyze historical and political contexts on the relationship between state and religion, particularly in election setting.*

Findings – *Indonesia inherits patrimonial style of government. In Suharto's administration, patrimonial politics reached its pinnacle. Suharto's patrimonial politics in some degree is close to ethnic-based politics because it gave 'affirmative action' to certain ethnicity, while excluding of others. B.J. Habibie's administration failed to establish a 'vetting agenda' which aims to dichotomize authoritarian officials from reformists and also to prevent old elites interfering with the reformed legal systems. Patrimonial style of government evolves into oligarchies. Jokowi's administration has failed to domesticate oligarchies in its government's circle.*

Research limitations – *This research is a preliminary research for a more elaborated research on the 2019 Presidential Election. This research consists of normative-doctrinal perspectives rather than empirical. This research focuses on the executive government: the Presidents, because Indonesia embraces Presidential system of government. Issues and discussions on legislative bodies and their election will be discarded.*

Originality/value – *This research is an interdisciplinary research on law and politics. Law and political perspectives will be delivered to construct holistic arguments. Moreover, this paper would be the first research examining the 2019 Presidential Election through both law and political point of views.*

Keywords: Ethnic-Religious Populism, Multicultural Democracy, Transitional Democracy, Election Law, the 2019 Presidential Election

Forest Management Based on Local Culture of Dayak Kotabaru in the Perspective of Customary Law to Maintain Forest Sustainability

Ifrani¹, Fathul Achmadi Abby², Abdul Halim Barkatullah³

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Abstract

Background – *Forest management in Indonesia has not yet been able to realize the constitutional mandate which impact on uncontrolled forest destruction, it is necessary to implement a good forest government system. Therefore it is very important to give indigenous peoples the authority to play a more important role in forest management in the future.*

Purpose – *This study aims to find the form of conserved forest management and sanctions for the perpetrators of forest destruction based on Dayak Kotabaru indigenous people.*

Design/methodology/approach – *The research method used in this study is normative juridical which focused on secondary data in the form of primary legal materials, secondary legal materials and tertiary legal materials. Thus the specifications used is descriptive analytic that describes the provisions, norms and legal principles applicable to obtain a comprehensive and systematic, factual and accurate picture of the aspect of the issues.*

Findings – *The results of this study are: First, forest conservation in the Dayak Kotabaru customary law is carried out with a shifting cultivation system. The shifting cultivation they do is actually not by opening and burning primary or secondary forest from one place to another continuously. In contrary they used Bera System to manage forest sustainability. Secondly, the sanctions for perpetrators of forest destruction is still applied with the principles of local culture as resolving other disputes that occur within the Dayak Kotabaru community, with payment of fines in the form of Tahil, namely plates or bowls that are considered valuable by indigenous peoples. The amount of fines are based on the severity of the violation*

Research limitations – *This research is limited for the used of descriptive analytic method with the support of secondary data which obtained from World Resource Institute, Global Forest Watch, and Lambung Mangkurat University Faculty of Law.*

Originality/value – *This paper is original and contained analysis from each authors with additional arguments and research as cited.*

Keywords: Forest Sustainability, Customary Law, Dayak Kotabaru

Relations between Bureaucracy and Private Sector in Coal Mining Business in Tanah Bumbu Regency

Andi Tenri Somp¹, Varinia Pura Damaiyanti²

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Abstract

Background – *Local governments need investment to sustain economic progress, while the private sector in this case mining entrepreneurs need land and support in the form of ease of administration and policies from the local government to enlarge their business scale.*

Purpose – *This study aims to explain how the relationship between the bureaucracy in this case the local government and the private sector, namely companies engaged in coal mining in the context of cooperation and mutual need for progress and development in Tanah Bumbu Regency.*

Design/methodology/approach – *The research method that used in this study is a qualitative research method through deep interviews with bureaucrats and private parties who have an interest in coal mining. In addition, data is also obtained from the collection of materials in the form of notes and written documents of local governments and institutions others.*

Findings – *It is important for the private sector to obtain a coal mining business license. How to obtain the permit through a predetermined procedure and also make an informal approach. Other results in this study indicate that coal has its own charm, as evidenced by the large number of investors who invest in this business. On the other hand, the bureaucracy tries to provide the best service possible to investors who benefit the region. The local government of Tanah Bumbu Regency is well aware that there are a number of issues in licensing, therefore they are trying to find breakthroughs in attracting investors. Public service in terms of licensing is a major complaint by the private sector regarding uncertainty in costs and the length of time to deal with licensing and bureaucracy. In addition, it is indicated that companies must pay a sum of money to officers, officials, and thugs as levies outside of official fees in accordance with regulations.*

Research limitations – *This research is a local study of Tanah Bumbu Regency and is limited to the issue of Mining Business Permits (IUP). The type of mining that is studied is coal mining which involves*

government bureaucratic stakeholders related to licensing and the private sector as parties who have interests.

Originality/value – *Understanding deeply and thoroughly the relationship between the bureaucracy and the private sector in the dynamics of local politics in Tanah Bumbu Regency. This research is expected to be able to contribute thought to the development of political science in Indonesia, especially in enriching political economic studies on an empirical basis in cases in the local political arena, and provide benefits for the development of social science and political science on research.*

Keywords: bureaucracy, private sector, coal mining, Tanah Bumbu Regency, licensing

Facebook Addict Tendency of Housewife with Todler

Yuanita Setyastuti¹

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Abstract

Background – *Based on the number of Internet users, Indonesia is a country with high number of Internet users with 88,1 million users in January 2016, and 79 million from that number, was access the Internet to use Social Media. As well as 66 million of 88.1 million Internet users access the internet via mobile (www.We are Social, Digital In Indonesia 2016). We are social in January 2017 data showed that facebook as the first rank of social media most used. The majority of users access the Internet to interact and communicate to others through various social media sites. APJJI 2015 data shown that 85% of Internet users access by mobile phones. The two most accessed internet age are 18 to 25 years old, 49% followed by age 26 to 33 years with 33,8% , with women as the biggest percentage of internet users (Internet User Profiles 2014, Survey of Puskakom UI and APJII 2014). Based on that data, when viewed in the age range 18 to 33 years there is a possibility that women access the internet has been married and have children. In the position as parents, especially mothers, certainly required many roles and interactions that must be done, especially through interpersonal communication in the family.*

Purpose – *The purposed of this study is to find out how much the tendency of facebook addict in housewives with todler.*

Design/methodology/approach – *This research was done by quantitative approach through survey method. The survey was conducted through a questionnaire distributed online via facebook to the respondents. The measuring tool used refers to Andreassen (2012, 503) clarified six core components of addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse. The sampling technique is done by simple random sampling on the facebook user that meets the research criteria. Research criteria are housewives with who are active using facebook. Data analysis technique is done by descriptive analysis using SPSS 22 application.*

Findings – *The results showed that based on the overall component of facebook addict, obtained a mean of 1,5 which means that the majority of respondents have an addicted tendency to facebook. Based on each component, 70 percent of respondents experienced salience, 73 percent of*

respondents experienced mood modification, 56 percent of respondents experienced tolerance, 63 percent of respondents experienced withdrawal, 74 percent of respondents experienced conflict and 66 percent of respondents experienced relapse. Based on the criteria facebook addicted, 56 percent of respondents experienced more than 4 components, so 56 percent of respondents experience high facebook addict

Research limitations – *Need a future study with the wider amount of respondent*

Originality/value – *based on the result, the mother with toddler became aware about they facebook uses behavior and aware that its effect the quality of parenting, so they could maintain their behavior of facebook uses.*

Keywords: Facebook addict, Social Media, Parenting, Housewife

Social Life of Santri in the Bank of Martapur River as the Learning Sources of Social Science Studies

Ersis Warmansyah Abbas¹, Ismi Rajian²

¹Lambung Mangkurat University, ²STIA dan Manajemen Kepelabuhan Barunawati Surabaya

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Abstract

Background - As a Santri City, Martapura accommodate 9,232 students of Islamic boarding schools. . Darusalam Islamic Boarding School has 2 (two) dormitories with a capacity of 70 rooms, each of which has 4 (four) students crowdedly live in dormitories or houses on the banks of the river.

Purpose - This study aims to describe the lives of students on the banks of Sungai Martapura using qualitative methods that find the life of students that based on independence in building individual abilities simultaneously build social life to achieve goals together.

Design/Methodology/Approach - using qualitative methods, the research explore the life of students on how they are required to fulfill individual lives so that their education in Islamic boarding school is successful and building social life among students and with the community while on the other hand they adapted themselves in order not to be eliminated from social issues that support the success of education in the school.

Findings - In everyday life students are obvious to build independence and social life that is implemented in the practice of social values, namely: religious, honest, tolerance, discipline, hard work, independent, patriotism, friendliness, environmental care, social care, responsibility, simplicity, and help.

Research Limitations - This research employed qualitative method that the result is still in the phase of initial exploratory. Further quantitative study should be conducted to confirm the finding.

Originality/Value - The values of students' social life on how they conduct the daily life in the bank of Martapura River can be used as a learning resource for Social Sciences Studies, especially in building independence and self-resilience.

Keywords: Social Life, Santri

Track: Health Research

The Influence of Tenure and Quantity of Fluid Intake to Core Body Temperature among Workers in Scalding Work Environment (Analytical Observational Study in Heavy Equipment Repair and Maintenance Department in Sebuku Iron Lateritic Ores (SILO) Company)

Gusti Nurjayanti¹, Ratna Setyaningrum², Agung Biworo³

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Abstract

Background – Working in a scalding work environment affects the physical condition of workers in carrying out the assigned tasks. If this condition is left unchecked it can lead the dehydration, fatigue, and heat stress. Less fluid intake will cause dehydration and the worker's body temperature had increase.

Purpose – The purpose of this study is to determine the influence of tenure and quantity of fluid intake to core body temperature among workers in Heavy Equipment Repair and Maintenance Department SILO Company.

Design/methodology/approach – This is an analytical observational study with cross sectional approach. The population as many as 105 people. The sample as many as 30 respondents by purposive sampling. The research instruments are questioner and thermometer.

Findings – The results show that as many as 18 respondents (18%) which had experience an increase of core body temperature ($>38^{\circ}\text{C}$), as many as 17 respondents (56.67%) are categorized as a long tenure (≥ 3 years of working), and as many as 20 respondents (66.67%) are categorized drinking less ($<200\text{-}300$ cc). statistical analytic using chi-square and fisher exact test show that there is no significant influence of tenure to core body temperature ($p= 0.547$) but there is a significant influence of quantity of fluid intake to core body temperature ($p=0.000$).

Research limitations – -

Originality/value – It can be concluded that there is no significant influence of tenure to core body temperature but there is a significant influence of quantity of fluid intake to core body temperature.

Keywords: tenure, quantity of fluid intake, core body temperature, scalding work environment

***Lactobacillus* sp. Identification In Caries-Affected Students In Smp Negeri 1 Sungai Pinang Kabupaten Banjar**

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Abstract

Background – Caries is an infectious disease affecting a tooth's hard tissues, which is consisted of email, dentin, and cementum. It is a multifactorial disease, initiated by the interaction of host, microorganisms/agents, substrates, and time. One of the most pathogenic agents is *Lactobacillus* sp. This agent is mostly found in active lesions of caries, can produce lactate acid and is an acidic-environment tolerant organism. Lead exposure is also a factor that can worsen caries. Lead is a calcium-antagonist and can hamper the metabolism of calcium in remineralization of tooth. Lead can precipitate into drinking water after being crystallized in the air, assisted by rain. This exposure is especially worrying to the community which still depends on unfiltered water from the river to fulfill their daily needs.

Purpose – This study was proposed to identify *Lactobacillus* sp. colony in caries-affected children and assess the difference between river water consuming and well-water consuming children.

Design/methodology/approach – This was an observational analytics with control group design study using cross sectional approach, performed in SMP Negeri 1 Sungai Pinang Kabupaten Banjar, November-December 2017. The population was 60 students, categorized into two groups (30 students each): river water consuming and well-water consuming groups. The samples' DMF-T indexes and teeth swab samples were recorded for analysis. The swab samples were then delivered to laboratories to be treated by staining and using Huccer methods to assess the *Lactobacillus* sp. colony.

Findings – The results showed that there was a significant difference between colony count of *Lactobacillus* sp. and DMT-index in both river water consuming and well-water consuming children.

Research limitations – identify *Lactobacillus* sp. colony in caries-affected children and assess the difference between river water consuming and well-water consuming children.

Originality/value – *There are no specific findings regarding the types of bacteria that cause oral health problems, especially caries in South Kalimantan*

Keywords: caries, DMF-T index, river water consumption, well-water consumption, lead

Track: Business Research

Exploring Accountability System in the Public Sector: A Review of Literature

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Abstract

Background – *This study presents a review of literature on accountability system in the public sector, following the spread of democracy worldwide. Nowadays accountability is a popular word in countries embracing democratic systems, but it is also a somewhat ambiguous notion. These differences take place because accountability has a multi-discipline meaning. Thus, the concept of accountability is contested and contestable among scholars.*

Purpose – *The purposes of this study are to map the school of thought of accountability system in the public sector and to know how the frameworks of accountability are constructed, especially in developing countries including Indonesia.*

Design/methodology/approach – *In reviewing the literature of public sector accountability, the study employs a bibliography strategy and accountability theory as its theoretical lens.*

Findings – *The study finds that they are two schools of thought of accountability: accountability as a virtue and accountability as a mechanism. Concerning accountability frameworks, they are shaped by inter-disciplinary input, not solely that of the accounting profession: it is now widely agreed that they should encompass general direction, legal compliance, financial reporting, products and performance information relating to the organization*

Research limitations – *It should be acknowledged that this study focuses more on reviewing literature of accountability system in the public sector and have not captured how private sector accountability system influence the public sector one.*

Originality/value – *The study offers unique values by capturing the practice of accountability system in both developed and developing countries and provides useful insight how the practice of accountability system including accountability reporting should be implemented to reach a broader audience or stakeholders.*

Keywords: Accountability, system, public sector

Blood Donating Behavior in Indonesia: Theory of Planned Behavior Perspective

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Abstract

Background – *There is a scarcity in the literature with regard blood donation research from Indonesia, as such a study in blood donation from non western perspective is important.*

Purpose – *This study aimed to examine the effect of attitude, subjective norm, perceived Behavioral Control, and Intention to blood donated behavior the general public in Banjarmasin City*

Design/methodology/approach – *This study employed a quantitative approach with Structural Equation Modeling- AMOS. Sample were taken are 300 respondents, 150 respondents society has ever donated blood, and 150 respondents have never donated blood*

Findings – *The result of study showed attitude, Subjective Norm, and Intention significant positive effect to blood donated ever behavior general public, And Perceived Behavioral Control does not affect the Intention and blood donated ever behavior in general public. Attitude, and Perceived Behavioral Control significant positive effect to Intention general public never blood donation. Subjective Norm does not affect the Intention general public have never blood donation.*

Research limitations – *The limitation of the current study was to the sample of the study that could not generalise to all Indonesian population*

Originality/value – *This study has contribute to the body of knowledge by investigate the blood donation behavior in Indonesia that still very limited similar study conducted in the study setting.*

Keywords: Theory of Planned Behavior, Indonesia, blood donation

Product Knowledge, Loyalty Program and Customer Satisfaction Study on Alfamart's Customer In Banjarmasin, South Kalimantan

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Abstract

Background – Retail business need to develop strategies to attract and satisfy consumers. Retail business in Indonesia is growing. This growth is indicated by the emergence of minimarket in various cities in Indonesia. Minimarket offers a variety of convenience products with facilities in shopping. One of the minimarkets that is now developing and dominating the retail business is Alfamart. Some of strategy developed such as product knowledge and loyalty programs with the aim of satisfying customers.

Purpose – this study was conducted to analyze: (1) the influence of product knowledge on customer satisfaction, and (2) the influence of loyalty programs on customer satisfaction.

Design/methodology/approach – Data were analyzed using linear regression. By using a survey data from 50 Alfamart card holders

Findings – this study shows that product knowledge and loyalty programs have an influence on customer satisfaction

Research limitations – Definition of product knowledge still limited cause respondent not clearly understand about definition of product knowledge

Originality/value – Product knowledge and loyalty program is a good strategy to attract customer

Keywords: Product Knowledge, Loyalty Program, Customer Satisfaction.

Entrepreneurial Intention of Jakarta Citizen

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Abstract

Background - *The denseness of the population in big cities like Jakarta causes a narrow employment. Therefore, citizen who do not have permanent job and skills of entrepreneurship will have low income and cannot meet the needs of the family. Therefore, the entrepreneurial spirit of the Indonesian citizen must be increased to help develop the Indonesian economy. This study chose the city of Jakarta as the object of research because the density of the population in Jakarta and this city also often used as a destination to find work.*

Purpose - *This study aims to exploring the level of entrepreneurial intentions (EI) among citizens in Jakarta. The examined factors that are expected to shape EI are personal attraction toward becoming an entrepreneur, perceived behavioral control, and subjective norms and social valuation of entrepreneurship.*

Design/Methodology/Approach - *The examined factors that are expected to shape EI, the researchers use regression analysis.*

Findings - *Regression analysis results indicated that citizens' personal attraction toward entrepreneurship and perceived behavioral control had a significant strong positive relationship with their EI. In addition, there was a significant moderate positive relationship between citizens' perceived subjective norms and social valuation of entrepreneurship with their EI*

Research Limitations - *This study focuses only on the workforce age population in Jakarta*

Originality/Value - *This research is expected to increase the creativity and ability of the community in channeling their ideas and creations*

Keywords: Product Knowledge, Loyalty Program, Customer Satisfaction.

Education Analysis, Work Experience, and Training on Work Productivity

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Abstract

Background – Education, work experience, and training are determinants of the success of the company.

Purpose – This study aims to find out how the influence of education, work experience, and training on work productivity work.

Design/methodology/approach – Analysis technique used is multiple linear regression analysis.

Findings – (1) Education (X1) has a positive and significant influence on work productivity. (2) Work experience (X2) has a positive and significant influence on work productivity. (3) Training (X3) has a positive and significant influence on work productivity.

Research limitations – Subjects in this study is limited to 77 people (N = 77) employees of PT. Berlian Jasa Terminal Indonesia (BJTI) Port in 2018. The small number of sample might make the result is not applicable to other ports.

Originality/value – This finding reinforce the finding of previous research on the importance of training for employees.

Keywords: Training, education, work experience, work productivity

The Modification Information System Model in Indonesian Tax Information System

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Abstract

Background – Directorate General of Tax (DGT) as an institution that contributes the largest state revenues is expected to perform better to secure the state revenues.

Purpose – This study was conducted to find empirical evidence on the success of public sector information system, specifically in Indonesian Tax Authority, Directorate General of Taxes

Design/methodology/approach – The data were collected by survey questionnaires through email and social media application among Account Representatives (ARs) in DGT. The responses of AR were analyzed using a structural equation modeling with Varian's approach, partial least square technique to test the hypotheses. Originality of this study can be found in mixing two model in IS that thought deductively related, success model and trust model. The second part is the analysis data with structural equation model (SEM) Varian's.

Findings – The result of this study indicates that mixing the two models can create new model of information system success model with trusting belief as intervening variable latent. All hypothesis indicate significant positively interrelationship among variable latent.

Research limitations – Amount of respondent is few caused by unadequate time for gathering dates. It is suggested for next researchers to do the replicative research with the other working system environment and getting more respondents

Originality/value – This research echoes the importance of modified information system in rapid growth of information technology.

Keywords: System Quality, Information Quality, Service Quality, Individual Impact

Labor Gang Number and Equipment Capacity on Loading and Unloading Performance

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Abstract

Background – In the past 3 years there has been a decrease in the performance of dry bulk loading and unloading at PT. Prima Utama Maritim Surabaya

Purpose – This study aims to determine the correlation of variable performance of dry bulk loading and unloading at PT. Prima Utama Maritim which is focused on the use of the number of labor gangs and equipment capacity.

Design/methodology/approach – Statistical analysis technique used is multiple linear regression analysis.

Findings – The results of this study indicate that the regression coefficients of the variables of Labor Gang Number and Equipment Capacity on Loading and Unloading Performance are positive.

Research limitations – Population in this study are all employees of PT. Prima Utama Maritim, which is directly related to loading and unloading activities as many as 35 people making this study can be considered as a preliminary finding only.

Originality/value – This research contributed to highlight the factors affecting the speed of loading and unloading which is often highlighted by policy maker.

Keywords: Labor Gang Amount, Tool Capacity and Loading and Unloading Performance of Dry Bulk

Readiness for loading and unloading equipment, weather and time Arrival of Dry Bulk Ship Against Waiting Time Berth at Terminal Jamrud Tanjung Perak Branch

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Abstract

Background – The larger the ship requires the port to have a good shipping security infrastructure

Purpose – purpose of this study is to determine the effect of readiness of loading and unloading equipment, ship arrival time and weather on ship waiting time (waiting time berth) at Terminal Jamrud

Design/methodology/approach – The sample in this study is 48 dry bulk carriers docked at the Jamrud Terminal. The analysis technique used is multiple linear regression analysis

Findings – The results of this study are the readiness of loading and unloading equipment, ship arrival time and weather partially have a positive and significant influence on ship waiting time (waiting time berth),

Research limitations – The population is limited to all dry bulk carriers docked not including other ports.

Originality/value – This research provided insight on how to speed the unloading process by observing variables related.

Keywords: Unloading Equipment Readiness, Arrival Time of Ship, Weather, waiting time of ship (waiting time berth)

Analysis of Brand Image and Service Quality on Brand Trust Honda Motor

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Abstract

Background – PT. Mitra Pinasthika Mustika (MPM) Surabaya needs to improve the Brand Trust in the eyes of consumers regarding Honda motor cycle products through Brand Image and Service Quality.

Purpose – To identify what the company has done to provide the best to consumers so that consumer confidence will arise in the brand.

Design/methodology/approach – Data collection techniques are carried out by distributing questionnaires. The analysis technique used is multiple linear regression analysis.

Findings – (1) brand image partially significant effect on brand trust Honda Motor (2) service quality partially significant effect on brand trust Honda Motor (3) Brand image and service quality simultaneous significant effect on brand trust Honda Motor.

Research limitations – The population in this study is data sales for the last three months that bought motorbikes they made Honda at PT. Mitra Pinasthika Mustika (MPM) Surabaya that is sales data in September-November 2017 as many as 1649 consumers. The short span may not provide conclusive view on what creates brand image.

Originality/value – This research provided a new insight on how to boost sales among fierce competition by reinforcing the two classical elements.

Keywords: Brand Image, Service Quality, Brand Trust

Corporate Social Responsibility on Company Image in PT Meiko Ekspres Surabaya

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Abstract

Background – At present the company is not only required to seek profit / profit only, but also must pay attention to social responsibility in the community

Purpose – This study aims to examine whether Corporate Social Responsibility has a significant relationship with Company Image of PT. MEIKO EKSPRES SURABAYA

Design/methodology/approach – Sampling using the Slovin formula, the sample in this study were 81 local residents in the PT MEIKO EKSPRES area which then analyzed the data obtained by using regression analysis

Findings – Results of Hypotheses using t test stated that variables corporate social responsibility (X) has a significant relationship to company image (Y)

Research limitations – The setting within one company may make the result is not compatible to other companies running the similar business.

Originality/value – The first research tried to highlight the CSR within private companies running expedition business.

Keywords: Corporate Social Responsibility (CSR), Company Image

Analysis of Product and Quality Personal Selling on Purchase Decisions

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Abstract

Background – the importance of understanding consumer behavior has been the concern of various industries, one of which is the motor liner industry.

Purpose – This study aims to examine the effect of product quality and personal selling on the purchase decision of motor liner

Design/methodology/approach – This study uses method probability sampling with research samples totaling 51 people from 104 populations at PT. Latu Murni Representative of Surabaya. The analytical method used is multiple linear regression.

Findings – The results of the study found that the regression equation in the form of is $Y = 2,090 + 0,339X_1 + 0,326X_2 + e$. The results show that personal selling has the greatest influence.

Research limitations – The sample for this study is 51 consumers at PT. Latu Murni Representative of Surabaya in 2018 making the result is not generalizable.

Originality/value – This study reinforced the previous study on the importance of personal selling within Indonesian setting.

Keywords: Product Quality, Personal Selling, Purchasing Decisions

Company and Corporate Social Responsibility Image to Loyalty of Service Users PT. Pelindo III

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Abstract

Background – Companies must pay attention to social responsibility in the community to ensure the sustainability.

Purpose – To identify corporate image and Corporate Social Responsibility (CSR) Against Customer Loyalty in PT Pelabuhan Indonesia III Branch Gresik

Design/methodology/approach – The method used in this research is quantitative approach with multiple linear regression analysis, with the previous test the quality of the data obtained using validity and reliability test, classic assumptions and hypothesis testing.

Findings – Simultaneously corporate image (X1) and corporate social responsibility (X2) has a significant relationship to customer loyalty variables (Y).

Research limitations – Respondents are limited towards PT Pelabuhan Indonesia III Gresik Branch making the generalizability is not applicable to the whole PELINDO III subsidiaries.

Originality/value – The initial attempt to examine the effect of CSR among PELINDO III group.

Keywords: Corporate Image, Corporate Social Responsibility, Customer Loyalty

Analysis of Receivables and Current Debt on Profitability in PT. Java Shipping Lines Surabaya

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Abstract

Background – This research is motivated by the importance of profitability corporate. Rentability has a relationship with debt and receivables.

Purpose – To examine if the receivable and current debt turnover simultaneously affect rentability at PT. Java Shipping Lines Surabaya

Design/methodology/approach – Type of research used is explanatory research using quantitative methods with secondary data.

Findings – Accounts receivable and current loans have simultaneous effect on profitability of PT. Java Shipping Lines Surabaya.

Research limitations – Samples from this study are quarterly financial statements from 2013 to 2017 PT. Java Shipping Lines Surabaya.

Originality/value – This research highlight the trend affecting profitability with the massive growth in air transportation.

Keywords: Account Receivable Turnover, Current Debt, Rentability

Company Image and Customer Satisfaction on Customer Loyalty of PT. Ambra Logistik Mandiri

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Abstract

Background – Every company always tries to build a positive image in the eyes of customers.

Purpose – The purpose of this study is to find out the company's image and customer satisfaction whether it has a partial and simultaneous relationship to customer loyalty

Design/methodology/approach – Type the research approach imposes quantitative types and populations of all service users of PT. Ambra Logistik Mandiri, which is 72 customers. In this study there were 42 respondents of service users of PT. Ambra Logistics Mandiri to represent the population and get accurate data by using random sampling, the data analysis technique used is multiple linear regression.

Findings – Corporate image and customer satisfaction together (simultaneously) have a significant relationship to the dependent variable namely customer loyalty.

Research limitations – The population in this study were 72 Ambra Logistik Mandiri service users that may not represent the view of other logistic company alike.

Originality/value – This research tried to explore the change in consumers' habit with the existence of new mode of on line delivery.

Keywords: Company Image, Customer Satisfaction, Customer Loyalty

Track: Management Research

Shaping Organizational Agility through Complete Market-Oriented Product Development, Networking Capability, and Nimble Organizational Structure in Cloud Computing Era

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Abstract

Background – *Organizational agility had become one of the most important organization competencies to survive and sustain in hyper competitive market of telecommunication equipment industry. Prior study on organizational agility suggested that correct implementation of market-oriented product development maximizes the fit between generated products and customer requirements, while minimizes the product delivery time to market. However, as complexity of customer requirement increases in today cloud computing era, there is necessity to further demonstrate how organizations leverage networking with partners and exploit internal organizational structural flexibility to fully gain product development capability and subsequently organizational agility.*

Purpose – *The study is aimed to explore how organization strategic agility and business performance of telecommunication equipment companies in Indonesia is influenced by complete market-oriented product development strategy. Further, how complete market-oriented product development is influenced by firms networking capability and nimble organizational structure as main antecedents will be identified in our conceptual research model.*

Design/methodology/approach – *Exploratory case studies with four telecommunication equipment companies in Indonesia and a literature review are used to examine the relationship between organizational agility antecedents. The case studies enable us to gain the state-of-the-art view from practitioners from the field and integrate it with existing theories to acquire managerial insight.*

Findings – *The study identified that in today's complex and dynamic digitized business environments where software and information technology becoming an integral part of telecommunication product itself, to achieve competitive advantage, organizations are required to andquot;become agileandquot;; becoming dexterous and flexible in delivering continuous innovation and solution that is customer-focused*

through rapid experimentation and decisiveness acquired from close networking with customers and partners under flexible project management structure.

Research limitations – *This study, however, has limitation that it is qualitative in nature and the conceptual framework needs be further tested through a large-scale survey.*

Originality/value – *Aligned with dynamic capability and resource-based view theory, the originality of this study lies on how organizations exploit not only internal resources and structure, but also how to access, configure, and leverage external network resources embedded in business partners to come up with full access of market-oriented product development in cloud industry era.*

Keywords: agility, market-oriented, product development, networking capability, nimble organizational structure

Track: Life Science Research

Phenyl Butyrate Acid Inhibit TNF-Alpha-Induced Nuclear ATF6 Expression in Endothelial Cells

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Abstract

Background – : *Endothelial cell (EC) is one of the body's cells that has dynamic properties and high plasticity in response to microenvironmental change. However, its plasticity turn EC lead to its dysfunction and contribute in several disease patomechanism. An inflammation agent such as TNF-alpha can induce EC dysfunction via releasing poten endoplasmic reticulum stress (ERS) pathway. Targeting ERS was new approach in vascular biology to inhibit EC dysfunction. One of its biomarker is activating transcription factor 6 (ATF6). However, ERS in endothelial cells is still poorly understood.*

Purpose – *In this study, we performed in vitro experiment using phenyl butyrate acid as ERS inhibitor to TNF-alpha -induced-ATF6 expression in human vein derived endothelial cells.*

Design/methodology/approach – *We measured ATF6 expression in endothelial cells as ERS biomarker and use phenyl butyrate acid (PBA) as potent selective ERS inhibitor to block its pathway.*

Findings – *The early result shows that PBA decrease translocated ATF6 expression in endothelial culture. From the result, it can been concluded that PBA has role in decrease ERS via translocation ATF6 inhibition in endothelial cells*

Research limitations – *Limit in other endoplasmic reticulum stress indicator*

Originality/value – *Our paper was first paper that prove PBA can decrease translocation ATF6 into nuclear endoplasmic reticulum stress*

Keywords: tnf-alpha,endothelial cells,endoplasmic reticulum stress

Role of forest Canopy on the Proton Budget of Selectively Logged Peat Swamp Forest in Central Kalimantan, Indonesia

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Abstract

Background – *The forest canopy plays an important role in determining the nutritional status of forest floors and soils. Litterfall and throughfall are the main sources of soil nutrients in ombrogenous peatland forests.*

Purpose – *This article describes the results of monitoring ion budgets in the selectively logged peat swamp forest of Central Kalimantan, Indonesia; with emphasis on the role of the forest canopy in filtering rainfall, which subsequently affects the proton budget.*

Design/methodology/approach – *the proton budget of the selectively logged forest is compared with that of burnt peat swamp forest.*

Findings – *Mean annual rainfall was 2,800 mm and the total proton inputs from rainfall and throughfall were 0.54 and 0.45 kmolc/ha/year, respectively. During the period December 2002 to March 2003 the canopy of the selectively logged peat swamp forest acted as a proton sink or buffer of 20 molc/ha*

Research limitations – *The proton buffer of the forest canopy obtained in this study is much less than obtained elsewhere.*

Originality/value – *Retention of HCO₃⁻ ions by the forest canopy is one of the important mechanisms in buffering protons. It implies that the forest canopy is of importance for balances of HCO₃⁻/CO₂ in the atmosphere-plant-soil system*

Keywords: acidification, ion dynamics, peat soils, precipitation proton budget, peat swamp forest

Site Quality and Growth Performance of *Acacia* (*Acacia* sp.) and *Sengon* (*Paraserientes falcataria*) on Post-mining Areas in South Kalimantan, Indonesia

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Abstract

Background – Several coal mining activities in South Kalimantan have entered the post-operation phase and are being prepared for submission to the government. All environmental management efforts have been carried out in accordance with the applicable standard procedures.

Purpose – To assess the level of post-mining success, evaluation was conducted, with a concentration on aspects of soil fertility, plant quality of life, and plant growth.

Design/methodology/approach – This evaluation uses survey and sampling methods using purposive sampling to determine soil fertility and census for life quality of plant and plant growth.

Findings – From the survey results it is known that the level of soil fertility is relatively good with the parameters of organic C, P₂O₅, K₂O, CEC, and saturation of bases close to the condition of secondary forests. The percentage of life quality of plants for *Acacia* (*Acacia* sp.) and *Sengon* (*Paraserientes falcataria*) ranges from 86.5-92.1%. The percentage of *Acacia* plant life tends to be higher between 37.9-61.0% compared to *Sengon* of 39.1-47.9%. The increment of diameter and height for *Acacia* and *Sengon* plants were relatively similar, each of 4.5-4.9 cm for *Acacia* and 4.7-5.0 cm for *Sengon* yearly, while the increment of height yearly between 3.0-3.4 m for *Acacia* and 3.3 m for *Sengon*. The level of soil fertility on post-mining areas in South Kalimantan has been a natural process towards recovery. Three years after planting, pioneer plants has begun to grow, this shows that soil fertility and the microclimate formed has supported natural succession.

Research limitations – - Site characteristic concerned only for fertility of soil (physical and chemical soil) - Kind of species in this research focused only two species namely: *Acacia* (*Acacia* sp.) and *Sengon* (*Paraserientes falcataria*)

Originality/value – - The soil fertility after three years reclamation and revegetation is relatively similar with the soil fertility in secondary forest. - The life quality of plants is very high 86.5-92.1%, but percentage of life for *Acacia* is higher than *Sengon*. But the horizontal (diameter) and vertical (height) increment both species are relatively similar.

Keywords: evaluation, revegetation, soil fertility, succession

Waterbirds in The Reclamation Area of PT Adaro Indonesia, South Kalimantan

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Abstract

Background – *The mining activities could cause a significant impact. The mining of coal has had significant effects on wildlife populations and their habitats.*

Purpose – *This research to determine the diversity of waterbirds in the reclamation area of PT Adaro Indonesia (PT AI). The aim of the research was to record waterbirds species in this area. Waterbirds identified in ex-mining pond or Paringin lake (EP), settling pond and sediment pond (SP), river, water ways, and puddle (RP), fish and shrimp breeding pond (FP).*

Design/methodology/approach – *The Research used point methods or point of abundance and exploration in the habitat types. Waterbirds were assessed in the representative plots using direct and line transect counting methods and exploration of habitat types. Analysis the type of habitat, name of the species, and number of waterbirds were identified.*

Findings – *Around the reclamation area of PT AI were found 19 species of 8 families waterbirds. Diversity of waterbirds are moderate category. Nine species are protected (PP No. 7/1999). They could be categorized as migration waterbirds in the reclamation area. Ten species local visitor and nine species resident were found in the reclamation area, although their relative frequencies of presence varied.*

Research limitations – *Waterbirds identified in ex-mining pond or Paringin lake (EP), settling pond and sediment pond (SP), river, water ways, and puddle (RP), fish and shrimp breeding pond (FP).*

Originality/value – *. This information can be used to develop more effective, long term conservation strategies, because waterbirds are popular subjects for research and monitoring, and long term datasets of waterbirds count often provide a useful resource as indicator of ecological change.*

Keywords: Diversity, Waterbirds, Reclamation, Local Visitor, Resident

Ethnobotanical Survey of Wild Swamp Vegetables Consumed by Banjarese in Banjar Regency, South Kalimantan

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Abstract

Background – Swamp provides needs for local communities who are living surrounding wetland areas especially the Banjar or Banjarese. They are consuming wild swamp vegetables and processing them into traditional food combined with rice.

Purpose – The potential swamp plants for vegetables by Banjarese was investigated through an ethnobotanical study.

Design/methodology/approach – The vegetables were obtained from three selected swamps located in three villages of Banjar regency namely Panjambuan, Sungai Batang and Sungai Tuan Ilir. Wild swamp vegetables were identified using a semi structured questionnaire technique and the 72 key respondents were selected by a purposive sampling based on their interaction with swamps. Then they were classified into 4 groups based on their ages and gender to determine knowledge level (Mg) in using wild swamp vegetables. After that, their level knowledge was tested based on gender and ages using Kruskal Wallis test. Mann Whitney U-test was applied to distinguish the difference of knowledge level from ages and their gender.

Findings – The findings observed six wild swamp vegetables using by Banjarese such as water spinach *Ipomoea aquatica*, genjer *Limncharis flava*, hairy water lily *Nymphaea pubescens*, water mimosa *Neptunia oleracea*, taro *Colocasia esculenta* and swamp fern *Stenochlaena palustris*. All parts of plants were used except root. Leaves were preferred to cook by 44,5% in comparison with other parts of plants like stem, flower, tendril and corm. Water spinach was frequently consumed by Banjarese compared to other plants. The knowledge level of local people was 67,84 categorized as a middle level and an elderly more than 60 years old had the highest knowledge level in using swamp plants compared to other groups. Moreover, women had better knowledge rather than men to utilize wild swamp plants for food.

Research limitations – Due to almost all the Banjar or Banjarese are living surrounding wetlands areas, this study has a limitation in terms of research site. The results can not be generalized for all Banjarese; however, the data can be used particularly in Banjar regency. Next

research could be done at other wetlands areas in South Kalimantan.

Originality/value – *Wild swamp vegetables are widely undiscovered in South Kalimantan. A local tribe such the Banjar or Banjarese has a long tradition using wetland plants for food or specifically for medicine. The previous research was done solely in the Martapura traditional market. The new one studied at three swamps and determined the level knowledge of Banjarese to utilize wild swamp vegetables.*

Keywords: Banjarese, ethnobotany, knowledge, wild swamp vegetables

Track: Engineering Research

Coagulation, Flocculation and filtration Processes for Wetland Water Treatment

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Abstract

Background – *Wetland water is a big issue for communities especially for those who are using this water for household. It is due to the quality of the water has not met WHO (World Health Organisation) standard, especially if the water is salty. The salty water generally varies during hot and rainy seasons. This phenomenon is mostly caused by intrusion of seawater into rivers during rainy season and it then evaporates during hot season. Hence, the salt concentration increases at one's convenience during hot season.*

Purpose – *The aim of this work is to treat wetland water through coagulation-flocculation and filtration processes in order to produce clean water.*

Design/methodology/approach – *Several experiments were conducted as preliminary tests for raw wetland saline water, such as: TDS (Total Dissolved Solid), pH and conductivity tests in order to evaluate the optimum dosage of lime and aluminium sulphate added for coagulation and flocculation processes. These tests were repeated when those processes were conducted. The filtration set-up was designed by using low cost materials such as palm fibre, sponge, fabric, charcoal, silica, gravel and coral.*

Findings – *It was found that the optimum dosage of lime and aluminium sulphate were approximately 20 mg/L and 120 mg/L, respectively. Also, liming, coagulation-flocculation and filtration were successfully reduced TDS and conductivity concentration from 443 to 65 mg/L (85,3%) and 896 to 129,0 mikro S/cm. Additionally, the pH is tremendously good at 7.40.*

Research limitations – *These processes are definitely easy to be applied with affordable cost in order to access clean water for daily need*

Originality/value – *Coagulation, Flocculation and Filtration processes for wetland water*

Keywords: wetland saline water, coagulation-flocculation processes, filtration set-up

Assessment of Land Use Changes using EEFlux Approach

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Abstract

Background - *As one of the world's largest palm oil producer, Indonesia is facing land conflicts among many interests. Its poor forest and land management practices, which have been going for decades, have degraded its landscape, wildlife and water resources.*

Purpose - *This study intends to assess land use changes using EEFlux approach. EEFlux (Earth Engine Evapotranspiration Flux is a version of METRIC (Mapping Evapotranspiration at high Resolution with Internalized Calibration) that operates on the Google Earth Engine system. It was developed by three institutions in the United States of America: University of Nebraska-Lincoln, University of Idaho and Desert Research Institute (DRI).*

Design/Methodology/Approach - *In this study, to sort the clarity of Landsat images, USGS GloVis (Global Visualization Viewer) was used to obtain some free cloud cover images, resulted in images of eight different dates. Then, EEFlux level 1 was employed to estimate NDVI (Normalized Difference Vegetation Index) as an indicator of "greenness" of an area and ET (evapotranspiration) as well. GIS software was used extensively to extract mean NDVI values from EEFlux. As one of palm oil plantation area in Indonesia, South Kalimantan Province was selected as study area in terms of expansion area and data availability. In this province, out of 13 regencies, 11 regencies have palm oil plantations.*

Findings - *In general, the result shows a significant decrease of NDVI values in nine regencies (vary from 15% to 50%), where NDVI values reach minimum value in Banjarmasin City, followed by Banjarbaru, in the last 20 years. The decreased NDVI values mean that there are a lot of changes in land use and land cover due to less green areas (more impervious surfaces). On the other hand, as the NDVI values tend to increase in palm oil plantation area (0.33 to 0.49), it can be a good estimate of an increased areal Evapotranspiration.*

Research Limitations - *This research was limited by the minimum number of maximum free cloud cover landsat images obtained from EEFlux which is a common thing found in tropical areas. There was only one landsat date and scene can be processed independently. Further research with more free cloud cover images and the use of mosaicking techniques of several scenes are needed in the future. NASA MODIS*

images can be an alternative way to obtain more free cloud cover with more frequent time.

Originality/Value - *Even though EEFlux has been started from 2012 and has been tested in some areas, the use of this approach in Indonesia, especially in South Kalimantan Province is a brand new. This study will contribute to the understanding and knowledge of this approach in humid tropical areas. The development of EEFlux Level 2 will be a valuable source for the next research.*

Keywords: EEFlux, NDVI, Evapotranspiration, Landsat, Land use

Track: Applied Science Research

HPLC Quantitative Analysis of Flavonoid Glycosides in the Leaves of Five Different Varieties of *Carica papaya* L.

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Abstract

Background – *Papaya (Carica papaya L.)* leaf is one of the potential raw materials for pharmaceuticals due to its sufficient pharmacological activity coming from its active components such as flavonoid and alkaloid. Quantification of its active components using a precise and accurate method, and selecting the plant variety with the highest productivity is important, but there is still no study concern on this aspect.

Purpose – This study was aimed to investigate the productivity of five varieties of *C. papaya* in the production of bioflavonoid rich extract and selecting the most potential variety.

Design/methodology/approach – A precise and accurate HPLC quantitative analysis was performed to determine the content of four flavonoids (manghaslin, clitorin, rutin, and nicotiflorin) in the leaves of five selected varieties of *C. papaya*.

Findings – The HPLC analysis showed that clitorin was the most dominant flavonoid in the leaves of *C. papaya*. It occupied more than 75% of the tested flavonoids. Among the investigated varieties, callina variety (a hybrid typed variety) exhibited the highest yield of flavonoids (43,57 mg/g). It was almost two times of the flavonoid content of the local variety.

Research limitations – Flavonoid content determination was only performed to five varieties of *C. papaya*. Further investigation involving more varieties and different geographical origins are required to provide more comprehensive information.

Originality/value – There is still no comparative study investigated the content and composition of flavonoid in several varieties of *C. papaya*. The results of this study are essential, especially for the pharmaceutical industries.

Keywords: *Carica papaya*, clitorin, flavonoid, HPLC, quantitative analysis

The Interconnection of Capture Fishery, Fish Processing Business and Fish Farming Prospect for the Featherback (*Notopterus chitala*) in Barito Kuala District, Indonesia

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Abstract

Background – Barito Kuala District is the largest producer of the featherback (*Notopterus chitala*) in South Kalimantan Province, Indonesia. Statistically it contributes about 4.04% and 2.88% of total regional and national fisheries production in 2016, respectively. There is an interdependence of interest between capture fisheries and fish processing business. The capture fishery production for featherback tends continuously decline from 377 to 62 tons, which absolutely affecting on production volume and selling expense of the fish including fish chips in the markets. Meanwhile, culture system for the featherback broodstocks is still being challenged.

Purpose – This paper describes the interconnection between capture fishery, fish processing business and fish farming prospect in Barito Kuala District, and provide some fundamental recommendations for future research.

Design/methodology/approach – The research was carried out in Barito Kuala District, located on 2 degree 29'50" S and 114 degree 20'50" E. Data on capture fishery were obtained from the Department of Marine and Fisheries Barito Kuala District and supported by both local fishermen and extension officer. While information on the existing fish processing business and fish farming obtained from various sources. Data were tabulated and analyzed using descriptive method. The market opportunity for featherback chips is determined by calculating the difference between demand and supply of fish chips. The feasibility of fish chips processing business was analyzed based on investment criteria such as Net Present Value (NPV), Net Benefit Cost Ratio (Net BCR), Internal Rate of Return (IRR) and payback Period (PP). The interest rate was fixed at 14% and the life of business for five years.

Findings – Supply of raw material for featherback fish chips production was completely dependent on the catch from the rivers, while commercial fish farming business is still absent. Fish chips processing business requires fish meat as raw material by at least 18 tons per year or about 27 tons of fresh fish. The fact the supply of fish meat was only about 3-4 tons per year (17-22%). This business was just able to supply fish chips to the

markets about 6 tons per year; meanwhile the demand of fish chips was about 36 tons per year. The average annual profit received by the producer was USD 897. The Net Present Value (NPV), Internal Rate of Return (IRR), and Net Benefit Cost Ratio (Net B/C) were USD 2,796, 137%, and 4.59 with the Payback Period (PP) value was 8 months 15 days, indicating business was considered feasible and profitable, as well as has the favorable prospect. To increase the values, the culture business should be promoted.

Research limitations – *An attempt has been made by Freshwater Fish Culture Center, Mandiangin to culture the featherback broodstocks; however, the result is still being challenged to overcome this problem. For future research, it is also necessary to collect more individuals of the featherback from Barito Kuala River to investigate the length-weight relationship and condition factor of this species.*

Originality/value – *For the time being, this issue should be of great concern to the people and the local authority as a whole to manage fish resource properly and to keep fish processing business sustained.*

Keywords: Featherback, Business feasibility, Interdependence of interest, Barito Kuala District

Genotype Performance of M6 of Local Rice Mutant Lines on Tidal Swamp by Crop Modelling Approach

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Abstract

Background – South Kalimantan has around 143.738 ha of tidal swamp that is planted by local rice once a year. The local high yield rice varieties have been developed in order to gain a new variety which has local characters those are preferred by local people (adaptable, fluffy, slender) but shorter in life cycle as extreme weather anticipation.

Purpose – The purposes of the research are to analyze variations of water consumptive use (evapotranspiration) of tested lines and to analyze the performance of M6 mutant lines at tidal swamp, which have short-lived period, slender, fluffy and higher yield compare to local rice.

Design/methodology/approach – Simulation activity was carried out at Agro-climatology laboratory, Faculty of Agriculture on 50 lines of M6 mutant lines and 2 local varieties which had cultivated at Sungai Rangas Hambuku village, Martapura Barat district, South Kalimantan in growing season 2016. Crop modelling simulation consists of 4 sub-models: plant development, plant growth, water balance and Nitrogen balance. The model has daily resolution as daily weather input needed, i.e. sun radiation, temperature, humidity, wind and rainfall. Model validation was done in graphics and t-paired test.

Findings – The 25 lines of 50 M6 mutant lines have been chosen those are performed the best agronomic characters. These 25 lines have evapotranspiration 853.9, 846.2, 824.0, 454.0, 492.4, 719.5, 873.3, 798.3, 602.8, 610.0, 855.1, 762.2, 827.6, 769.8, 790.2, 781.3, 698.5, 837.3, 802.0, 572.7, 864.8, 745.2, 961.7, 941.5, and 473.5 mm respectively. Water consumptive use of these lines is about 3–11 mm per day, at the age of 111–115 days of harvest. The model validity was approved in describing extreme climate effect and water availability on rice biomass from 14.070 ton ha⁻¹ reduce to 11.813 ton ha⁻¹, which eventually gave impact on grain reduction to 1.619 ton ha⁻¹.

Research limitations – The simulation was done only at one site of tidal swamp in South Kalimantan. This must be improved by explore to another location in the future.

Originality/value – This study is an effort to anticipate global climate change in relation to short-lived rice lines. Furthermore, the model simulation is a pioneer on local - high yield varieties in particular on tidal swamp.

Keywords: local rice, tidal swamp, short-lived, crop modelling

FTIR and Chemometrics Application on Determination of Total Flavonoid Content of Pasak Bumi Root Extract (*Eurycoma longifolia* Jack.)

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Abstract

Background – The combination of FTIR and chemometrics is an alternative method on determination of total flavonoid content of pasak bumi (*Eurycoma longifolia* Jack.) root extract

Purpose – This study aims to determine the method of FTIR and chemometrics can be used for determination of total flavonoid content and determine the total flavonoid content of *E. longifolia* root extract using FTIR and chemometrics.

Design/methodology/approach – The samples from three growing area were determined their flavonoid content by colorimetric method and measured their absorbance by FTIR spectrophotometer. The analysis was done by PCA chemometrics to grouping IR spectra based on growing area and PLSR to determine prediction model of total flavonoid content of *E. longifolia* root extract

Findings – The best grouping and prediction model is shown by IR spectra in the range of wavenumbers 1800-1540 cm^{-1} with total variation is 99% and prediction model with equation $y = 0.995x + 0.002$ (R^2 calibration = 0.995; R^2 validation = 0.970; RMSEC = 0.008; RMSECV = 0.021).

Research limitations – The total flavonoid content of *E. longifolia* root extract (% b/b +/- SD) from Mandiangin, Condong, and Sabuai is 0.225 +/- 0.009; 0.437 +/- 0.007; and 0.466 +/- 0.016 ($R^2 = 0.995$ and RMSEP = 0.008)

Originality/value – Based on this, the combination of FTIR and chemometrics can be used to predict the total flavonoid content of unknown *E. longifolia* root extract.

Keywords: *Eurycoma longifolia* Jack., Flavonoid, FTIR, PCA, PLSR

FUTURE EVENTS

November 15 – 16, 2018

2nd Korea International Conference on Business, Management and Social Science: Theory, Current Issues and Research (KIMTIR)

<http://www.kimtir.researchsynergy.org/>

November 19 – 20, 2018

2nd International Conference on Business, Economy, Management and Social Studies towards Sustainable Economy (BEMSS)

<http://www.2ndbemss.researchsynergy.org/>

November 29 – 30, 2018

2nd International Conference on Management Studies and Social Science (MASOS)

<http://www.2ndmasos.researchsynergy.org/>

December 3 – 4, 2018

2nd International Conference on Emerging Issues in Social Studies, Economy, Education and Management in Digital Era (EISDE)

<http://www.2ndeisde.researchsynergy.org/>

December 13 – 14, 2018

2nd International Conference on Global Economy in Business, Management, Social Science and Humanity Perspective (GEMSH)

<http://www.2ndgemsh.researchsynergy.org/>

December 20 – 21, 2018

2nd International Conference on Interdisciplinary Studies for Leveraging Innovation (ISLI)

<http://www.2ndisli.researchsynergy.org/>



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