

1st Sustainability International Conference

Equitable Environment and Resource Management for Poverty Alleviation

15-17th November 2022

PROGRAM BOOK

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Opening Speech: Chairperson

Your Excellency –

the Governor of Central Java;

the Director/ Deputy Directors, and Representatives of the Regional Development Planning Agency of Central Java, and of the National Research and Innovation Agency;

the Rector and Vice-Rectors of Soegijapranata Catholic University;

the Head of Research and Community Service Centre;

the Faculty Deans, and Vice Deans, Head Programs, Head of Study Centres, Distinguished Plenary, Parallel, and Poster Presenters;

Honorable Guests, Audiences, and Fellow Committee Members,

It is a great honor and pleasure for me to be standing here to formally welcome you to the 1st SIC (Sustainability International Conference) hosted by the Research and Community Service Centre of SCU (Soegijapranata Catholic University), and the Regional Development Planning Agency of Central Java. The SIC is planned to be held yearly by SCU.

In this year's 1st SIC, the theme chosen is "Equitable Environment and Resource Management for Poverty Alleviation". This theme is chosen because we believe that it is high time for us, who are experts in the field as researchers, lecturers, and students to alleviate the poverty line in our countries. The global Covid-19 pandemic has, unfortunately, impacted all aspects of urban and rural areas. Based on World Bank Data in 2020, the poverty level of the world experiences an increase for the first time in over 20 years. About 100 million people are currently living in poverty. In addition to the global pandemic, overpopulation also adds up to the amount of poverty. Given that poverty exists and needs to be addressed within our multidiscipline, we divide the conference's focus and scope into 4 main pillars, i.e. Technology, Communities & Well-Being, Circular Economy, and Balanced Environment.

Let's make this conference a platform for us to share our research, ideas, and strategies to overcome poverty. By sharing our best solutions and hopes, we may produce new collaborations to make our world a much better place to live in. Together - we can develop and realize stronger sustainable programs that can:

- a. End poverty in all its forms everywhere
- b. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- c. Ensure healthy lives and promote well-being for all at all ages Ensure inclusive and equitable quality education, and promote lifelong learning opportunities for all
- d. Achieve gender equality and empower all women and girls
- e. Ensure availability and sustainable management of water and sanitation for all
- f. Ensure access to affordable, reliable, sustainable, and modern energy for all
- g. Promote sustained, inclusive, and sustainable economic growth with full and productive employment, and decent work for all

Distinguished Guests, Presenters, and Participants,

I hope you can all still bear with me for the rest of my welcoming speech.

As you have learned through our Program Book, I am happy to say that our Keynote Speakers are very special. On the first day, we will meet Professor Jonathan V. Gochuico, from the Faculty of languages and Literature of DLSUD-Das Marinas, Philippines, who will touch upon the Covid-19 and the Digital Divide. From him, we can look forward to how the New Normal's technology can be made better as a solution to sustainability issues.

Second is Dr. Yopi, who is the Deputy for Regional Research and Innovation, National Research and Innovation Agency, in Indonesia. He will present to us a very important talk on how to strengthen the role of regional research and innovation agency in local governments in preparing evidence-based policies to support better regional development planning.

The third is Associate Professor, Dr. Gerardus Majella Adhyanggono, who is also the Dean of the Faculty of Languages and Arts, at Soegijapranata Catholic University. He will question how the Central Java's community's local traditions of the so-called Ujungan and Cowongan is giving us an Anthropocene burden, so a program must be devised as a solution to the problem.

On the second day, we will be enlightened by Professor Harold Krikke, who is a professor in Closed-Loop Supply Chain of the Open University, The Netherlands. He will talk about the Circular Economy by understanding the hurdles in transition.

We will also have Dr. Pungky Sumadi, who is Head of the Regional Development Planning Agency of Central Java. Similar to Dr. Yopi, I'm sure that Dr. Pungky will enlighten us all on what we must do to alleviate poverty in Central Java area, so it can be an example for other countries.

Last but not least, Prof. Budi Widianarko, who is a Professor of Environmental Toxicology from the Faculty of Agricultural Technology, Soegijapranata Catholic University, will touch upon the Balanced Environment pillar. His talk on urban food system transformation offers pathways to food sovereignty.

Ladies and Gentlemen,

We have received 113 abstracts for PPT presenters and 16 for Poster Presenters. Not all have been selected to be presented and displayed in this conference. You are among the lucky 77% who are fortunate enough to be selected to disseminate your research here. Total wise, we have recorded 206 presenters and 65 audiences in this conference, plus many more committee members, who are at your service. Let's take time to give applause for our enthusiastic involvement in the conference, so far!

Ladies and Gentlemen,

We sincerely hope, after your presentation, you will be revising your full paper to meet the expectations and solutions offered by the conference reactors and audiences. Once revised, the committee is committed to assisting you in not only giving you reliable feedbacks from our internal journal, proceeding, and book chapter reviewers, so when you submit to your preferred

media of publication, they will be worthy and only need small revisions if any. In other words, the dissemination of your work does not end at this conference, but it is the start of your academically qualified work.

Ladies and Gentlemen,

I am sure that all of you now should feel very grateful to be here. I believe you would agree with me, when I say again that “You are very lucky”, because amongst you are speakers and participants originating from 10 countries: the Phillipines, Pakistan, the Netherlands, Indonesia, and from our supportive reviewers from Australia, the United States of America, India, Taiwan, the United Kingdom, and Nigeria. From Indonesia alone, we have those coming from 16 cities. Not only from our very own town Semarang, but also from Papua, Lampung, Aceh, Bengkulu, Pangkalpinang, Jambi, Manado, Nusa Tenggara Timur, Bali, Jakarta, Bekasi, Tangerang, Surabaya, Malang, Bogor, Bandung, Cirebon, Tulungagung, Nganjuk, Sidoarjo, Cilacap, Purwokerto, Demak, Magelang, Jepara, Pekalongan, Jombang, Kudus, Boyolali, Tegal, Grobogan, Kendal, Pati, and Yogyakarta. Have I mentioned everyone? I hope so....

Ladies and Gentlemen,

Nearing the end of my long speech, I would like to especially thank our major sponsors, the Regional Development Planning Agency of Central Java and the National Research and Innovation Agency, who has supported and made this International Conference possible.

Many thanks are given especially to the Rectorate and hard-working people from the Research and Community Service Centre of Soegijapranata Catholic University, in addition to the Gracia Choir, the FLAcoustic band, and the Kembang Taru dance team, who will give their best entertainment, soon...

Nothing is perfect, hence, on behalf of the committee, if there are any setbacks or inconveniences that crop up in our event, please accept our sincere apologies. May God bless us all with a fruitful and memorable International Conference!

As Michael Jackson once sang in his beautiful song...

*We are the world
We are the children
We are the ones who make a brighter day
So, let's start giving
There's a choice we're making
We're saving our own lives
It's true we'll make a better day
Just you and me*

Thank you!

Semarang, 15th November 2022

Dr. Dra. Ekawati Marhaenny Dukut, M.Hum.
Chief Committee of 1st SIC

Keynote Speech: Central Java Governor

H. Ganjar Pranowo, S.H, MIP



Opening Speech: Rector of Soegijapranata Catholic University

Respected Honourable:

1. The Governor of Central Java
2. Head of Bappeda (Agency for Regional Development) Central Java
3. Vice Rector for IRP (Innovation Research and Publication) of Soegijapranata Catholic University,
4. Head of LPPM (Research institutions and community service) Soegijapranata Catholic University
6. Speakers
7. All seminar participants

Kind regards.

The Sustainable Development Goals (SDGs) which are signed by 195 countries, including Indonesia, should not stop at the document level. These very noble and challenging goals must be continuously striven for.

In the last 10 years, the Indonesian government has tried its best to reach the sustainable development goals by implementing various development programs that we can now see and enjoy together. However, there is still homework to be done. They are goals that must be followed by sustainable leadership. Equal leadership is key. It is not enough to take sides but leaders need the ability to execute.

Furthermore, the effective realization of the SDGs will be achieved not only by sustainable leadership but also by the participation of all components, both directly and indirectly. Soegijapranata Catholic University was born with a mission, among many, to develop and disseminate research for the betterment of life. With this mission, it is absolutely necessary for SCU to take an active role in synergizing with the government and various other parties to realize the SDGs.

This particular mission is actually incorporated into the strategic plan of SCU's research, which main source is the 17 SDGs items. Research conducted by lecturers and students must be able to contribute, no matter how small, to the realization of the SDGs. The research does not have to be complicated and complex which often almost impossible to implement, but

simple research which departs from the reality of our society. The research conducted should also be fluid, involving various fields of science. A collaboration between various fields of science is a necessity since the problems faced by humans and His creation are increasingly complex, making them very difficult to solve by a single field of science. With regard to the collaboration between these fields of science, it takes a key attitude and mindset, namely: humility and flexibility, in the discussion process to achieve common goals.

Hopefully, this seminar will further sharpen and enrich the lecturers and students, especially those who work on the realization of the SDGs. Have a good seminar. *Talenta Pro Patria et Humanitate*. Let's dedicate our talents to our country and humanity. God bless you all.

Semarang, 15th November 2022

Rector of Soegijapranata Catholic University

Dr. Ferdinand Hindiarto, S.Psi., M.Si

Opening Speech: Head of Central Java's Regional Development Planning Agency

Ir. Agung Tejo Prabowo, MM



List of Committee Members

- Steering Committee** : Dr. Ferdinandus Hindiarto, S.Psi., M.Si
R. Setiawan Aji Nugroho, S.T, MComp IT, PhD
Dr. Y. Trihoni Nalesti Dewi, S.H.,M.Hum
Prof. Dr. Ir. Y. Budi Widianarko, M.Sc
Dr. Rustina Untari, SE, M.Si
- Chairperson** : Tri Yuni Atmojo, ST, MSi
Ing. Wiwiek Joelani, MT
Dr. Dra. Ekawati Marhaenny Dukat, M.Hum
- Secretary** : Sri Hestningsih, W, SE, MT
Louis Cahyo Kumolo Buntaran, S.Ds., MM
Agustin Hesti Pertiwi, A.Md
Lam Ferdinandus Yogi
Natalia Suwarno, S.Ars, M.Arch
- Treasurer** : Kamsinah, SH
Dhiyan Khrisna Wardhani, ST., MUE
Clara Bonita Dhinar R, S.Psi
Fransiska Roswari, SE
- Program Coordinators** :
Mellia Harumi, S.TP., M.Sc
Shresta Purnamasari, S.E, M.Sc
- MC** : Timothea Sharleen Surmaatmadja
Gregory Jimmy Cahyono
- Interpreter** : B. Retang Wohangara, SS, MHum
- Plenary Moderators:** : Angelika Riyandari, SS, MA, PhD
Dr. B. Danang Setianto, SH, LLM, MIL
- Parallel Moderators & Operators:**
Adelia Suwanto
Anggik Yulianto Prasetyo
Aurellia Divosa Adisti
Bryan Austin
David gunawan
Evelyn Vania
Henley Raharjo
Johanes Arya Pramesta Nugraha
Jonathan Christiawan
Kiara Zefanya Setiawan
Kristoforus TD
Lidwina Deang Lung

Maria Dyan
Muhammad Taufan Putra Samudra
Oktavius Theo Andreas Riyadi
Rafael Yusia Adi Kusuma
Sebastian Hanzel
Shirley Noviyanti Supatra
Stieven Nathanael
Viorent Aurelia Kardani

Parallel Session Reactors
(Balanced Environment)

:
Dr. Johnny Ching
Dr. Michael Guyame
Arwin Purnama Jati , S.Sn, MA
Ms. Geraldine Zamora, MSED
Mrs. Michael Guyame
Dr. Victoria Kristina Ananingsih, S.T.,M.Sc
Lita Febriani, ST, MT

(Communities & Well-Being)

Dr. Jemerson N. Dominguez, LPT, ACAC
Maria Bramanwidyantari, S.Psi, MA
Krismalita Sekar Diasti, S.Pd, M.Pd
Bartolomeus Yofana Adiwena, S.Psi., M.Si
Herlina Kurniawati, ST, MT
Setyo Aji Wijayanto, ST, MLing

(Circular Economy)

Dra. MY. Dwi Hayu Agustini, MBA, PhD
Linggar Yekti Nugraheni, SE, MComm, Akt, PhD, CPA
Dr. Elizabeth Lucky Maretha Sitinjak, S.E, M.Si, CPA
Shresta Purnamasari, S.E, M.Sc
Wiwin Widiastuti, SE, M.Sc, MT
Alfina Handayani, SP, MSi

(Technology)

Ms. Marivic Mitschek
Dr. Ir. Bernadeta Soedarini, MP
Dr. Leonardus Heru Pratomo, S.T, M.T
Rosita Herawati, S.T., M.I.T
Okki Chandra A, SSos, MAP

Sessions

:
Ir. Rachmen Djamal, MS
Drs. Mursid Zuhri, MSi
Arif Sofianto, Sip, MSi
Tri Risandewi, SE, Msi
Ir. M. Sakdi, MM
Eko Nugroho, SE

Public Relations & Cooperation :

Angelika Riyandari, SS, MA, PhD
Glyceria Chrisya Larasati S.Ikom

Promotion Creative Team, Information & Technology :

Alfons Christian Hardjana, S.Ds., MA
Andre Kurniawan Pamudji, S.Kom, M.Ling
Yosua Norman Rumondor, S.Kom
Yonathan Purbo Santosa, S.Kom., M.Sc

Entertainment : Y. Yogi Tegar Nugroho, S.Sn., M.A

Properties, Transportation & Accommodation :

Sri Hartati, ST
Erna Muji Setyoningsih
Halimah Nurrisa, SSi
Agus Darto Miyarso
Fx Hartanto
Agustinus Eko Supriyanto

Liaison Officer & City Tour : Dra. Cecilia Titiek Murniati, MA, PhD
Oryzha Audrey Prasetyo
Alicia Brillia Sarwono
Wisely Richard Arthur
Wenseeslaus Garendy Merciano
Putri Paramitra Az Zahra

Abstracts : Dra. MY. Dwi Hayu Agustini, MBA, PhD
Dr. Ir. Bernadeta Soedarini, MP
Dr. Victoria Kristina Ananingsih, S.T., M.Sc
Dr. Heny Hartono, SS. M.Pd
Dr. Leonardus Heru Pratomo, S.T, M.T

Proceeding : Rikarda Ratih Saptaastuti, S.Sos, M.I.Kom
Mellia Harumi, S.TP., M.Sc
Dhiyan Khrisna Wardhani, S.T., MUE
Daniswara Agusta Wijaya, S.Psi., M.Psi
Rosita Herawati, S.T., M.I.T
Dr. Herie Saksono, MS (BRIN)
Linggar Yekti Nugraheni, SE, MComm, Akt, PhD, CPA
Dr. Ricver Ureta (University Saint La Salle, Philippines)
Dr. Guydeok Yeon (Christ University, India)
Prof. Tien-Hsiung Weng (Providence University, Taiwan)
Dr. Edward Tello Melendez (Monash University, Australia)

Journal : R. Setiawan Aji Nugroho, S.T, M.Comp IT, PhD
Dr. Dra. Ekawati Marhaenny Dukat, M.Hum
Shresta Purnamasari, S.E, M.Sc
Maria Bramanwidyantari, S.Psi, MA
Dr. Elizabeth Lucky Maretha Sitinjak, S.E, M.Si, CPA
Prof. Dr. Ir. Saptana, Msi (BRIN)
Prof. Radhika Gajjala, Ph.D (Bowling Green State

University, USA)
Dr. Sheilla Trajera (University Saint La Salle, Philippines)
Prof. Samson Thomas (Marian College, Kuttikkanam
India)
Chaminda Wijethilake Ph.D. CMILT, FHEA (University
of Essex Colchester, United Kingdom)

Poster : Arwin Purnama Jati , S.Sn, MA
Florentinus Ferry Bagastyatama, S.E
Bartolomeus Yofana Adiwena, S.Psi., M.Si
Yonathan Purbo Santosa, S.Kom, M.Sc
Krismalita Sekar Diasti, S.Pd, M.Pd
Agus Fanar Syukri (BRIN)
Prof. Etiido Effiongwilliam Inyang, Ph.D (University of
Port Harcourt, Nigeria)
Dr. Jemerson N. Dominguez, LPT, ACAC (De La Salle
University, Dasmariñas, Philippines)

E-book & Publication : Ignasius Eko B. Setiono, S.Pd., M.M

Food, Beverages & Souvenir : Fransiska Roswari, S.E
Clara Bonita Dhinar R, S.Psi
Agustinus Eko Suprianto

Photo & Video Documentation :
Theresia Putri Manggar Sari, S.Ds
Yonathan Purbo Santosa, S.Kom., M.Sc
Oswaldus Benyto Aman

Security Personnel : Kabul Tri
Didiek Dwi A.
Ahmad Lilik
M. Arif
Bayu Setiawan
M. Rangga

ZOOM LINKS:

General Rehearsal 14th November 2022
Committee at 1-2pm; Presenters at 2-3pm
<https://zoom.us/j/98516088014>

Conference 15-16th November 2022 <http://bit.ly/SIC2022>

CITY TOUR: 17th November 2022 to Gedong Songo Temple, Railway
Station and Gua Maria Kerep at Ambarawa, includes lunch at Tungku Bumi
Bandungan and panoramic dinner at Alam Indah

Poster & Conference Schedule



1st Sustainability International Conference Equitable Environment and Resource Management for Poverty Alleviation 15-17th November 2022

PLENARY SPEAKERS



Conference Focus

1st SIC aims to respond to the global poverty issues which are related to the 3 Pillars of Sustainability: (1) Environmental Pillar: Recent updates or developing new technology that reduces environmental effect related to the carbon footprint of developing area, (2) Social Pillar: Initiatives promoting the well-being, health, and safety of communities, (3) Economic Pillar: Initiatives that ensure businesses and development can thrive while making these long-term positive impacts.

1st SIC is accepting ABSTRACTS on

1. **Balanced Environment**
 - a. Inclusive and sustainable growth of the environment
 - b. Pollution/ emission/ environmental contamination/ carbon footprint
 - c. Climate change/ ecological system/ green infrastructure/ spatial planning
 - d. Waste/ energy/ agricultural/ natural resource (infrastructure)
 - e. Public policy/ conservation development/ equitable placemaking
 - f. Management improvement of water and other natural resources
2. **Communities and Well-Being**
 - a. Human prosperity and social development (including stunting and humanization programs)
 - b. Human nutrition/ public health/ food security and safety/ resilience/ quality of life
 - c. Community development/ participatory planning/ gender mainstreaming
 - d. Local culture/ environmental psychology/ environmental behavioral upgrading
 - e. Public communication/ education
 - f. Empowerment of people living in poverty
3. **Circular Economy**
 - a. Rural development and poverty eradication
 - b. Best practices of economic development strategy
 - c. Innovations for fast-growing economy
 - d. Growth of recycle/ blue economy/ green economy/ value chain/ digital economy
 - e. Resource productivity & Innovation/ sustainable business model
 - f. Sustainable products/ consumers education
 - g. Develop and implement rapid and sustained growth policies and programs
 - h. Engagement in business trades as a path out of poverty
4. **Technology**
 - a. Recent updates on environmental technology for sustainability
 - b. Recent updates on community and well-being technology
 - c. Recent updates on circular economy technology
 - d. Recent access to technology and innovation with affordable energy resources
 - e. Best practices on digital technology divides



Keynote speech by
Rector SCU & Governor of Central Java, Indonesia
& Head of Regional Development Planning Agency

Dr. Ferdinandus Hindarto, SpSci, MSi
Ganjar Pranowo SH, MIP
Ir. Agung Tejo Prabowo, MM

2nd CALL

FREE OF CHARGE

Call for participants:	20 Jul - 10 Nov 2022
Call for presenters:	20 Jul - 20 Oct 2022
Registration, abstract submission for paper & poster presenters:	20 Jul - 24 Oct 2022
LaA for abstract acceptance:	22 Aug - 24 Oct 2022
Deadline for youtube video	
PPT link & poster submission:	30 Oct 2022
Full paper submission for journals/proceedings/ e-book chapters:	24 Oct - 24 Nov 2022
Conference dates (hybrid):	15 - 16 Nov 2022
Onsite Semarang tour:	17 Nov 2022

PUBLICATIONS:
Scopus/WoS Indexed proceedings
Q1-Q4 & S1-S2 journals
ISBN e-book chapters



<https://sic.unika.ac.id/> Registration bit.ly/SIC2022-Reg



The Sustainability International Conference		EQUITABLE ENVIRONMENT AND RESOURCE MANAGEMENT FOR POVERTY ALLEVIATION		EQUITABLE ENVIRONMENT AND RESOURCE MANAGEMENT FOR POVERTY ALLEVIATION	
Research and Community Service Centers, Soekarno-Hatta Catholic University, Semarang, Indonesia		Research and Community Service Centers, Soekarno-Hatta Catholic University, Semarang, Indonesia		Research and Community Service Centers, Soekarno-Hatta Catholic University, Semarang, Indonesia	
ROOM 1001b - 1017 (1018-1023)					
Tuesday, 15 November 2022					
08:30 – 09:00 Registration in room 1001					
09:00 – 09:10 Opening & Prayer (MC)					
Indonesian National Anthem, SCU Official Choir (official)					
09:30-09:30 Opening and Welcome (Dr. David M. Mawardi, DUKIT, MARS)					
09:30-09:30 Speech by the Head of National Agency Regional Development Planning Agency (Dr. Agus Triandono, M.M)					
09:40-09:50 Speech by the Rector of SCU (Dr. Ferdinand Hidayat, S.P., M.Si)					
09:50-10:00 Keynote speech by the Director of Central Java (Dr. Gung Prasanto, S.P., M.Si)					
10:00-10:15 OFFICE BREAK (Refreshment)					
10:15-10:30 Plenary session 1 (Plenary room 1001)					
10:30-10:35 Introduction by Moderator (Agustina Riandani, S., MA, PhD)					
10:30-11:00 COVID-19 AND THE DIGITAL DIVIDE: SUSTAINABILITY ISSUES AND OPPORTUNITIES IN THE BETTER NORMAL					
Jonathan V. Beckhaus, Ph.D.					
(Professor, Faculty of Languages & Literatures, De La Salle University, Philippines, Cebu, Philippines)					
11:00-11:30 STRENGTHENING THE ROLE OF REGIONAL RESEARCH AND INNOVATION AGENCY (BRIDA) GOVERNMENTS (PIMDA) IN PREPARING EVIDENCE-BASED POLICIES TO SUPPORT REGIONAL DEVELOPMENT PLANNING IN LOCAL					
Sri. S. S. S.					
Special for Action Research and Innovation, National Research and Innovation Agency - BRIDA, Indonesia)					
11:30-11:40 LOCAL TRADITIONS IN QUESTION: THE ANTHROPOGENE BURDEN OF UJUNGAN AND COWUNGAN					
G.M. Adnyanggans, S.S., MA, PhD					
(Associate Professor in Film & Literary Criticism, Center of English Department, Faculty of Language & Arts, Soekarno-Hatta Catholic University, Semarang, Indonesia)					
11:40-11:50 Q&A					
12:00-12:40 Questions & Answers led by Moderator					
13:00-14:00 LUNCH BREAK (Refreshment)					
14:00-14:30 from MAIN ROOM to 1018-1023 rooms					
14:30-15:30-16:30-17:00-18:00					
Room A: Communities and Well Being (1)		Room B: Technology		Room C: Education and Well Being (2)	
Operator: Jhannah Aya Prasanta		Operator: Evelyn Vanita		Operator: Dikarlan Thapa AB	
Moderator: Steve Isangar, Michael Baker, Marissa & Bryan		Moderator: Steve Isangar, Michael Baker, Vincent & Tasha		Moderator: Steve Isangar, Michael Baker, Sakya & Anshok	
REACTORS: Dr. Jenevina, Ms. Reza		REACTORS: Dr. Jenevina, Ms. Reza		REACTORS: Dr. Michael Lee, Mrs. Michael Lee	
10:0017 ANALYSIS OF THE SUSTAINABILITY OF ECONOMIC DEFICIENCY PROGRAMS IN A REPLETE ECONOMIC AREA		10:0013 ANALYSIS OF THE PERFORMANCE OF SUPERVISED LEARNING ALGORITHM FOR ALIGNMENT OF OBJECTIVES AND ASSESSMENTS - (1) Marik & Miroshchik; (2) Rosarini Engvald		10:0015 MICROPLASTICS IN THE WATER OF MALU PAVY - Michael C. Duganle, PhD	
Dr. Levy Lantika, Ph., MPH		(1) Marik & Miroshchik; (2) Rosarini Engvald		Michael C. Duganle, PhD	
10:0018 INTERGENDERAL CHILD LABOR: A MATRIE CASE STUDY OF FLIPPED FARMING FAMILIES - (1) Dr. Jeneran N. Domingos, Ph.D., ACAC; (2) Alyssa May V. Balasara; (3) Ms. Jeddish B. Bilo; and (4) Nurhanisa Margawati M. Hozabidi		10:0013 INHERENT OF THINK ENABLED ARCHITECTURE FOR SAFE MODERN PUBLIC TRANSPORTATION AMIDST THE PANDEMIC - (1) Jayne Adonis; (2) Vradly Lorenz; (3) Beza Vin Manojan; (4) Marik Miroshchik (corresponding author)		10:0016 SURVEY OF PLANT LITTERS ALONG IMULI RIVER, CAVITE, PHILIPPINES - Dr. JOHNNY A. CHING	
(1) Dr. Jeneran N. Domingos, Ph.D., ACAC; (2) Alyssa May V. Balasara; (3) Ms. Jeddish B. Bilo; and (4) Nurhanisa Margawati M. Hozabidi		(1) Jayne Adonis; (2) Vradly Lorenz; (3) Beza Vin Manojan; (4) Marik Miroshchik (corresponding author)		Dr. JOHNNY A. CHING	
10:0019 URBAN RIVER IN REGIONAL COMPETITIVENESS BASED ON REGIONAL DEVELOPMENT POLICY IN JAWA TENGGAH PROVINCE - (1) Dr. Heli Bina Wilaya (2) Heli Nur Arni, S.P.W.A.; (3) Sri Henninghah, S.MT.; (4) Herlina Kuslanawati, ST MT		10:0014 ENVIRONMENTAL IMPACT DUE TO GOLD MINING IN TUMBUK BAYU BANJARWATI - (1) Dr. Bina Suciyo, SK, MSc.; (2) Dr. Faria Dwi Nivana, SK, MSc, MEd.		10:0017 EFFICIENCY OF ADVERSE CHILDHOOD EXPERIENCES: EFFECT AMONG ADOLESCENTS IN INDONESIA CONTROL - Dewi Nur Agatha Wilaya, S.P.H., MPH, Psikolog	
(1) Dr. Heli Bina Wilaya (2) Heli Nur Arni, S.P.W.A.; (3) Sri Henninghah, S.MT.; (4) Herlina Kuslanawati, ST MT		(1) Dr. Bina Suciyo, SK, MSc, MEd.; (2) Dr. Faria Dwi Nivana, SK, MSc, MEd.		Dewi Nur Agatha Wilaya, S.P.H., MPH, Psikolog	
10:0020 SUSTAINABLE STRATEGIES ON U.S. WIC VERSUS LOCAL INDOONESIAN PROGRAMS - (1) Angli Yuliyono Prasetyo; (2) Dr. Dis. Stewart Marhanny Dulay, M.Hus (corresponding author)		10:0014 BOTTLE PRODUCTION SYSTEM USED BY SOCCREPRENUR BUSINESSES FT. YULIA - (1) Tereza Svrl Proutchuk; (2) Tijn Marco Roscoe Lowman Chaudhry; (3) Yuly Yulia Elizabeth Raghoo; (4) Dr. Ruzita Urutan; S. MEd (corresponding author); Q, B & A session (15 min)		10:0018 RISK MANAGEMENT OF ADVERSE CHILDHOOD EXPERIENCES: EFFECT AMONG ADOLESCENTS IN INDONESIA CONTROL - Dewi Nur Agatha Wilaya, S.P.H., MPH, Psikolog	
Angli Yuliyono Prasetyo; (2) Dr. Dis. Stewart Marhanny Dulay, M.Hus (corresponding author)		(1) Tereza Svrl Proutchuk; (2) Tijn Marco Roscoe Lowman Chaudhry; (3) Yuly Yulia Elizabeth Raghoo; (4) Dr. Ruzita Urutan; S. MEd (corresponding author); Q, B & A session (15 min)		Dewi Nur Agatha Wilaya, S.P.H., MPH, Psikolog	

<p>0903. CONNECT EARLY WARNERS SYSTEM 2.0 FOR THE CITY OF ALBANY - (2) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (3) R. Setiawan Al-Dzikri, R. Y. Adhyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>	<p>0903. BUSINESS MODEL FOR LOCAL FORESTRY BUSINESS UNIT - (1) B. Unggar Yudi Nugraha, M. Econ., PhD, CA; (1) Shinta Puranegara, M. Econ., PhD; (3) Agatha Teresia, M.AW; (4) Sriputra Arca Dewa, M. Ag; (5) R. Setiawan Al-Dzikri, M. Comp. T.; PhD; (6) Dr. Agus Adhiana Christiantoni, M.A., CPA</p>	<p>0903. THE COMMUNITY'S UNDERSTANDING OF THE ROLE AND RESPONSIBILITY: A STUDY ON WETLAND WATERSHED - (1) Christine Novita Dewi, B.Sc., M.Asc., CA; CPA (corresponding author); (2) Gustany Harjati, S.D., M.Sc</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>
<p>G. & A. session (13. res)</p>			
<p>17.30-18.00 MC Announcement (best parallel presenters & best poster) & Closing prayer (for 1st day)</p>			
<p>Wednesday, 16 November 2022</p>			
<p>08.00-08.30 for registration in room 01</p>			
<p>08.30-09.00 Opening & Prayer MC</p>			
<p>08.00-08.15 SCD promotional video</p>			
<p>08.25-08.35 Prerary session 8 (live zoom meet)</p>			
<p>08.25-08.35 Opening speech by Vice Rector for Innovation, Research and Publications (Robbiah Setiawan Al-Nugraha, PhD) Vice Rector for Innovation, Research, and Development</p>			
<p>09.35-09.45 CORFEE R&D/ promotional video</p>			
<p>08.45-10.00 Introduction from the Moderator</p>			
<p>Dr. B. Dwiastu Setiawan, SH, LLM, M.S.</p>			
<p>10.00-10.30 Circular Economy - Understanding the Hurdles in Transition</p>			
<p>Prof. Dr. Harstad Wibika</p>			
<p>(Professor in Closed Loop Supply Chain, Open University, The Netherlands)</p>			
<p>Dr. Pujiyati Sunard, MCO, PhD</p>			
<p>(Head of Regional Development Planning Agency of Central Java, Indonesia)</p>			
<p>11.00-11.30 URBAN FOOD SYSTEM TRANSFORMATION: A PATHWAY TO FOOD SOVEREIGNTY</p>			
<p>Prof. Dr. R. Budi Setiawan, M.Sc</p>			
<p>(Professor of Environmental Toxicology, Faculty of Agricultural Technology, Soegijornatan Catholic University, Indonesia)</p>			
<p>11.30-12.00 Questions & Answers led by Moderator</p>			
<p>12.00-12.12 ON CAMPUS/PHOTO SESSION</p>			
<p>12.15-12.30 LUNCH BREAK/ promotional video</p>			
<p>12.30-12.45 Free MAIN Zoom room to BREAKOUT rooms</p>			
<p>14.00-14.30 for lunch break</p>			
<p>Room A: Technology (1) Operator: Aurelia Divina Adili, Leliana & Bryan REACTORS: Dr. Merisa, Dr. Unggar</p>	<p>0901. MAPPING HOUSEHOLD STABLE FOOD AFTER PANDEMIC COVID-19: THE CASE IN JAWANGHANG RESIDENCY - (1) Nugraha Fira Baiyana, SP., BE. (corresponding author); (3) Ahyani</p>	<p>0903. PROCESSORS OF NON-BLITEN CEREAL SEQUITS WITH THE USE OF DIFFERENT TYPES OF FATS - (1) Victoria Kristina Anungrah (correspondent) (2) Yulia Lidia Pranaswati (3) Cynthia Andriani (4) Semarang</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>
<p>Room B: Technology (2) Operator: Maria Dyas, Nugraha Fira Baiyana, Nurulhuda Umar, Viantri & Triandhi REACTORS: Dr. Kristina, Mr. Chai C.A.</p>	<p>0903. HANDBOOK IMPLEMENTATION OF FPO BUS PROPORTIONAL INTERNAL IN TBC CONVERTER FOR NERT APPLICATION - (1) Melvin Darmasari Hartono; (2) Dr. Leonardus Heru Pratiwi S. T., M.T.</p>	<p>0903. CHARACTERISTICS OF SAMBUTO (Andropogon paniculatus) LEAVES EXTRACT AT COMBINATION OF TEMPERATURE AND TIME IN ULTRASONIC Krisna Wijayanti</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>
<p>Room C: Circular Economy Operator: Eriksatrius TD, Rara & Pratiwi REACTORS: Dr. Lucky, Mr. Alfa</p>	<p>0903. IMPLEMENTATION OF CARBON FOOTPRINT CALCULATOR IN INDUSTRIAL (1) Reswita Inggrianti Herina, M.Sc.; (2) Adhira Ahsani Susanti, S.S., M.Sc.; (3) Dr. Ischrudin Bahriani, M.H.</p>	<p>0903. REGIONAL DEVELOPMENT ANALYSIS OF CENTRAL JAVA PROVINCE BASED ON REGIONAL CHARACTERISTICS - (1) Semuel Marul, SP, MT (corresponding author); (2) Dr. Fudher Hani Mardiana ST MT MDP; (3) F.M. Isah, AM; (4) Tri Yuni Andriani, IT, M.Si</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>
<p>Room D: Communitas and Well Being Operator: Rahel Yulia Adi Kusuma, Moderator: Uma Isangar, Nurulhuda Umar, Almi & David REACTORS: Ma. Intirratia, Ma. Herlina K.</p>	<p>0903. EFFORTS FOR JAMES SURVIVE DURING A PANDEMIC (COMPARATIVE STUDY ON SARS-CoV-2 SUPPORT INDONESIAN AND UNITED STATES) - (1) Riana Anni Fadilah S.S., M. Res (2) Dr. Brian Suciyo S.H., M.H. (3) Djuha Ream</p>	<p>0903. THE ROLE OF A COMPANY TO PEOPLE WITH THE COMMUNITY-BASED MENTAL DISORDERS - (1) Dr. Soepi Andari, M.Si (2) Dra. Huseini Yusuf M.Sc.Sc.PhD (3) Dr. Dhy Kusumawati, M.Si (4) Akhsadul Barroema, S.Sos, M.Si</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>
<p>Room E: Balanced Environment Operator: Deslyn Moderator: Uma Isangar, Nurulhuda Umar, Detha & Angga REACTORS: Dr. Mochan G. Mrs. Michael G. M. Anah</p>	<p>0903. THE EFFECT OF LOCAL WATERSHED ON THE EFFECTIVENESS OF FOREST PROTECTION POLICIES - (1) Bina Hendri S.H., M.H. (2) Prof. Nurita Abadi Wabale (3) Ban Supriya, PhD</p>	<p>0903. INTEGRATED RICE-FISH FARMING BUSINESS DEVELOPMENT MODEL TOWARDS AN INNOVATION VILLAGE - Bantul Triyanti, S.S., M.Ling</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>
<p>Room F: ROSTER</p>	<p>0903. SURVEY OF PLASTIC LITTERS ALONG RIVER, CAVITE, PHILIPPINES - Dr. Jobany A. Ching</p>	<p>0903. SURVEY OF PLASTIC LITTERS ALONG RIVER, CAVITE, PHILIPPINES - Dr. Jobany A. Ching</p>	<p>0907. EMPOWERMENT OF CIVIL SUBORGANIZATION IN THE CONTEXT OF POST-CONFLICT URBAN DEVELOPMENT PLANNING: A CASE STUDY IN DAMBUN - (1) Dr. Yuzma Trihasa Nisanti Dewi, M.Chem; (3) Dr. Ardiyaningrum, M.Sc.; (5) Andrew Ryan Sanjaya, M.A.; (6) Jazratul Khar, L.B., LLM; (6) Prof. Abduloh Wibisono; (6) Pray Soeriy, D. Pratiwi, (7) Dr. Abdul Wahab</p>

Plenary Speakers' Abstracts & Biodata

Technology:

COVID-19 AND THE DIGITAL DIVIDE: SUSTAINABILITY ISSUES AND OPPORTUNITIES IN THE BETTER NORMAL

Abstract:



Keywords:

BIODATA:

Jonathan V. Gochuico, LPT, Ph.D. is a full professor at the Languages and Literature Department, De La Salle University-Dasmariñas, Cavite, Philippines. He has presented research works in various international, national, and regional fora; has facilitated training and seminar-workshops on research writing, instructional materials and curriculum, linguistics, communication, and development communication; and has authored several instructional materials in grammar, research, and reading and writing. He is a reviewer of the Bureau of Learning Resources of the Department of Education. He has also served as Learning Resource Evaluator of the joint project of UNESCO, the Department of Education, and Asia Pacific College. Some of his research works were published in the institutional journals of DLSU-D, the Asian Congress for Media and Communication Journal of ACMC, and Journal of Business and Social Development of the University Malaysia Terengganu and Institut Social Malaysia. He is currently the editor-in-chief of the Academia Lasalliana Journal of Education and Humanities which became an international indexed journal under his leadership. He is also the Learning Objectives Coordinator of the Center for Innovative Learning Programs and the College Research Representative of the College of Liberal Arts, DLSU-D. He is a research mentor, adviser, and editor in the undergraduate, master's, and doctorate programs of the University. He earned his AB Philosophy and AB Communications Arts degrees at St. Paul Seminary Foundation, Silang, Cavite - Magna Cum Laude; his Master of Arts in Teaching – English from DLSU-D and was conferred with “With Distinction” and “Best Thesis” awards; and his first doctorate degree in applied linguistics at the Philippine Normal University and a second doctorate degree in development communication at the University of the Philippines Los Baños.

STRENGTHENING THE ROLE OF THE REGIONAL RESEARCH AND INNOVATION AGENCY (BRIDA) IN LOCAL GOVERNMENTS (PEMDA) IN PREPARING EVIDENCE-BASED POLICIES TO SUPPORT REGIONAL DEVELOPMENT PLANNING

Abstract:

Keywords:

BIODATA:

Dr. Yopi is Deputy for Regional Research and Innovation, National Research and Innovation Agency

CURRICULUM VITAE

PERSONAL DATA

Name : Yopi
Sex : Male
Marital status : Married
Date of birth : December 20, 1969
Nationality : Indonesia
Office : BRIN
Position : Deputy of Regional Research & Innovation BRIN
Speciality : Bioprocess Eng., Biotechnology, Standardization, HRD Development
Office Address : Gedung B.J Habibie Jl. M. H. Thamrin 8, Jakarta 10340
E-mail : yopi003@brin.go.id
Home Address : Jalan Bakti Abri, Perumahan Griya Bhara Wira B-7 Cimanggis Depok
Tel. +62-21-8741170, Mobile : 081315944402
E-mail: yopisunarya@gmail.com



EDUCATIONAL BACKGROUND

1. April 1998 to 31 March 2002, Ph.D in Applied Biological Chemistry / Biotechnology, Tokyo University of Agriculture and Technology, Japan.
2. April 1996 to 31 March 1998, Masters in Applied Biological Science / Biotechnology, Tokyo University of Agriculture and Technology, Japan.
3. April 1990 to 31 March 1994, B.Sc. in Applied Biological Science / Biotechnology, Tokyo University of Agriculture and Technology, Japan

WORK EXPERIENCE

1. 1998-2005 : Lecturer at Chuo University Japan
2. 2009-2016 : Lecturer at Chemical engineering Department, Indonesia University
2. 2010-2015 : Head of Bioprocess Division, RC for Biotechnology LIPI
3. 2010-2019 : Head of Biocatalyst and Fermentation Laboratory, Research Center for Biotechnology LIPI
4. 2019-2021 : Head of Center for Research & Human Resources Development Badan Standardisasi Nasional (BSN)
5. 2022 - present : Deputy of Regional Research & Innovation BRIN

Communities & Well-Being:

LOCAL TRADITIONS IN QUESTION: THE ANTHROPOCENE BURDEN OF UJUNGAN AND COWONGAN

Abstract:



Keywords:

BIODATA:

G.M. Adhyanggono, SS, MA, PhD is an Associate Professor in Film and Literary Criticism. He is the current Dean of the English Department, Faculty of Language and Arts, Soegijapranata Catholic University, Indonesia.

CIRCULAR ECONOMY: UNDERSTANDING THE HURDLES IN TRANSITION

Abstract:



Keywords:

BIODATA:

Prof. Dr. Ir Harold R. Krikke (1967) studied Industrial Engineering and Management at Twente University of Technology, majoring in Operations Research. At the same university he obtained his Ph.D. degree in Reverse Logistics in 1998. Thereafter, he worked as a business consultant at Tebodin consultants and as a project manager at CentER Applied Research. He held academic positions as (assistant/associate/full) Professor at Rotterdam School of Management, Tilburg School of Economics & Management and Open Universiteit Nederland. He also acted as a guest teacher at TIAS business school, Hult Business School, Vlerick Business School, Maastricht University and TU Delft and as a consultant to various companies. His favorite topics are (value creation in) circular economy, supply chain risk, and additive manufacturing. Prof. Krikke has been involved in about 25 applied research projects, bridging the gap between theory and practice. He has published in international journals such as International Journal of Production Economics, European Journal of Operational Research, International Journal of Production Research, The International Journal of Life Cycle Assessment, California Management Review, and many others. He also published in many popular journals, blogs and websites and has about 6000 citations in GoogleScholar.

TITLE:

Abstract:



Keywords:

BIODATA:

Drs. Pungky Sumadi, MCP, PhD, is Deputy of Population and Employment in National Research and Innovation Agency

Balanced Environment:

URBAN FOOD SYSTEM TRANSFORMATION: A PATHWAY TO FOOD SOVEREIGNTY

Abstract: According to United Nations two thirds of the world's population will live in cities. Although occupying only 2-3 percent of the earth's surface area, with the lifestyle and consumption practices of its citizens, cities monopolize three-quarters or 75 percent of natural resources and contribute more than 70 percent of global greenhouse gas emissions. This prompts the urgent need for transforming the urban food system. Ideally, cities are not only food devourers, but they must be able to provide some of its food. To make a food contributing city is not a utopia. While cities are part of the problem, but at the same time they may offer solutions. Density and proximity within a city actually reduces the economic and environmental costs of providing its own food. Cities also have significant institutional and technical capacities to deal with environmental problems, including food issues. Moreover, cities are centers of innovation. This presentation showcases the UNEP's SHIFT project in the City of Semarang as an example of urban food transformation initiative.



Keywords: food system, urban, SHIFT, Semarang

Biodata:

Prof. Dr. Ir. Budi Widianarko, M.Sc. is a Professor in Environmental Toxicology at the Faculty of Agriculture, Soegijapranata Catholic University. He is also Chairperson of Food Safety and Integrity Research Group at the Department of Food Technology, Soegijapranata Catholic University (SCU), Semarang – Indonesia. He obtained his BSc in Animal Science from Diponegoro University (1986), MSc & PhD in Ecotoxicology from Vrije Universiteit Amsterdam (in 1991, 1997). His teachings, research and community services are centered around Food Ecology and Safety. Since 1998, he has successfully promoted 10 PhDs in Food Science, Environmental Toxicology and Health Science - in affiliation with Indonesian and Dutch universities. Currently, he is supervising 5 PhD students. He is also serving in several boards and committees related to food, agriculture and ecology, such as Board of Trustees (Yayasan Obor Tani, Yayasan Purba Danarta, Yayasan Bintari, Lembaga Gita Pertiwi); Experts Team of the Food Security Agency, Central Java; Advisory Council of Semarang City's Development. In the field of higher education, he is a trustee of the United Board for Christian Higher Education in Asia (UBCHEA, based in New York and Hong Kong), and was the Rector SCU for two terms (2009-2017), and now he is Executive Director of Sandjojo Foundation.

Guidelines for Parallel Speakers & Audiences

1. All authors must be present during the hybrid conference presentation in Zoom.
2. Authors and audiences must log-in on time for the assigned cluster group of the parallel session.
3. Authors must put on the conference Virtual Background during their YouTube video and Q & A sessions.
4. The YouTube video must be in between 12-15 minutes of the presentation. When the video duration is more than 15 minutes, the committee has the authority to stop the video in time.
5. All authors and audiences must be on-camera and be courteous, during the live zoom Q & A sessions.
6. Online and offline authors and audiences must fill in the registration form/ scan the attendance sessions 2x a day, i.e.
 - during the main morning plenary session, and
 - during the small classroom parallel afternoon sessionsto receive their certificate of recognition.
7. Problems met during the hybrid conference can be addressed to the moderator/ operators/ L.O. of each main/ parallel room.

Parallel Speakers' Abstracts & Biodata

ID 0013 – DAY 2 — PARALLEL SESSION 4 – 13.45-14.45 – ROOM – Circular Economy

Ramatun Anggraini Kiemas, M.Sc.⁽¹⁾; Adinda Arimbi Saraswati, S.Si., M.Si⁽²⁾ ; Drs. Fachruddin Rahmat, M.Si⁽³⁾

IMPLEMENTATION OF CARBON FOOTPRINT CALCULATOR IN INDONESIA

Abstract: The aim of the study about the Carbon Footprint Calculator is to participate in the program of the Indonesia Government to reduce net zero emissions in Indonesia, to support a similar study related to carbon footprint, and to encourage people and industry to aware and participate in reducing carbon emissions in Indonesia. Carbon Footprint Calculator is used to calculate how much carbon emissions are generated from daily activities to overcome the climate crisis. Calculation of carbon emissions related to the impact of climate change can be started by being responsible for our environment through reducing and replacing carbon footprints. With the Carbon Footprint Calculator, we can now easily keep track of our carbon footprint as part of the broader efforts to manage emissions and decarbonize supply chains. The study used the descriptive method. The data carry out through literature studies that consist of carbon footprint calculator in Indonesia from research exploration from various sources, such as scientific reports, technical reports, article journals, and web-portal. The result of this study can contribute as policy to the Indonesian Government related to carbon emission and net zero emission, and the study is be able as information to the public, for the people, community or also industry to participate to reduce their consumption of carbon emission and to align with the goals and targets of the SDG This study about the Implementation of the Carbon Foot Print Calculator especially in Indonesia has benefits for Indonesian Policy Maker to encourage more people, communities and industries to calculate their environmental footprint indicators and to change the mindset of people, communities, and encourage industry as well to participate in reducing carbon emission in their activities. This study can contribute to the effort of sustainable development goals and has a lot of positive implications for the Government, Public, Industry, Community and etc. for participating in reducing carbon emissions.

Keywords: Carbon Foot Print Calculator; Carbon Emission; SDGs

BIODATA:

- (1) **Ramatun Anggraini K., M.Sc.** Research Center For Sustainable Production System and Life Cycle Assessment, National Research and Innovation Agency (BRIN) Magister in Management Information – University of Central England in Birmingham, United Kingdom 1. Implementation Of Cloud Computing For Centre Development, Education And Training-Volume.4,Issue.9.September-2018 International Journal Of Advanced Scientific Technologies, Engineering And Management Sciences(Ijastems). ISSN:2454-356x 2. Book : Introduction To Sewerage System And Eco-Drainage As Contributing Author. Yogyakarta : GRE Publishing, 2021.

- (2) **Adinda Arimbi Saraswati, S.Si., M.Si** Directorate of contaminated land recovery and emergency response to hazardous and toxic waste and non-hazardous and toxic material, Ministry of Environment and Forestry. S2 Program Studi Ilmu Lingkungan, Kekhususan Perencana Lingkungan – Universitas Indonesia, Jakarta (M.Si.) 1. Jurnal Rekayasa Lingkungan Vol.14 no.2, Desember 2021, p-ISSN : 2085.38616 e-ISSN : 2580-0442, Konsep Green City Dalam Mendukung Penataan Desa Warloka, Kecamatan Komodo, Kabupaten Manggarai Barat, NTT Menggunakan Tools Green Map. 2. Jurnal Rekayasa Lingkungan Vol.14 no.2, Desember 2021, p-ISSN : 2085.38616 e-ISSN : 2580-0442, Kajian Lingkungan Pengembangan Produksi Garam Industri Di Indonesia
- (3) **Drs. Fachruddin Rahmat, M.Si.** Center of Data and Information, National Research and Innovation Agency (BRIN) S2 Program Studi Ilmu Lingkungan, Kekhususan Perencana Lingkungan – Universitas Indonesia, Jakarta (M.Si.) 1. Pengembangan Sistem perencanaan program dan anggaran berbasis aplikasi eGov, sebagai project leader (2019) 2. Evaluasi dan Audit system TI BPPT untuk persiapan Transformasi Digital BPPT, sebagai project leader (2020).

Michael C. Guyamin, PhD⁽¹⁾

MICROPLASTICS IN THE WATER OF IMUS RIVER

Abstract: Microplastics are synthetic solid particles or polymer matrixes of regular or irregular form with size ranging from 1 μm to 5 mm of primary or secondary origin. They are insoluble in water and can occur in rivers due to the fragmentation of macroplastics. This study quantifies and identify microplastics in the water of Imus River. Sampling sites were selected encompassing upstream, midstream, and downstream stretches of the entire river system, distributed within five cities or municipalities located along the Imus River. The microplastics in the water samples were collected and analyzed quantitatively and qualitatively using a visual identification standard procedure. The isolated microplastics were analyzed using FTIR in transmission mode. Microplastics was examined under a scanning photomicroscope, with plastic items counted, and classified into fibers, fragments (irregular and polygonal), and microbeads. Microplastics were found in all water samples (amounting to 12 m³ from all sampling stations for both dry and wet months) with a mean (\pm SD) concentration of 12.41 (\pm 10.035) and 17.45 (\pm 11.757) #/m³, for dry and wet months respectively. Classified by type, fibrous microplastics are the most common in both dry and wet seasons, with concentrations of 4.87 #/m³ and 7.51 #/m³, respectively. Unclassified (other) microplastics had concentrations of 4.76 #/m³ for the dry season and 5.97 #/m³ for the wet season. Microbead concentrations were only 0.41 #/m³ for the dry season and 0.61 #/m³ for the wet season. Classification by resin materials among all sampling stations shows that microplastics in the Imus River are mostly PP and PET, with small amounts of polyacetylene (PA), HDPE, and others.

Keywords:

BIODATA:

(1) **Dr. Michael C. Guyamin** is an Associate Professor in De La Salle University-Dasmariñas under the Biological Sciences Department. He has been teaching Biological Science courses in DLSU-D for almost 19 years. He finished his undergraduate degree, BS Biology (cum laude, 1999), master's degree in Biology (2005), and Doctor of Philosophy in Biology (2019) at DLSUD. His research interests are in the fields of Biodiversity and Environmental Science.

Dr. Leny Latifah., P.Si., MPH⁽¹⁾. Marizka Khairunnisa⁽²⁾, Diah Yunitawati⁽³⁾

ANALYSIS OF THE SUSTAINABILITY OF IODINE DEFICIENCY DISORDERS (IDD) ELIMINATION PROGRAMS IN A REPLETE ENDEMIC AREA

Abstract: Iodine deficiency is the leading preventable cause of intellectual disability in the world, which was successfully prevented in most countries. Several countries showed the re-emergence of IDD when the IDD control program is not sustainably implemented. Wonogiri is an area with endemic IDD replete characteristics with a history of severe endemic and in 2012 surveillance showed non-endemic status. In 2018 Wonogiri district level surveillance, many cases of goiter and cretinism found concentrated in certain areas. This research aimed to analyze the sustainability indicators programs implementation for iodine deficiency disorders (IDD) eradication. A SWOT (strength, weakness, opportunity, and threaten) analysis was carried out on 10 indicators of the IDD elimination program in Wonogiri area. Data of the situation regarding current situation of the program were obtained from FGD (Focused Group Discussion) with program officer in district and public health centers level. FGDs conducted with cross-program stakeholders. The results of the analysis show that not all of the 10 sustainability indicators program has been implemented (USI legislation and UIE surveillance in vulnerable areas and groups). The S-O strategy shows the need to strengthen the commitment of the team of IDD elimination and integrating teams into national priority health programs like the stunting prevention team. The W-O strategy shows the need for mapping to prioritize areas and targets, continuous monitoring, and provide a database for IDD surveillance. The S-T strategy recommends the need to draft a regional regulation on Iodized salt to ensure continuous availability of iodized salt at the producer, retailer and consumer levels. The W-T strategy recommends to strengthen the collaboration with external organization to strengthened IDD surveillance skills and IDD laboratory capacity. This research showed the rock bottom elimination of IDD in certain areas. SWOT analysis exhibit several strategy for enhancing sustainability programs for IDD elimination.

Keywords: Iodine deficiency disorder, sustainability, program, endemic, replete

BIODATA:

- (1) **Dr. Leny Latifah, Psi, MPH.**, Peneliti dari Institusi Pusat Riset Kesehatan Masyarakat dan Gizi, OR Kesehatan BRIN, menempuh pendidikan S1 dan profesi psikolog pada Fakultas Psikologi UGM, pendidikan S2 pada Jurusan Gizi Kesehatan FK UGM (1998) dan S3 Kesehatan Masyarakat pada FK UGM (2015) Selama ini terlibat riset dan menulis artikel-artikel jurnal nasional, internasional, dan buku di bidang gizi, perilaku kesehatan, pertumbuhan dan perkembangan sepanjang usia, kesehatan ibu dan anak, termasuk kesehatan mental.

ID 0020 - DAY 2 – PARALLEL SESSION 4 – 13.45-14.45 – ROOM D – Communities and Well Being

Dr. Soetji Andari, M.Si⁽¹⁾, Dra. Husmiati Yusuf M.Soc.Sc.PhD⁽²⁾, Dra. Elly Kuntjorowati, M.Si⁽³⁾, Akhmad Purnama, S.Sos, M.Si⁽⁴⁾

THE ROLE OF A COMPANION TO PEOPLE WITH THE COMMUNITY-BASED MENTAL DISORDERS

Abstract: The World Health Organization (WHO) found that 24% of patients who went to primary health care had a diagnosis of mental disorders. Mental disorders that are often found in primary health care include depression and anxiety, both as a separate diagnosis and comorbidities with a physical diagnosis. In Indonesia, people with mental disorders are ranked 2nd largest, based on Riskesdas data in 2018, it was found that the older they are, the higher the emotional mental disorder detected so that it requires assistance for people who have mental disorders. Upaya to improve the mental health of the community and prevent the increasing number of people with disorders needing a companion as a top priority for mental health. The role of community-based companions for people with mental disorders can be a priority in reducing mental disorders in the future

Keywords: mentoring, people with mental disorders (ODGJ), community-based, role of companion

BIODATA:

- (1) Dr. Soetji Andari, M.S, Bandung 18 Mei 1965. S1 STKS Bandung thn 1990, S2 Kebijakan UGM, S3 Sosiologi UGM 2013 Peneliti Ahli Madya BRIN, Pangkat/Gol yakni Pembina Utama Muda, IV/c
- (2) Dra.Husmiati,M.Soc.Sc.PhD, Makassar, 9 Oktober 1967 S1 di STKS Bandung, S2 dan S3 di Universiti Sains Malaysia (USM) Malaysia, pangkat/gol. Pembina Utama Muda, IV/c.
- (3) (3) Dra. Elly Kuntjorowati, M.Si, Yogyakarta, 24 Juli 1957. S1 Sastra Sejarah UI 1984,S2 (STPMD) tahun 2010 Peneliti Utama BRIN,Pangkat/gol. Pembina Utama Madya, IV/d.
- (4) Akhmad Purnama,S.Sos, M.Si, Klaten, 19 Juni 1968. S1 STKS 1993,S2 Psikologi Sosial UGM pada 2006. Peneliti Ahli Madya, Pangkat/Gol. Pembina Tk.I, IV/b.

Dr. Soetji Andari, MSi⁽¹⁾, Tyas Eko Raharjo S.St, M.A⁽²⁾, Drs. Wardo⁽³⁾

ERUPTIVE DISASTER MITIGATION BASED ON LOCAL WISDOM ON THE SLOPES OF MERAPI

Abstract: Disaster mitigation around the slopes of Merapi is closely related to the local wisdom of the surrounding village communities. Mount Merapi is the most active volcano in the world has various forms of local wisdom in efforts to mitigate eruption disasters. In research problems to find out the form and meaning of local wisdom of rural communities on the slopes of Merapi which are used in efforts to mitigate eruption disasters. The research was conducted in Kalurahan Umbulharjo, Kapanewon Cangkringan, Sleman Regency. The method used is descriptive qualitative. This study aims to determine the form and meaning of local wisdom of the merapi slope community in an effort to mitigate the eruption disaster. The results showed that in an effort to mitigate the eruption disaster, communities in the rural slopes of Merapi utilize a number of forms of local wisdom: 1) local knowledge includes local initiatives in the form of religious activities, guidance on Javanese philosophy, mountain falls, jimpitan, and rembug residents. Local technology in the form of lies as a vehicle for exchanging information both safe conditions and in a state of danger 2) local culture, in the form of traditions including labuhan and nyadran ceremonies, slawatan arts, and local expressions such as sing eling and alert, 3) local skills include farming skills in the manufacture of animal feed based on organic waste. 4) local resources include human resources, nature, and social resources. 5). Local social processes include strengthening patterns of social interaction, community relations, and social supervision. 6) Group solidarity includes strengthening attitudes of togetherness and social solidarity based on Javanese philosophy. It is recommended that the policy of handling victims of natural disasters prioritizes mitigation efforts by utilizing every form of local wisdom of the community in disaster-prone areas.

Keywords:

BIODATA:

- (1) Dr. Soetji Andari, M.Si was born in Bandung 18 May 1965, S1 STKS Bandung, S2 and S3 Gadjah Mada University, Peneliti ahli madya di BRIN.
- (2) Tyas Eko Raharjo, S.St, MA, S1 STKS Bandung, S2 Kebijakan Kesejahteraan UGM, Peneliti Ahli Madya di BRIN.
- (3) Drs. Wardo, S1 Yogyakarta State University

Nugrahana Fitria Ruhyana, SP., ME⁽¹⁾, Hadi Ferdiansyah, STP., MIL⁽²⁾

EFFECTIVENESS OF DISTRIBUTION OF SOCIAL PROTECTION PROGRAMS DURING THE COVID-19 PANDEMIC IN SUMEDANG REGENCY

Abstract: Poverty alleviation efforts face significant challenges with the COVID-19 pandemic. By 2021, poverty increased nationally and in almost all districts/cities in Indonesia. Meanwhile, the government has increased spending and expanded the scope of recipients of social protection programs. There are indications that the social protection programs that have been distributed have not been fully targeted. Therefore, the purpose of this study is to explore the distribution of social protection programs in various income groups by taking the research locus in Sumedang Regency, which experienced an increase in poverty from 10.26% to 10.71% in 2021. Recommendations are needed for efforts to be made so that aid distribution is more effective and significantly impacts poverty alleviation. Susenas data were analyzed descriptively for their quality which was then discussed in a Focus Group Discussion to obtain additional information from stakeholders related to poverty. The social protection programs in question are the Program Keluarga Harapan (PKH), Program Indonesia Pintar (PIP), Bantuan Pangan Non Tunai (BPNT), and Kartu Keluarga Sejahtera (KKS). The results of data analysis show inclusion errors where around 34-49 percent of recipients of social protection programs are households outside the bottom 40, especially in PIP. Ironically, there is still an exclusion error where about 52 percent of households with the lowest income class (decile 1) still have not received social protection programs. Based on the results of the FGDs, the high inaccuracy in targeting recipients of social protection programs indicates that the accuracy of data on program beneficiaries is still low and not entirely valid. Therefore, verifying and validating data integrated with population data and regularly updated in village meetings is necessary. Monitoring and evaluating aid distribution mechanisms are also essential to ensure that program recipients receive complete and appropriate assistance and improve their quality of life.

Keywords: social protection programs; poverty alleviation; inclusion error; exclusion error

BIODATA:

- (1) **Nugrahana Fitria Ruhyana** is a researcher in the field of socio-economics at the research and development planning agency, Sumedang Regency.
- (2) **Hadi Ferdiansyah** is a planner at the same agency. Often collaborates in research related to the problems of social protection programs and the vulnerability of micro and small businesses during the COVID-19 pandemic. The research results have been published in journals and become policy recommendations for the government in Sumedang Regency.

Indah Gilang Pusparani, S.Sos., M.Sc. ⁽¹⁾, **Dr. Kartono, SE., M.Si.** ⁽²⁾, **Kurnia Tri Hermawan, S.Sos., M.AP.** ⁽³⁾, **Yanah, SE., M.Si.** ⁽⁴⁾, **Toni Ari Wibowo, SSTPar., M.Par.** ⁽⁵⁾

STAKEHOLDERS' PARTICIPATION IN CREATIVE ECONOMIC DEVELOPMENT IN CIREBON CITY

Abstract: This study aims to examine the participation level of stakeholders, identify the dominant stakeholders, and investigate the factors inhibiting stakeholders' participation in the planning, implementation, and evaluation of creative economic development in Cirebon City. "Creative City" is politically and legally stipulated as the city vision in the regional mid-term development plan 2018-2023 of Cirebon City. As the creative economy is centered around the production, exchanges, and consumption of goods and services from human creativity, Cirebon City is, therefore, a significant case study to investigate how the local government implements participatory processes in developing a creative city. Using qualitative methods, data were collected through a semi-guided interview of 190 respondents from five stakeholders: academics, businesses, communities, government institutions, and media organizations. It was followed by a focus group discussion of 12 key respondents selected purposively from the five stakeholders. With primary and secondary data sources, qualitative data was analyzed through the process of data reduction, data display, and conclusion drawing/verification. This study concluded that stakeholders' participation in all stages of creative economic development in Cirebon was still minimum. The businesses in culinary and craft subsectors as the most dominant stakeholders in the participation processes. The lack of socialization from the municipal government and the limited collaboration amongst the stakeholders were identified as the inhibiting factors of inclusive participation in creative city development. The government needs to accelerate creative economic development through multisectoral policies, including improvement of business knowledge and skills of the local business actors, goods and services' quality upgrading and assurance, certification and legal assistance, and promotion and market expansion.

Keywords: Creative City, Creative Economic Development, Participatory Development, Participatory Planning, Stakeholders' Participation

BIODATA:

(1) **Indah Gilang Pusparani, S.Sos., MSc.** works as a Researcher at the Regional Research and Development Planning Agency Cirebon City (Badan Perencanaan Pembangunan, Penelitian dan Pengembangan Daerah Kota Cirebon). Her publications mainly focus on the creative economy, participatory development, and regional innovation. She was educated at Universitas Indonesia, majoring in International Relations for undergraduate study; and University College London, majoring in Development Administration and Planning for her master's degree.

(2) –

(3) –

(4) -

Dr. Fitria Dewi Navisa, SH, MKn, MH⁽¹⁾, Hisbul Luthfi Ashsyarofi, SH, MH. ⁽²⁾

MODEL OF CLIMATE CHANGE RISK PREVENTION AND MANAGEMENT POLICY ON MARITIME BIODIVERSITY BASED ON GREEN ECONOMIC SUSTAINABLE (GES)

Abstract: The purpose of this study is to determine and analyze the policy model of prevention and management of climate change risks to maritime biodiversity based on Green Economic Sustainable (GES). This study is qualitative and uses a statutory approach (statute approach) and conceptual approach (conceptual approach) is done by examining and understanding the concepts of political law behind the norms governing climate change to maritime biodiversity based on Green Economic Sustainable (GES). This study uses primary legal materials such as draft laws, research results, the work of legal circles and so on. Data analysis methods use data analysis, data reduction, data presentation, and then concluding. To test the validity of the data in this study used the triangulation technique. Indonesia on November 4, 2016, ratified the Paris Convention into law, Law Number 16 of 2016. One of the efforts in upholding the agreement is that Indonesia established the peat restoration agency in 2016 based on Presidential Regulation Number 1 of 2016 to anticipate and respond quickly to land and forest fires that occurred in 2015. In doing so, Indonesia has also continued its moratorium on permits for primary forests and peatlands and most recently a moratorium on permits for oil palm and mining. Another proof of Indonesia's participation in the UNFCCC is the implementation of low carbon development and climate resilience as outlined in nine national development priority actions outlined through Nawa Cita. Indonesia has also ratified the United Nations Convention on the Law of the Sea (1982 Convention) in Law Number 17 of 1985. This ratification is due to Indonesia's good Sea area, which is subject also under sovereignty and resides in that rights and territorial jurisdiction. The concept of Green Economic Sustainable (GES) is an important component of Indonesia's sustainable economic development plan. Indonesia is an archipelago with low Coast and the second longest in the world and is vulnerable to climate change. Therefore, as a country that ratifies the Climate Change Convention (UNFCCC) and the Kyoto Protocol, Indonesia is also very interested in the Paris Agreement.

Keywords: climate change, maritime biodiversity, Green Economic Sustainable (GES)

BIODATA :

- (1) I'm an advocate since 2015 and lecturer at law department, Universitas Islam Malang since 2019. I'm an expert in private law and business law. I graduated S1 in law department, Brawijaya University. S2 in Master of Notary, Brawijaya University, S3 in doctoral program, Brawijaya University. And last took S2 in Master of Law, Universitas Islam Malang. I have 35 journal publications both national and international. I have research experience four times, both internally and nationally.
- (2) I'm an advocate since 2021 and lecturer at law department, Universitas Islam Malang since 2019. I'm an expert in criminal law. I graduated S1 in Law Department, Universitas Islam Malang. S2 in Master of law, Brawijaya University. I have 6 National Journal publications. I have twice as much research experience on an internal scale.

Geraldine Campos Zamora, MEd⁽¹⁾

SURVEY ON MACROPLASTICS LITTERS IN MANILA BAY

Abstract: One of the major environmental concerns nowadays is the persistence of marine litter and its adverse effects to marine organisms and human health. Marine litters include all anthropogenic material that has been disposed of by humans intentionally or unintentionally in the coastal and marine environment. The composition of marine litter varies depending on locations but most of the litter consists of plastic. Recent studies indicated that the Philippines ranked third among the highest contributing countries of plastics in the marine ecosystems. The country is said to contribute 0.28–0.75 million metric tons of marine plastic per year (Jambeck et al. 2015). Plastic litters will directly affect the marine species by ingesting them or entangling with them which causes severe injuries and deaths. Plastics can also affect the water quality. The extent of marine plastic pollution in Manila Bay was assessed in terms of actual and estimated total count, weight, cover and density of plastic litters dumped in the bay. Unlike other studies on marine plastic pollution, the data in this report was based on actual collection of plastic litters using quadrat sampling method in coastal waters of different barangay along Manila Bay, namely Brgy. San Dionisio in Paranaque City, Brgy. 76 in Pasay City, Brgy. 649 (Baseco) in the City of Manila, and Brgy. Tangos South in Navotas. Plastic litters were collected and classified according to resin materials as PET, HDPE, PVC, LDPE, PP, PS or miscellaneous macroplastics. The actual values of collected plastic litter were determined and compared during dry and wet months. The importance value was also determined based on relative values of these data to describe the most dominant type of plastic litter present in the bay and to calculate the estimated total count, weight, cover, and density of plastic litters in the entire bay. The percentage of single-used plastics was also reported.

Keywords: Macro plastics, frequency, cover. density.

BIODATA :

- (1) **Geraldine Campos Zamora** is a full-time faculty of De La Salle University-Dasmariñas since 1997. She was appointed chair of the Physical Sciences Department in 2013-2018 and served as the Research Implementation Monitoring and Evaluation Coordinator of the University Research Office (2019-2022). Currently appointed as the Associate Director -University Pollution Control Officer. She finished her Bachelor of Science in Physics Teaching (cum laude) as a DOST Scholar at Philippine Normal University and received her Master in Science Education major in Physics as a STUFAP Grantee at DLSU-Manila. She is currently writing her Dissertation research for her PhD in Environmental Studies at Miriam College.

Dr. Airill L. Mercurio⁽¹⁾

WATER QUALITY ASSESSMENT OF MANILA BAY BASED ON ITS PHYSICO-CHEMICAL CHARACTERISTICS

Abstract: The physico-chemical characteristics of water are important in determining the health, condition and in management strategies for aquatic ecosystems. This study was conducted to determine the water quality of Manila Bay in the Philippines which has been classified by the Department of Environment and Natural Resources (DENR) as Class SB water. Such classification is intended for fisheries, recreational and tourist purposes (DENR EMB, 2016). Four barangays along Manila Bay i.e, Brgy. San Dionisio in Paranaque City, Brgy. 76 in Pasay City, Brgy. 649 in Baseco, City of Manila, and Brgy. Tangos South in Navotas and an estuary in Malabon were chosen as sampling stations to measure different physico-chemical characteristics and to confirm the condition of its water quality. Physico-chemical parameters include water surface temperature, dissolved oxygen (DO), biological oxygen demand (BOD), pH, total suspended solids (TSS), phosphates, nitrates, salinity, conductivity and total dissolved solids (TSS). Physico-chemical parameters were measured and compared during the dry and wet months using standard procedures. The average values of the two seasons for each parameter were also compared to the standard values set by DENR. Results shows that all measured physico-chemical parameters were within the standard values except for nitrates, phosphates and TSS in which the values exceeded the critical limits. These conditions in the waters of Manila Bay may be attributed to the wastes generated brought about by the surrounding residential and commercial areas and from tributaries of the bay.

Keywords: Manila Bay, physico-chemical, water quality, parameters

BIODATA:

(1) **Dr. Airill L. Mercurio** is an Associate Professor of the Biological Sciences Department under the College of Science and Computer Studies in De La Salle University- Dasmariñas Cavite Philippines. She has been teaching Biological and Environmental Science courses, both in the undergraduate and graduate levels, in DLSU-D for almost 23 years. She finished her bachelor's degree in Biology at DLSU-D, Masters in Education Major in Biology at DLSU-Manila and Doctor of Philosophy in Biology at DLSU-D. Her research interests are in the fields of Aquatic Ecology and Environmental Science

(1) Dr. Jemerson N. Dominguez, LPT, ACAC; (2) Alyssa May V. Refuerzo; (3) Ma. Jedidiah R. Rile; and (4) Harrienne Margaret M. Honrado

INTERGENERATIONAL CHILD LABOR: A MULTIPLE CASE STUDY OF FILIPINO FARMING FAMILIES

Abstract: Approximately 2.1 million of the Philippine’s 5 to 17-year-olds are categorized as child laborers. With the decrease in number of child farmers in the country, it is still a fact that such phenomenon exists from one generation to the next. This research aims to explore the intergenerational child labor cycle within the Filipino agricultural setting by discovering the history, perception, and experiences of the Filipino farmers as narrated by the participants. A multiple case study was used with the aid of snowball sampling and data triangulation. The researchers found out that intergenerational transmission of roles is mainly influenced by family history, educational attainment and economic status as observed from the first generation of farmers. The results showed both positive and negative perceptions often stem from the ability to provide the needs of the family and oneself and dearth from privileges respectively. Presently, exposure to hazardous situations and calamities remain as the inevitable problems of the Filipino farmers. Despite those, the researchers found out that these Filipino farming families continue to strive and find happiness amidst being brought up as child farmers.

Keywords: intergenerational child labor, multiple case study, Filipino-farming families

BIODATA :

(1) –

(2) Ms. Alyssa May Refuerzo is a licensed psychometrician. She is currently a full - time employee of the Department of Education, working as an Administrative Assistant in one of the Schools in Molino Bacoor Philippines. In addition to her Administrative duties, she also works for a clinic which specializes in Children's behavior.

(3) Ms. Ma. Jedidiah Rile is a also a licensed Psychometrician. Presently, she is a full-time employee in one of the Telecommunication companies in Makati City Philippines, working as a Administrative Assistant. In addition to her duties, she is also a part-time student taking up Master of Arts in Clinical Psychology in De la Salle University Dasmariñas, Philippines.

(4) –

Janette P. Bala, MS Biology⁽¹⁾

WATER QUALITY ASSESSMENT OF IMUS RIVER BASED ON ITS PHYSICO-CHEMICAL CHARACTERISTICS

Abstract: The physico-chemical characteristics of water are essential in determining the status, quality and in management strategies for aquatic ecosystems. Imus River is one of six major rivers flowing through the Philippine province of Cavite, emptying out into Manila Bay. This study assessed the water quality of Imus river based on its physicochemical characteristics to confirm the Class-C (intended for fisheries, agriculture, and recreational use) classification of the river per DENR standards. Sampling sites were selected encompassing upstream, midstream, and downstream stretches of the entire river system, distributed within five cities or municipalities located along the Imus River: Silang, Dasmariñas City, Imus City, Bacoor City, and Kawit. Physico-chemical parameters include water surface temperature, dissolved oxygen (DO), biological oxygen demand (BOD), pH, total suspended solids (TSS), phosphates, nitrates, salinity, and total dissolved solids (TSS). Physico-chemical parameters were measured and compared during the dry and wet months using standard procedures. The average values of the two seasons for each parameter were also compared to the standard values set by DENR. Results shows that the surface water temperature is significantly lower during wet months as compared to dry months while pH, DO, salinity, and TDS registered equal values during dry and wet months. BOD, phosphates, nitrates and TSS were significantly higher during wet months. The average values of all physico-chemical characteristics are within the DENR standards for Class C classification except for phosphates and TSS which exceeded critical limits. These conditions may be attributed to the wastes generated brought by residential, agricultural, industrial and commercial activities.

BIODATA:

(1) **Ms. Janette Bala** is an Associate Professor and a former Curator of the Natural History Collections under Biological Sciences Department of De La Salle University- Dasmariñas. Her field of expertise includes Aquatic Ecology, Systematics and Environmental Science.

Marivic R. Mitschek ⁽¹⁾; Rosanna Esquivel ⁽²⁾

ANALYSIS OF THE PERFORMANCE OF SUPERVISED LEARNING ALGORITHM FOR ALIGNMENT OF OBJECTIVES AND ASSESSMENTS

Abstract: We can only attain transformational growth if we have a thorough understanding of the intended learning outcomes and educational method. Higher education must reevaluate its methods for teaching and learning as well as its use of technology if it is to address the relevance and quality of the educational experience. The assessment of professional course and general education courses delivery in a blended learning environment and its achievement of learning outcomes were highlighted in this paper. It was meant to see if the blended learning environment's evaluations and tasks were reflected in the expected learning results. Weka 3.8.6 software's implementation of the Correlation and Regression Tree (CART) algorithm made it possible to build decision tree models to evaluate how closely the learning outcomes of the assessments matched either the learning objectives stated at the beginning of the course. Moreover, it also evaluated the accuracy of the models using different predictors using values such as Kappa statistic and Matthews Correlation Coefficient (MCC). WEKA was found effective for classifying predictors for both professional and general education courses utilizing the given predictors. The qualities were found to be effective predictors for identifying how the learning results align via visualization. The researcher recommends that other predictors or attributes should be identified for classification; aside from decision trees, other supervised learning algorithms should be used; assessment criteria should be specified for non-discrete assessments, and assessment method should be incorporated into the assessment model for policy updating and suggestion. outcomes-based education, blended learning, supervised learning algorithm.

BIODATA:

- (1) **Marivic R. Mitschek**, De La Salle University-Dasmariñas, Dasmariñas, Cavite, Philippines.
- (2) **Rosanna Esquivel**, De La Salle University-Dasmariñas, Dasmariñas, Cavite, Philippines

Javee Adison⁽¹⁾; Vradly Llamas⁽²⁾; Renz Vin Manipon⁽³⁾; Marivic Mitschek⁽⁴⁾

INTERNET OF THINGS ENABLED ARCHITECTURE FOR SAFE MODERN PUBLIC TRANSPORTATION AMIDST THE PANDEMIC

Abstract: Everyday items are increasingly becoming intelligent enough to communicate directly with other surrounding and distant systems and things. This research paper discusses the Internet of Things and the creation of an Arduino-based capacity checker and warning system for modern public jeepneys. Public transportation saw a significant shift as a result of the COVID-19 epidemic, and individuals must adhere to the health and safety guidelines established by the World Health Organization (WHO) to stop the virus from spreading further. With the development of technology, it is now feasible to employ sensors or the Internet of Things to monitor compliance with official regulations and standards. The study's objective is to include sensors into contemporary transportation to aid in slowing the COVID19 virus's transmission. A scale replica of a modern jeepney was utilized with sensors installed to assess the impact of sensor integration on public transportation. It demonstrates the operation of the device and how the current jeepney will actually use it. Because of the findings, it is clear that sensors like proximity sensors and weight sensors will be utilized to develop safety regulations for utilizing public transportation. The device shown excellent results in implementing protocols imposed by the government.

BIODATA :

- (1) Experienced Assistant Professor with a demonstrated history of working in the higher education industry. Skilled in Analytical Skills, Lecturing, Editing, Instructional Design, and Public Speaking. Strong education professional with a Master's Degree focused in Information Technology from Adamson University.
- (2) –
- (3) –
- (4) **Marivic R. Mitschek**, De La Salle University-Dasmariñas, Dasmariñas, Cavite, Philippines.

(1) Marivic Mitschek; (2) Roda Sanares; (3) Maria Gloria del Rosario; (4) Juanito Doctor, Jr

EFFECTIVENESS AND STAKEHOLDERS' PERCEPTIONS OF THE STUDENT INFORMATION SYSTEM INTEGRATION IN HIGHER EDUCATION INSTITUTION

Abstract: Due to the pandemic, the majority of human activities must now be done online. The global education system is impacted by the coronavirus. The purpose of this study is to investigate how stakeholders see the role of LMS integration with administrative services. The proponents specifically want to identify and clarify administrative tasks utilizing an LMS, for example, Schoolbook, in a blended learning environment. The integration of LMS with other administrative services like enrollment, account creation, and course development is not covered in any literature, although all higher education institutions use LMS. The study's primary concern is with the integration of student information systems into the management of their administrative tasks using Technology Acceptance Model (TAM). Additionally, there is minimal attention paid to the technological requirements of integrating student information systems. Based on its intended goal, which was to appropriately represent the data from the e-data to the schoolbook, the SIS integration was effective. Perceived effectiveness is, however, impacted by the system's interaction with other DLSU-D services, particularly by the policy on loading and the posting of payments. To ensure that the system will be seen favorably, these two problems need to be resolved. The results are likely to apply to other campus-based courses and universities that place the same emphasis on integrating learning management systems with other existing systems in their organizations, even though not all components of the study can be transferred to other situations. learning management system, technology integration, system integration.

BIODATA:

- (1) Marivic Mitschek,** De La Salle University-Dasmariñas, City of Dasmariñas, Cavite, Philippines.
- (2) Roda Sanares,** De La Salle University-Dasmariñas, City of Dasmariñas, Cavite, Philippines.
- (3) Maria Gloria del Rosario,** De La Salle University-Dasmariñas, City of Dasmariñas, Cavite, Philippines.
- (4) Juanito Doctor, Jr.** De La Salle University-Dasmariñas, City of Dasmariñas, Cavite, Philippines.

(¹) Oki Imanudin, S.Pt., M.S.; (²) Dr. Achmad Firman, S.Pt., M.Si.; (³) Dr. Ir. E. Tanti Marlina, S.Pt., MP. IPU ; (⁴) Prof. Dr. Ir. Ellin Harlia, MS

CHARACTERIZATION OF RUMEN FLUID MICROBIAL OF BUFFALO AS A MEDIA IN LIGNITE COAL IMMERSION IN BIO-BLOCK PRODUCTION

Abstract: This study aims to examine the microbial characteristics of buffalo rumen fluid as a media for immersing lignite coal in bio-block production in producing coalbed methane (CBM). The parameters observed were rumen fluid characteristics, the effect of rumen fluid composition and immersion time on the number of anaerobic bacteria and gas production during anaerobic fermentation. This study used a factorial randomized block design where the coal was immersed in buffalo rumen fluid in a 500 ml serum tube with a volume of 350 ml with the following treatment: A = rumen fluid (as control), B = rumen + coal (1: 1), C = Rumen + Coal (2: 1), D = Rumen + Water, E = Rumen + Water + Coal (1: 1), F = Rumen + Water + Coal (2: 1), G = Rumen + Starch, H = Rumen + Coal + Amylum (1: 1), I = Rumen + Coal + Starch (2: 1), J = Rumen + Cattle mix, K = Rumen + Coal + Cattle mix (1: 1) and L = Rumen + Coal + Cattle mix (2: 1) with the immersion time of 0, 7, 14 and 21 days. Data were analyzed descriptively. The results showed that the treatment and immersion time affected the number of anaerobic bacteria and gas production. The best treatment was produced by treatment L (rumen fluid + coal + cattlemix (2: 1)) with 14 days of immersion time with 1930×10^{-10} cfu /ml of anaerobic bacteria and 329 ml of gas.

Keywords: bio-block, buffalo rumen fluid, coalbed methane (CBM), immersion

BIODATA:

- (1) **Oki Imanudin** has been a full-time lecturer at Universitas Majalengka since 2010. In addition to his teaching duties, he has been an instructor of plethora waste management training in Sumedang, Majalengka and Kalimantan. He published some articles in reputable journals. He currently continues his Doctoral degree at Universitas Padjadjaran.
- (2) –
- (3) –
- (4) –

Cristopher B. Parmis, MSc., RChT⁽¹⁾

SONOPHOTOCATALYTIC DEGRADATION OF EBT DYE USING ZINC OXIDE DOPED WITH POTASSIUM FERRICYANIDE IN SIMULATED WASTEWATER.

Abstract: The presence of dyes in the environment from various sources particularly in the textile industry has been a major concern in recent decades due to its serious implications on natural processes and human health. In this study, a synthesized zinc oxide (ZnO) doped with potassium ferricyanide for the potential degradation of eriochrome black T (EBT) dye in synthetic wastewater via sonophotocatalysis was investigated. Fourier-transform infrared spectroscopy with attenuated total reflection (FTIR - ATR) has shown peaks attributed to ZnO while scanning electron microscopy - energy dispersive x-ray analysis (SEM-EDX) revealed successful incorporation and uniform distribution of the dopant on the surface of ZnO. Removal of EBT dye was optimized based on four factors such as pH level, contact time, catalyst dosage, and pollutant concentration using response surface methodology - central composite design (RSM-CCD) at a frequency of 42 kHz and UV light range of about 365 nm. The predicted and actual optimum EBT removal were achieved at 91.02 % and 91.88 %, respectively with conditions: pH = 8, contact time = 20 min, doped catalyst dosage = 0.3 g, and initial pollutant concentration = 15 mg/L following a linear best-fit model (p-value <0.0001). The linear model equation suggests that the removal of dye was highly influenced by pH and catalyst dosage. In addition, the EBT degradation reaction kinetics follows the linearized zero-order model with correlation coefficient (r^2) value of 0.9977 suggesting that the rate constant is equal to the rate of reaction at all dye concentrations. While additional tests are recommended like catalyst regenerability, this study has successfully demonstrated that zinc oxide doped with potassium ferricyanide assisted by UV radiation and sonication can be an effective method for the removal of EBT dye in wastewater.

BIODATA:

- (1) He is a full-time college instructor in the Environmental science and Chemical engineering technology section under the civil and allied department at Technological University of the Philippines- Taguig Campus since 2019. He earned his Diploma in chemical engineering technology at the Technological University of the Philippines-Taguig in 2013. After a year he took up a ladderized degree program and finished his Bachelor of Science in Environmental science at the same university in 2017. He also passed the chemical technologist/technician licensure examination last 2018. He completed his masteral degree in environmental science at De La Salle University-Dasmariñas. as a teacher and researcher he endeavor to be a good steward of environment by opting a sustainable living.

Dr. Rian Sacıpto, SH, MH. ⁽¹⁾; Dr. Fitriá Dewi Navisa, SH, MKn, MH ⁽²⁾, Mardyanto Wahyu Tryatmok⁽³⁾

LEGAL ANALYSIS OF ENVIRONMENTAL IMPACT DUE TO GOLD MINING IN TUMPENG PITU BANYUWANGI REGIONAL GOVERNMENT

Abstract: Protection and management of the biological environment include process, use, control, treatment, control, and punishment. Steps were taken by the company to handle pollution of natural resources around the mine, for the way, research and analysis of Natural Resources before the implementation of the program, periodic prevention and monitoring, managing waste from the company's activities, avoiding protected zones and conservation and reclamation implementation. The impact of crowding on the environment is very large, namely the inhibition of land fertility, damage to the soil, and the occurrence of shaking of the soil resulting in landslides, as well as the effect on plants and fauna, influential on less healthy communities, and greatly impact on the occurrence of micro changes. Landscape changes and mining sites become damaged and will cause landslides. This type of research uses normative juridical research. While the research approach used by the author of the legislation approach, and case approach. The company's efforts as the main body of mining operations must not only consider the impact on the environment but also consider the impact of mining on the lives of people around the mining area. Through environmental research and analysis before the implementation of the project, the company regularly carries out prevention and monitoring, manages the residual waste in the company's activities, avoids protected areas and protected areas, and carries out reclamation. Tumpeng Pitu mining has a huge impact on nature, namely the decline of land use, the increase in soil density, or landslides, destruction of flora and fauna, public health problems, and microscopic changes in the impact on the environment. environment. While the post-mining impact is a change in The Shape of the land along with the shift of natural plates, along with the occurrence of land irregularities, so that it becomes large holes so that the land becomes unproductive. In this case, the government as an internal policy should pay attention to the impact of gold mining permits in Tumpeng Pitu Banyuwangi. The government was not only tempted by money but also had to consider the dangers of gold mining. Starting from the destruction of forests, the most serious is the impact of mining on the environment of surrounding communities. Similarly, the government cannot directly grant permits to companies to manage to mine, and the government must strictly consider the environmental impact of mining.

Keywords: Environment, Society, Gold Mining.

BIODATA:

(1) Dr. Rian Sacıpto, S.H., M.H. Born in Kendal reGENCY, Central Java 32 years ago, the author is a researcher at the National Research and Innovation Agency as well as a certified lecturer. Studying the science of law has been in the field during his education at The Bachelor's and master's level at Diponegoro University and completed his final education at the Doctoral Program in law at the Sultan Agung Islamic University of Semarang.

(2) **Dr. Fitria Dewi Navisa**, I'm an advocate since 2015 and lecturer at law department, Universitas Islam Malang since 2019. I'm an expert in private law and business law. I graduated S1 in law department, Brawijaya University. S2 in Master of Notary, Brawijaya University, S3 in doctoral program, Brawijaya University. And last took S2 in Master of Law, Universitas Islam Malang. I have 35 journal publications both national and international. I have research experience four times, both internally and nationally.

Rohmatun Nazilah, MTr.Keb⁽¹⁾

Development of an M-Health Based Education " Self Hypnosis and Back Massage" For Fathers to Support Breastsfeeding Mothers.

Abstract: Maternity home visit services by midwives during the peak of the COVID-19 pandemic were restricted, while maternal anxiety and depression increased. Innovation of health promotion is urgently needed to reach pregnant women and her partners for providing support and care, also optimizing parental mental health. The objectives is to develop an education model for maternal support during perinatal period. The methods is using an M-Health based educational model for couple were developed using the intervention mapping approach to systematically explain the process of developing an educational model within five steps: (1) recognizing the determinants and aspects of holistic care during pregnancy through literature review; (2) defining the objectives and the method for the model; (3) translating the method into practical strategies for program design to obtain the objectives; (4) Validating the model; and (5) planning implementation and adoption through a pilot test with 12 couples of pregnant women and their husbands. The result is the M-Health based education model "Self-Hypnosis and Massage for Couple" (SHMC) package consisted of a program book, two e-modules, two power point files, an audio video, and e-certificate. The method used were self-hypnosis for mothers and the fathers get a back massage training for post-natal. The training delivered through Zoom and Whatsapp video. The model had high validation score from the experts of IT (93.3), self-hypnosis (91.1), and postnatal massage (91.6). The user found the material easy to understand. Attending the training were very helpful for managing perinatal stress and anxiety. Conclusion: the SHMC model had a high validity, feasible to apply, and had a high utility. Further research needs to implement this model and analyze the impact.

Keywords: m-Health, self-hypnosis, back massage, couple training

BIODATA:

- (1) **Rohmatun Nazilah** has been an alumni of the Master of Applied Midwifery since 2021. Currently, she devotes herself to being a housewife accompanying her husband who works in Kapuas, Central Kalimantan. Apart from being a housewife, she also does freelance work online, and provides home care mom baby spa services in the Kapuas area of Central Kalimantan. She is very happy with the world of children and devotes herself to serving the community so that mothers can exclusively breastfeed.

Dr.Rumanintya Lisaria Putri,SE,MM ⁽¹⁾, **Sahat Aditua Fandhitya Silalahi, ST, MBA** ⁽²⁾, **Eddy Supriadi Yusuf,SE,MM** ⁽³⁾, **Yoga Cakra Sanjaya,SH,MM** ⁽⁴⁾

FINANCIAL TECHNOLOGY: INCREASING INCLUSIVENESS IN MSMEs AFTER COVID-19

Abstract: Inclusion and Financial literacy is a program that in recent years is being promoted by the government through the Financial Services Authority (OJK) in order to achieve a prosperous Indonesian society supported by financial digitization in order to reach remote parts of Indonesia, people only need to make transactions using mobile phones. . Of course, with the support of internet and electricity service infrastructure that is already available with the availability of digital financial services, people no longer need to go to the bank so that all services switch to smartphones. Fintech bank formal also does not need to set up branch offices (branchless banking) to serve customers. This study aims to find out how the role of financial technology (fintech) in realizing financial inclusion for MSMEs in the post-Covid-19 pandemic period. The research method applied in this writing is a qualitative method by collecting data through a literature study. The results showed that indirectly the Covid-19 pandemic had an effect on increasing the use of technology, including in the financial sector, namely by using fintech. In addition, Fintech provides easy access to various types of financial services, can reach all MSMEs to remote areas, open access to business financing more easily and quickly, and contribute to the empowerment of MSMEs and the local economy in increasing the financial inclusion of MSMEs

Keywords: Financial Technology, Financial Inclusion, MSMEs

BIODATA:

- (1) **Rumanintya Lisaria Putri** – Born in Blitar, East Java, Indonesia on January 30, 1982. Completed her Doctoral Education majoring in Economics, Concentration in Finance in 2019. Currently a researcher at the National Research and Innovation Agency (BRIN), Research Center for Cooperatives, Corporations and People's Economy . The focus of the research areas are Economics of digitization, Management and Business as well as Macroeconomics and International Trade Email: rumanintyalisariaputri@gmail.com, rumanintya.lisaria.putri@brin.go.id.
- (2) **Sahat Aditua Fandhitya Silalahi, ST, MBA**, associate business and management researcher at the National Research and Innovation Agency (BRIN). Obtained his S2 degree from Gadjah Mada University. Explore research on marketing in small and medium enterprises, strategies for State-Owned Enterprises (BUMN), and business development in the sharia and halal sectors. Publications in international journals include: "Factors Affecting Intention to Adopt Halal Practices: Case Studies on Indonesian SMEs" and "Building Halal Industry in Indonesia: The Role of Electronic Word of Mouth to Strengthen the Halal Brand Image (Journal of Islamic Marketing, Q2, Scopus). Correspondence can be by e-mail: saha005@brin.go.id or sahatsilalahi81@gmail.com
- (3) **Eddy Supriadi Yusuf,SE,MM** – Born in Garut, West Java, Indonesia on May 9, 1976. Completed S2 education majoring in Business and Management from Bogor Agricultural University in 2022. He is currently a researcher at the National Research

and Innovation Agency (BRIN), the Center for Cooperative, Corporate and People's Economy Research. The focus areas of research are Agricultural Economics, Management and Business as well as Macroeconomics and International Trade. Email: eddyusuf12@gmail.com, eddy.supriadi.yusuf@brin.go.id

- (4) **Yoga Cakra Sanjaya,SH,MM** – Born in Blitar, East Java, on September 1, 1985. Completed S2 education majoring in Master of Management from Kadiri Islamic University in 2018. Currently a Young Expert in Industry and Trade Extension, at the Blitar City Industry and Trade Office. Email: Cakrasanjaya1985@gmail.com.

Nugrahana Fitria Ruhyana, SP., ME.⁽¹⁾ (corresponding author); Afriyanni⁽²⁾

MAPPING HOUSEHOLD STAPLE FOOD AFTER PANDEMIC COVID-19: THE CASE IN SUMEDANG REGENCY

Abstract: Household spending on food needs has increased during the COVID-19 pandemic. Several important foods experienced price increases and contributed to inflation due to supply chain disruptions and the imbalance between increased demand and limited food production due to social restrictions and climate change's impact. This study aims to provide appropriate policy recommendations and strategies in mapping the types of staple food that are widely consumed and have a large proportion of household expenditure in Sumedang Regency, one of the regions with an agricultural sector base in West Java Province. The data source for mapping basic food needs is the National Socio-Economic Survey for the Consumption Module for March 2021. The initial stage of the research is identifying essential food commodities that can trigger inflation in Sumedang Regency. Then each main food commodity is analyzed for the amount of consumption and household expenditure allocated and compared with the production of these commodities in the local area. The analysis results are presented in a scatter plot and compiled into a staple food management scheme by dividing agricultural and industrial food commodities. Food commodities are divided into basic categories for those whose production level exceeds consumption, including rice, corn, cassava, sweet potato, beef and chicken. Excess production can become export potential or raw material for the processing industry to provide added value. Food commodities with lower production levels than consumption, such as fish, chicken eggs, shallots, and garlic, require increased local production or cooperation with producing regions. Industrial food products still depend on large industries, such as cooking oil, instant noodles, flour, sugar, and salt. Research and innovation are needed to develop local initiatives that produce substitute products, such as mokaf flour from cassava which is abundant in Sumedang, for substitution of wheat flour.

Keywords: staple food; food consumption; food production; agricultural production.

BIODATA:

- (1) Nugrahana Fitria Ruhyana, SP., ME, Regional Research and Development Planning Agency of Sumedang Regency, Sumedang, Indonesia.
- (2) Afriyanni Afriyanni, Research and Development Agency of Pekanbaru City, Riau Province.

Riesti Triyanti, S.Si., M.Ling⁽¹⁾

INTEGRATED RICE-FISH FARMING BUSINESS DEVELOPMENT MODEL TOWARDS AN INNOVATION VILLAGE

Abstract: The increase in the conversion of agricultural land to non-agricultural land has resulted in reduced agricultural land, causing rice production and productivity to decline. If this continues, it will affect food security in Indonesia, especially in Java. One way to control it is to develop a rice-fish integrated farming business. The innovation village initiative aims to improve the lives and livelihoods of rural residents. This study aims to: (1) identify the characteristics of social capital in managing the rice-fish integrated farming business system and (2) build a model of a rice-fish integrated farming-based innovation village. The researcher conducted this research in Candibinangun Village, Special Region of Yogyakarta, Indonesia, in 2020 and 2022. This study used a qualitative approach. The data used in this study is primary data obtained through in-depth interviews and focus group discussions. In addition, the data were analyzed using descriptive analysis. The results showed that the design of the rice-fish integrated farming-based innovation village development model was designed to refer to the fisheries agribusiness system, which includes: upstream, on-farm, downstream, supporting systems and marketing. The model is built from 5 components: government, financial institutions, village-owned enterprises, farmer group association and travel awareness group, associations of farmers using water, and fishery-agricultural extension. The implication is that the studies and results generated from the rice-fish integrated farming-based innovation village model can be adopted in village planning and applied to villages in other districts by adjusting the characteristics of each area.

Keywords: integrated rice-fish farming; agribusiness; innovation village; social capital; institutions; local camphion.

BIODATA:

(1) **Riesti Triyanti** completed her formal education as a Bachelor of Science from Brawijaya University, Malang (2006), in 2016, and the opportunity to continue her education to a Master of Environmental Science at Diponegoro University and graduated in 2018. The author joined the Research Center for Marine and Fisheries Socio-Economics from 2006 until June 2022. Since July 2022, the author has been a researcher with expertise in marine and fisheries socio-economics at the Research Center for Behavioral and Circular Economics, the National Research and Innovation Agency. The author was appointed as a Young Researcher in 2014. The research topics included Economic Valuation, Panel Data, Social-Ecological systems, Value chains, and Fisheries Management. In 2013 and 2015, the author took part in an International Course with a scholarship from the Dutch Government at Wageningen University and Research with the topic of training on Market Access for Sustainable Development and Ecosystem Approach to Fisheries.

Binar Eko Harijanto ⁽¹⁾; Rosita Herawati S.T., M.I.T. ⁽²⁾

IMPLEMENTATION ANALYSIS OF SYNTHETIC DATA VAULT FOR MEDICAL WORKFORCE NUMBER PREDICTION

Abstract: The Covid 19 pandemic has proven us the importance of medical workforce distribution, as insufficiency of health professionals may lead into patient abandonments, eventually casualties. Moreover, healthcare would be more effective if the government have access to future medical workforce numbers. Unfortunately, the implementation of prediction algorithm within the field is not yet present, and high quality medical workforce data in Indonesia are rare. This research approaches said problem by utilizing Support Vector Regression, and Random Forest algorithm to predict future numbers of medical workforce within Semarang city. To fight data scarcity, Synthetic Data Vault technique is implemented to substitute the real dataset. The results are in the form of time series data prediction and accuracy tests using MSE (Mean Square Error) and MAPE (Mean Absolute Percentage Error) to compare the performance of presented methods.

Keywords: Prediction Algorithm, Synthetic Data, Medical Workforce

BIODATA :

(1) **Binar Eko Harijanto** has been a student at Soegijapranata Catholic University since 2018, taking information engineering as his major. Aside from studying, he participated in a number of competitions such as Soegijapranata Creativity Competitions, Cyberlearning Creation Essay Competition, and Sumber Alam Technovation which he ranked 1st, 4th, and 2nd runner up respectively. He has been a member of Soegijapranata Debate Society in 2019. Having a determination to push his skills and luck further, he participated in Student Creativity Program (PKM) with five others. During his time in university, Binar pursued not only programming skills, but also literature writing, economy, and history.

(2) –

(3) –

Winan Kristin Tambunan S.M ⁽¹⁾ Dr. Dra. MY. Dwi Hayu Agustini, MBA ⁽²⁾

DIGITAL AUGMENTED REALITY AS A TOOL FOR BUILDING STRONGER INSTITUTIONAL BRAND IMAGE

Abstract: Digital technology used by universities in delivering their service and learning process particularly during the pandemic covid-19 in which social distance must be applied. Digital augmented reality, an audio visual technology, used in delivering services of a university can create image on the students and publics that the university is an innovative and modern institution. Such image may in turn attract more potential students. This research aims to analysing whether digital augmented reality can really create positive institutional brand image of the university applying the technology. It studied a private university in Semarang applying the technology to build an image as an innovative and modern university. Questionnaires in the form of Google form were distributed to the students and publics who recognize the digital augmented reality applied by the university. The analysis on 75 completed questionnaires results in the fact that augmented reality creates positive brand image of the university. Thus, the university can use this technology as a tool to build stronger brand image.

Keywords:

BIODATA:

(1) **Winan Kristin Tambunan S.M.** adalah seorang Mahasiswi Magister Manajemen di kampus swasta di Jawa Tengah yaitu Universitas Katolik Soegijapranata Semarang. Kota Semarang, Karangrejo, Kec. Gajahmungkur, Kota Semarang, Jawa Tengah 50231

(2) –

Hasna Azmi Fadhilah S.Stp., M.Res⁽¹⁾ Dr. Rian Sapiro S.H., M.H.⁽²⁾ Jalu Azam⁽³⁾

EFFORTS FOR SMES SURVIVE DURING A PANDEMIC: (COMPARATIVE STUDY ON SMES SOCIAL SUPPORT IN BANJARBARU AND SUMEDANG)

Abstract: While it is well-established that the key success of entrepreneurs during pandemic is their ability to adapt to technology and digital marketing. We argue that besides digital intelligence, small-scale business benefit from social support. Through comparative qualitative studies in Sumedang, West Java and Banjarbaru, South Kalimantan we developed a conceptual framework that shows how social support from households becomes an integral part of the daily activities of entrepreneurs. In contrast to the perception of social support which is often cited as a static variable, our findings describe it as a dynamic and continuous process that is at the core of business startup and growth over time. We also challenge the perspective that households are merely a repository of resources and entrepreneurs are passive recipients of support by pointing out that social support should be interactive, where entrepreneurs and households play a collaborative role in entrepreneurship. Finally, we conclude that apart from technological adaptation, social support dynamics need to be taken into account as the main effect model and hypothesis regarding entrepreneurial resilience in times of pandemic.

Keywords:

BIODATA:

- (1) My name is **Hasna**, I currently work as a lecturer in the IPDN government science study program, Ministry of Home Affairs, I like to write articles and publish them so that they can benefit everyone, especially as a reference in deepening material so that it can be used for the advancement of science.
- (2) –
- (3) –

Sefri Doni, M.Pd. ⁽¹⁾; **Eryanti Manurung, SE.** ⁽²⁾; **Anawahidah Rizky Manurung, S.Kom** ⁽³⁾

E-GOVERNMENT IN THE VILLAGES OF LABUHANBATU REGENCY AND ITS IMPACT ON PUBLIC SERVICES

Abstract: The realization of good public services can be done regardless of status, database and the amount of funds owned. The state is obliged to serve every citizen and resident to fulfill their basic rights and needs within the framework of public services which is the mandate of the 1945 Constitution of the Republic of Indonesia. To accelerate the realization of good public services, the central government has distributed government affairs to provincial and regional governments. Although the division of government affairs has been carried out and adequate regulatory support, in reality, public services in Indonesia are still far from what they should be, one of which is in Labuhanbatu Regency. The Public Service Standard Compliance Survey which is routinely carried out by the Ombusman of North Sumatra Province in 2019 and 2021 places Labuhanbatu Regency in the yellow zone where previously it was in the red zone. The poor quality of public services at the district level is an accumulation of poor service quality at the lowest level, namely the village. Therefore efforts to make improvements by utilizing every resource is an absolute thing to do. To try to contribute to solving the problems that have been described previously, a research was conducted on the application of the village information system and saw its impact ON PUBLIC SERVICE EFFICIENCY IN VILLAGE GOVERNMENT IN LABUHANBATU REGENCY. This study used a quasi-experimental design with 18 selected villages as samples. The results of the study show that there is a significant difference between services before and after the use of information systems on the efficiency of public services in village government in Labuhanbatu Regency. This is certainly influenced by many things including the completeness of village apparatus and human resources who are literate to information technology, the availability of information technology devices and the availability of population data. (E-Government) (Village) (Information System).

Keywords:

BIODATA:

- (1) **Sefri Doni, M.Pd** is a Researcher at the Research and Development Agency of Labuhanbatu Regency since 2021. Besides being a researcher he is also an editor in several national journals, one of which is Info Bibliotheca since 2020. Not only that, he also has a side profession as a Content creator at Information Technology in the Library.
- (2) **Eryanti Manurung, SE** adalah seorang fungsional Analis Pemanfaatan Iptek sejak 2022 di Badan Penelitian dan Pengembangan Kabupaten Labuhanbatu. Sebelumnya ia sempat menjabat sebagai kepala sub bagian penyelenggaraan pemerintahan dan pengkajian peraturan pada OPD yang sama sejak 2017. Tidak hanya itu ia juga berpengalaman dalam mendorong OPD di Kabupaten Labuhanbatu untuk menjadikan inovasi sebagai solusi dalam penyelesaian masalah juga sangat mendukung perencanaan yang berbasis riset.

- (3) **Anawahidah Rizky Manurung, S. Kom** is a computer administrator at the Research and Development Agency of Labuhanbatu Regency. Besides being active as ASN Anawahidah is also active in being part of digital transformation and improving Indonesia's digital economy towards Industry 4.0.

Ir. Nicco Plamonia, MT., M.Sc., Ph.D⁽¹⁾

UNDER SUSTAINABILITY PERSPECTIVES: A COMPARATIVE ANALYSIS OF THE COST AND TIME ASPECTS FOR THE USE OF IRONWOOD AND ANDESITE MATERIALS AS A JOGGING TRACK. (CASE STUDY: HOTEL ARUSS SEMARANG)

Abstract: The approach to sustainability act look difficult for some. Developing the hotel facility supposedly considers the sustainability view to the usage of materials. For example, the construction of a jogging track using wood material. Construction a jogging track using wood material can be categorized as an unsustainable act since the use of wood may cause the pressure on natural forest due to tree cutting. Moreover, there are still alternative materials to replace wood materials and less extractive (i.e. Natural Stone). We employ the case study of Jogging Track construction of Aruss Hotel in Semarang, Indonesia. The jogging track is planned to use ironwood material. Ironwood was chosen since it has luxurious, strong and resistant characteristics, at an expensive price because it is rare and only grows in a specific region in Indonesia. We proposing to employ Andesite Materials to replace Ironwood. Andesite material has the characteristics of being resistant to weather changes, the price of the material is more affordable. We proposing the usage of andesite, since the usage of andesite can save the budget (value for money) and meet the needs of artistic value of a hotel We conduct two activities during the research: (1) identify and compare the cost of both materials; and (2) calculates the time for installing both materials. In the first activity, the cost identification is carried out using the direct cost method which is calculated based on the Unit Price Analysis (AHS) of the Indonesian National Standard (SNI) 2021. The unit price is using the local workers wage and unit price of Semarang City's. Second, the analysis of the construction time, by calculating the productivity capacity of workers using worker coefficient index of the AHS-SNI. The result in that the jogging track using alternative andesite materials much cheaper for 73, 91% (IDR 307,031,041.00) compare to the iron wood. The construction time for andesite only takes 13 days while iron wood takes 36 days, it is 23 days faster. We would like to conclude that using andesite material as the alternative of iron wood is a sustainable act. Replacing wood with stone may reduce the pressure to the natural forest. Reduce the pressure to the natural forest can be done together with saving the cost budgets.

Keywords: Sustainable Act, Iron Wood, Andesite, Budgeting

BIODATA

(1) Ir. Nicco Plamonia, ST., MT., M. Sc, Ph.D was born on 15 June 1983 in Kerinci, Jambi, Indonesia. He finishes his basic education in same city. Elementary School (1 July 1988 – 10 June 1994). Junior High School (18 July 1994 – 5 June 1997). Senior high school (3 July 1997 – 22 June 2000). In July 2000, he accepted at Universitas Diponegoro, a public university, finish on 24 of March 2005. Starting in August 2005. He completed a Master in Infrastructure and Built Environment (M.T) (August 2008-October 2010) at the same Institute. Since November 2010, he has worked at PAM JAYA, a Jakarta Water Utility organisation. While working he decides to take Civil Engineering at Universitas Pancasila, a private university,

completed in 9 March 2015. In December 2013, he was accepted as the Master student lead PhD at the University of Twente, the Netherlands. Spending four quartile from 3 December 2013, he finish his Master of Science (M.Sc) in Construction Management and Engineering on 29 of November 2014. His doctoral research started on December 2015 when he successfully presented his research proposal, titled: “Improving the Coverage Area of Drinking Water Provision by using Build Operate and Transfer Investments in Indonesia. An Institutional Analysis”. The research is financed by Lembaga Pengelola Dana Pendidikan (LPDP), Ministry of Finance of the Republic of Indonesia, since awarding the grant in June 2013 until February 2018. In July 2018, he finish his Professional Engineer (Ir.) programme of the Institute of Engineers, Indonesia (PII) and the Institut Teknologi Bandung, West Java, Indonesia. Lastly, in 3 December 2020 he successfully defence His dissertation and earn the Doctor of Philosophy degree.

Binov Handitya S.H., M.H⁽¹⁾; Prof. Harlida Abdul Wahab⁽²⁾; Rian Sactpto, Ph.D⁽³⁾

THE EFFECT OF LOCAL WISDOM ON THE EFFECTIVENESS OF FOREST PROTECTION POLICIES

Abstract: The purpose of this paper is to present the results of research conducted by the author on the several factors that influence the effectiveness of forest protection policies. This study tries to analyze some of the factors affecting degradation including questioning why people are still cutting trees and assess the extent to which the effectiveness of forest protection policy in Indonesia. The data used to corroborate the results of research in the can by distributing a number of questions on a questionnaire given to respondents by purposive sampling. Respondents selected by 40 people on average work as farmers/cultivators who have taken or cut wood in the forest, so the data obtained is expected to represent the purpose of the study. The results of filling out questionnaires by respondents showed data that the highest factor determining why people cut wood in the forest was due to economic reasons and ignorance of existing policies. Meanwhile, for some questions that lead to the effectiveness of forest protection policies, respondents tend to answer that they don't know. Another analysis of the research conducted looks at the current application of sanctions, including administrative sanctions, fines and even imprisonment, which cannot show the enforcement of forest destruction violations in a better direction. The contribution made after analyzing the results of the questionnaire and reviewing several forest protection policies is that it is necessary to add some provisions on the study of local wisdom and the formulation of new forms of sanctions that are more effective, such as social sanctions.

Keywords: Policy Effectiveness; Forest Protection; Social Sanctions.

BIODATA:

- (1) **Binov Handitya S.H., M.H**, Lecturer at Ngudi Waluyo University Semarang, Indonesia.
- (2) **Prof. Harlida Abdul Wahab**, Lecturer at Ghazali Shafie Graduate School of Government Universiti Utara Malaysia.
- (3) **Rian Sactpto, Ph.D**, Researcher at The National Research and Innovation Agency, Indonesia.

R. Setiawan Aji Nugroho, PhD⁽¹⁾; B. Linggar Yekti Nugraheni, SE, MComm, Phd, Akt⁽²⁾; Dr. Agnes Advensia Christmastuti, SE., MSi.⁽³⁾

E-SUPPLY CHAIN AND FINANCIAL TECHNOLOGY ADOPTION FOR SOCIAL FORESTRY FARMERS

Abstract: Studies on factors determining the intention of use of technology applications by social forestry farmers have been overlooked. There are more than 100.000 social farmers in Java, Indonesia, which is grouped into one foundation named Social Forestry Society Movement (SFSM). The foundation finds difficulties to govern its organization and initiate to apply a supply chain and financial system. This study investigates factors determining the intention to use the supply chain and financial system by the social forestry farmers. This study uses Technology Acceptance Model framework and conducts surveys to social forestry farmers. This study finds that intention to use the supply chain and financial system is determined by the perceived usefulness, perceived ease of use and perceived attractiveness. This study also finds that computer or mobile phone self-efficacy strengthen the association between perceived usefulness, perceived ease of use, perceived attractiveness, and intention to use.

Keywords:

BIODATA

(1) **Robertus** is the vice rector of innovation, research and publications at Soegijapranata Catholic University, Semarang. Currently, he is a visiting scientist at CSIRO Data61, Australia. Robertus received his PhD from Macquarie University in 2018 and master degree in computing and information technology from the University of New South Wales, Australia in 2009. He was a PostDoctoral Research Fellow at Dept. of Computing, Macquarie University, Australia, co-funded by CSIRO Data61. In his research career, Robertus has been granted many prestigious awards, including: Research Excellence Progress Award, from Dept. of Computing, Macquarie University (May 2016), Digital Productivity Award, from CSIRO Data61, in recognition of significant contributions in support of scientific outcomes (December 2015), Best Paper Award, from Web Information System Engineering (WISE) 2015, Rank A Conference based on CORE RANKING, ERA RANKING. Miami, Florida, USA, Best Student Paper Award, from IEEE BigData Congress 2015, New York, USA (Acceptance Rate 18%), Postgraduate Studentship Award, from CSIRO Data61 (April 2014). His current research interests include bigdata, social network analysis, machine learning, web engineering, and computational linguistic.

(2) –

(3) –

Bernadeta Soedarini⁽¹⁾; Dion Nugraha⁽²⁾; Mellia Harumi⁽³⁾

CHEMICAL SANITIZERS AND THEIR APPLICATION IN FOOD INDUSTRY

Sanitation in food industry aims to ensure the food safety of the final product. Sanitizers are chemicals with ability to reduce the number of microorganisms present on the surface of equipment. There are many types of sanitizers available on the market, each has different level of effectiveness when it is applied in particular food industry. The effectiveness of sanitizer can be influenced by several factors among others concentration, contact time, equipment materials and typical microorganisms present in the food industry. Plate-shaped equipment is commonly used in the seafood and bakery industry. They are such as conveyor equipment, cutting boards, tables and knives. Considering the materials and characteristics of the equipment, it would be a challenge to fit the sanitizer due to its effectiveness as well as its safety aspects of the residue. The purpose of this study was to mapping various kinds of sanitizers applied to plate-shaped equipment used in the seafood and bakery industry. There were at least 50 journal articles related to the topic used in this study.

Keywords: sanitation, chemical_sanitizers, plate-shaped equipment, food_industry

BIODATA:

(1) **Bernadeta Soedarini** is a PhD who works as a senior lecturer at Soegijapranata Catholic University in Semarang Indonesia since 1994. Together with Mellia Harumi, MSc; she offered several research topics to the undergraduate and master students which are mostly in food quality and safety. The abstract sent to this conference is actually one of them.

(2) –

(3) –

Noval Fajar Kustiawan.⁽¹⁾; Dr. Leonardus Heru Pratomo S.T., M.T⁽²⁾

A VOLTAGE CONTROL ON WIND TURBINE POWER PLANT APPLICATION USING PMSG FOR BATTERY CHARGING

Abstract: Renewable energy can be used for free and continuously. Wind energy is one of the renewable energies, this energy can be converted into electrical energy with equipment called a permanent magnet synchronous generator (PMSG). The output voltage from the results of this energy conversion varies greatly, it takes an equipment to regulate the output voltage. The method to obtain a controlled output voltage is done by installing a DC-DC converter. In order to get a lower voltage, a step down DC-DC converter is installed. This equipment is implemented by using two active power switches and two passive power switches. The regulated output voltage is generated by installing a microcontroller type STM32F407 as the main control device. In order to verify what is being done, computational simulations and implementations are carried out in the laboratory. From the test results, the system is able to work well. The load used in this test is a 48 Volt battery consisting of four 12 Volt batteries.

Keywords: Renewable Energy, Step Down DC-DC Converter, PMSG, STM32F407

BIODATA:

(1) **Noval Fajar Kustiawan** was born in Semarang, Indonesia, in 1999. At a recent, he is studying at under graduation program at Soegijapranata Catholic University.

(2) –

Dr. Andy Bhermana, SP., MSc⁽¹⁾

MANAGEMENT AT DEVELOPED AREAS THROUGH SPATIAL LAND USE PLANNING USING LANDFORM APPROACH

Abstract: The need of spatial land use planning become apparent since the region has an opportunity to be developed for agricultural development. On the other side, balanced environment should be maintained in order to achieve sustainability for future use. Land resources information can then be used as basic information and prerequisite for analysis and evaluation in planning process. This study was conducted in East Barito district with total areas of 382,688 hectares and basic data is mainly available at scale of 250,000. Landform approach using slope classification was then used to determine agricultural land regions. Procedure of land suitability evaluation in addition to geographic information system (GIS) technology were applied to define specific kind of use for lands. In the case of East Barito as study areas, mainly on the basis of digital elevation model (DEM) analysis, the region can be classified into 6 slope classes i.e. <3%; 3-8%; 9-15%; 16-25%; 26-40%; and >60%. The result of land suitability evaluation integrated into GIS environment establish that arable lands that can be utilized for agricultural purposes is still available with total area of 226,211 hectare (59.11% of total study areas. The region can then be delineated for group of commodities involving food crops (annual crops) and estate crops (perennial crops). Further land evaluation also indicated that there are several regions that spatially are recommended only for forest because of the existence of limiting factor such as slopping lands and peat depth in peatlands.

Keywords: spatial, land use, planning, landform, slope.

BIODATA

(1) **Andy Bhermana** is a senior researcher at Research Center for Geospatial - National Research and Innovation Agency. He has been a full-time researcher since 2004 with his expertise involve land use planning, soil mapping, geographic information system and remote sensing.

Dra. Elly Kuntjorowati, M.Si⁽¹⁾; Dr. Soetji Andari, M.Si⁽²⁾; Dra.Husmiati, M.Soc.Sc. PhD; ⁽⁴⁾ Akhmad Purnama, S. Sos, M.A⁽³⁾

ASSISTANCE OF PEOPLE WITH COMMUNITY-BASED MENTAL DISORDERS IN THE TIMES OF THE COVID-19 PANDEMIC

This study aims to identify the efforts of companions in exploring the potential for meeting the basic needs of ODGJ (People with mental disorders) during the Covid-19 pandemic. Knowing the obstacles faced by ODGJ in meeting basic needs during the Covid-19 pandemic. The problem is, what are the efforts of the facilitators in exploring the potential for meeting the basic needs of ODGJ during the Covid-19 pandemic? and what are the obstacles faced by ODGJ in meeting basic needs during the Covid-19 pandemic? The research method used in this type of research is action research. The research location is in Sleman Regency and Bantul Regency, Special Region of Yogyakarta. The research subjects were community-based ODGJ companions (consisting of ODGJ observers/carers, community leaders, and ODGJ families) according to research needs, 60 respondents were involved in each location. Data collection techniques using field notes, interviews, questionnaires, and documentation. Data analysis used descriptive qualitative. The results showed that the efforts to assist ODGJ both in Sleman Regency and Bantul Regency as a whole were in the very good category. Constraints faced by companions include: ODGJ is very dependent on companions, especially in terms of eating, taking medicine, resting, and bathing if they don't often forget. In terms of psychology, ODGJ is very difficult to communicate, socializing with the community feels awkward and most people do not support the existence of ODGJ. In terms of the economy, most of the ODGJ families come from poor families without skills, so they cannot fully support treatment.

Keywords: ODGJ Assistance; Community based, Pandemic Covid-19

BIODATA

(1) **Dra. Elly Kuntjorowati, M.Si** Born in Yogyakarta, on July 24, 1957. Domiciled at Jl. New Package UH VI/1099 Yogyakarta. Completed his Bachelor's degree in History Literature from the University of Indonesia in 1984 and Master of Science, Government Science – School of Village Community Administration (STPMD) in 2010. Has a history of work as a Staff of the Director General of Binkesos Jakarta (1984-1985), Staff of UKPK Regional Social Affairs Office (1986), and Staff of Evstat B2P3KS Yogyakarta (1987-1989). He currently holds the position of Principal Researcher in the field of Social Service System expertise at the National Research and Innovation Agency (BRIN) with rank/goal. Middle Principal Advisor, IV/d. Active as a member of the DIY Indonesian Research Association. Can be contacted via email at elly003@brin.go.id, ellykuntjorowti@gmail.com, and contact 082227728790. The publication history is as follows: Elly Kuntjorowati 2022 Suicide as a Human Tragedy: Causes and Relief Efforts, Journal of Hunan University Natural Sciences Vol 49 (5) 25 2022. Elly Kuntjorowati 2021 Social Rehabilitation Program of Uninhabitable Houses with Social Impact on the Welfare of Beneficiary Families in Pringsewu Regency, Lampung Province Journal of Social Welfare Research Vol 20 No 3 of 2021

- (2) **Dr. Soetji Andari, M.Si** .Born in Bandung on May 18, 1965. Completed his undergraduate education in Social Welfare at STKS Bandung, continued his master's education in Social Welfare Policy at Gadjah Mada University and completed his doctoral education in Sociology at Gadjah Mada University. Has a work history as a District Social Worker. Purwakarta, Indonesian Braille Publishing Center staff, and researchers at the Center for Research and Development of Social Welfare Services (B2P3KS) Yogyakarta. He currently holds the position of Associate Researcher in the field of social welfare expertise at the Research Center for Social Welfare, Villages and Connectivity of BRIN with the rank/goal being Young Main Trustees, IV/c. He can be contacted via email at soet001@brin.go.id and soetjiandari@gmail.com.
- (3) **Dra.Husmiati,M.Soc.Sc.PhD** Born in Makassar, on October 9, 1967. Completed his undergraduate education at the Bandung College of Social Welfare, and completed his master's and doctoral degrees at Universiti Sains Malaysia (USM) Penang Malaysia. He currently serves as an Associate Researcher in the field of Social Welfare expertise at the Research Center for Social Welfare, Villages and Connectivity (KSDK) of the National Research and Innovation Agency (BRIN) with a rank/purpose. Young Main Trustees, IV/c. He is an active member of the Indonesian Research Association, LSP, and the Quality Assurance, Division. Can be contacted via email at husmiati@brin.go.id. The history of publication is as follows.

Faizal Bukhori.⁽¹⁾; Dr. Leonardus Heru Pratomo S. T., M. T.⁽²⁾

IMPLEMENTATION OF SINGLE PHASE 5-LEVEL INVERTER FOR INDEPENDENT POWER SUPPLY APPLICATION

The trend of solar energy power generation is growing rapidly in Indonesia. The main requirements for this generation are a Photovoltaic, DC-DC converter with a maximum power curve algorithm and inverter. Utilization of photovoltaic and DC-DC converters are used to get maximum power. The inverter is used to convert DC voltage to AC voltage according to the IEEE 519 standard. Conventional inverters have limitations such as high switching frequency and large voltage stress, and high harmonic values. The solution to this problem is a multilevel inverter. The main problem with multilevel inverters is the number of power switches used and their control strategies. This paper will discuss a 5-level inverter and control strategy to produce a regulated output voltage according to the IEEE 519 standard. The 5-level inverter consists of 6 active switches with two voltage divider capacitors on the input side. Computational simulations are carried out to determine the performance of the designed system and the final stage of hardware implementation in the laboratory. The test results obtained that the system could work well as an independent power supply and has a defect rate of 4.07%. This result is still below the IEEE 519 standard with a maximum value of 5%.

Keywords: Photovoltaic, Harmonic, 5-Level inverter, regulated output voltage

BIODATA

(1) **Faizal Bukhori** was born in Grobogan, Indonesia, in 2001. At recent, he is study at under graduation program at Soegijapranata Catholic University.

(2) –

Melvin Kurniawan Hartono⁽¹⁾; Dr. Leonardus Heru Pratomo S. T., M. T⁽²⁾

HARDWARE IMPLEMENTATION OF P&O PLUS PROPORTIONAL INTEGRAL IN TLBC CONVERTER FOR MPPT APPLICATION

Abstract: New and renewable energy sources have a clean, free, and sustainable character. Photovoltaic (PV) is one energy source that uses sunlight to produce DC electrical energy. PV has a unique characteristic curve, so it is necessary to pay attention to the curve for operating PV. PV should not be loaded directly because the load curve is uncertain at the maximum area. A DC-DC converter with a maximum power algorithm is needed to obtain maximum power. Three-Level Buck Converter (TLBC) is a converter with the ability to convert high voltage and current, so it has many advantages compared to conventional Buck DC-DC converters. The TLBC converter is highly efficient and very suitable for PV applications. Maximum Power Point Tracker (MPPT) is an algorithm used to get maximum power, one of which is Perturb and Observe (P&O). However, the algorithm (P&O) is added with a Proportional Integral (PI) control system to get even better performance. A computational simulation is carried out to ensure the interpretation of these two control strategies. Implementation is the final stage in a laboratory to see the performance of the system that has been designed. From the results of implementation, the system can operate properly and has an efficiency of 84%.

Keywords: TLBC converter, MPPT, P&O, Two control strategies, efficiency

BIODATA:

- (1) **Melvin Kurniawan Hartono** was born in Semarang, Indonesia, in 2000. At present, he is studying at the undergraduate program at Soegijapranata Catholic University.
- (2) –

Yustina Trihoni Nalesti Dewi⁽¹⁾

CONFLICT EARLY WARNING SYSTEM 2.0 FOR THE CITY OF AMBON

Abstract: Between 1999-2002, Ambon experienced a deadly period of interreligious violence. The post-conflict period featured a relatively fragile peace. The divide between the two religious identities was never truly resolved, and distrust and polarization continue to persist. Cognizant of this fact, Institut Tifa Damai Maluku (ITDM) launched an early warning system (EWS) in 2005 which aided local communities to identify potential triggers to violence and to respond timely and appropriately. While this programme was discontinued in 2012, data from the period of 2012-2021 nonetheless demonstrates that many grievances remain unresolved. In light of this, calls to renew ITDM's initiative have resurfaced. The goal of this research is to construct and implement a more permanent and sustainable EWS in Ambon. Our EWS system is based on three cornerstones. First, full engagement of both grassroots and official administrative institutions, improving upon ITDM which was discontinued due to a lack of legal and administrative support from authorities. Second, our EWS draws from local values and customary laws (adat) which have been proven by previous research to be powerful tools for conflict resolution and reconciliation. Third, our proposal innovates upon ITDM by coupling an AI-driven conflict prediction system powered by machine learning, allowing real-time analysis of public internet activity to more rapidly predict and react to potential areas of conflict by identifying provocative or hate messages online. The project is realized through three stages of approximately one year each. The EWS is developed in the first year on the basis of a multidisciplinary study encompassing literature reviews, interviews and focus group discussions with the aim of identifying the optimal structure of the EWS based on social theories on conflict escalation and resolution, the specific nature of the Ambonese people, adat, their customs and their values, previous successful EWSs in different countries, and lessons learnt from the ITDM venture. We also develop the EWS AI and define the data used to train its machine learning component before training the model to produce accurate predictions of conflict risks. In the second year, we inculcate the EWS in select areas in Ambon which have agreed to test the proposed EWS within their communities. Throughout the second year, data is collected to determine levels of user satisfaction, its viability, the practical costs and expenses, and the efficacy of the system to predict and prevent conflicts. We also establish a preparatory network of strategic alliances between stakeholders and community members which enables general implementation in Ambon. In the third year, we undertake the final steps necessary to implement the EWS in Ambon. We engage with the Ambonese authorities and draft a proposed regulation to support the EWS. Second, we establish the necessary network for the city-wide EWS through workshops, seminars, discussions and media promotion. We also provide technical training for the AI operators. The project is realised once the EWS is fully functional and appropriately supported and backed by the local government to allow long-term and sustainable conflict prevention.

BIODATA:

- (1) **Yustina Trihoni Nalesti Dewi** graduated from Law Faculty of Gajah Mada University. She currently is a senior lecturer and Head of The Research and Community Service Institute of Soegijapranata Catholic University Indonesia. She specializes in international law, humanitarian and human rights law, and conflict

reconciliation. She has published 4 books, many articles, and other works. She was invited as a visiting scholar at Flinders Law School, Adelaide, Australia (2010 and 2013) and as a guest researcher at Norwegian Center for Human Rights, Oslo University, Norway in 2009. Dr. Dewi has been involved in multiple research projects on social conflict, reconciliation and reparation, and frequently works together with the International Committee of the Red Cross (ICRC) in disseminating of human rights and humanitarian law issues in the workshops, seminars, and courses for the Indonesian lecturers and public officials.

⁽¹⁾**Dr. Elly Kristiani Purwendah, S.H., M.Hum.;** ⁽²⁾**Dr. Daniel Joko Wahyono, M.Biomed.,** ⁽³⁾**Elisabeth Pudyastiwi, S.H., M.H.**

SUSTAINABLE WASTE MANAGEMENT TOWARDS “ZERO WASTE” THROUGH CIRCULAR ECONOMY CONCEPT IN BANYUMAS REGENCY

Abstract: Indonesia is committed to implement a circular economy under the umbrella of low-carbon development and a green economy through a circular economy that aims for “zero waste”. The implementation of a circular economy has the potential to provide positive economic, social and environmental benefits such as increasing green jobs, reducing waste generation and reducing greenhouse gas emissions. To achieve this goal, this paper uses a concept approach with secondary data sources in the form of primary, secondary and tertiary legal materials. Regulation of the Minister of Public Works of the Republic of Indonesia Number 03/PRT/M/2013 as implementing the provisions of Article 18 Paragraph (5), Article 24 Paragraph (1) and Paragraph (3) and Article 25 Paragraph (3) Government Regulation No. 81 of 2012 concerning Management Household Waste, regulates the Integrated Waste Processing Site (TPST) as a place for collecting, sorting, reusing, recycling, processing and final processing activities. Waste management in Banyumas Regency is the administration of government affairs in the field of the environment and the field of public works and spatial planning, sub-issues of waste. The population of 1.78 million people (2020 population census) shows a high population with waste problems of up to one hundred and forty-three (143) per day, equivalent to 1,650-1800 m³. This condition caused a waste emergency in 2018 with the closure of two (2) of the 3 (3) existing TPAs. As an innovation, the Banyumas Regency government carried out a waste management method using waste as a resource by involving nine (9) Community Self-Help Groups (KSM).

Keywords: zero waste, circular economy, green jobs, waste

BIODATA

- (1) Dr. Elly Kristiaani Purwendah, S.H., M.Hum.,** has been a permanent lecturer at the Faculty of Law, Wijayakusuma University, Purwokerto since 1994 until now. Become a reviewer in the Journal of Bina Hukum Lingkungan (Sinta 2), Editor Section Study of Legal Research E-Journal janabadra, Reviewer Journal of Batulis Civil Law Review Universitas Patimura Ambon, Reviewer Journal of Komunitas Yustisia (Sinta 5), Reviewer Journal of Pendidikan Kewarganegaraan (Sinta 4), Board of Editor Ganesha Law Review. Reviewer Journal of Lambung Mangkurat Law Journal, Program Magister Kenotariatan Fakultas Hukum Universitas Lambung Mangkurat, Banjarmasin (Sinta 3).
- (2) Dr. Daniel Joko Wahyono, M.Biomed,** has been a permanent lecturer at the Faculty of Biology, Jenderal Soedirman Universitas Purwokerto since 1991 until now. Become a Member of the Editorial Board of Scientific Magazines Biosfera a Scientetific Journal (Sinta 3).
- (3) Elisabeth Pudyastiwi, S.H., M.H.,** has been a permanent lecturer at the Faculty of Law, Wijayakusuma University, Purwokerto since 1994 until now.

⁽¹⁾Victoria Kristina Ananingsih ⁽²⁾ Cynthia Andriani ⁽³⁾ Ecclesia Alfa ⁽⁴⁾Sumardi

PROCESSING OF NON-GLUTEN CEREAL BISCUITS WITH THE ADDITION OF OAT FLOUR AND JALI FLOUR (*COIX LACRYMA-JOBI L*)

Abstract: Biscuits are one type of bakery product that is produced by baking dough. The use of jali and oats has begun to be developed as a substitute for flour for bakery products. Jali (*Coix lacryma-jobi L*) has a high protein content (13 g) and is being widely developed. Oats contain soluble fibre, namely glucan, to slow the increase in blood sugar. In particular, jali and oats do not contain gluten and can be consumed by people with celiac disease. This study aimed to formulate non-gluten biscuits with a combination of oat flour and jali flour. and to determine the physicochemical and organoleptic characteristics of those biscuits. Non-gluten biscuits is made with five formulations, F1 (100% oat flour: jali flour 0%), F2 (60% oat flour: 40% jali flour), F3 (50% oat flour: 50% jali flour), F4 (40% oat flour: 60% jali flour), and F5 (0% oat flour: 100% jali flour). The research started with making biscuits (creaming, mixing, moulding, and baking), then continued with physical testing using a texture analyzer, proximate testing, and a sensory hedonic rating test (30 untrained panellists). Physical testing with the lowest hardness parameter at F1 was 571.67 gf and the highest was at F5 (1549.43 gf). The results of the proximate test of biscuits from the five formulations had a moisture content of 5.64-5.99%, ash content of 1.76-1.83%, fat content of 0.23%, crude fibre content of 2.26-6.91%, and protein content of 9.04-11.42%. Based on the sensory test, overall, the F1 biscuit formula was the most preferred by the panelists, with a sensory score of 4 out of 5. The more jali flour is added, the higher the protein content. The best formulation was 60% jali flour and 40% oat flour because the characteristics of texture, taste, color, and aroma were not significantly different from the use of 100% oat flour.

Keywords: biscuit, jali, non-gluten, oat

- (1) **Victoria Kristina Ananingsih** is a full-time lecturer at Food Technology Department, Soegijapranata Catholic University, Indonesia since 1998. In addition to her teaching duties, she has been editorial board of her campus academic journal, Journal of Food Culinary, Nutrition and Technology since 2022. She is teaching Food Processing Technology course so that her students can learn how to process good quality food products using appropriate unit operation.
- (2) **Cynthia Andriani** has been a part time lecturer at Food Technology Department, Soegijapranata Catholic University, Indonesia since 2021. She is teaching some courses: Food Processing Technology, Machines and Equipments, Dairy Technology, and Plant Design. She will continue her PhD at Auckland University, New Zealand in February 2023.
- (3) **Ecclesia Alfa** has been graduated from Food Technology Department, Soegijapranata Catholic University, Indonesia in 2022. She dedicated as Research Assistant in the project: "Processing of non gluten biscuits", that belong to Food Processing and Engineering Research Group.
- (4) **Sumardi** has been a full time lecturer at Food Technology Department, Soegijapranata Catholic University, Indonesia since 1993. He is teaching some courses: Mathematical Modeling, Statistical Analysis, and Computer Application.

Mellia Harumi, S.Si., M.Sc.⁽¹⁾

THE ANALYSIS OF SALAD DRESSING SHELF-LIFE BASED MAYONNAISE USING POLYETHYLENE TEREPHTHALATE (PET) PACKAGING

Abstract: The effect of levels of oxidation in various oil salad dressing emulsion and shelf life affecting conditions on stability and peroxide values (PV) were determined. PV measurement was carried out by titration method and visual observation of stability to support the data. About 5 type of oils were used in this product formulation, i.e soybean, sunflower, canola, coconut, and virgin coconut oil. Products were made without egg yolk and changed with soybean milk and xanthan gum as emulsifier and stabilator. PET packaging was used to set the same condition with 56 days of observation. The observation was conducted for every 7th day. The data was then calculated using ASLT method with Arrhenius approach. The results showed that the more composition of xanthan gum made the sample have a good emulsion stability value. When compared with commercial products, salad dressing in this study had the longest shelf life of 132 days (salad dressing with canola oil, stored at 25 °C). The shortest shelf life of salad dressing is 46 days (salad dressing with soybean oil, stored at 45 °C). Commercial salad dressing products have a shelf life of up to 11 months. Therefore, the use of preservatives and antioxidants have the potential to be used to increase the shelf life of salad dressing products.

Keywords: salad dressing, ASLT, mayonnaise shelf-life

BIODATA

(1) **Mellia Harumi, S.Si., M.Sc.**, Department of Food Technology, Faculty of Agricultural Technology, SCU. Jl. Pawiyatan Luhur Sel. IV No.1, Bendan Duwur, Semarang

Dhiyan Krishna Wardhani, ST., MUE.⁽¹⁾

COMMUNITIES AND WELL BEING: STUDY OF RELATIONSHIP BETWEEN CITY BRANDING AND URBAN SUSTAINABILITY FOCUSING ON TOURISM CITY: SOLO

Abstract: By offering a supportive management framework that promotes behaviors that revolve around innovation, revitalization, improving the urban environment, and providing incentives for creating an sustainable city identity, city branding theories and practices can successfully support urban sustainability. Residents of successful branded cities support the brand because these cities present themselves in convincing ways, which reinforces the brand's veracity. Most importantly, these communities establish a system of interdependence between the population and local government, advancing toward shared objectives to start the city's growth, development, and economy. Solo as a traditional city in Indonesia, whose branding strategy is helping the city to achieve a more sustainable way of community, planning, economy while at the same time promoting itself as a tourism city. Solo provides an example of a city that has international exposure as Spirit of Java through local culture, food, and festivals with traditional identity represent Java. The city promotes local culture as a branding to boost economy and city development.

BIODATA:

- (1) **Dhiyan Krishna Wardhani, ST., MUE.**, Environmental and Infrastructure Engineering Department, Soegijapranata Catholic University, Jl. Pawiyatan Luhur IV/1, Semarang, Indonesia

Krisna Wiyarta⁽¹⁾

CHARACTERISTICS OF SAMBILOTO (ANDROGRAPHIS PANICULATA) LEAVES EXTRACT AT COMBINATION OF TEMPERATURE AND TIME IN ULTRASONIC

Abstract: Natural medicines become one of alternatives for maintaining health, especially during COVID-19 pandemic. One of the ingredients that have the effect of increasing immune booster is sambiloto. Sambiloto can be extracted to be used in food and beverage industries. One of the modern extraction methods is the Ultrasonic-assisted Extraction (UAE). The advantages of this method are saving extraction time, optimizing solvents, and preventing compound damage due to high temperatures. The purpose of this study was to determine the characteristics of sambiloto extract at combination of temperatures and times using UAE method. This research begins with drying sambiloto leaves and grinded into powder. Then, the powder was dissolved and extracted in an ultrasonic bath at 30oC, 40oC, and 50oC for 5, 10, and 15 minutes. The parameters measured were antioxidant activity, total flavonoid, and color. The result of this study was found that temperature significantly affected the antioxidant activity and total flavonoid. Meanwhile, time only significantly affects antioxidant activity. In the color test, there was no significance, either temperature and time variables. The combination of temperature and time that produce the best characteristics of sambiloto extract is 40°C within 10 minutes.

Keywords: UAE, Sambiloto, Antioxidant Activity, Total Flavonoid Content

BIODATA

(1) **Krisna Wiyarta** has been a college student at Soegijapranata Catholic University of Semarang, Indonesia since 2018. In the final year of his study in Food Technology major, he made a bachelor thesis about ultrasonic-assisted extraction of sambiloto. His enthusiasm in product development, technology, and business made him interested in making sambiloto, as one of ingredients that has potential as natural medicine, to be extracted using Ultrasonic-Assisted Extraction technology to increase its efficiency in the process of production from sambiloto extraction.

Clara Bonita Dinar Ristanti, S.Psi⁽¹⁾, Agustina Sulastri⁽²⁾

DETERMINATION OF PSYCHOLOGICAL WELFARE (WELL-BEING) AT RETIREMENT AGE: A LITERATURE REVIEW

Abstract: Retirement is a phase which have to be faced by a worker in the completion of his work duties. The preparation of the process draws attention to the people who experience it or the stakeholders to provide policies on the retirement matters. This research aims to provide information about the factors which influence the welfare of life (wellbeing) in the retirement. This research applies a literature review of nine journals which discuss about retirement. This research was conducted by looking for journal sources in an application called Publish Perish by using two keywords “Retreatment” and “Pension”. The crossafe search found that there are 5 journals from the keyword “Pension” and 10 journals from the keyword “retreatment”. After the reduction, nine journals were obtained according to the researcher’s desire. The result of this research shows the factors affecting the retirement’s wellbeing which are categorized by: psychology, economics, social, gender and health. Psychology deals with loneliness, anxiety, or negative psychological factors. Economics deal with deals with income and financial support in retirement. Social problems are more related are more related to relationships in the family and the people around then who support retirement. The health factor is always presented in every retirement situation because health becomes a big expense in retirement.

Keywords: pensioner, wellbeing, literature.

BIODATA

- (1) **Clara Bonita Dinar Ristanti, S.Psi**, Faculty of Psychology, Soegijapranata Catholic University, Jl. Pawiyatan Luhur Sel. IV No.1, Bendan Duwur, Kec. Gajahmungkur Semarang.
- (2) **Agustina Sulastri**, Full Time Lecturer At Universitas Katolik Soegijapranata. Doctor of Philosophy (PhD) Educational Psychology di Radboud University

B. Linggar Yekti Nugraheni, SE., MCom., PhD., CA⁽¹⁾ ; Shresta Purnamasari, SE., MSc⁽²⁾ ; Apelina Teresia, SE.,MAk⁽³⁾; Stefani Firzca Dewi, SE., MSc⁽⁴⁾; R. Setiawan Aji Nugroho, ST., MComp.IT., PhD⁽⁵⁾; Dr. Agnes Advensia Chrismastuti, SE., MAk., CPA⁽⁶⁾

BUSINESS MODEL FOR SOCIAL FORESTRY BUSINESS UNIT

Abstract: Social forestry is a governmental permit scheme giving rights to forest farmers to utilise forest. This study aims to develop a business model for social forestry farmers. There have been some scholars conduct studies on the business model development for non-profit or non-governmental organisations. However, there has no studies investigates and develops an appropriate business model for social forestry farmers. This study applies a case study in an organisation that manage social forestry in Java island i.e. Social Forestry Society Movement (SFCM) and conducts FGD with some ministries and leaders, partners, and representatives of social forestry farmers. Findings of this study are; first, a cooperative must be the heart of the business model; second, the role of technology may help to govern the organisation and reduce the distribution channel of social forestry commodities; third, there has to be a mutual business model between SFCM and business partners in developing business units.

Keywords: Social_forestry; business_model; social_forestry_society_movement; cooperative; technology

BIODATA

(1) **Linggar** a full time lecturer in the Department of Accounting Soegijapranata Catholic University. She is interested in conducting researches in the area of financial accounting, SMEs, and organisational studies. She is a reviewer in some reputable national and international journals.

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Emma Rahmawati, SE., M.Kesos⁽¹⁾ Mujiyanto⁽²⁾, Azhar Amir⁽³⁾, Taufan Daniarta Sukarno⁽⁴⁾, Suprapedi⁽⁵⁾

VILLAGE WASTE MANAGEMENT MODEL IN CREATING AN INCLUSIVE ECONOMY

Abstract: Waste is a common problem faced in various regions, a lot of waste has not been handled specially in rural areas. The percentage of waste generated in villages is higher than in the urban areas, mostly due to the larger number of residents in villages. But behind the waste problem, there is an economic opportunity if the village can manage it well. Currently, there are villages that have succeeded in managing their waste that can realize an inclusive economy inside their villages. Therefore, the purpose of this research is to develop a village waste management model in implementing an inclusive economy. This research method used descriptive qualitative data collection through in-depth interviews, FGD's and observation. The results showed that the village waste management model includes a management team, processing plan, technology, financing, utilization and collaboration. This village waste management model involves various parties and the participation of village communities inclusively proven to reduce poverty and stunting in the village.

Keywords: Inclusive Waste Management; Village; Inclusive Economy.

BIODATA

- (1) Emma Rahmawati**, currently working as a researcher at the National Research and Innovation Agency (BRIN). This woman who was born in Jakarta, February 10, 1989, has a Bachelor's Degree in Management, a Master's Degree in Social Welfare Science and is currently completing her doctoral education in the Environmental Science Doctoral Program. The last few years have been quite active in writing on matters related to management and social welfare and the village environment, as well as issues related to SDGs and Village Competitiveness. National Research and Innovation Agency (BRIN), Jl. Gatot Subroto Kav.10, Jakarta Selatan 12710, Indonesia; Graduate School, Doctoral Program of Environmental Studies, Brawijaya University, Jl. MT Haryono 169, Malang 65145, Indonesia
- (2) Mujiyanto**, Ministry of Villages, Disadvantaged Regions Development and Transmigration, Jl. TMP Kalibata 17, Jakarta Selatan 12750, Indonesia
- (3) Azhar Amir**, National Research and Innovation Agency (BRIN), Jl. Gatot Subroto Kav.10, Jakarta Selatan 12710, Indonesia
- (4) Taufan Daniarta Sukarno**, National Research and Innovation Agency (BRIN), Jl. Gatot Subroto Kav.10, Jakarta Selatan 12710, Indonesia

(1)Nadya Ramadi, SM; (2)Dr. Dra. MY. Dwi Hayu Agustini, MBA

THE IMPACT OF SELF-EXPRESSIVE BENEFITS AND GREEN ATTITUDE ON GREEN PURCHASE INTENTION

Abstract: Consumers' intention on green product has been increasing along the time. Consumers are willing to pay higher price for green product since they can get psychological benefit by expressing their selves in green consumption (self- expressive benefits). Such consumers usually show awareness and have positive attitude toward the environment. The study aims to analyze impact of self-expressive benefit and green attitude toward purchase intention on green product of natural coloring batik Siputri. Survey using questionnaire was conducted to the buyers of batik Siputri. The questionnaire was distributed using google form and the data was analyzed using linier regression. The result indicates that self-expressive benefit and green attitude have significant effect on the purchase intention of batik Siputri. The management of batik Siputri must innovate the product and do marketing communication to leverage self- expressive benefits on the customers and increase positive attitude toward the environment.

Keywords: green attitude, green product, purchase intention, self-expressive benefit

BIODATA:

(1) Magister Manajemen, Unika Soegijaprata Semarang, Jl. Pawiyatan Luhur IV 1, Semarang Indonesia

(2) –

(1)Lidwina Deang Lung; (2)Dr. Dra. kawati Marhaenny Dukut, M.Hum.

STARBUCKS EFFORTS IN INDONESIA’S POVERTY ALLEVIATION: A SEMARANG CASE STUDY

Abstract: Poverty Alleviation is an attempt by a country to solve poverty. Indonesia is a developing country which, in fact, still has a high poverty rate. Various agencies helped the government in alleviating poverty. One of these institutions is Starbucks Coffee. Starbucks is a coffee shop that is popular among the public. In addition to focusing on selling coffee and making a profit, Starbucks also has a program called Corporate Social Responsibility (CSR) in which they participate in protecting the environment and helping needy people. In addition, they carry out various activities such as collaborating with coffee plantations, especially in developing countries, providing clean water, donating part of their income to the Foundation, etc. In this presentation, the researchers will describe what Starbucks has done to solve poverty. By using interviews with several Starbucks baristas in Semarang, the researchers found that, among others, there is a need to socialize the green brand image of Starbucks as a way of decreasing poverty.

Keywords: Poverty alleviation, Starbucks, pop culture, CSR

BIODATA:

- (1) Lidwina Deang Lung** is a student of the English Department, Faculty of Language and Arts, Soegijapranta, Semarang, Indonesia. Her interest is in popular culture. She is a 7th semester student who is working on her thesis proposal on Starbucks.
- (2) Dr. Dra. Ekawati Marhaenny Dukut, M.Hum.** is a full-time lecturer at the English Department, Faculty of Language and Arts, Soegijapranta, Semarang, Indonesia since 1998, who specializes on American Popular Culture. Students who have worked with her dealt with the popularity of Instagram, Facebook, Podcast, TikTok and many other popular culture products.

(1)Agung Cahyadi, SE; (2)Dr. Elizabeth Lucky Maretha S., SE, M.Si, CPA

THE EFFECT OF ECONOMIC VALUE ADDED, MARKET VALUE ADDED, AND CARBON EMISSION DISCLOSURE ON STOCK RETURN

Abstract: Public interest in investment continues to grow along with the increase in financial literacy. It's easy to make investments, making it vulnerable in decision-making. The stock price is an indicator of the company's financial performance, but the value in the financial statements cannot be used as a reference by investors in measuring the company's performance because the value of the financial statements is a reflection of historical value in the past, not the current market value. To overcome these shortcomings, financial analysts have developed the concept of measuring financial performance using Economic Value Added (EVA) and Market Added Value (MVA). If EVA and MVA are positive, it means that the company can provide added value to investors because the value generated exceeds the cost of capital, otherwise, if EVA and MVA are negative, the amount of return received by investors is lower than the cost of capital issued. The company's commitment to environmental performance is an added value for investors because it indicates the company can continue its business. This study aims to examine the effect of EVA, MVA, and disclosure of carbon emissions on stock prices. The data collection method in this study uses non-participant observation, namely annual reports and sustainability reports sourced from the Indonesia Stock Exchange. This study uses multiple linear regression analysis tools. Hypothesis testing using the T-test, simultaneous hypothesis testing using the F test. The sample criteria in this study are companies that are included in the SRI-KEHATI index consecutively from 2016 to 2020. The results of this study indicate that only MVA has an effect positive and significant, while EVA has a negative and significant effect, while the disclosure of carbon emissions has a negative and insignificant effect.

Keywords: EVA, MVA, Disclosure of carbon emissions, the stock price

BIODATA:

- (1) Agung Cahyadi SE** as an active student in SCU's Master of Accounting. He received a Masters grant from DIKTI. He is as an active student in SCU's Master of Accounting. He received a Masters grant from Dikti. Agung has also worked in accounting and finance. He is currently works at KONI Semarang City as an accounting and tax staff.
- (2) Dr. Elizabeth Lucky Maretha** lecturer at the Accounting Study Program for S1 and S2 Accounting, Faculty of Economics and Business, Soegijapranata Catholic University. The courses taught are Financial Management, Investment Theory, Capital Markets, Financial Analysis and Valuation, Asset Management, Risk Management, and Stock Systems. The author is more focused on the behavior of individual investors and corporate actions in carrying out company operations to get better company value.

Muhammad Hilmy Aziz, S.Sos., M.I.Kom⁽¹⁾

COMMUNITIES AND WELL BEING: INTEGRATION OF THE INNOVATION DIFFUSION MODEL AS THE DEVELOPMENT OF A COMMUNITY SECURITY STRATEGIC COMMUNICATION MODEL (SDG'S PROGRAM)

Abstract: Security is a significant need in human life. Security can color all activities of human life, ranging from personality, behavior patterns, and ways of respecting and thinking. What will also have a great spirit when this security can be obtained optimally is a lifestyle. Through a sense of security, humans can improve all their abilities without shame and fear. However, this expectation clashes with security that cannot be obtained optimally, so efforts are needed to realize security conditions in accordance with the indicators in the SDGs. This study aims to create a strategic communication model for improving public security that is close to the SDGs expectation index. Then the research method used is descriptive qualitative with data collection through literature studies and a review of research results relevant to the study's focus. The results of the research after the in-depth analysis are as follows: 1) The community's sense of security is the primary need for efforts to give birth to community welfare; 2) The objective reality of community security in various regions has not been evenly distributed, especially in big cities, especially the capital city of Jakarta, where the sense of community security is so low; 3) The interaction of 5 (five) elements in the communication strategy, namely innovation, communication channels, time, social systems, and technology, can increase the community's sense of security or security; 4) Integrative elements of modification of the innovation diffusion model cannot be separated when implemented as a communication strategy to increase security.

Keywords: Strategic Communication Model, Security Communication, Diffusion of Innovation

BIODATA

(1) **Muhammad Hilmy Aziz** was born on April 25, 1995, in Surabaya. In 2020, he graduated from the Master of Communication Science Study Program at Diponegoro University, and in 2017, he graduated from the Communication Science Study Program UPN "Veteran" East Java. Since 2021, I have been a permanent lecturer in the Communication Science Study Program at Bhayangkara University Surabaya. The best article grace was awarded at the International Conference event FISIP UPN "Veteran" East Java, held in 2021. Currently, the focus of research or expertise is on communication science in public relations and strategic communication.

(1)Oei, Vanessa Ignatia; (2)Stephana Dyah Ayu Ratnaningsih, SE.,Msi.,CA.,CPA.

IMPACT SUSTAINABILITY AT UNIVERSITY TO CREATE SUSTAINABLE ACCOUNTANTS

Abstract: This study aims to determine the influence of campus sustainability, environmental sustainability, and education about sustainability that affect students' attitudes and intentions to become sustainable accountants. As well as assessing the role of the universities in integrating these three factors. The survey was conducted on 239 accounting students in Semarang. The sample is determined by random sampling. This study uses linear regression to examine the effect of campus sustainability, environmental sustainability, and education on sustainability on the intention to become a sustainable accountant. This study also examines the mediating effect of attitudes on sustainability against the existing model. Of the ten hypotheses developed, all were accepted. The test results showed us that those three factors positively affect students' attitudes and intentions to become sustainable accountants. There is a mediating effect of attitudes toward sustainability on the factors that influence the intention to become a sustainable accountant. The results show that the role of universities related to policies in implementing sustainability factors affects students' attitudes and intentions of students to become sustainable accountants. Implication: The test results show the need for universities to attempt on having organizations or programs that can create sustainability around the campus and its surroundings as well as support in the field of education in promoting sustainability to influence students' attitudes and intentions to become accountants who support sustainability. Moreover, it can also be useful for further developers, especially to build the students' awareness regarding environmental sustainability.

Keywords: Campus Sustainability, SDGs, Sustainability Accounting.

BIODATA:

- (1) Oei, Vanessa Ignatia** She is an accounting student at Soegijapranata Catholic University, Indonesia. She actively participates in organizations on campus, one of which is the Student Executive Board of the Faculty. She is also interested in doing research in the field of sustainability because it is something that is rarely researched and is related to the accounting profession in the future.
- (2) Stephanha Dyah Ayu Ratnaningsih, SE.,Msi.,CA.,CPA** She has been a teaching staff of accounting at Soegijapranata Catholic University Semarang. She has been the secretary of the Center for Accounting Research and Development since 2021. She is active in conducting research and community service, especially in the fields of accounting and sustainability. Some of her teaching systems combine research, teaching, and community service.

⁽¹⁾Gracelia Noviana; ⁽²⁾Stephana Dyah Ayu Ratnaningsih, SE., Msi.,CA.,CPA

DETERMINANT OF SUSTAINABILITY BEHAVIOR UPGRADING

Abstract: The purpose of this study was to ascertain whether knowledge and attitudes regarding sustainable development have a positive impact on sustainable behavior. The sample of this study was 239 accounting students at universities in Semarang City. Data were collected using the sample method. The researcher used multiple regression to test the hypothesis, by testing 2 hypotheses, namely hypothesis 1 the level of student knowledge about sustainable development has a positive effect on sustainable behavior and hypothesis 2 student attitudes have a positive effect on sustainable behavior. Both hypotheses are accepted with the result of study show that student knowledge and attitudes have a positive impact on their sustainable behavior, because students exhibit a wide range of sustainability-related knowledge and attitudes, though some aspects of sustainable development remain unclear to them. Sustainable behavior is influenced by attitudes and knowledge levels. Especially in order to promote student understanding of using natural resources wisely and conserving the environment, it is intended that universities will increase their teaching of sustainable development. The findings indicated that student knowledge and attitudes have an impact on sustainable behavior. As a result, improving sustainable behavior requires disseminating extensive knowledge and cultivating a supportive mindset. Either adding sustainability-related activities or in learning processes or by having academics create broad courses on sustainability. The following study is advised to make changes by examining variables that may have an impact on students' knowledge and attitudes about sustainable behavior.

Keywords: Sustainable Development, Knowledge, Attitudes, Behaviors, University Student

BIODATA:

- (1) Gracelia Noviana** I am accounting student at Soegijapranata Catholic University, Semarang. I am a student who is involved in events and activities on campus. I also serve as administrator of UKM PPM. I'm particularly interested in performing study on sustainability at this time. Sustainability is a topic that is not only appealing but is also growing in importance for the entire community.
- (2) Stephan Dyah Ayu Ratnaningsih, SE., Msi.,CA.,CPA** She works as an accounting professor at Soegijapranata Catholic University in Semarang. Since 2021, has held the position of secretary for the accounting research and development center. Her studies and volunteer work are particularly active in the areas of accounting and sustainability. One method of instruction that has been created combines research, instruction, and volunteer work.

⁽¹⁾Stefani Ipsika Clara Ayu Pratami; ⁽²⁾Stephana Dyah Ayu Ratnaningsih, SE., Msi.,CA.,CPA

SOCIO-DEMOGRAPHIC FACTORS IMPACT ON SIX PRIMARY CORPORATE SOCIAL RESPONSIBILITY

Abstract: The purpose of this study was to ascertain how sociodemographic characteristics affected the six primary corporate social responsibility. This study was used 239 accounting students from Semarang as a sample. The researcher collected data through surveying. Using SmartPLS, 18 research hypotheses were examined. The three sociodemographic variables of gender, academic stage, and work experience are hypothesized to have an impact on the six primary corporate social responsibility involved economic responsibility, legal responsibility, ethical responsibility, stewardship principle, company-employee relationship, environmental responsibility. According to the findings of the analysis test done with SmartPLS, only the academic phase has an impact on students' perception of the six primary corporate social responsibility. The six primary corporate social responsibility initiatives had little impact on students' perceptions regardless of gender or work experience. Even if the academic phase is the only one that effected, it has the greatest effected on legal responsibility. In contrast to gender and job experience, the academic phase has an impact on students' perception of the six main CSR initiatives. This demonstrates how learning from each university has a significant impact on how accounting students understand and perception the six primary corporate social responsibility. Implication: The study's findings that it may supply knowledge to universities, which can then include learning students about the six primary corporate social responsibility from beginning to final levels. The following study is advised to make improvements by looking for factors that may affect students' perceptions.

Keywords: Perception, CSR, Sociodemography

BIODATA:

- (1) **Stefani Ipsika Clara Ayu Pratami** She is a Soegijapranata Catholic University in Semarang accounting student. Student Pastoral Services is one of the groups on campus where I am involved in student life. I have a strong interest in researching CSR, a program that can aid in the accomplishment of sustainable development objectives. Because my future profession is related to this subject, which is rarely investigated.
- (2) **Stephana Dyah Ayu Ratnaningsih, SE., Msi.,CA.,CPA** She works as a teaching staff at Soegijapranata Catholic University, Semarang. Since 2021, has held the position of secretary for the accounting research and development center. Her studies and volunteer work are particularly active in the areas of accounting and sustainability. One method of instruction that has been created combines research, instruction, and volunteer work

Daniswara Agusta Wijaya, S.Psi., M.Psi., Psikolog⁽¹⁾

RISK MANAGEMENT OF ADVERSE CHILDHOOD EXPERIENCES' EFFECTS AMONG ADOLESCENTS: INDONESIAN CONTEXT

Abstract: Research on adverse childhood experiences (ACEs) have been increasing recently, especially in several developing countries. It is undeniable that ACEs have long-term impacts which can cause several negative outcomes among adolescents. Considering vulnerability and individual perception of ACEs influenced by cultural variations, risk management need to be constructed based on specific culture and context. Thus, risk management need to be established to prevent negative outcomes specifically among Indonesian people. This study was conducted using systematic review on several previous literatures with specific keywords related to ACEs in Indonesian Adolescents. Articles and literatures were retrieved from Google Scholar. In Indonesia respectively, previous research has shown numbers of adversity such as violence, neglect, family disfunction and also malnourishment. Results from some regions of Sulawesi and Java displays varied concept of ACEs across cultures in Indonesia. In order to formulate culture-based risk management there are several issues, in Indonesia specifically, that should be taken into accounts such as how ACEs perceived based on local points of view, traditional familial interaction and values, patriarchy culture, and traditional concepts/beliefs. Findings are expected to pave the ways for future research and policy on Indonesian adolescents.

Keywords:

BIODATA:

(1) **Daniswara** is now a Junior Lecturer at Psychology Faculty of Soegijapranata Catholic University, has been worked since 2021. Daniswara has taken part in numbers of International Joint Research, specifically on the topic of neuropsychology and developmental psychology. Besides, he is also a clinical psychologist with focus on children and adolescents. Several journal articles and therapy module have been published, not only as the outcomes of his research projects but also clinical practices.

Meida Rachmawati⁽¹⁾, Eko Eddy Supriyanto⁽²⁾, Herie Saksono⁽³⁾, Fibry Jati Nugroho⁽⁴⁾, Rian Sacıpto⁽⁵⁾

Green Taxonomy: Indonesia's Green Economy Governance Policy

Abstract: The purpose of this article is to analyze the green economy policies implemented by the government. The method used in the preparation of this article is a literature review. We measure the green economy based on (1) sectoral support, (2) green growth curriculum, and (3) development tools. The results of this study are that sectoral support must-have aspects of the Green Growth Program promoting green investment in three priority sectors: sustainable energy, sustainable landscapes, and green infrastructure in Special Economic Zones (SEZ). The green growth curriculum program refers to the Green Growth Competency Development System for State Civil Apparatus so that the state apparatus can formulate policies following the green development model roll. The third result is the development of tools, including expanded cost-benefit analysis and strategic environmental studies. This paper concludes that the government must plan these three things to sustain a green economic ecosystem. The green economy is expected to be able to change the macro economy into social inclusion which in turn can change aspects of poverty in society.

Keywords: Green Taxonomy, Green Economy, Policy.

BIODATA:

- (1) **Meida Rachmawati**, meidaleanptsg@gmail.com Universitas Ngudi Waluyo, Semarang.
- (2) **Eko Eddy Supriyanto**, eddyaisme@gmail.com STKIP Nahdlatul Ulama Kabupaten Tegal
- (3) **Herie Saksono**, herie.saksono26@gmail.com Badan Riset dan Inovasi Nasional.
- (4) **Fibry Jati Nugroho**, fibryjatinugroho@gmail.com STT Sangkakala, Salatiga.
- (5) **Rian Sacıpto**, rian.sacıpto@gmail.com Badan Riset dan Inovasi Nasional.

Tirza Marselina⁽¹⁾; Stephana Dyah Ayu R., SE., M.Si., Akt⁽²⁾

ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT GOALS IN ASEAN COUNTRIES

Abstract: The purpose of this study is to describe the results of achieving the 17 SDGs in ASEAN countries as a fulfillment of Sustainable Development. For the method, this study was conducted using descriptive analysis of economic, social, environmental, peace and Justice data owned by countries in ASEAN. The type of secondary data used is public big data published by the World Bank. This study analyzed the results of achieving SDGs in ASEAN countries using Google Data Studio visualization. The result of this study showed that there are differences in the achievement of SDGs achievement performance from ASEAN countries. Singapore focused on the economic pillars, especially on GDP per capita and Fixed Broadband Subscription, so it was easy to achieve the pillars of social, environmental, peace and justice. Indonesia focused on managing biological and animal diversity supported by abundant natural resources. Malaysia focused on achieving renewable internal freshwater and renewable energy consumption. Vietnam achieved achievements on gender equality on social pillars. Thailand focused on meeting food needs on the environmental pillar. The conclusion of this study is the achievement of Sustainability Development by applying the same goals faced with the limitations of the conditions of each country, especially in natural resources. The UN's establishment of 17 goals at the international level and the sustainability report achievement blueprint cannot guarantee that every country can provide the same performance on each goal. The balance and application of these 4 pillars will create sustainability in the earth's governance system. For Implication, this research provided input to countries in ASEAN on improving and developing the achievement of SDGs goals

Keywords: Sustainable Development Goals; ASEAN Country

BIODATA:

(1) –

(2) **Stephana Dyah Ayu R., SE., M.Si., Akt** is a teaching staff of accounting at Soegijapranata Catholic University Semarang. She has served as secretary of the Accounting Research and Development Center since 2021. She is active in conducting research and community service, especially in the fields of accounting and sustainability. Some of the teachings developed to use a service learning pattern that combines research, teaching, and community service. This helps students to better understand the material by doing community service. This model also collaborates with students in umbrella research that is integrated with the needs of society.

Sri Purwanti, ST., M.M. G.M.Urp⁽¹⁾

COMMUNITY PARTICIPATION TOWARD ORGANIC AND NONORGANIC GARBAGE, CASE STUDY IN MAGELANG MUNICIPALITY

Abstract: Garbage were a global problem, non-organic garbage tends to be hard to break down which has a great impact on environmental degradation, but organic garbage is very easy to break down and also has an impact on a dirty, clumsy, and bad odor in the surrounding area. This study aims to prove the public's contribution toward garbage elimination which handle by households. This study uses descriptive qualitative methods and uses three samples for comparison. The result of this study is the participation of the community which is different in every part of the City, the volume of garbage is also different in every nongovernmental group (KSM) and the volume of organic garbage is always bigger than nonorganic garbage. Maggots have a huge contribution toward garbage reducing nearly 100%, besides that the leftover garbage is less than 10%. It can be concluded that the contribution of the community toward garbage reduction is more than 90%

Keywords: Community, Participation, garbage

BIODATA :

(1) Her name is **Sri Purwanti**, her email is sripurwanti93@yahoo.com. She is An Architect but She Works in the Regional Development Planning Board of Magelang City, Central Java, Indonesia as a Planner Analyst since 2011. She also got a scholarship in 2016 which brought her to study at Keio University, Japan. But, until now, she still has a problem with English. so, please don't ask a lot but you can give her some advice to complete her study. Her hobby is Zumba, so she could get a lot of ideas and inspiration when she goes to Aerobic/ Zumba class. She has a big interest in Environmental Issues because she realizes that when the Government tried to make Development Planning, They must notice the carrying capacity and what it caused/impacted by the Development. She also has been worked in a community empowerment program in 2008 in Karawang Regency, South Java Indonesia which has a concern with Poverty Alleviation.

Noorvita Ika Mardianti, SKM., M.AP⁽¹⁾

INDONESIAN LAND REFORM, BETWEEN FOOD SECURITY OR ECONOMIC GROWTH AS A POVERTY ALLEVIATION

Abstract: The Central Statistics Agency (BPS) recorded that the number of poor people in March 2022 reached 26.16 million people or 9.54% of the total population of Indonesia, with the percentage of poor Indonesians in rural areas of 12.29%, meanwhile, the percentage of poor people in urban areas was 7,50%. Agrarian Reform is a significant strategic move that, if carried out methodically, will alter the composition of land usage and tenure in the agricultural sector. Due to this circumstance, struggling farmers will be more likely to own productive land, which will boost their chances of increasing their income. That requires compatible and comprehensive rules, to face problematic relationship between poverty reduction and entrepreneurship promotion. The nation considered in this study have seen an increase in "subsistence" or self-provisioning output as a result of a mix of factors. The method used is a qualitative research method through analytical literature reviews. Thus, the theory that policies might reduce poverty by giving poor people access to assets and encouraging entrepreneurship and growth, while downplaying the role of the state in Indonesia in supporting rural households' agricultural produce.

Keywords: Poverty, Land Reform, Economic, Food Security

BIODATA:

(1) Noorvita Ika Mardianti, noorvita81@gmail.com, is a Civil Servant in Regional Secretariat of Central Java Province. She earned a bachelor's degree in Public Health, Diponegoro University, Semarang, Indonesia; Masters in Public Administration, Brawijaya University, Malang, Indonesia. Her thesis on minimal services in the health sector is included in the Mini Directory of Public Administration Thesis-Dissertation I published by Bappenas in 2018 which is edited by Dr. Guspika, MBA (Head of Pusbindiklatren Bappenas RI). She has several publications indexed by google scholar: eprints.undip.ac.id; fia.ub.ac.id and Russian Journal of Agricultural and Socio-Economic Sciences 71 (11), 2017

Annisa Indah Pratiwi, S.T.⁽¹⁾

THE EFFECTIVENESS OF USING ECO BAGS TO SUPPORT SUSTAINABLE DEVELOPMENT GOALS: A REVIEW

Abstract: Eco bags usher in a new era of reducing plastic use progressively being used as an alternative in shopping malls, supermarkets, public markets, and by every business actor. This is due to the government's policy of prohibiting the use of plastic bags and switching to environmentally friendly grocery bags. Eco bags are the latest innovations for grocery bags with environmentally friendly raw materials because it is easy to recycle and decompose. However, the usage of eco bags is not the greatest alternative that provides a solution because it produces new clusters of waste as a result of their use and contributes to the impact of climate change. This paper focuses on the effectiveness of utilizing eco bags in decreasing plastic waste and integrating it with SDGs point 13, namely climate change and its effects. This paper uses a document study or literature review method related to the environmental impact analysis of eco bags in several countries. The results of the researchers showed that the process of making eco bags made of craft paper bags and cotton woven bags which are often found in supermarkets and shopping centers have a higher negative impact on climate change. Given this phenomenon, the government should re-evaluate this regulation related to using environmentally friendly grocery for maximum use and not produce new clusters of waste from it.

Keywords: eco bags, environment, sustainable development goals, climate change

BIODATA :

(1) **Annisa Indah Pratiwi**, has been a staff at BRIN since 2022. She started her career as a laboratory analyst in a private company, then turned into an environmental laboratory analyst in Bogor Regency. She has studied environmental engineering at Sahid University, Jakarta. Currently, she is involved in the Sustainability Assessment, Ecodesign, and Industrial Ecology research groups at the Center for Sustainable Production Systems Research and Lifecycle Assessment.

⁽¹⁾ **Dr. Daniel Joko Wahyono, M.BioMed.;** ⁽²⁾ **Dr. Elly Kristiani Purwendah, S.H., M.Hum;** ⁽³⁾ **Basuki, S.T., M.T.**

RECENT DEVELOPMENT OF BIOFUELS AND BIOENERGY TECHNOLOGY

Abstract: Dependency on fossil fuels is one of many threats to human civilization due to its rarity, unsustainable nature and a major contributor to climate change, making it necessary for alternative energy sources that are sustainable, low emission and abundant. One of the alternatives of energy sources studied by researchers is biofuel. Biofuel is a fuel that comes from plants or algae or waste from organic materials or biomass. Biofuel has actually been around for several decades and is used as an alternative energy for industrial and domestic purposes on a small scale due to the limitations of the technology at that time which made the effectiveness of the energy that were produced inadequate. In this review paper, we will discuss the latest developments in biofuel technology in the modern era where we will discuss how advances in genetic engineering, nanotechnology and developments in production lines and various other technological developments that can enable the production of environmentally friendly and sustainable fuels that are easily available so that later it can become a main replacement for fossil fuels.

Keywords: Biofuel, Bioenergy, Green Energy, Green Technology, Sustainability

BIODATA :

- (1) Dr. Daniel Joko Wahyono, M.Biomed,** has been a full time lecturer at the Faculty of Biology, Jenderal Soedirman University Purwokerto since 1991 until now. He becomes a Member of the Editorial Board of Scientific Magazines Biosfera a scientific journal (Sinta 3).
- (2) Dr. Elly Kristiani Purwendah, S.H., M.Hum,** has been a full time lecturer at the Faculty of Law, Wijayakusuma University, Purwokerto, since 1994 until now. She becomes a reviewer in the Journal of Bina Hukum Lingkungan (Sinta 2). Editor Section Study of Legal Research E-Journal janabadra, Reviewer Journal of Batulis Civil Law Review Universitas Pattimura Ambon, Reviewer Journal of Pendidikan Kewarganegaraan (Sinta 4). Board of Editor Ganesha Law Review, Reviewer Journal of Lambung Mangkurat Law Journal, Program Magister Kenotariatan Fakultas Hukum Universitas Lambung Mangkurat, Banjarmasin (Sinta 3).
- (3) Basuki, S.T., M.T.,** has been a full time lecturer at the Faculty of Engineering, Wijayakusuma University, Purwokerto, since 1998 until now. He becomes an active contributor in Journal of Majalah Teodolita Universitas Wijayakusuma.

(1) Dr.Ing. Ir. Winarna, M.A.; **(2) Tutun Seliari, S.T., M.Sc. (correspondent);** **(3) Dr. Ing. Ir. Paulus Bawole, MIP.**

TOURISM DESTINATION DEVELOPMENT MODEL THROUGH COMMUNITY-BASED TOURISM APPROACH

Abstract: The Covid-19 pandemic has had a huge impact on tourism activities both domestically and internationally. Tourism and culture are being faced with similar challenges in adapting to new situations and conditions. The current development carried out by the Ministry of Tourism of the Republic of Indonesia is the design of rural tourism travel patterns and urban tourism. One of them is “Gelang Projo” which integrates Magelang – Kulon Progo – Purworejo. The village of Hargorejo which is the locus of this research is one of the tourist destinations that is part of the design of the rural tourism travel pattern. Kalurahan Hargorejo, located in Kapanewon Kokap, Kulon Progo Regency, Special Region of Yogyakarta, is in the “Bedah Menoreh” program area which is being developed by the Yogyakarta Special Region Government. This is an opportunity for Hargorejo Village to seize opportunities as a tourist destination to improve the community's economy. By using the Community Based Tourism (CBT) approach, this study aims to obtain a model for developing tourist destinations that support the “Bedah Menoreh” path exploration in the Hargorejo Village. The method of data collection was carried out using action research with the implementation strategy using Community Action Plans (CAP). From the results of research that has been carried out through field surveys, interviews and FGD’s with local communities, village officials and related parties, the economic dimension, social dimension, cultural dimension, environmental dimension, and political dimension are important factors in the of tourism village development model. The strategy in formulating a tourism village development model in the Hargorejo Village is through developing human resource capacity and the performance of the business community / MSMEs, improving the management (management of tourism village), increasing the attractiveness of tourism village, and increasing promotions. The whole series of model processes for developing tourist destinations in the Hargorejo Village is manifested in a tagline, “Citra Pesona Wisata Hargorejo”, which represents the Hargorejo Village as a charming and attractive tourism village for tourists.

Keywords: community-based tourism, tourism village, community empowerment, tourism model development, community action plan

BIODATA :

(1) Dr.-Ing. Ir. Winarna, M.A., winarna@yahoo.com, is a lecturer at the Department of Architecture at Duta Wacana Christian University, Yogyakarta. He currently serves as the Dean of the Faculty of Architecture and Design, Duta Wacana Christian University. Since 2000 until 2022 he has conducted research with the theme of using informal spaces in the middle of the city, urban public spaces, and the landscape of tourist spaces. During the Covid-19 pandemic, he conducted research on the redefinition of public space during the Covid-19 pandemic with a case study in the city of Yogyakarta. He is also active in community service activities through community empowerment with community-based village planning activities.

- (2) **Tutun Seliari, S.T., M.Sc.**, tutunseliari@staff.ukdw.ac.id is a lecturer at the Department of Architecture at Duta Wacana Christian University, Yogyakarta. From 2016 to 2022 he has conducted research on the theme of architecture and tourism. Together with Mr. Winarna and Mr. Paulus Bawole, she is a member of the Laboratory of Environment, Urban and Settlement. During the Covid-19 pandemic, she conducted several studies related to the existence of tourist destinations. She is also active in community service activities through community empowerment with community-based village planning activities.
- (3) **Dr.-Ing. Ir. Paulus Bawole, MIP.**, paulus@staff.ukdw.ac.id Paulus Bawole is a lecturer at the Department of Architecture at Duta Wacana Christian University, Yogyakarta. He served as Deputy Dean for Academic Affairs at the Faculty of Architecture and Design and served as Chair of the Masters Program in Architecture at Duta Wacana Christian University. His field of expertise is urban design architecture, urban settlement, and landscape architecture. He has done a lot of research with the themes of development of urban kampong, urban settlement, community empowerment, spatial planning and disaster. He is also active in community service activities through community empowerment with community-based urban planning activities.

Dendy Setyawan, S.Si., MT⁽¹⁾

LEADING PRODUCTS AND INVESTMENT ANALYSIS TO IMPROVE FOOD-PRODUCER GROWTH CENTER REGIONS (STUDY IN LAMONGAN REGENCY, EAST JAVA)

Abstract: This study aims to find out how big the regional development gap is in Lamongan Regency and find solutions to narrow the gap through selecting the right regional base sector to be developed further. 27 sub-districts in the Lamongan Regency area were investigated to find out their base sector. Using the service hierarchy analysis and ICOR it was found that the potential and efficient sectors to develop are Health Services and Social Activities, while the potential but less efficient sectors that still feasible to be developed were Agriculture, Forestry & Fisheries, Water Supply, Waste Management and Recycling, Construction & Real Estate and Information and Communication. Meanwhile, sectors the non-potential and inefficient to develop are Minings, Electricity and Gas Supply, Wholesale and Retail, Financial Services and Insurance, Service Companies and Educational Services.

Keywords:

BIODATA

- (1) **Dendy Setyawan, S.Si., MT**, was born in Madiun, currently working as a researcher at the Research and Development Agency of East Java Province. The author is currently studying the Doctoral Program in Economics at the University of 17 August 1945, Surabaya, and is very interested in regional economic development activities

(1) Zukruf Novandaya; (2) Holi Bina Wijaya; (3) Sri Hestningsih W; (4) Wiwin Widiastuti

INSTITUTIONS' ROLE IN MSME CLUSTER SCALING UP: CASE OF JAWA TENGAH PROVINCE, INDONESIA

Abstract: The Central Java MSME cluster has a central role in the economic development of Central Java. The cluster concept in the development of MSMEs is needed to support the integration of localization benefits and economic benefits. Optimization of MSME cluster institutions to support MSMEs is needed to ensure the sustainability and internalization of processes in MSME cluster units. Central Java MSME cluster institutions have been formed with the existence of an institutional ecosystem from the provincial level to the community level. However, the institution encountered several obstacles to be able to optimize the development of the MSME Cluster. The role of institutions in the MSME cluster will be analyzed based on the role of local leadership, organizational activity, partnerships, product management and management of results from MSME institutions. This research will use a quantitative approach with mixed methods analysis. The object of the research is the Central Java UMKM cluster from 35 regencies/cities. This research will analyze three main targets. The first analysis will analyze the development profile of the Central Java MSME Cluster. The second analysis will analyze the role and institutional process of the MSME cluster in supporting MSMEs based on the MSME variable going upgrade. The third analysis will analyze the influence of the institutional role with the characteristics of MSMEs advancing to class. The results of the study provide a typology of institutional roles to be able to achieve MSMEs to scaling up.

Keywords: MSME Cluster; MSME scaling up; Regional Economy

BIODATA

- (1) Zukruf Novandaya**, Center for Participatory Planning, Diponegoro University, Semarang
- (2) Holi Bina Wijaya**, Diponegoro University, Semarang
- (3) Sri Hestningsih W**, Badan Perencanaan Pembangunan, Penelitian dan Pengembangan Daerah (BAPPEDA) Jawa Tengah
- (4) Wiwin Widiastuti**,

(1) Hafzhi Nur Azmi, S.P.W.K ; (2) Dr. Holi Bina Wijaya ; (3) Ir. M. Sakdi, MM ; (4) Setyo Aji Wijayanto, ST. M.Ling

REGIONAL INNOVATIONS TO SUPPORT COMPETITIVENESS IN JAWA TENGAH PROVINCE, INDONESIA

Abstract: Regional innovations are an important driver of economic development and regional competitiveness. Regions can achieve economic efficiency and regional effectiveness by creating an optimal innovation system. Regional innovation is formed by innovation infrastructure, regional innovation policies, business/company innovations, educational institution innovations and public research institute innovations. The purpose of this study is to analyze the regional innovations in Jawa Tengah Province with a regional competitiveness perspective. This study uses a descriptive quantitative analysis method with descriptive statistical data to examine innovation capacity. The result of this research is the profiling of regional innovations and their implications for regional competitiveness and regional development in Jawa Tengah.

Keywords: Regional Innovations, Regional Competitiveness, Regional Development PROVINCE, INDONESIA

BIODATA:

- (1) Hafzhi Nur Azmi, S.P.W.K**, Center For Participatory Planning, Diponegoro University Jl. Prof Soedarto, Semarang
- (2) Dr. Holi Bina Wijaya**, Center For Participatory Planning, Diponegoro University Jl. Prof Soedarto, Semarang
- (3) Ir. M. Sakdi, MM**, Bappeda Jawa Tengah, Jl Pemuda, Semarang
- (4) Setyo Aji Wijayanto, ST. M.Ling**, Bappeda Jawa Tengah, Jl Pemuda, Semarang.

(1) Dr. Holi Bina Wijaya; (2) Hafzhi Nur Azmi, S.P.W.K ; (3) Sri Hestiningsih, SE,MT.; (4) Herlina Kurniawati, ST.MT

URBAN ROLES IN REGIONAL COMPETITIVENESS BASED ON REGIONAL DEVELOPMENT POLICY IN JAWA TENGAH PROVINCE

Abstract: Regional competitiveness is the ability of regions to achieve economic growth in order to improve community welfare, so they are able to compete at regional and national levels. At the national level, regional competitiveness is defined as the capacity of the region to collaborate in development (on a regional scale) according to its functions and roles to achieve economic efficiency and regional effectiveness. Urban areas have a crucial role in increasing regional competitiveness in the context of regional development, including centers for investment and capital receipts, commodity and raw material markets, information, knowledge and technology centers, and centers for absorption of economic activity and labor. The purpose of this study is to analyze urban roles in regional competitiveness based on regional development policies in Jawa Tengah. This research uses a descriptive quantitative analysis method with statistical data to examine the regional competitiveness value of 6 cities in Jawa Tengah and its comparison with the surrounding non-urban area, regional development policies of Jawa Tengah, as well as literature related to the function and role of urban in regional development. The result of this research is the typology of the role of cities in Central Java in regional competitiveness.

Keywords: Urban Roles, Regional Competitiveness, Regional Development

BIODATA:

- (1) Dr. Holi Bina Wijaya**, Center for Participatory Planning, Diponegoro University, Jl Prof.Soedarto, Semarang.
- (2) Hafzhi Nur Azmi, S.P.W.K**, Center for Participatory Planning, Diponegoro University, Jl Prof.Soedarto, Semarang.
- (3) Sri Hestiningsih, SE,MT.**, Bappeda Jawa Tengah, Jl Pemuda, Semarang.
- (4) Herlina Kurniawati, ST.MT**, Bappeda Jawa Tengah, Jl Pemuda, Semarang.

(1) Riries Angelishita; (2) Dr. Elizabeth Lucky Maretha Sitinjak, S.E, M.Si, CPA

STAND-ALONE RETURN AND TREYNOR PORTFOLIO PERFORMANCE: LIQUIDITY, SOLVENCY, AND PROFITABILITY

Abstract: The purpose of this study was to examine the impact of liquidity, solvency, profitability on Stand-Alone Return (SAR) and Treynor Portfolio Performance. This study uses multiple linear regression methodology, with research samples from LQ45 stocks for the 2017-2021 period. This research portfolio consists of seven selected stocks used single index model method with various sectors such as the financial sector, property and real estate, primary consumer goods, non-primary consumer goods, raw goods, and infrastructure. Researchers selected 7 stocks from companies that care about the environment to form a green portfolio. Companies that are concerned about the environment have sustainability in their business and have a growing return. The results of this study, Return on Equity (ROE) affect positively Stand-Alone Return (RSA) and Treynor Portfolio Performance. This is because in normal and extraordinary economic conditions, both investors and companies prioritize equity management to generate net income. The impact of independent variables in this study can explain their effect on dependent variables by 17% for Stand-Alone Return (RSA) and 19% for Treynor Portfolio Performance. The F test had a result of 2,735 (sig. 5%) for Stand-Alone Return (RSA) and 3.002 (sig. 5%) for Treynor Portfolio Performance.

Keywords: Green Portfolio, Treynor's Portfolio Performance, RSA, ROE.

BIODATA:

- (1) Riries Angelishita** is final year student at the Soegijapranata Catholic University. She was involved in Kedaireka activities as MBKM students. She was active in DIKTI grant research at the national level as research assistant. Despite being active in student activities and research, she still get achievements in the academic field.
- (2) Dr. Elizabeth Lucky Maretha Sitinjak, S.E, M.Si, CPA** is active in research and community service. He is the head of the GFF (Green Fresh Farm) educational tourism activity carried out in Jatirejo, Semarang. He also conducts research in economics, accounting, and finance.

(1) Ester Mulyani Simanjuntak (Correspondent); (2) Dr. Elizabeth Lucky Maretha Sitinjak, S.E, M.Si, CPA

STAND-ALONE RISK AND RETURN: SOLVABILITY AND PROFITABILITY

Abstract: This study aims to determine the effect of company performance on risk and returns stand-alone in a stock portfolio. The study took only seven issuers listed in the LQ-45 index. The independent variables are solvency ratio (DER proxy) and profitability ratio (NPM proxy). Whereas the dependent variables are risk and return stand-alone. In addition, this study also uses macroeconomics (PDB proxies) as a moderation variable. The research method used in this study is multiple linear regression with a fit model and meets the criteria of the best linear unbiased estimator. Sampling was carried out using purposive sampling techniques on the financial statements of companies listed on the Indonesia Stock Exchange for the 2017-2021 period and the results of 35 samples were obtained. From the results of the study, it was obtained that with the simultaneous moderation of Gross Domestic Product, DER and NPM had a significant effect of 19.3% on stand-alone risk. Meanwhile, partially only the NPM variable has an influence on stand-alone risk with a significance of 15.3%. Then simultaneously DER and NPM had a significant effect of 15.9% on stand-alone returns through moderation of Gross Domestic Product, partially there is only one variable that has a significant influence on stand-alone returns, namely DER of 9.7%.

Keywords: Green Portfolio, Company Performance, Stand-Alone Risk, Stand-Alone Return, Gross Domestic Product

BIODATA :

- (1) Ester Mulyani Simanjuntak** is final year student at Soegijapranata Catholic University. She was involved in Kedaireka activities as MBKM students. She was active in DIKTI grant research at the national level as research assistant. Despite being active in student activities and research, she still get achievements in the academic field.
- (2) Dr. Elizabeth Lucky Maretha Sitinjak, S.E, M.Si, CPA** is active in research and community service. He is the head of the GFF (Green Fresh Farm) educational tourism activity carried out in Jatirejo, Semarang. He also conducts research in economic, accounting and finance.

(¹) Irwantoro, S.Sos., M.Si; (²) Ari Setyanto, AP., M.Si; (³) Darmawan Soecahyo, S.Pi., M.Si; (⁴) Dendy Setyawan, S.Si., MT

DEVELOPMENT OF BUMDESA MODEL AS A VILLAGE FINANCIAL INSTITUTION

Abstract: Technically BUMDes refer to Permendes PDTT No. 4 Th 2015 on Establishment, Management and Management, and Dissolution of Village Owned Enterprises. With the presence of Law Number 6 Year 2014 and Government Regulation Number 43 Year 2014 About the Implementation of Law Number 6 Year 2014 About the Village, the future of the village gets a bigger chance to increase its role in economic development of rural society. In this case BUMDes can be an instrument and optimized its role as a legal local economic institution located at the village level to improve community welfare and village income. The problems of this research include the factors that become obstacles and strategy development model BUMDesa as village financial institutions. This research uses descriptive qualitative method with research location in Bondowoso and Magetan districts. The conclusion of this research is basically in the mechanism of BUMDesa formation in research locus already in accordance with the mandate of Law Number 6 Year 2014 and Permendes Number 4 Year 2015, Village Government also play an active role in encouraging institutional of BUMDesa with equity participation from Village Fund for capital strengthening and continue to encourage so that the creation of a strong and ready to compete in providing benefits to villagers in the village economic sector so that villages are more advanced and independent and prosperous community. The obstacles faced by BUMDesa in the research location are mainly related to the capital of BUMDesa which is still small besides it is also related to the capacity of Human Resources and supporting facilities and infrastructures in supporting the activities of BUMDesa, the role of East Java Provincial Government through Jalin Matra program is very dominant that is less more 80% in terms of capital allocated for both BUMDesa at research locus. While the recommendation given in this research is as the District Government is expected to encourage policies and strategic programs in strengthening and development of rural economic activities (BUMDes), it is expected that the Government of East Java Province and especially the District Government increase the budget for capital for BUMDesa, intensify training, coaching and supervision and assistance so that existing BUMDesa can continue to grow and can support the acceleration of rural economic development, in case of recruitment board BUMDesa should be done selectively and professionally. As a strategy to strengthen the capital of BUMDesa, the Provincial Government and District Government and the Village Government should synergize to encourage and facilitate the proper arrangement of BKAD institutions to reposition UPK Dana Bergulir ex PNPM through BUMDesa Antar Desa Cooperation by establishing BUMDesa Bersama in container BKAD, where UPK Dana Bergulir is placed as one of the Joint Venture Unit of BUMDesa under BUMDesa Bersama.

Keywords: model development, BUMDesa, village financial institution.

BIODATA:

(1) **Irwantoro, S.Sos., MSi**, graduated S1 faculty of State Administration, Universitas Brawijaya Malang in 1994 and graduated S2 in Public Administration, Wr University. Supratman Surabaya in 2011. Occupation: (1) Young Researcher in Policy and Administration at the Research and Development Agency of East Java Province (2) Extraordinary Lecturer of FISIP, East Java National Development University. The training that has been attended: (1) Research and Statistics Training, R&D Agency of East Java Prov – LPPM UNAIR, (2) Training for the Functional Position of the First Researcher of the LIPI Research Center, (3) Bintel Mixed Methods Research.

(2) –

(3) –

(4) –

⁽¹⁾ Christine Novita Dewi, SE., M.Acc., CA., CPA; ⁽²⁾ Centaury Harjani, S.Ds., M.Sn

DOES COCONUT SHELL MATERIAL GO BEYOND THE WOOD BUSINESS SUSTAINABILITY?: A STUDY ON KREBET BATIK KAYU

Abstract: Krebet Village has been known as a center for Wooden Batik Crafts. However, the Covid-19 pandemic forced many craftsmen to give up on continuing their business. One of the challenges faced is that wood as the main raw material is categorized as a non-renewable resource. Although the use of licensed wood is a form of environmental responsibility, it is ruled out because its high price. Because environmentally friendly products are intended to maintain the survival of the universe, it is important to develop sustainable green products by involving social, economic, and ecological aspects. The products developed are residential interior products that are increasingly developing during the Covid-19 pandemic. Many people renovate their homes to give a refreshing effect/not boring, healthier, and more comfortable to live in. This research contributes to Batik Kayu Krebet in developing green products as an effort to build environmental and business sustainability, using alternative natural waste materials (Coconut Shell). Learning from natural process, an attitude of designing with and as part of nature, this study uses the methods of 1) observing existing products, 2) experimental laboratories, and 3) comparing the economic value before and after the experiment. The results showed that coconut shell alternative materials were able to go beyond business sustainability by involving social, economic, and ecological aspects.

BIODATA :

(1) Christine Novita Dewi, christine_n_dewi@staff.ukdw.ac.id, has been a full-time lecturer at Duta Wacana Christian University of Yogyakarta, Indonesia since 2014. Besides my teaching duties, I have been Auditor and Consultant for many institutions. My experience as a practitioner also supports my academic work, where I can bring real problems from the field into class discussions in the areas of internal control and information systems, business systems development processes and good business governance in relation to local context knowledge.

(2) –

⁽¹⁾ **Dr.-Ing. Wiyatiningsih, S.T., M.T.;** ⁽²⁾ **Kristian Oentoro, S.Ds., M.Ds.**

THE ROLE OF GASTRONOMY HERITAGE IN THE DEVELOPMENT OF BICYCLE TOURISM IN KOTAGEDE, YOGYAKARTA

Abstract: Gastronomic experience becomes a favorite tourism attraction at present time. The authenticity of the process and product of local culinary is involved in tourism attraction package known as gastronomy heritage. This cultural tourism has been initiated through bicycle tourism in Kotagede, the heritage district in Yogyakarta. Unfortunately, the beauty of Kotagede can be experienced merely by limited community, especially tourists with specific interest, such as history, culture and spiritual purposes. Therefore, a bicycle tourism was designed to explore the cultural heritage in Kotagede that may attract more tourists. Based on the background, the study aims at exploring local culinary and its role in the development of bicycle tourism in Kotagede. The study implemented a descriptive research method exploring the local culinary and its setting that have potentials to improve the attractiveness of bicycle tourism in Kotagede. The study was conducted in the bicycle tourism route “The Romance of Old City”, one of the bicycle tourism routes in Yogyakarta. The gastronomy heritage involved in the bicycle tourism consists of traditional herbal drink and food that are served at the bicycle rest stops. The culinary experience is analyzed with gastronomy heritage principles and its role in strengthening the local identity of Kotagede heritage district. The study results show that Kotagede can be more experienced through bicycle tourism, because of the movement flexibility and the longer duration of travel. The gastronomy experience may enrich tourists’ insight about the local culinary and its cultural meaning. By involving local culinary in the bicycle tourism the local community will have the opportunity get benefits from the bicycle tourism activity. Thus, the gastronomy heritage play a key role in empowering culinary sellers and strengthening the local identity as the significant aspect of tourism attraction in Kotagede.

Keywords: Bicycle Tourism, Culinary Sellers, Gastronomy Heritage, Kotagede, Local Identity

BIODATA :

(1) Wiyatiningsih is a lecturer at the Department of Magister Architecture, Universitas Kristen Duta Wacana, Yogyakarta. She got her Bachelor’s and Master’s Degree of Architecture from Universitas Gadjah Mada, Yogyakarta and studied doctorate at Department of Architecture, Karlsruhe Institute of Technology, Germany. She is currently member of the Board of Research and Development (Dewan Litbang) of Yogyakarta Province and the Research Network (JARLIT) of BAPPEDA Yogyakarta. She is deeply interested in researching socio-cultural aspects of architecture and design, such as gender and inclusive issues. She has been conducting researches about the role of gender in spatial planning, working place for women in traditional houses and developing tourism villages. Currently, she is expanding her research on the role of architecture and the built environment in developing creative tourism post Covid-19 pandemic, such as urban bicycle tourism in the heritage districts and along river bank kampongs.

(2) **Kristian Oentoro** is a lecturer in the Department of Product Design at the Universitas Kristen Duta Wacana, where he has been a faculty member since 2011. He completed his Bachelor's degree in design at Universitas Kristen Duta Wacana and a Master's degree in design from Institut Teknologi Bandung. He currently serves as head of the product design department at Universitas Kristen Duta Wacana and is a member of the Yogyakarta Tourism Promotion Board (BP2KY). His current research interests are craft-based design, collaboration design, and tourism products and services. In 2017, Kristian Oentoro was selected as a product designer at the Innovative and Creative Nusantara Collaborations (IKKON) program organized by Indonesia's Creative Economy Agency (BEKRAF). He has also collaborated actively with researchers in several other disciplines of architecture and design, particularly on empowering communities through design. His work has recently focused on strategies for developing creative tourism and revitalizing craft design as a local souvenir at several Yogyakarta tourism kampongs.

Muhammad Indra Hadi Wijaya, ST., MPWK.⁽¹⁾, Holi Bina Wijaya⁽²⁾, Sri Hestingsih W⁽³⁾, Wiwin Widiastuti, Hafzi Nur Azmi⁽⁴⁾

STAGES OF COMPETITIVENESS INDEX FOR SUSTAINABLE REGIONAL GROWTH POLICIES IN CENTRAL JAVA PROVINCE INDONESIA

Abstract: Economic growth through the rapid acceleration of investment in Central Java Province is currently driving the development of cities and districts. The measurement of regional competitiveness is currently only limited to analyzing regional capabilities in development. This condition makes regencies and cities compete with each other regardless of the functions and roles of the interrelated regions. The need for meaning and utilization of regional competitiveness in the application of the regional system is an urgent matter to support the policies of the Central Java Province. This study uses a quantitative approach by starting an analysis of the stages of regional development identified from competitiveness starting from basic requirements as a factor-driven, efficiency-driven and innovation factor. From this stage, we will classify the functions and roles of cities and districts in the regional system in Central Java. The data was obtained from the distribution of questionnaires in 35 districts and cities in Central Java Province and the results of interviews with stakeholders in the regions and provinces. The results of the study show that cities and regencies have stages of competitiveness in driving innovation and strengthening the driving factors for not doing efficiency. Spatially, the city is better at achieving the value of competitiveness, but most of these urban districts have not included the role of the region in the policy of planning a sustainable regional system.

Keywords:

BIODATA :

(1) **M Indra Hadi** has been a full-time lecturer at Diponegoro University since 2018, he focus on rural planning development and local economic development. so from this research and publication with tittle Stages of Competitiveness Index for Sustainable Regional Growth Policies in Central Java Province Indonesiacan contribute for Centra Java Province.

Muhammad Indra Hadi Wijaya⁽¹⁾

DISTRICT/CITY RESPONSE PATTERNS FOR CHILD PROTECTION DURING COVID-19, CASE STUDY OF CENTRAL JAVA PROVINCE, INDONESIA.

Abstract: COVID-19 for two years has become an inseparable part of the lives of urban and rural communities. The impact occurs as a whole, such as the impact of COVID-19 on children. Children are a vulnerable part of society during a pandemic, what are the conditions for their health, education, and protection. The role of the city in carrying out its duties as a public servant is important, where all stakeholders have an important role. Central Java, one of the provinces affected by COVID-19 has responded well with its adaptive programs. This research was conducted with a quantitative approach with a quantitative descriptive method, starting with an analysis of the role of stakeholders and programs related to COVID-19 prevention for children. The results of the analysis are continued by looking at the spatial pattern between cities and districts. Research data is taken from primary surveys through FGD and document review. The results of the study identify that not all city/district areas have a response to child protection during the COVID-19 pandemic, urban areas are more responsive to this condition. Increasing the role of protection for children during a pandemic is an important part of the process of returning to the new normal.

Keywords:

BIODATA:

(1) Muhammad Indra Hadi Wijaya, Vocational School, Diponegoro University, Jl Prof Sudarto No 1, Semarang City, Indonesia.

(1) Wiwin Widiastuti, SE., M.Sc., MT; (2) Dr. Hardi Warsono, MT; (3) Dr. Retno Sunu Astuti, M.Si; (4) Trina Fizzanty, Ph.D.

THE IMPACT OF THE COVID-19 PANDEMIC ON TOURISM MSMEs, SURVIVAL STRATEGY AND GOVERNMENT POLICY IN RESTORING THE ECONOMIC CONDITION OF TOURISM MSMEs IN THE BOROBUDUR NATIONAL TOURISM STRATEGIC AREA, CENTRAL JAVA, INDONESIA

Abstract: The tourism sector is the most affected sector by the COVID-19 pandemic in Indonesia. The COVID-19 pandemic has hit the tourism industry in Indonesia since February 2020 up till now. The tourism micro, small and medium enterprises (MSME) sector has not been spared the impact of the Covid pandemic. The study aims to determine the impact of the Covid-19 pandemic on the tourism MSME sector in the Borobudur National Tourism Strategic Area, tourism MSMEs survival strategies, and government policies to restore MSMEs conditions in the Borobudur National Tourism Strategic Area which is the centre of Central Java tourism development. The study uses an electronic survey to 100 MSMEs actors and interviews with key informants. The results showed that the Borobudur tourism MSMEs sector was very badly affected by the Covid-19 pandemic with a decrease in turnover of more than 80% and a reduction in the workforce of more than 60%. The survival strategy implemented by Borobudur tourism MSMEs is to produce local community needs related to the Covid-19 pandemic in the health and food sectors. The tourism MSME survival strategy in the midst of a pandemic is to have good adaptability, innovation, and collaboration. Meanwhile, government policies to save the condition of tourism MSMEs consist of emergency response policies, recovery policies and normalization policies.

Keywords: Impact of the Covid-19 Pandemic, MSMEs, Survival Strategy, Government Policy, Economic Recovery.

BIODATA :

- (1) Wiwin Widiastuti**, wiwinwidi@gmail.com, has been a resercher at BAPPEDA Prov. Jateng, since 2011. In addition she take doctoral program in public adminitration at Diponegoro University.
- (2) Hardi Warsono**, hardiwarsono@lecturer.undip.ac.id, has been a full time lecturer at Diponegoro University.
- (3) Retno Sunu Astuti**, retnosunu@lecturer.undip.ac.id, has been full time lecturer at Diponegoro University.

Alfina Handayani, S.P.,M.Si.⁽¹⁾

STRATEGY TO SUPPORT THE SUSTAINABILITY OF LOCAL SOYBEAN PRODUCTION: CASE IN CENTRAL JAVA

Abstract: Soybean is the main food commodity in Indonesia. However, over the last twenty years, its production has decreased sharply, which caused dependence on imports has increased. On the side, the price of imported soybeans has jumped sharply in the last two years, which impacts disruption on national food security. Therefore, this study aims to explore the extent of the role of local governments in supporting the sustainability of soybean production, especially in Central Java. This research is a descriptive study using secondary data analysis sourced from BPS, regional planning documents, and other supporting sources. The results showed that the role of local governments in supporting the sustainability of local soybeans was still low, especially in price protection, product facilitation, and institutional support. Most farmers also switched to other commodities that were much more profitable. The strategy implemented is to encourage the performance of all soybean farming systems from the production facilities, farming sub-systems, downstream sub-systems, and supporting sub-systems. The recommendation of this research is the need for synergy between the Central and Regional Governments and institutional support for soybean price stability.

BIODATA:

(1) Alfina Handayani, S.P.,M.Si., BAPPEDA JATENG

Muhammad Akbar Pribadi, M.Si⁽¹⁾

OPTIMIZATION OF SPBE IMPLEMENTATION BY LOCAL GOVERNMENTS THROUGH PUSAT JEJARING INOVASI DAERAH (PUJA INDAH)

Abstract: The existence of the Pusat Jejaring Inovasi Daerah (Puja Indah) with a passion to provide effective, efficient public services is a form of implementation of various regulations, namely Law Number 25 of 2009 concerning Public Services, Law Number 23 of 2014 concerning Regional Government, Government Regulation no. 12 of 2017 concerning the Guidance and Supervision of the Implementation of Regional Government, PP 38 of 2017 concerning Regional Innovation, and the existence of Presidential Regulation Number 95 of 2018 concerning the Electronic-Based Government System (SPBE). Since it was launched by the Minister of Home Affairs until December 2020, as many as 71 regions have signed a statement of commitment with the Ministry of Home Affairs with details of 8 (eight) provinces, 45 (forty five) regencies, and 18 (eighteen) cities. In its implementation, based on the 2020 activity report, there are still problems/obstacles in the implementation of activities, namely (1) related to applications that are not perfect (there are still bugs/errors and unsuitable flows) (2) the Covid-19 pandemic which causes budget refocusing which causes activities not to run optimally. The purpose of this article is to analyze the key factors in implementing SPBE by local governments. The method used is a qualitative method with the data sources used are based on the results of in-depth interviews, observations and documentation.

Keywords: Key Factors, SPBE, Public Service

BIODATA:

(1) Born in Bireuen/Aceh, Indonesia, November 11, 1989, **Muhammad Akbar Pribadi** is currently a Researcher at the National Research and Innovation Agency (BRIN). His basic education started at SDN Bireuen Level, then he continued to SMP Negeri 1 Bireuen before then entered SMA Negeri 1 Bireuen and graduated in 2007. He obtained a bachelor's degree at the State Administration Science Study Program, FISIP Universitas Sumatera Utara (graduated 2013). In 2015 he continued his master's education after receiving a scholarship from the Ministry of Youth and Sports of the Republic of Indonesia in the Postgraduate Program in Regional and Rural Development Planning, Universitas Sumatera Utara (graduated 2017). Since 2020 until now, he is still carrying out his duties as a Researcher at the Research Center for Domestic Government of the National Research and Innovation Agency. Currently, the focus of research is on Digital Governance, Regional Innovation and Public Services.

**ID 0124 – DAY 1 – PARALLEL SESSION 2 – 15.30-16.30 – ROOM D –
Communities and Well-Being**

⁽¹⁾ **Injilia Trifena Mamusung;** ⁽²⁾ **O’gracya Michelle Deeng;** ⁽³⁾ **Aditya Iman Sutomo;**
⁽⁴⁾ **Andrew Eryan Chandra;** ⁽⁵⁾ **Yosua Yohanes Moniaga;** ⁽⁶⁾ **Dr. Rustina Untari, SE,
MSi.**

WORKFORCE EMPOWERMENT IN PT. CALISTAPRIMA PIRANTIINDAH

Abstract: Unemployment due to the low quality of human resource development is a prominent issue in Indonesia. The idea of being able to find work must be replaced with the ability to create jobs in overcoming social problems in the form of poverty due to unemployment that usually appears in the community. Sociopreneur business can be the right choice in reducing poverty. One of the sociopreneur-based businesses, namely PT. Calistaprima Pirantiindah is a waste recycling company. PT. Calistaprima Pirantiindah who was accompanied by the Citra Insan Indonesia Development Foundation (YPCII) empowered people who were previously unfit for work to become eligible to work with skills in sorting waste plastic bottles and cups. The existence of workforce empowerment activities in this company provides opportunities for the elderly to work and earn wages in meeting household needs, which had a positive influence on improving the local economy and benefits the company because the input materials to the factory have been sorted through coaching carried out at the stall.

Keywords: Empowerment, Sociopreneur, Unemployment

BIODATA :

- (1) Injilia Trifena Mamusung**, 22z10003@student.unika.ac.id one of the students who participated in an independent student exchange activity at Soegijapranata Catholic University. She also led the student association organization of the Industrial Engineering at De La Salle University Manado, since last year. She created several programs with the aim of strengthening student relations and carrying out several community service activities with the aim of helping residents affected by natural disasters.
- (2) O’gracya Michelle Deeng**, 22z10008@student.unika.ac.id program at the De La Salle Catholic University Manado. Now she is participating in a student exchange program at the Soegijapranata Catholic University Semarang. She is enthusiastic and highly motivated, likes to seek new challenges. And she want to be a leader who can inspire and can think out of the box, explore new ideas with critically thinking.
- (3) Aditya Iman Sutomo**, 20d10008@student.unika.ac.id is a student student of the Management study program at Soegijapranata Catholic University.
- (4) Andrew Eryan Chandra**, 20d10027@student.unika.ac.id is a student of the Management study program at Soegijapranata Catholic University.
- (5) Yosua Yohanes Moniaga**, 20d10238@student.unika.ac.id ,a student of the Management study program at Soegijapranata Catholic University. He is like to have interaction with others and want to improve his skills for his future career.
- (6) Rustina Untari**, r_untari@unika.ac.id is a Lecturer at the Faculty of Economics and Business, and the Head of the Center for Women’s Studies, at Soegijapranata Catholic University, Semarang, Indonesia. She holds a Dr in Industrial Management

from the Bandung institute of Technology, Indonesia. Her research interests are small and medium enterprises, entrepreneurship, culture and creative industries, and industrial clusters.

⁽¹⁾ Natalia Widiyari, S.IP., M.Si.; ⁽²⁾ Alfons Christian H., S.Ds., M.A.

THE MYTH IN CORPORATE SOCIAL RESPONSIBILITY: NARRATIVE COVERAGE BY AN OIL COMPANY (CASE: VIDEO OF CSR OF PETRONAS OIL COMPANY IN INDONESIA)

Abstract: Corporate social responsibility (CSR) is a form of sustainability effort. CSR is considered an obligation that must be assumed by all profit-centered organizations. The remaining debate about CSR is that CSR is frequently taken as the compensation of draining resources, especially for industries whose operation is heavily related to natural resources such as oil companies. The CSR as the inward control that is imposed by the company itself, has not yet serviced the main purpose of addressing the concern of sustainability. The myth built around the practice of CSR emphasizes more the existence of the company instead of its contribution to the surrounding community. The CSR video from the oil company narrated serves as a herald of a good corporate citizenship. The CSR implementations and practices that are presented in the video do not manage as the best possible way to contribute to community in needs. However, the myth narrated in the video becomes the best practices of the company in conducting further CSR efforts. The myth is retold and recited in similar business condition and in time it is normalized. The connotative meaning of the process is enforced throughout the practices and further implementation.

Keyword: corporate social responsibility, sustainability, myth, video.

BIODATA:

- (1) **Natalia Widiyari S.IP, M.Si** teaches at the School of Communication with a specialization in Marketing Communication. She joined the Faculty of Business and Administration and Communication Studies in 2006 to specialize in Business Communication. The bachelor's degree was obtained from the International Relations Department, Faculty of Social and Political Science, Parahyangan Catholic University, while the master's degree was obtained from the Communications Department, Graduate School, Faculty of Social and Political Science, University of Indonesia. Currently, she is pursuing a doctorate at the College of Mass Communication, University of the Philippines, Diliman. The theme of her publications and researches focus on Corporate Social Responsibility (CSR) -both from the aspect of organization and also policy discussions related to CSR-, identity - identity on the side from the marketing perspectives related to brands and identities, and identity on the side related to national issues such intolerance, women and culture,. Her writings can be accessed through UNIKA Atma Jaya library (atmalib) and researchgate. The courses taught include marketing communication and organization communication. She is also involved in training on effective communication themes and is actively involved in market research as a field researcher. She could be contacted via email nataliaw@atmajaya.ac.id
- (2) **Alfons Christian H., S.Ds., M.A.** teaches at the school of Visual Communication Design with a specialization in Applied Media. He joined the Faculty of Architecture and Design in 2019 to specialize in Applied Media and Boardgame. The bachelor's degree was obtained from the Visual Communication Design, Faculty of Architecture and Design, Soegijapranata Catholic University while the master's degree was obtained

from the Communications Department Major in Applied Media Studies, Graduate School, College of Liberal Arts, De La Salle University. The theme of his publications and research focus on graphic design, media, and boardgame. His writings can be accessed through ResearchGate and google scholar. The courses taught include design methods, boardgame design, and aesthetic. He can be contacted via email alfons@unika.ac.id

(1)Yesica Cecilia Budiono; (2) Veronica Farrent Widodo; (3) Feisy Sisilia Rambitan; (4) Fernanda Genoveva Pangemanan; (5) Dr. Rustina Untari, SE .MSi

DIFFERENCE BETWEEN ECOPRENEUR AND REGULAR ENTREPRENEUR

Abstract: Currently, business is not only thinking about making a profit, but also thinking about the preservation of our natural environment. There are 2 meanings in business, namely ecopreneur and entrepreneur. Ecopreneur is a combination of two syllables, namely eco and entrepreneurship, which means environmental-based business activities. Ecopreneurship is an entrepreneurship that refers to business activities with activities that provide benefits and give more and special attention to environmental sustainability. An entrepreneur is someone who develops his own business, is fully responsible for his business operations, and is the main owner of the business. The purpose of this paper is to compare and understand more about ecopreneurs and entrepreneurs. In making this paper, the author hopes that young people in Indonesia who will make businesses in Indonesia think more about our natural environment. Because business is not only about profit, but we also have to think about our surroundings so that our environment becomes beautiful. We have to start from ourselves to think about our environment. From here we can analyze that there are 2 types of businesses that both provide benefits to us, namely ecopreneurs and entrepreneurs. But each one has its drawbacks, namely if ecopreneurs really think about the preservation of nature but the process is quite difficult and for satisfactory results it requires patience, while entrepreneurs have an easy process, but the materials used are not environmentally friendly and can damage our environment, if we can't manage waste well.

Keywords: (Ecopreneur, Entrepreneur, Ecopreneurship, Entrepreneurship, Environment)

BIODATA :

- (1) Jesicaceciliaa9@gmail.com**, An undergraduate student of management economics at Soegijapranata Catholic University Semarang since 2019. I have entrepreneurial mindset and creative problem solving. I highly motivated to grow professionally and passionate to develop skill. I also can learn new thing.
- (2) feisycici@gmail.com**, MBKM Student Exchange at Soegijapranata Catholic University Semarang this year. I have a creative mindset in making decisions in entrepreneurship. I am also motivated to continue to develop every existing idea to achieve a goal.
- (3) Veronicafarrent26@gmail.com**, I am a student of Soegijapranata Catholic University since 2019 and majoring in management economics. I want to learn things related to business. I also want to be a brave person. If you never try then you will not know its success. From courage, I understand the meaning of failure and success so that I can learn business pangemanan.
- (4) fernanda@gmail.com**, Students are active in the agribusiness study program at the catholic university dela salle manado. And now i'm participating in a student exchange program at the catholic university of soegija pranata semarang. I have a good ability to communicate and adjust to the new environment. I like to try new things to add to my experience and knowledge.

⁽¹⁾ **Dr. Rustina Untari, M.SI (corresponden author);** ⁽²⁾ **Gilbertus Romero Diaz Wibisana;** ⁽³⁾ **Gabriele Calista;** ⁽⁴⁾ **Ekklesia Monica Tunena;** ⁽⁵⁾ **Eunike Runtuwene**

APPLICATION OF ECOPRENEUR AT NATURAL COLOR BATIK "SI PUTRI"

Abstract: Bu Putri as an ecopreneur and is the founder of the production of Natural Color Batik “Si Putri” is needed to help increase the potential of the community in protecting the environment by using various environmentally friendly materials to make batik creations. This study aims to educate and motivate students as the nation’s successors and those who will enter the world of work so that they are able to have broader insights in the use of goods around us, especially in the use of organic waste. This research was conducted qualitatively and by practicing where the owner provided a lot of information from the establishment of the production location to the production method and to the finished goods. Then Ibu Putri as the owner of Natural Color Batik “Si Putri” uses ecoprinting batik, where batik is made with leaves for bag decoration. In research there are many lessons that can provide motivation, one of which is green values.

Keywords: Ecopreneur, Production, Green Values, Batik, Si Putri.

BIODATA :

- (1) Gabriele Calista** is a student from Soegijapranata Catholic University located in Semarang, Central Java. She's a part of the management study program in the economics faculty. At Unika, she also actively participate in the student creativity unit in which case the one that she follows is SEL (Soegija Eco Life). SEL usually engage more with the environment. In here, she's trained in various things that give positive value to the surrounding environment, such as making stuff from recycled materials and much more. On the occasion of this seminar she would like to seek more knowledge about the conditions and problems that occur around us. In addition, she also hopes that this will improve her ability to solve problems as a prospective entrepreneur.
- (2) His name is Gilbertus Romero Diaz Wibisana.** He's an active student at Soegijapranata Catholic University Semarang. Currently, he's halfway through the 5th semester. In here, he served as a member of the student executive board for his faculty. The Economics and Business Faculty. He just finished serving last Saturday. And now that he's done with that, he wants to keep going. He wants to try more new things that can expand his knowledge and his experience even further beyond. That's the reason why he is here today.
- (3) Her name is Ekklesia Monica Tunena.** She is a student at De La Salle Catholic University Manado who is currently participating in a student exchange program at Soegijapranata Catholic University, Semarang. The reason she join student exchange is to gain experience . She also served as treasurer of the student association of the De la Salle industrial engineering study program.
- (4) Her name is Eunike Runtuwene.** She is an active student at De La Salle University Manado who is currently participating in student exchange at Soegijapranata university. She has the principle to do her best, and also she really wants to learn

about many things, and she hope that in the future she will continue to grow and become the best version of herself. She also served as treasurer of the student association of the De la Salle faculty of engineering.

- (5) **Rustina Untari** is a Lecturer at the Faculty of Economics and Business, and the Head of the Center for Women's Studies, at Soegijapranata Catholic University, Semarang, Indonesia. She holds a Dr in Industrial Management from the Bandung Institute of Technology, Indonesia. Her research interests are small and medium enterprises, entrepreneurship, culture and creative industries, and industrial clusters.

(1) Carel Yudea.; (2) Teresa Sevi Pramudyani.; (3) Tjin Marco Kurniawan Chandra.; (4) Yetly Yulita Elisabeth Baghiu.; (5) Dr. Rustina Untari, SE .MSi.

BOTTLE PRODUCTION SYSTEM USED BY SOCIOPRENEUR BUSINESS PT. CALISTA PRIMA PIRANTI INDAH (CP)

Abstract: This journal aims to describe the Sociopreneur conducted by Mr. Andre as the owner of Calista Prima Piranti Indah. Mr. Andre as a Sociopreneur who is assisted by the Yayasan Pembangunan Citra Insan Indonesia in running a business. The data collection technique used is by means of observation and interviews. The results of this study concluded that the owner of Calista Prima Piranti Indah has the character of a Sociopreneur who can help solve problems in the surrounding environment. Because the existence of Calista Prima Piranti Indah can reduce plastic bottle waste by reprocessing plastic bottle waste. In addition, Calista Prima Piranti Indah also provides jobs for women over the age of 55, so that they can overcome unemployment in the community there and can reduce the impact of plastic bottle waste pollution. **Keywords:** Sociopreneur, plastic bottle litter.

Keywords:

BIODATA :

(1) –

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(5) **Rustina Untari** is a Lecturer at the Faculty of Economics and Business, and the Head of the Center for Women’s Studies, at Soegijapranata Catholic University, Semarang, Indonesia. She holds a Dr in Industrial Management from the Bandung Institute of Technology, Indonesia. Her research interests are small and medium enterprises, entrepreneurship, culture and creative industries, and industrial clusters.

(1)Dr.Rustina Untari, SE.Msi ; (2)Nobertus Labu (3)Azi Yanuarius Paul, S.Fil.,M.Th

LOCAL RESOURCES SUPPORT REVIVAL OF NATURAL WEAVING AT KAMPUNG ADAT BENA BAJAWA FLORES

Abstract: Bena Village is a traditional village in Ngada District, Flores, NTT. This village is very well preserved for the authenticity of the buildings or the customs of the people. The indigenous people of the Bena Village have a livelihood as farmers. In addition, because of its uniqueness, Bena traditional village has become a tourist destination. The number of tourists causes the weaving business survive because the tourist are mostly bought weaving as souvenirs. Crafter also prefer to use natural colors because tourist like it. . Natural Color Weaving was revival at 2012. This research is trying to find the natural resources around Bena Village that support revival of Natural Weaving. We found many plants that can use for natural colos live in around the villages. They live in forest around village as if heritage and show that their ancestors did weaving with natural color.

Keywords: Bena, Weaving, craft, Natural color

BIODATA :

- (1) Rustina Untari, r_untari@unika.ac.id** is a Lecturer at the Faculty of Economics and Business, and the Head of the Center for Women’s Studies, at Soegijapranata Catholic University, Semarang, Indonesia. She holds a Dr in Industrial Management from the BandungInstitute of Technology, Indonesia. Her research interests are small and medium enterprises, entrepreneurship, cultureand creative industries, and industrial clusters
- (2) Norbertus Labu, norlabu@yahoo.co.id** is a doctoral student in environmental science at Soegijapranata Catholic University, Semarang, Indonesia. Since 2019, he has been a lecturer at Sekolah Tinggi Pastoral Atma Reksa Ende – Flores, Indonesia. He is also active in the family pastoral activities of the Archdiocese of Ende - Flores, Indonesia
- (3) Azi Yanuarius Paul, S.Fil.,M.Th, azipauljanuar92@gmail,** he has been a secretary and full time lecturer at Sekolah Tinggi Pertanian Flores Bajawa Ngada Indonesia since 2020. In addition to his teaching duties he has been a vice director in Agricola Educationist Journal since August 2022 and he became a leader at P2MW (Entrepreneurship for college student) for corn pizza .He is also a social worker as a member of Covid and stunting task force in government since 2020. He is a companion at Catholic Youth Organization. Since 2019-2020 he did his service as a priest at Santo Paulus Jerebuu Parish. He has good talent in writing. There were some articles written by him such as: Implementasi Prinsip-Prinsip Dasar Pendidikan Katolik Seturut Deklarasi “Gravassimum Educationis” Di Sekolah Tinggi Pertanian Flores Bajawa” in a book entittle :STIPER-FB Kehadiran Demi SDM Pertanian Unggul and “ Tobat Ekologis : Rekonsiliasi Terhadap Dosa Disfungsi Dalam penggunaan Pestisida di Kabupaten Ngada.

LOCAL RESOURCES SUPPORT REVIVAL OF NATURAL WEAVING AT KAMPUNG ADAT BENA BAJAWA FLORES

Abstract

Bena Village is a traditional village in Ngada District, Flores, NTT. This village is very well preserved for the authenticity of the buildings or the customs of the people. The indigenous people of the Bena Village have a livelihood as farmers. In addition, because of its uniqueness, Bena traditional village has become a tourist destination. The number of tourists causes the weaving business to survive because the results are mostly bought as souvenirs. Craftsmen also prefer to use natural colors. This research is trying to find the natural resources around the Bena that cause them to survive using natural colors that are environmentally friendly.

Keyword : Bena, Weaving, craft, Natural color

Introduction (RU)

Kampung Adat Bena Bajawa merupakan sebuah perkampungan megalitikum yang terletak di Kabupaten Ngada, Flores, Nusa Tenggara Timur, tepatnya di Desa Tiwuriwu, Kecamatan Aimere. Kampung Adat Bena Bajawa yang diperkirakan sudah ada sejak 1.200 tahun yang lalu dan terdapat kurang lebih 45 rumah dari 9 suku.

Teori (RU)

Metode (RU)

Sekilas tentang Kampung Adat Bena (RP)

- Arti Kampung Adat
- Sejarah ditetapkannya kampung Adat Bena
-
- Kehidupan Masyarakatnya
- Tenun sudah ada berabad yang lalu

Tenun di Kampung Adat Bena (RP)

Sumberdaya (Bahan Pewarna Tenun) di Bena (RN)

Jenis tanaman

Terdapat beberapa jenis tanaman yang digunakan dalam pewarna alam. Tanaman-tanaman dimaksud adalah 1) Lobha, (Tanaman ini digunakan sebagai pengunci warna) 2) nila (taru), 3) angka, 4) manga, 5) secang dan 6) mangkudu. Tanaman-tanaman ini diproses untuk mendapatkan warna tertentu. Warna-warna yang dapat dihasilkan dari tanaman-tanaman di ini adalah biru, hijau, merah, ungu, coklat dan kuning.

Warna biru diperoleh dari tanaman nila (taru) yang dicampur dengan kapur sirih. Menurut para pengrajin kepekatan warna sangat tergantung pada proses oksidasi.

Warna hijau diperoleh dari perpaduan tanaman indigo (taru), lobha, kulit kayu angka dan kulit kayu mangga.

Warna merah diperoleh dari tanaman secang dan kulit kayu mangkudu. Mangkudu sendiri dapat menghasilkan beberapa warna yaitu warna kuning diperoleh dari kayu mangkudu, warna merah dari kulit kayu mangkudu. Warna ungu dan coklat diperoleh dari akar mangkudu.

Pemeliharaan

Tanaman-tanaman pewarna alam diperoleh dari alam. Bena terletak pada daerah perbukitan. Tanaman-tanaman pewarna tumbuh dari alam yang ada sekitar perkampungan Bena. Pohon lobha hanya ditemukan di Bena. Lobha tidak dibudidayakan. Masyarakat mengambildaun lobha dari hutan yang ada di sekita kampung Bena. Pohon lobha tidak dapat tumbuh di tempat lain. Pohon ini menjadi kekhasan dari kampung Bena.

Tanaman lain didapatkan di kebun-kebun masyarakat pengrajin tenun secara pribadi dan juga untuk kebutuhan pribadi. Belum banyak masyarakat yang membudidayakan tanaman indigo secara khusus. Untuk memenuhi kebutuhannya, pengrajin tenun mencarinya di hutan atau di tempat lain; umumnya di daerah perisir pantai. Di daerah ini, tanaman indigo bertumbuh lebih baik dan memiliki kualitas warna yang lebih baik pula.

Analisis ketersediaan Bahan dan sustainable Business (RU

Apa Keuntungan bagi penggunaan warna alam jika Resources tersedia

- Kemudahan mendapatkan bahan
- Murah
- mudah melakukan inovasi

Conklusi