



THE 4TH UPI INTERNATIONAL GEOGRAPHY SEMINAR 2020



Pendidikan Geografi

GEOGRAPHY'S CONTRIBUTION TO
THE SUSTAINABLE DEVELOPMENT GOALS:
GLOBAL CHALLENGES AND OPPORTUNITIES

BOOK OF PROGRAM



IGEOS 2020

IOP Conference Series
Earth and Environmental Science

Scopus



WELCOMING REMARKS

It is a great honor for me to welcome all of you to the 4th International Geography Seminar (IGEOS) 2020. On behalf of the steering committees, I would like to express my sincere gratitude for your presence at this seminar. The theme of this seminar **“GEOGRAPHY’S CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS: GLOBAL CHALLENGES AND OPPORTUNITIES”**.

Geography plays a crucial role in understanding our world. It makes a vital contribution to our knowledge of the rapidly changing environmental and social challenges facing us and how we should tackle them.

Geography is a field of science dedicated to the study of the lands, the features, the inhabitants, and the phenomena of the Earth. Learning geography will create citizens who are able to understand and do something about some of the major issues and problems including climate change, energy dependence, war and regional conflicts, globalization and international terrorism. Geography provokes and answers questions about the natural and human worlds, using different scales of enquiry to view them from different perspectives. It develops knowledge of places and environments throughout the world, an understanding of maps, and a range of investigative and problem-solving skills both inside and outside the classroom. As such, it prepares pupils for adult life and employment.

Geography is a focus within the curriculum for understanding and resolving issues about the environment and sustainable development. It is also an important link between the natural and social sciences. As pupils study geography, they encounter different societies and cultures. This helps them realize how nations rely on each other. It can inspire them to think about their own place in the world, their values, and their rights and responsibilities to other people and the environment. It includes historical and political geography, cultural geography, economic and physical geography, regional science, cartographic methods, remote sensing, spatial analysis, and applications to areas such as land-use planning, development studies, and analyses of specific countries, regions, and resources.

The Sustainable Development Goals were adopted by the United Nations in 2015 as a call-to-action for people worldwide to address five critical areas of importance by 2030: people, planet, prosperity, peace, and partnership.

The 4th IGEOS 2020 provides the scope for opportunities to learn progressed by international scientists and academicians. International Geography Seminar offers excessive quality content to suit the diverse professional development of science and technologies. It is a perfect platform to discuss the current discoveries and developments in the field of Geography.

In closing, I encourage delegates to participate actively in the interesting discussions over the day. I wish everyone a successful and fruitful conference and keep in healthy during this pandemic covid19.

Thank you and warm regards,

Dr.rer.nat. Nandi, S.Pd., M.T., M.Sc.

Chairman IGEOS

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PROGRAM SCHEDULE
4th INTERNATIONAL GEOGRAPHY SEMINAR (IGEOS)
UNIVERSITAS PENDIDIKAN INDONESIA, SEPTEMBER 30, 2020

NO	TIME	ACTIVITY	VENUE
1	07.00 – 08.00 WIB (Western Time of Indonesia)	Registration (Tia Kartika Septiyanti and Jalu Rafli)	Main Meeting room
2	08.00 – 08.40	Opening Ceremony: 1. Dr.rer.nat Nandi, S.Pd., M.T., M.Sc. (Chairman IGEOS) 2. Dr. Agus Mulyana, M.Hum. (Dean Faculty of Social Sciences Education) 3. Prof. Dr. M. Solehuddin, M.Pd., MA. (Rector of Universitas Pendidikan Indonesia)	Main Meeting room & Numan Sumantri Building room 103
3	08.40 – 09.00	Break	
4	09.00 – 10.30	Plenary Session 1 Keynote Speaker: 1. Prof. Dr. Mohammad Ali Universitas Pendidikan Indonesia, Bandung - Indonesia 2. Prof. Dr. M. Baiquni Universitas Gadjah Mada, Yogyakarta – Indonesia 3. Prof. Jon C. Lovett University of Leeds, Leeds - UK Chair Session: Annisa Joviani Astari, M.II, M.Sc. Ph.D	Main Meeting room
5	10.30 – 11.00	Question and answer	Main Meeting room
6	11.00 – 12.15	Plenary Session 2 Speaker: Prof. Dr. Darsiharjo (UPI) Prof. Dr. Eva Banowati (UNNES) Prof. Madya Dr. Mohd Hairy Ibrahim (UPSI) Assoc. Prof. Dr. Mamat Ruhimat (UPI) Prof. Madya Dr. Nor Kalsum Mohd Isa (UPSI) Dr. Salfarina Samsudin (UTM) Chair Session: Dr. Eng. Beta Paramita	Main Meeting room
7	12.15 – 12.25	IGEOS announcements	Main Meeting room
8	12.25 – 13.00	break	
9	13.00 – 15.00	Parallel session 1	Break out room
10	15.00 – 15.30	break	
11	15.30 – 17.00	Parallel session 2	Break out room
12	17.00 – 17.30	Closing ceremony and IGEOS announcements	Main Meeting room

PARALLEL SESSION

BREAK OUT ROOM	SESSION CHAIR:
Break out room 1: Physical Geography and Environment management	Arif Ismail, M.Si.
Break out room 2: GIS and Remote Sensing	Shafira Himayah, M.Sc.
Break out room 3: Humankind and Environment	Muhammad Ihsan, M.T.
Break out room 4: Humankind and Environment	Asri Ria Affriani, M, Eng
Break out room 5: Hazard, Risk, Land Degradation and Disaster	Hendro Murtianto, M.Sc.
Break out room 6: Land Use and Land Cover Change	Riki Ridwana, M.Sc.
Break out room 7: Gender, Religius, Politics and Environment	Silmi Afina Aliyan, M.T
Break out room 8: Health Environment and Sustainable development Goals (SDGs)	Alnidi Safarach Bratanegara, M.Si
Break out room 9: Urban and Rural Environmental Geography	Haikal Ihsan, M.Sc.
Break out room 10: Geography Education	Totok Doyo Pamungkas. M. Eng

PRESENTATION SCHEDULE

Breakout room 1: Physical Geography and Environment management

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20015	Deasy Arisanty, Karunia Puji Hastuti, Aswin Nur Saputra, Muhammad Muhaimin, Faisal Arif Setiawan	Characteristic of Mass Movement in Riam Kanan Watershed, Indonesia
2	13.10 - 13.20	ABS-IGEOS-20041	Syahrizal Koem, Rakhmat Jaya Lahay, Salmun K. Nasib	The Sensitivity of Meteorological Drought Index Towards El Nino-Southern Oscillation
3	13.20 - 13.30	ABS-IGEOS-20042	Winda Dwi Octavia, Supriatna, Ratna Saraswati	Estuary Boundary of Cimandiri and Cisadane Based on Water Surface Salinity
4	13.30 - 13.40	ABS-IGEOS-20043	Aswin Nur Saputra, Deasy Arisanty, Muhammad Muhaimin, Sidharta Adyatma	Empirical Modeling of the Distribution of Chlorophyll-a in Riam Kanan Reservoir
5	13.40 - 13.50	ABS-IGEOS-20093	Haura Ikrimah, Supriatna, Iqbal Putut Ash Shidiq	Spatial Distribution Analysis of Lift Net Fishing Device Based on Oceanographic Features in Palabuhanratu Bay
6	13.50 - 14.00	ABS-IGEOS-20104	Safira Nur Aisyah, Supriatna, Andry Rustanto	A spatial Study of Landscape Patterns in Landslide-Prone Areas at Cikakak Sub-District, West Java
7	14.00 - 14.10	ABS-IGEOS-20102	Intan Manyoe, Ronal Hutagalung	The extraction and analysis of lineament density from digital elevation model (DEM) in Libungo geothermal area, Gorontalo
8	14.10 - 14.20	ABS-IGEOS-20165	Djati Mardiatno, Mukhamad Ngainul Malawani, Marindah Yulia Iswari, Kharisma Nur Hafizah, Noviyanti Listyaningrum	Study on Morpho-arrangement of Anthropogenic Landforms to Identify the Potential Exposures to Tsunami Hazard in Parangtritis, Yogyakarta
9	14.20 - 14.30	ABS-IGEOS-20162	Muhamad Danial Suma, Rini Rahmatia S, Intan Noviantari Manyoe, Tessy Choirunnisa Kobandaha, Mohammad Rizki Aditya Kandouw, Dewi Darmayanti Tolodo	Mass wasting mechanism of Gorontalo Outer Ring Road (GORR) in Padengo, Gorontalo
10	14.30 - 14.40	ABS-IGEOS-20216	Aliza Sanad, Eko Kusratmoko, Adi Wibowo	Urban Heat Islands Phenomenon In Majalengka Regency
11	14.40 - 14.50	ABS-IGEOS-20196	Siti Hamidah, Maulia D. Kembara, Dina Siti Logayah	Simulation Of Landslide Disaster In Reducing Disaster Risk
12	14.50 - 15.00	ABS-IGEOS-20140	Alfi Wira Wijaya, Eko Haryono	Study of Carbon dioxide (CO ₂) Concentration Distribution in The Soil on Mixed Vegetation Area Landcover at Specific Sites of Jonggrangan Karst Zone
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20206	Ambar Kusumandari, Dwi Prasetya Ananta	The effectiveness of agroforestry in reducing the erosion rate compared to the eucalyptus plantation in Wanagama I Educational Forest
14	15.40 - 15.50	ABS-IGEOS-20215	Dinda Shafira Dwi Arlan, Eko Kusratmoko, Revi Hernina	The Identification Of Soil Moisture As A Factor Of Drought In Cilutung Watershed During Indian Ocean Dipole Year
15	15.50 - 16.00	ABS-IGEOS-20228	Riyatmoko Aji, Tjaturahono Budi Sanjoto, Juhadi	Impact of the Rob Flood Disaster in North Pekalongan
16	16.00-16.10	ABS-IGEOS-20146	Muhamad Ervin, Muh. Alfin Anafi, As'ak Arif, Herlina Restu Ayu Puspita, Arifima Nurlaila Dewi, Arif Ashari	Hydrogeomorphology of Spring at the Junction of Sumbing-Sindoro Twin Stratovolcanoes, Central Java

No	Time	Code	Author	Title
17	16.10 - 16.20	ABS-IGEOS-20106	Listyo Yudha Irawan, Sumarmi, Damar Panoto, Irfan Helmi Pradana, Rahmad Faizal, Melinda Meganagatha Rosbella Devy, Dimas Bayu Perdana Putra	The Identification of Flood Susceptibility And Its Contributing Factors in Kabupaten Sampang

Breakout room 2: GIS and Remote Sensing

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20006	Ketut Prasetyo	Application Of Remote Sensing And Gis To Identify The Vulnerability Of Ground-W A Ter Pollution In Topographic Karts
2	13.10 - 13.20	ABS-IGEOS-20013	Triana Devi Pratiwi, Iqbal Putut Ash Shidiq, Supriatna	Cimandiri Estuary Zonation Based on Sea Surface Salinity from Sentinel-2 Imagery and its Relation with the Catching Spots Distribution of <i>Anguilla</i> spp. Larvae
3	13.20 - 13.30	ABS-IGEOS-20019	A Sediyo Adi Nugraha, I Putu Ananda Citra	Application of Split-Windows Algorithm (SWA) Method in Forest Canopy Density (FCD) Model on Landsat 8 OLI/TIRS
4	13.30 - 13.40	ABS-IGEOS-20025	Alphi kemal hisyam, Supriatna, Iqbal Putut Ash Shidiq	Using NDVI, ARVI, MSAVI Algorithm For Paddy Growth Phase and Estimation of Rice Productivity in Cikakak Sub- District, Sukabumi Regency
5	13.40 - 13.50	ABS-IGEOS-20039	Budi Setiawan, Sukamdi, Umi Listyaningsih	Probabilistic Projections of Total Fertility Rates for Indonesia and its Regions using the Bayesian Hierarchical Model
6	13.50 - 14.00	ABS-IGEOS-20049	Sofia Utari Ramadhani, Rokhmatuloh, Adi Wibowo	The rice production of paddy field and relationship with elevation using Sentinel-1A SAR in Subang Regency
7	14.00 - 14.10	ABS-IGEOS-20053	Ahmad Nurhuda, Adi Wibowo, Kustiyo	Spatial-temporal of the growth phase and rice varieties using Sentinel-1A radar imagery in Ciasem District, Subang Regency
8	14.10 - 14.20	ABS-IGEOS-20078	Muhammad Muhaimin, Dini Fitriani, Sidharta Adyatma, Deasy Arisanty	Mapping Build-Up Area Density Using Normalized Difference Built-Up Index (NDBI) and Urban Index (UI) Wetland In The City Banjarmasin
9	14.20 - 14.30	ABS-IGEOS-20077	Bowo Susilo, Ari Cahyono	Utilization of Online Geospatial Data Sources for Oikonym Study: Mapping and Analysis of Housing Name in Capital Area of Kulon Progo Regency
10	14.30 - 14.40	ABS-IGEOS-20073	Andry Rustanto, Nurul Sri Rahatiningtyas, Martijn J Booij	An integrated method to develop high temporal Landsat images using free and open-source (FOSS) GIS application
11	14.40 - 14.50	ABS-IGEOS-20091	Riko arrasyid, Ervika Putri Wulandari, Lisma Dian Sukmawati, Nandia Putri, Vira Islami Nurawaliyah	Applied Geographic Information System for disaster based on smong's local wisdom
12	14.50 - 15.00	ABS-IGEOS-20105	Karunia Pasya Kusumawardani, Iswari Nur Hidayati	Analysis of Urban Heat Island and Urban Ecological Quality Based on Remote Sensing Imagery Transformation in Semarang City

No	Time	Code	Author	Title
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20103	Budi Setiawan, Sukamdi, Umi Listyaningsih	Probabilistic Projections of Life Expectancy for Indonesia and its Region using the Joint Probabilistic Projection Model
14	15.40 - 15.50	ABS-IGEOS-20144	Risma Sari Septianingrum, Eko Haryono	Morphometric Analysis Using Geographical Information System Techniques in Serpeng and Sumurup Watersheds
15	15.50 - 16.00	ABS-IGEOS-20178	Mohamad Fikri Maulana, Tjong Giok Pin, Adi Wibowo	Spatial Pattern of Propagation Digital Terrestrial Television System in East Jakarta City
16	16.00 - 16.10	ABS-IGEOS-20171	Rahma Kurnia Sri Utami, Nurul Khakim, Retnadi Heru Jatmiko, Andri Kurniawan, Listumbinang Halengkara	GIS Network Analysis to Optimize Zoning System Implementation for Public Junior High Schools in Yogyakarta City
17	16.10 - 16.20	ABS-IGEOS-20183	Siti Hamidah, Lili Somantri, Arif Ismail, Riki Ridwana, Regina M. Hitoyo	Cartography Training: Thematic Mapping Related to the Covid-19 Outbreak for Government Staff
18	16.20 - 16.30	ABS-IGEOS-20203	Shafira Himayah, Riki Ridwana	Vegetation Spectral Characteristics Based on Altitude Zone in Galunggung Volcano

Breakout room 3: Humankind and Environment

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20021	Ilma Indriasri Pratiwi, Endah Fitriyani, Andreas Suwandi	Model for Culinary Destination Planning and Management on Tourism Village in Coastal Area: Case Study of Gebang Mekar Tourism Village in Cirebon West Java
2	13.10 - 13.20	ABS-IGEOS-20020	Nuri Novianti Afidah, Siti Hamidah, Risris Hari Nugraha, Mochamad Whilky Rizkyanfi, Ahmad Fuadin, Welsi Damayanti	The Kadu Lexicon Local Wisdom of Geographic's Toponymic at Pandeglang Regency, Banten Province
3	13.20 - 13.30	ABS-IGEOS-20055	Dadi Mulyadi Nugraha, Vini Agustiani Hadian, Nurti Budiyantri, Daris Hadiano	Environmental Efforts Through 'lembur Kaulinan Lebaksiuh'
4	13.30 - 13.40	ABS-IGEOS-20085	Sukamdi, Ratih Fitria Putri, Muhammad Arif Fahrudin Alfana, Seri Aryati, Ratri Purnama Dewi, Bagas Aditya, Lucia Sandra Budiman, Sri Kumala Ningrum	Demographic issues in local area: insight from Kretek Sub District, Regency of Bantul, Yogyakarta Special Region, Indonesia
5	13.40 - 13.50	ABS-IGEOS-20097	Andi Putranto	Landscape Archaeology As A Key Concept For Cultural Resources Management In Indonesia
6	13.50 - 14.00	ABS-IGEOS-20094	Dadi Mulyadi Nugraha, Pipi Karmila, Febriana Ruspenti, Iwan Kurniawan, Kikki Ayu Kirana	Constructing the values of Environment Care Characters through Duduk Ngelmu program as an effort to increase civic Disposition
7	14.00 - 14.10	ABS-IGEOS-20124	Muslihin ahmad, Enok Maryani, Ahmad Yani	Pawang Uteun Local Wisdom Values in Managing Aceh Forest
8	14.10 - 14.20	ABS-IGEOS-20122	Ahmad Yani, Asep Mulyadi, Rosita	Tour Guide Level of Understanding on Geodiversity, Biodiversity; and Culture Diversity - Study at Ciletuh Pelabuhanratu Global Geopark

No	Time	Code	Author	Title
9	14.20 - 14.30	ABS-IGEOS-20101	Muhammad Aliman, Sumarmi, Yurni Suasti, Dahri Hi Halek, Rozana Eka Putri	Rimbo Larangan Revitalization of Minangkabau Community to Foster High School Students Environmental Awareness
10	14.30 - 14.40	ABS-IGEOS-20152	Aang Supriatna, Ratna Fitria, Kama Abdul Hakam, Siti Nurbayani, Warlim	Indigenous Knowledge in "Sundanese Land" Kawih to Introduce Geographical Conditions to Elementary School Students
11	14.40 - 14.50	ABS-IGEOS-20148	Nurdiani Fathiraini, Wawan Darmawan, Tarunasena Ma'mur, Wildan Insan Fauzi	The Vantage Point of Geopolitics: Capturing Indonesia's Maritime Axis Policy
12	14.50 - 15.00	ABS-IGEOS-20142	Angga Kurniawansyah, Tjong Giok Pin, Nurul Sri Rahatiningtyas	The Suitability of Mangrove Tourism In The District of Cilamaya Wetan, Karawang Regency, West Java Province
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20133	Wildan Insan Fauzi, Ayi Budi Santosa, Tarunasena, Iing Yulianti	The Demographic Dynamics of Bandung City 1907-1996 in Haryoto Kunto's View
14	15.40 - 15.50	ABS-IGEOS-20176	Nabila Cahya Sakina, Tuty Handayani, Dewi Susiloningtyas	Coastal Communities Mobility Pattern Around Mangrove Ecotourism Sukakarta Village, Cilamaya Wetan, Karawang Regency.
15	15.50 - 16.00	ABS-IGEOS-20172	dinie anggraeni dewi, Dasim Budimansyah, Ace Suryadi, Dadang Sundawa	Ecological Citizenship : Environmental Care Program For Young Citizen In Digital Era
16	16.00 - 16.10	ABS-IGEOS-20107	Labibatussolihah, Agus Mulyana, Yani Kusmarni, Yeni Kurniawati	Geographical Information: Walking Tour Opportunities in The Karst Area
17	16.10 - 16.20	ABS-IGEOS-20153	Dina Siti Logayah Dina Siti Logayah, Acep Supriadi, Retno Ayu Hardiyanti	Genius Loci: Heritage Tourism as a Special Interest Social Space
18	16.20 - 16.30	ABS-IGEOS-20130	Endah Fitriyani	New Normal in the Hotel Industry: How to apply cleanliness, health, safety, and environmental sustainability standards of Hotel in Bandung.
19	16.30 - 16.40	ABS-IGEOS-20065	Ridwan Effendi, Vidi Sukmayadi, Seniwati, Triyanto, Muhaimin Zulhair Achsin	Media Coverage and People's Perspective: Non-Muslims Perception of Human Rights

Breakout room 4: Humankind and Environment

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20114	Ahmad Zubair, Widyawati Sumadio, Anggie Renaissance Zulkarnain Putri	Passengers Deviant Behavior Mapping In Duri Train Station
2	13.10 - 13.20	ABS-IGEOS-20168	Sakinah Ralea Lestari	Relationship Between Fishermen Wife'S Characteristics And Decision Making In Household And Social Communities At Depok Beach
3	13.20 - 13.30	ABS-IGEOS-20217	Siti Nurbayani	Correlation Of Socio-Regional Characteristics And Women's And Children's Violence Distribution In Indonesia
4	13.30 - 13.40	ABS-IGEOS-20227	Bigharta Bakti Susetyo, Bayu Wijayanto, Widia Sutriani, Feri Ferdian	Construction of Spatial & Tourism Perspective for Wali Nagari, Customs Leader and Community Figure in Nagari Batuhampar, Limapuluh Kota
5	13.40 - 13.50	ABS-IGEOS-20226	Siti Nurzulaika Binti Roslan, Zuriatunfadzliah Binti Sahdan	Mapping Force Migration From survivor of Domestic Violence in Refuge WAO

No	Time	Code	Author	Title
6	13.50 - 14.00	ABS-IGEOS-20233	Devita Rahmadani, Hafid Setiadi, Triarko Nurlambang	Political Contestation of Public Space on Local Community
7	14.00 - 14.10	ABS-IGEOS-20230	Adhit Setiadi, Nurrokhmah Rizqihandari, Hafid Setiadi	The Impact Of Tourism Development On The Changes Of Households Economy In Ciwidey Tourism Area, Bandung Regency, West Java
8	14.10 - 14.20	ABS-IGEOS-20247	Slamet Nopharipaldi Rohman, Enok Maryani, Ahmad Yani	Local Wisdom of the Indigenous Society of Kampung Kuta in Maintaining Leuweung Gede as a Form of Environmental Conservation Efforts
9	14.20 - 14.30	ABS-IGEOS-20072	Aprillia Christianawati, Dyah Rahmawati Hizbaron	Physical Vulnerability Analysis of Cultural Heritage for Strong Winds in the City of Yogyakarta, Indonesia
10	14.30 - 14.40	ABS-IGEOS-20027	asep mulyadi, moh. Dede, Bayu Iqbal Anshari, Millary Agung Widiawaty	Toponyms And Flood Disaster In The Capital Region Of Jakarta, Indonesia
11	14.40 - 14.50	ABS-IGEOS-20081	Ahmad Yani, Mamat Ruhimat, Asep Mulyadi	Geography Teacher's Innovativeness on TPACK Framework Based Learning Technology
12	14.50 - 15.00	ABS-IGEOS-20092	Suhendro , Dede Sugandi, Mamat Ruhimat	Geography Teachers Skills: Higher Order Thinking Skills (HOTS) Oriented Assessment Instrument
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20120	Amelia Zahara, Enok Maryani, Ahmad Yani	The Effect of Media Literacy on Geography Skills in Geography Education Students
14	15.40 - 15.50	ABS-IGEOS-20118	Akhmad Munaya Rahman, Faisal Arif Setiawan, Bambang Subiyakto, Hasymi Syarif	The Effectiveness of Video Usage as Learning Resource for Students
15	15.50 - 16.00	ABS-IGEOS-20209	Nandi	Rural and Urban Education: Challenges for Future Geography Education
16	16.00-16.10	ABS-IGEOS-20137	Tresa Tri Susilawati, Enok Maryani, Ahmad Yani	Implications of Inquiry Approach Against Understanding Geography Concept Material By Utilizing Customary Environments in Kampung Naga
17	16.10 - 16.20	ABS-IGEOS-20254	Nurul Rochmah Pramadika	Tourists' Motivation Towards The Sustainable Tourism Attraction
18	16.10 - 16.20	ABS-IGEOS-20011	Dian Equanti, Galuh, Agus	Local Aspiration About Tourism. How People Thought About Their Living Space and How Far Do They Want to Participate in Tourism Sector. A Study of Community Based Tourism at Batu Burung Beach, Singkawang City of West Kalimantan.

Breakout room 5: Hazard, Risk, Land Degradation and Disaster

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20029	I Putu Ananda Citra, I Putu Ari Purwanto	Variation of Coastal Resource Potential in Tejakula District
2	13.10 - 13.20	ABS-IGEOS-20040	Nur Risma Tirani, Supriatna, Adi Wibowo	Impact of the Climate on Fishing Locations of Fish Larvae in Palabuhanratu Bay
3	13.20 - 13.30	ABS-IGEOS-20099	Mu'alim Nur, Wiwandari Handayani	Water-Related Disasters in Pemali-Comal River Basin - Indonesia: Typology and Policy Support

No	Time	Code	Author	Title
4	13.30 - 13.40	ABS-IGEOS-20157	Dewi Tolodo, Intan Noviantari Manyoe, Yayu Indriati Arifin	Geochemistry Characteristics of The Hungayono geothermal Area for The Development of Clean Energy in Gorontalo Province
5	13.40 - 13.50	ABS-IGEOS-20237	Galuh Yuliani, Fira Nandatamadini, Denni Widhiyatna, Mamun Mollah, Siska Mutiara, Agus Setiabudi	Adsorption Of Ammonium Ions In Aqueous Solution Using Raw And Acid Washed Peat Soil
6	13.50 - 14.00	ABS-IGEOS-20253	Syiva Fauzia Lestari, Suratman	The susceptibility of landslide zone using weight of evidence method in nagari tanjung sani and nagari sungai batang, west sumatera.
7	14.00 - 14.10	ABS-IGEOS-20026	M.H. Dewi Susilowati	Priority Regions of Mitigation For Drought and Food Insecurity in Lebak Regency, Banten Province
8	14.10 - 14.20	ABS-IGEOS-20034	Naya Cinantya Drestalita, Nurrohman Wijaya, Naufal Muhammad Iqbal	Spatial assessment of socio-economic vulnerability to climate-related disasters at the local level: Study of coastal villages in Indramayu, Indonesia
9	14.20 - 14.30	ABS-IGEOS-20145	Sani Afifah, Dyah Rahmawati Hizbaron, Muh Aris Marfai	Tidal Flood Hazard Modelling Using The National DEM (DEMNAS) and SPOT 6 Imagery in Part of Sayung District, Demak Regency
10	14.30 - 14.40	ABS-IGEOS-20014	Aldila Rahma, Djati Mardiatno, Dyah Rahmawati Hizbaron	Factor Analysis and Consensus Contributing to Undergraduate Students' Ecoliteracy on Disaster Risk Reduction
11	14.40 - 14.50	ABS-IGEOS-20113	Rafika Hasanah, Ernawati, Muhammad Aliman	Content Analysis in Geography Textbooks of Natural Disaster Mitigation using Beck and McKeown Model
12	14.50 - 15.00	ABS-IGEOS-20166	Sitti Raisa, Enok Maryani, Epon Ningrum	Contribution of Critical Thinking in Disaster Preparedness of Geographic Students
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20158	Vini Agustiani Hadian, Kama A. Hakam, Siti Nurbayani, Ratna Fitria	Role Playing: Disaster Mitigation Literacy Strategies in Primary School Students
14	15.40 - 15.50	ABS-IGEOS-20195	Warlim , Ratna Fitria, Kama A. Hakam, Siti Nurbayani, Aang Supriatna	Disaster Mitigation Through Comic Moral Dilemmas for Elementary School Students
15	15.50 - 16.00	ABS-IGEOS-20246	Mustolikh Mustolikh, Dasim BudimansyahDarsiharjo, Encep Syarief Nurdin	Religious Constructivism Approach in Disaster Mitigation Learning for Environmentally Caring Character Development

Breakout room 6: Land Use and Land Cover Change

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20037	Dhandy Septian Wiratama, Supriatna, Tjong Giok Pin	Oceanographic Factors and Land Cover Change in Cimandiri Watershed Against Phytoplankton Distribution in Cimandiri Estuary, West Java with Sentinel-2A Imagery
2	13.10 - 13.20	ABS-IGEOS-20051	Ahmat Rifai	Spatial Dynamics Model for Land Carrying Capacity Prediction in Ambon City

No	Time	Code	Author	Title
3	13.20 - 13.30	ABS-IGEOS-20062	Hana Yazid, Adi Wibowo, Kustiyo	Spatial Distribution of Rice Planting Pattern using Sentinel-1A SAR in Pabuaran District, Subang Regency
4	13.30 - 13.40	ABS-IGEOS-20116	Riki Ridwana, Fitra Saleh, Shafira Himayah, Riko Arrasyid, Totok Doyo Pamungkas, Azhari Al Kautsar	Spatiotemporal Analysis of Rice Crops in the Covid-19 Pandemic Period for Local Food Security Using Sentinel 2B Imagery Case Study: Tasikmalaya City
5	13.40 - 13.50	ABS-IGEOS-20164	Kartika Kusuma Wardani, Supriatna, Andry Rustanto	Sustainable Agricultural Landscape as a Food Security Effort in Cisolok Sub-district, Sukabumi Regency, West Java, Indonesia
6	13.50 - 14.00	ABS-IGEOS-20163	Brian Pradana, Ade Pugara, Deny Aditya Puspasari	The effect of tollroad development on land-use change in exit tollroad, Batang District
7	14.00 - 14.10	ABS-IGEOS-20155	Nofa Martina Ariani, Bagus Nuari Priambudi, Muhammad Indra Hadi Wijaya	Land Use Change As An Indicators To Formulate The Gentrification Phase At The Diponegoro University Semarang
8	14.10 - 14.20	ABS-IGEOS-20173	Wahdini Safira, Astrid Damayanti, Tito Latif Indra, Muhammad Dimiyati	Model Cellular Automata-Markov Chain For Prediction of Development and Land Carrying Capacity of Settlement in Balikpapan City, East Kalimantan Province
9	14.20 - 14.30	ABS-IGEOS-20234	Sofy Wardhani, Triarko Nurlambang, Nurrokmah Rizqihandari, Hafid Setiadi	Spatial Segregation at Large-Scale Planned Residential Bintaro Jaya
10	14.30 - 14.40	ABS-IGEOS-20232	Ghillman Fikri, Hafid Setiadi, Ratri Candra Restuti, Satria Indratmoko	The Influences of Farmer Group Institution on Agricultural Land Use Change in Ciwidey Agropolitan Area, Bandung Regency, West Java
11	14.40 - 14.50	ABS-IGEOS-20046	Sukamdi	Population Impact Analysis : Consequences of Population Policy on Demographic Variables in Yogyakarta Special Region
12	14.50 - 15.00	ABS-IGEOS-20207	Widyawati Sumadio, Ahmad Zubair, Kintan Maulidina, M. Khairul Rosyid, Fariz Zulkarnain	Community characteristic as a foundation in planting hilly areas, a case study
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20229	Aurora Febrianti Naser, Hafid Setiadi, Nurrokhmah Rizqihandari, Satria Indratmoko	The Spatial Relationship between The Horticultural Farming and Household Welfare at Rancabali District, Bandung, West Java
14	15.40 - 15.50	ABS-IGEOS-20063	Elvanya Rosaline Dewi Andini, Widyawati Sumadio	Tea Smallholder Livelihood Development
15	15.50 - 16.00	ABS-IGEOS-20170	Virgi Citra Nabila, Astrid Damayanti, Muhammad Dimiyati	Suitability of Seaweed Cultivation Areas on Serangan Island, Denpasar City, Bali Province.

Breakout room 7 : Gender, Religiou, Politics and Environment

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20005	Ratna Fitria, Bunyamin Maftuh, Elly Malihah, Aang Supriatna, Warlim, Kama Abdulhakam, Siti Nurbayani	Voting Behavior of West Javanese Women in Terms of Geographical Location and Cultural
2	13.10 - 13.20	ABS-IGEOS-20245	Mirna Nur Alia Abdullah, Oca Ginting	Diffusion : Dowry Change in Maba Belu Selambar Culture (a Case Study on Marriage between Karo and Kupang Tribes in Indonesia)

No	Time	Code	Author	Title
3	13.20 - 13.30	ABS-IGEOS-20012	Nurti Budiyantri, M Rindu Fajar Islamy, Muhamad Parhan, Risris Hari Nugraha, Ganjar Eka Subakti, Ahmad Fuadin	Internalizing Islamic Values In Building Green Education
4	13.30 - 13.40	ABS-IGEOS-20016	Vidi Sukmayadi, Muhammad Fasha Rouf, Azizul Halim Yahya	Indigenous Concepts of Gender, Communication and their Link to Spatial Processes: A Case Study in Kasepuhan Ciptagelar, Indonesia
5	13.40 - 13.50	ABS-IGEOS-20056	Suka Prayanta Pandia, Ermawati Girsang, Shania Taras Perangin-angin, Shirley Natasha	Perceptions of Racism Based on Regional Indigenous
6	13.50 - 14.00	ABS-IGEOS-20033	Karunia Puji Hastuti, Deasy Arisanty, Akhmad Munaya Rahman, Parida Angriani	Exploring indigenous knowledge values of bahuma as a preservation of the national culture of Indonesia
7	14.00 - 14.10	ABS-IGEOS-20038	Rama Wijaya, Maulia Depriya Kembara, Muhamad Parhan, Nurti Budiyantri, Vini Agustiani Hadian	Pemali as a Defense of Ecovillage Values in the Kampung Kasepuhan Babakan Lama
8	14.10 - 14.20	ABS-IGEOS-20045	Dadi Mulyadi Nugraha, Wina Nurhayati Praja, Abdul Azis, Abih Gumelar, Pandu Hyangsewu	Internalization of Green Moral community of Kuta Village Ciarnis Regency
9	14.20 - 14.30	ABS-IGEOS-20047	Edi Suresman	Religion as a Solution to Behavioral Problems Faced by Street Children: A Case Study in Indonesia
10	14.30 - 14.40	ABS-IGEOS-20052	Suka Prayanta Pandia, Audia Fara Pencawan, Ermawati Girsang, Dina Wati Veronika Napitupulu	Effectiveness of Peacecamp in Eastern Indonesia
11	14.40 - 14.50	ABS-IGEOS-20061	Munawar Rahmat, Endis Firdaus, Wildan Yahya	Sunni-Shiite Harmony and Conflict in Jepara (Central Java) and Sampang (Madura)
12	14.50 - 15.00	ABS-IGEOS-20058	Sidharta Adyatma, Muhammad Muhaimin, Muhammad Anshori, Aswin Nur Saputra	Takmir's (mosque administrator) response to the suitability of the mosque's qibla direction in Banjarmasin
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20030	heni zaenudin, Kokom Siti Komariah	A Media-Based Campaign to Protect Watershed of Citarum River, West Java Province, Indonesia
14	15.40 - 15.50	ABS-IGEOS-20079	Nur Alliya Yasmin Noor Azlan, Zuriatunfadziah Bt Sahdan	Perceptions of Influential Transgender in Malaysia: A Social Media Analysis
15	15.50 - 16.00	ABS-IGEOS-20243	Endis Firdaus, Munawar Rahmat, Raniri Munawar	Emotional Geography of eternity: A case study of spiritual tolerance of religion in the family of a widow whose husband dies of a different religion

Breakout room 8 : Health Environment and Sustainable Development Goals (SDGs)

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20188	Amrullah Fathurrahman, Supriatna	Challenges and Opportunities of Biodiversity Park as a Togong-Tanga Indigenous Peoples Conservation Area in Banggai Kepulauan, Central Sulawesi
2	13.10 - 13.20	ABS-IGEOS-20182	Anggita Winda Sari, Dewi Liesnoor Setyowati	The Local Wisdom of Communities in Maintaining the Sustainability of Telaga Mangunan in Tlogohendro Village, Petungkriyono District, Pekalongan Regency
3	13.20 - 13.30	ABS-IGEOS-20008	Endang Puji Astuti, Joni Hendri, Mara Ipa, Mega Tyas Prihatin, Andri Ruliansyah, Triwibowo Ambar Garjito	Identification of Wuchereria bancrofti in Culex quinquefasciatus Post-Mass

No	Time	Code	Author	Title
				Drug Administration (MDA) Lymphatic Filariasis in Bekasi District, Indonesia
4	13.30 - 13.40	ABS-IGEOS-20023	Heni zaenudin, Ahmad Fachrul Muchtar affandi, Ridwan Effendi	Health Campaign of COVID-19 Prevention through New Media in an Urban Area
5	13.40 - 13.50	ABS-IGEOS-20032	Pandji Dhewantara, Muhammad Umar Riandi, Tri Wahono	Effect of climate change on the geographical distribution of leptospirosis risk in Western Java, Indonesia
6	13.50 - 14.00	ABS-IGEOS-20057	Ferry Fathoni, Jon C Lovett, Annisa Joviani Astari, Hery Haerudin	Sustainability of the Indonesian energy for the transportation sector: Impact of the global agenda and national environmental policies on institutional development
7	14.00 - 14.10	ABS-IGEOS-20070	Annisa Joviani Astari, Lili Somantri, Alnidi Safarach Bratanegara, Haikal Muhammad Ihsan, Silmi Afina Aliyan	Ecological Criteria for Sustainability in Global, National, and Local Scales: A Review of the Literature and Case Study in the Indonesian Palm Oil Sector
8	14.10 - 14.20	ABS-IGEOS-20076	Muhammad Alfana, Sukamdi	Covid-19 Implications for Demographic Parameters and Demographic Bonus Achievements in Indonesia
9	14.20 - 14.30	ABS-IGEOS-20084	Alwan husni ramdani, Haikal Muhammad Ihsan, Aly Mecca	Government Instagram Study In An Urban Area In Pandemic Covid-19
10	14.30 - 14.40	ABS-IGEOS-20082	Alnidi Safarach Bratanegara, Lili Somantri, Annisa Joviani Astari, Silmi Afina Aliyan, Haikal Muhammad Ihsan	the importance of environmental awareness and industrial hygiene for workers
11	14.40 - 14.50	ABS-IGEOS-20080	Nur Wita Fadillah, Chatarina Muryani, Pipit Wijayanti	An Analysis of Sustainable Tourism Development Planning of Geopark in Nglangeran Region, Patuk District, Gunungkidul Regency, Special Region of Yogyakarta
12	14.50 - 15.00	ABS-IGEOS-20096	Trisnarningsih Trisnarningsih, Buchori Asyik	Child Marriage in Urban Areas: Gender Quality Perspectives in Sustainable Development Goals (SDGs) Programs
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20090	Wanajat Kastolani, Darsiharjo, Iwan Setiawan, Upi Supriatna	Integrated Waste Processing In Pangandaran Beach Tourism Area
14	15.40 - 15.50	ABS-IGEOS-20117	Sukmaniar	Level of Community Vulnerability in the Slums of Palembang City
15	15.50 - 16.00	ABS-IGEOS-20108	Novanda Nurul Aini Puspitasari, Pramono Hadi	Effects of Land Use on The Number of Coliform Bacteria in Boyong River, Sleman
16	16.00 - 16.10	ABS-IGEOS-20251	Jalu Rafli Ismail, Arif Ismail, Nandi	Spatial Analysis on Influence of Elevation Toward Infection Fatality Ratio of Coronavirus Disease 2019 in Bandung Regency and Bandung City
17	16.10 - 16.20	ABS-IGEOS-20242	Nandi, Lili Somantri, Arif Ismail	Mapping of the level of vulnerability of the region to the pandemic Covid-19: Case study of Bandung Municipality
18	16.20-16.30	ABS-IGEOS-20174	Agung Satriyo Nugroho, Muhammad Galang Ramadhan Al Tumus, and Khadijatusalma	Mapping Threat of Crisis Due to Covid 19 Towards the Management of the Indonesian Border By: Agung Satriyo Nugroho, Muhammad Galang Ramadhan Al Tumus, and Khadijatusalma

Breakout room 9 : Urban and Rural Environmental Geography

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20001	Dias Oktri Raka Setiadi, Muhammad Baiquni	Household Livelihood Strategies of Inhabitant Traditional Javanese House in Brayut Tourist Village
2	13.10 - 13.20	ABS-IGEOS-20004	Nurti Budiyantri, Maulia D Kembara, Rama Wijaya A. Rozak, Pandu Hyangsewu, Daris Hadiananto	The Role Of Local Culture "masagi" In Developing Indonesian Education Spirituality Becomes Insan Kamil
3	13.20 - 13.30	ABS-IGEOS-20024	Moh. Dede, Chay Asdak, Iwan Setiawan	Spatial-Ecological Approach in Cirebon's Peri-Urban Regionalization
4	13.30 - 13.40	ABS-IGEOS-20064	Dio Armansyah, Widyawati Sumadio	Social Capital Role in Enhancing the Middle Eastern Investment in Warung Kaleng Area
5	13.40 - 13.50	ABS-IGEOS-20075	Dedy Miswar	Spatial Analysis of Uninhabitable Houses (RTLH) Tanggamus Regency, Lampung Province
6	13.50 - 14.00	ABS-IGEOS-20074	Arry retnowati, Genta Darma Maulya, Khusnul Intan Dwi Fajar	Sustainable development from the view of Village Development Index Implementation at Landslide Prone Area in Kulon Progo
7	14.00 - 14.10	ABS-IGEOS-20088	Ikhsan Maulana Mulya, M.H. Dewi Susilowati, Ratri Candra Restuti	Locations and Tourist Characteristics of Culinary Tourism in West Bandung Regency, West Java Province
8	14.10 - 14.20	ABS-IGEOS-20086	Rena Mukti Sari, Ahmad, Moh. Gamal Rindarjono	An analysis of Settlement Areas Development in the 2010-2020 Period in Blambangan Umpu, Way Kanan Regency, Lampung Province
9	14.20 - 14.30	ABS-IGEOS-20159	Ade Pugara, Brian Pradana, Deny Aditya Puspasari	The Efficiency of Semarang Pekalongan Toll Road in Goods Transportation
10	14.30 - 14.40	ABS-IGEOS-20156	Deny aditya puspasari, Ade Pugara, Brian Pradana	Tourism and Housing Transformation Process
11	14.40 - 14.50	ABS-IGEOS-20151	Monica Pratiwi	Livelihood sustainability of small-scale fishermen on Depok Beach, Special Region of Yogyakarta
12	14.50 - 15.00	ABS-IGEOS-20149	Ade Pugara, Fahrul Hidayat, Rizal Aprianto, Izzan Arif Hutomo	The Influence of Mudik Tradition on The Corona Case Escalation In Central Java
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20147	Firyadi	CO2 Emissions and Sequestration with Land Use and Land Cover Changes According to the Spatial Plan in Banyuasin Regency, South Sumatra
14	15.40 - 15.50	ABS-IGEOS-20139	Riris Rinonce Hapsari, Hapsari Proboningrum, Muhamad Rosyid Pamungkas	Overtourism Threat In Kuta District, Badung Regency, Bali Province
15	15.50 - 16.00	ABS-IGEOS-20212	Iwan Hermawan, Octaviadi Abrianto, Revi Mainaki	The Spatial Structure Of Cirebon City In 1918 Based On Archeological Heritage Of Sugar Industry And Railroad Transportation
16	16.00 - 16.10	ABS-IGEOS-20223	Paramita Rahayu, Erma Fitria Rini, Jayanti Kusuma Wardhani	Urban water governance: Lesson learned from urban water problems in Surakarta
17	16.10 - 16.20	ABS-IGEOS-20231	Wafa Fauzia, Hafid Setiadi, Nurrokhmah Rizqihandari	Transformation of Public Space Utilization by Online Ojek
18	16.20 - 16.30	ABS-IGEOS-20095	Murdiyah Winarti, Wawan Darmawan, Erlina Wiyanarti, Iing Yulianti	Cultural Heritage and History-Based Tourism Potentials in Bandung City
19	16.30 - 16.40	ABS-IGEOS-20210	Fauziah Che Leh	Geography of Fear: Tourists and their experiences in Kuala Lumpur Urban Tourist Spot

No	Time	Code	Author	Title
20	16.40 - 16.50	ABS-IGEOS-20126	Siti Rahmah Husnul Khotimah, Wawan Gunawan, Angga Dwiartama	Effectiveness of ginger supply chains in rural communities as a form of farming sustainability (study case in Cianjur district)

Breakout room 10 : Geography Education

No	Time	Code	Author	Title
1	13.00 - 13.10	ABS-IGEOS-20238	Rafzan	Dimension of critical thinking students on Project Citizen Learning to Build Awareness In Natural Resource Utilization
2	13.10 - 13.20	ABS-IGEOS-20035	Daris Hadianto , Vismaia S. Damaianti, Yeti Mulyati, Muhamad Parhan, Nurti Budiyaniti	Geographical Position And Society Literacy Skill : Implementation Of Literacy Model Based On Local Culture, Life Ability, And Independent Business In The Underdeveloped Regions
3	13.20 - 13.30	ABS-IGEOS-20048	Suhendro , Slamet N. Rohman, Avi Valentri, Ottovianus Diliano Nery, Nurul Komariah, Ismail Akbar	The Urgency of Technological Pedagogical and Content Knowledge (TPACK) in Integrating Geography Learning
4	13.30 - 13.40	ABS-IGEOS-20068	Nur Wahyuni	The Contribution Eco-Literacy in Environmental Care Behavior Students of State High School in The City of Medan
5	13.40 - 13.50	ABS-IGEOS-20115	Ahmad Yani, Enok Maryani, Epon Ningrum	Scientific Learning Implementation during the Covid-19 Pandemic in Geography Subject
6	13.50 - 14.00	ABS-IGEOS-20112	Sugeng Widodo, Sugeng Utaya, Sumarmi, Syamsul Bachri	The Development of Creative Thinking Oriented Instructional Material of Geography Subject
7	14.00 - 14.10	ABS-IGEOS-20111	Totok Doyo Pamungkas	Student Perception of E-Learning in Geographical Perspective
8	14.10 - 14.20	ABS-IGEOS-20161	Pardo wandra, Iwan Setiawan, Ahmad Yani	The Effect of Problem Based Learning Model on Students' Spatial Thinking (Quasi-Experimental Study, In Class XI IIS SMAN 1 Lunang, Kab. Pesisir Selatan).
9	14.20 - 14.30	ABS-IGEOS-20150	Dian Puspita Anggreni, Sumarmi, Dwiyono Hari Utomo, Muhammad Aliman	The Influence of Guided Inquiry Learning with Geo-Literacy and Scheme on Spatial Thinking Ability
10	14.30 - 14.40	ABS-IGEOS-20135	Saiful Amin, Budi Handoyo, Sumarmi, Syamsul Bachri, Singgih Susilo, Cipta Estri Sekarrini	The development of a conceptual model of environment-problem-based geography instructional materials
11	14.40 - 14.50	ABS-IGEOS-20134	Ruli As'ari, Dede Rohmat, Epon Ningrum, Ahmad Yani	Exploring the Potential of Galunggung Volcano Region to Develop Geographic Education Field Laboratory
12	14.50 - 15.00	ABS-IGEOS-20131	Siti Fadjarajani	Integration of Spatial Intelligence-Based Learning with Utilization of the Ecovillage Program in the Citanduy Watershed, West Java, Indonesia
	15.00 - 15.30		Break	
13	15.30 - 15.40	ABS-IGEOS-20198	Alvi Yasin Martindo	Need Analysis to Identify Hypermedia Lite Droid for Spatial Thinking
14	15.40 - 15.50	ABS-IGEOS-20208	Rasi Yeni Mustika, Enok Maryani, Wanjat Kastolani, Rasi Yeni Mustika, Enok Maryani, Wanjat Kastolani	The Role of Geographic Learning on Breakdown Behaviour In Pandeglang High School

No	Time	Code	Author	Title
15	15.50 - 16.00	ABS-IGEOS-20202	Dede Sugandi, Ramadhan Pascawijaya	Cognitive Assessment of Students in Geographic Learning at The Senior High School At Bandung City
16	16.00 - 16.10	ABS-IGEOS-20211	Epon Ningrum	Utilization of Microteaching to Develop Teaching Skills of Students at the Geography Education Study Program, Universitas Pendidikan Indonesia
17	16.10 - 16.20	ABS-IGEOS-20244	Robiyati, Ahmad Yani, Iwan Setiawan	The Effect of the Availability of Non-Textbooks in Geography Learning on Student's Reading Interest in Geographic Literacy
18	16.20 - 16.30	ABS-IGEOS-20017	Aris Munandar	Differences in Learning Activities by Using Merdeka Lesson Plans for Elementary School Teachers in Jakarta
19	16.30 - 16.40	ABS-IGEOS-20098	Yeni Kurniawati, Wawan Darmawan, Murdiyah Winarti, Tarunasena	Geography Trajectory in the High School History Textbook's Historiography Based on the 2013 Curriculum
20	16.40 - 16.50	ABS-IGEOS-20255	Ade Rika Siti Fauziah, Mamat Ruhimat, Dede Sugandi	The Role of Disaster Knowledge in the Preparedness of Students in West Bandung Regency

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PHYSICAL GEOGRAPHY AND ENVIRONMENT MANAGEMENT

ABS-IGEOS-20015

Characteristic of Mass Movement in Riam Kanan Watershed, Indonesia

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Mass movement occurred in upstream in Riam Kanan watershed due to this area is part of Meratus Mountain. The objective of study is to analyse the vulnerability class of mass movement in the upstream of Riam Kanan Watershed and to analyse the characteristics of the mass movement in the upstream of Riam Kanan Watershed based aspects of morphology and morphogenesis. This study used the survey method, to determine the vulnerability class mass movement using slope maps and vegetation density map. Aspects of morphology and morphogenesis are used to determine the characteristics of mass movement. Aspects of morphology are slope of hill. Aspects of morphogenesis includes soil depth and rock weathering. The research area is dominated by medium and high vulnerability classes i.e. 54804.47 Ha and 36546.04 Ha. The mass movement type in the landform of weak eroded of denudation hills, metamorphic rock material (D1) is rotational landslides and rock fall. Rotational landslide has the characteristic of slope > 250, the soil thickness ranges from 1-2 m and occurring of rock weathering. Rock fall has the characteristic of slope > 450, about 30 cm of soil thickness, low vegetation density, further weathering.

Keywords : mass movement, landform, morphology, morphogenesis

ABS-IGEOS-20041

The Sensitivity of Meteorological Drought Index Towards El Nino-Southern Oscillation

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s.koem@ung.ac.id, rjlahay@gmail.com, salmun@ung.ac.id El Nino-Southern Oscillation (ENSO) contributes to the regional climates, such as precipitation and droughts. The objectives of the present work were to: (1) identify the severity index; (2) analyze the correlation of Standardized Precipitation Index (SPI) and Reconnaissance Drought Index (RDI), and; (3) identify the response of SPI and RDI towards ENSO. SPI and RDI were calculated for time scales (3, 6, and 12 months), and these represented the seasonal and annual drought. The identification of the responses of the drought severity index, based on ENSO, consisted of several thresholds, namely weak, moderate, and strong. In this research, the correlational value and RMSE only represented the performance of SPI and RDI on different time scales. The areas with similar climate conditions demanded a test on the performance of SPI and RDI in different height variations. According to the results, the drought severity index would decline along with an increase in the time scales. The strong El Nino phase could be significant to the seasonal and annual drought. In other words, ENSO was impactful on the precipitation and dynamics of drought. Drought periods were due to the moderate and strong El Nino phase, while the weak phase led to a normal condition. For this reason, ENSO could be functioned as an indicator to predict drought.

Keywords : rainfall, the severity of drought, SPI, RDI

ABS-IGEOS-20042

Estuary Boundary of Cimandiri and Cisadane Based on Water Surface Salinity

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Estuary is a very unique system, where mixing between rivers and seawater produces steep gradients of different abiotic components that include salinity, temperature, inorganic, and organic nutrients (Santos et al., 2014). Estuary areas have an important role but also have vulnerabilities that can threaten life in the estuary region, so it is necessary to have knowledge of estuarine boundaries so that conservation can be maintained, and can improve the management and development of estuarine areas. This study aims to analyze the boundaries of the Cimandiri Estuary and the Cisadane Estuary based on surface water salinity, and analyze the relationship of estuarine surface water salinity with rainfall, sea surface currents and tides in the Cimandiri Estuary and Cisadane Estuary. The variables used in this study are salinity, rainfall, sea surface currents, and tides. The research method use the Cimandiri Algorithm by processing OLI Landsat 8 Imagery in 2018 and 2019. The results of this study are the Cimandiri Estuary and Cisadane Estuary boundaries based on the water surface salinity observed based on the rainy season and the dry season divided into 3 estuary boundary classes namely Mexo-oligohaline (0.5-5 ‰), Mexo-mesohaline (5-18 ‰), and Mexo-polyhaline (18-30 ‰). Cimandiri's salinity value is strongly influenced by season, then by tides and last by the currents, it is because the Cimandiri Estuary has a deep waters. Meanwhile in the Cisadane Estuary, the salinity value is strongly influenced by season, then by the currents and tides, and also influenced by freshwater from land, it is because the Cisadane Estuary has a shallow water.

Keywords : Algorithm, Estuary, Landsat 8, Remote Sensing, Water Surface Salinity

ABS-IGEOS-20043

Empirical Modeling of the Distribution of Chlorophyll-a in Riam Kanan Reservoir

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Monitoring inland water quality through remote sensing is an alternative method. Broad remote sensing image coverage has the potential to increase the scope of monitoring. Remote sensing imagery is very suitable for monitoring in the Riam Kanan Reservoir which has a normal water level of 3200 Ha. Community activities for fisheries and tourism have the potential to increase nutrients and water fertility. The impact is in the form of an explosion of algal micro population which has a negative effect on the aquatic ecosystem and the surrounding population. Landsat 8 OLI was used in this study to determine the level of chlorophyll-a content in reservoir waters. Empirical modeling is a method for modeling the distribution of chlorophyll-a content utilizing the results of field measurements. Through this method also can be known which spectral band has an influence in monitoring the chlorophyll-a so that it can be seen the level of water fertility in the Riam Kanan reservoir.

Keywords : Chlorophyll-a, Empirical, Landsat 8 OLI, Reservoir

ABS-IGEOS-20093

Spatial Distribution Analysis of Lift Net Fishing Device Based on Oceanographic Features in Palabuhanratu Bay

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The types of charting gear being utilized by fisher in Palabuhanratu Bay are improving over time. From the raft lift-nets to the boat charting equipment. According to local authorization in fish gathering or PPI, the number of chart fishing gear in Palabuhanratu Bay is around 500 pieces in 2019. The goals of this study are to analyze the spatial distribution of lift net fishing devices during the dry and rainy months and determine the oceanographic features that are might influencing the spread. Some oceanographic parameters being employed include sea surface salinity, sea surface temperature (SST), water current, water depth, and chlorophyll-a concentration. This study uses images from the Google Earth application to mark the location of the lift net fishing devices. Additional satellite imageries from Landsat 8 OLI-TIRS sensors applied to generate sea surface salinity, SST, and chlorophyll-a maps. The lift net fishing devices are mostly distributed in shallow water (water depth between 40 to 100 meters). The chlorophyll-a concentration, sea surface salinity, SST, and water depth the most significant oceanographic features influencing the number of lift net fishing devices during both seasons (dry and rainy months).

Keywords : Lift net, spatial distribution, oceanographic features, Landsat 8 OLI-TIRS, Palabuhanratu Bay

ABS-IGEOS-20104

**A spatial Study of Landscape Patterns in Landslide-Prone Areas at Cikakak Sub-District,
West Java**

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Landslides have a record of deadliest impact in Indonesia during 2015 – 2017. Landslide may be caused by human activities which deteriorate the environment condition such as by reconstructing the landscapes that may reduce the ecological functions. Therefore, mapping the landslide-prone area is necessary as one of the efforts to mitigate the disaster that could be following. The methods used in this study are the landscape metrics with FRAGSTATS 4.2. and Index Storie. Landscape metrics is useful to map the landscape pattern while the Index Storie can be used to map the landslide-prone area, both Indexes then being used for further analysis to determine the relationship between landscape patterns and landslide-prone areas in the study area. Deforestation in the study area is indicated by the values of PD, LPI, and IJI related to the increase in vegetated land cover and built-up area based on the LPI and LSI values in 2000 – 2020. The Index Storie shows that areas of moderate landslide-prone areas dominate the study area, the characteristics of landslide-prone areas in Cikakak Sub-District are rainfall intensity with wet classification, slopes 0 - 50%, volcanic lava rock, and soil types associated with brown latosol and yellowish-brown latosol. A combination of landscape metrics and Index Storie show that the relationship between landscape patterns and landslide-prone areas can be one of the priorities determining tools used for monitoring and planning land cover as an effort to mitigate landslides.

Keywords : Landscape, landscape metrics, landslide-prone areas

ABS-IGEOS-20102

The extraction and analysis of lineament density from digital elevation model (DEM) in Libungo geothermal area, Gorontalo

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Remote sensing often used in geothermal exploration because it was considered has many advantages. The aim of this research is to extract and analyze the lineament density in the Libungo geothermal area based on a Digital Elevation Model (DEM). Lineament is obtained from Digital Elevation Model (DEM) satellite image data downloaded from the Geospatial Information Agency (BIG) page. Digital Elevation Model (DEM) data processing uses Geomatica software to extract the lineament automatically. Extracted lineament is processed using ArcGIS software to produce a lineament density map and processed using Rockworks software to generate direction. Lineament density maps help identify permeability in the Libungo geothermal area. Based on the results of the extraction and lineament density analysis, it is interpreted that the Libungo geothermal area has a high density value. High density values are associated with good permeability. A direction that affect lineaments in the Libungo geothermal area are northwest-southeast in the direction of Gorontalo's main geological structure.

Keywords : remote sensing, geographical information, structural, permeability, geothermal

ABS-IGEOS-20165

Study on Morpho-arrangement of Anthropogenic Landforms to Identify the Potential Exposures to Tsunami Hazard in Parangtritis, Yogyakarta

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This research was conducted in the tsunami prone area of Parangtritis, Yogyakarta. The purpose of this study is to classify and analyse the distribution of anthropogenic landforms, as preliminary information to identify the potential vulnerability to tsunamis. The method used in this research is descriptive-comparative, i.e. by comparing the variations of anthropogenic landforms typology within the present management zones. There are three management zones in the research area, namely the core zone, the restricted zone, and the supporting zone. For each zone, the type of human intervention were identified with regard to the following classification: mining, urbanogenic, traffic, agrogenic, water management, tourism, and sports. The anthropogenic landforms are then classified into excavation, planation, and accumulation types. The results of the study were presented in the form of tables and maps of anthropogenic landforms in each management zone. Assessment of the level of exposure to tsunami hazard is carried out qualitatively for each anthropogenic landform in the different management zones. This research revealed that type of intervention in each management zone are varied. The supporting zone has the most complex of intervention, i.e. mining, urbanogenic, traffic, water management, tourism, and sports. The excavation, planation, and accumulation forms are very diverse, depend on the people activities in each management zone. Every form resulted by a particular human activity has a certain level of exposure to tsunami hazard, so it is necessary to consider it for reducing the specific risk to tsunami.

Keywords : coastal area, management zones, types of intervention, anthropogenic landforms, specific risk

ABS-IGEOS-20162

Mass wasting mechanism of Gorontalo Outer Ring Road (GORR) in Padengo, Gorontalo

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One of the things that triggered the unrealized government project, namely Gorontalo Outer Ring Road or GORR, is the number of landslide points scattered along the GORR road section, as is the case in the area around GORR, namely Padengo area. This research aims to determine the mechanism of mass wasting in the Padengo area. The method used is the field survey. Data taken in the form of lithology data, geological structure and geomorphology. Field data is then analyzed to determine the mechanism of mass wasting at the research area. The results showed that the lithology of the study area was composed of reef limestone and alluvial. Reef limestone has a yellowish white color, has a massive structure, contains fossils that are exposed to molluscs and corals and is easily dissolved. The geomorphology of the study area is composed of solusional hilly units and lake plain units. In the research area, there are many extension fractures. Based on the lithological, geological structure and geomorphological, it can be concluded that the potential for mass wasting that can occur in the Padengo area is very large. It was known that the main controller for mass wasting is the fractures and the lithology characters in the research area. The type and mechanism of landslides that generally occur in Padengo Village are the Debris Slide type.

Keywords : Hazard, Risk, Carbonate, Extension Fracture, Structural

ABS-IGEOS-20216

Urban Heat Islands Phenomenon in Majalengka Regency

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The Majalengka Regency considering by The Government of West Java Province is one of the priorities of infrastructure development to sustain the accelerate of development such as West Java International Airport, Kertajati Aero City, settlements, hospitals, shopping centres, business centres, resorts, entertainment facilities. The conversion function of agricultural land into non-agricultural or industrial will affect land surface temperature, which triggers the urban heat island phenomenon. The purpose of this study was to analyze the spatial and temporal distribution of urban heat island and the effect of land cover, building density, and vegetation greenness on land surface temperatures in Majalengka in 2013, 2016 and 2019. Variables used in this study were land cover, vegetation greenness, building density, and land surface temperature obtained from the processing of Landsat Image 8 of 2013, 2016, and 2019 are validating survey at 98 points selected by random sampling method. The results showed that the land surface temperature values of Majalengka areas were between 15.26 ° C to 39.99 ° C. The phenomenon of urban heat island dominates the north to the Majalengka Regency. The Areas with low land surface temperatures found in areas with land cover in the form of built land, low greenness, and high building density. The southern of Majalengka Regency of the land surface temperature is getting lower with vegetation land cover, high vegetation greenness, and low building density. Low land surface temperature is associated with high vegetation greenness and low building density while the highest surface temperature associated with build up area with high building density.

Keywords : Land Surface Temperature, NDBI, NDVI, Urban Heat Island.

ABS-IGEOS-20196

Simulation of Landslide Disaster in Reducing Disaster Risk

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The Centre of Volcanology and Geological Hazard Mitigation (PVMBG) recorded 1,887 soil movement events throughout Indonesia 2015-2016 which resulted in 3224 people. A total of 154 soil movement occurred in West Java was categorized as much compared to other provinces. Disaster mitigation efforts continue to be carried out by the government, one of which is involved in the community to increase awareness of disaster management through the National Program Kampung Siaga Bencana (KSB). People who live in disaster-prone areas are empowered through capacity building and encouraged to establish disaster mitigation infrastructure such as evacuation routes. One of the villages entering the disaster-prone area, namely Alamendah Village in Rancabali District, Bandung Regency. The geographical location of villages in the highlands and massive development has the potential to give birth to a disaster. Therefore, increasing public awareness of disasters in the natural village must be carried out so that disaster mitigation can be applied properly. This research is expected to provide benefits to the public and encourage the formation of Kampung Siaga Bencana, namely the KSB management consisting of administrators and members and existing sections and building networks (work partners) both individually and institutions that have concentration in disaster mitigation activities.

Keywords : disaster mitigation, disaster preparedness villages, alamendah

ABS-IGEOS-20140

Study of Carbon dioxide (CO₂) Concentration Distribution in The Soil on Mixed Vegetation Area Landcover at Specific Sites of Jonggrangan Karst Zone

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Karstification and soil physical factor in the soil at Jonggrangan Karst Zone induces carbon dioxide (CO₂) concentration dynamics. This research aimed to measure soil carbon dioxide (CO₂) varieties on mixed vegetation area at specific sites of Jonggrangan Karst Zone and analyzing the relation among soil physical factors with carbon dioxide (CO₂) concentration. The data were collected between the dry season and rainy season, also between differences of soil depth at 20 cm, 40 cm, and 60 cm. The data were analyzed graphically, comparatively, and built upon statistic descriptive. The result shows that the soil moisture has strong relation to carbon dioxide (CO₂) concentration and has directly proportional trend vertically. The soil organic matter also has relation toward carbon dioxide (CO₂) concentration, but has inversely proportional trend to carbon dioxide (CO₂) concentration. The rising of carbon dioxide (CO₂) concentration happens at the rainy season and influenced by land cultivation.

Keywords : CO₂ concentration, karst, soil moisture, soil organic matter, soil temperature, soil texture

ABS-IGEOS-20206

The effectiveness of agroforestry in reducing the erosion rate compared to the eucalyptus plantation in Wanagama I Educational Forest

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Due to the increasing demand of grass for feeding the cattle, agroforestry land use was developed in the area of Wanagama I Education Forest. As a consequence, research on erosion rates at the agroforestry land use is very important, especially by comparing its erosion rate with that of eucalyptus in order to analyze the effectiveness of agroforestry in reducing the erosion rate. The objectives of the study is to determine the erosion rates both at the agroforestry area and eucalyptus plantation and the influence of rainfall to erosion rates at the two areas. The erosion rates were measured by using the small plot 22 x 4 meters were established in the field both at the agroforestry and eucalyptus areas. For measuring the rainfall, ombrometer were installed at such sites. Sigma Plot software was applied for multiple regression analysis, which is the effect of rainfall depth and intensity on erosion rate. The results of the study showed that the erosion rates on eucalyptus plantation land was 1445.85 kg/ha or 1.45 tons/ha and on agroforestry land was 679.82 kg/ha or 0.68 tons/ha. Rainfall depth and rainfall intensity affect erosion on eucalyptus land with a coefficient of determination of 0.585 and on agroforestry lands of 0.716.

Keywords : Erosion, Small Plots, Eucalyptus, Agroforestry, Wanagama

ABS-IGEOS-20215

The Identification of Soil Moisture As A Factor Of Drought In Cilutung Watershed During Indian Ocean Dipole Year

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The Indian Ocean Dipole event in 2019 has caused several drought events in the Cilutung Watershed. The information about the spatial and temporal soil moisture distribution along its changes is needed to identify soil moisture values as a drought factor in the Cilutung Watershed. The Landsat 8 OLI-TIRS data used to get the value of soil moisture based on Soil Moisture Index (SMI) method by applying the triangle method between Land Surface Temperature (LST) and Normalized Difference Vegetation Index (NDVI). This study analyses the spatial patterns of soil moisture and identifies physical characteristics that are forming in the areas with dry and very dry soil moisture values in the Cilutung Watershed during the dry period in 2019. The results showed that in the Cilutung Watershed during the dry month period in 2019, the Soil Moisture Index value would be higher on steep slopes, with the land-use consisting of shrubs, forests and mixed dryland agriculture, with the type of soils, red-yellow podzolic while the Soil Moisture Index value would be lower on the flat slopes, with the land-use consisting of residential land and open land, with the type of soils grumusol. Based on the K-Means grouping analysis method, the areas with dry and very dry soil moisture values in the Cilutung Watershed tends to have physical characteristics of flat slopes, the type of land use such as the settlement, mixed dryland agriculture, open land and rice fields, with the soil types grumusol, latosol and andosol.

Keywords : Cilutung Watershed, LST, NDVI, SMI

ABS-IGEOS-20228

Impact of the Rob Flood Disaster in North Pekalongan

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The Rob flood that struck the city of Pekalongan has an impact on surrounding areas. North Pekalongan Sub-district is a district that has suffered the worst impact if compared with other sub-districts. There are seven villages affected by this flood disaster. This research aims to analyse the impact of the flood disaster that occurred in the district of North Pekalongan. Data retrieval techniques using observations, in-depth interviews, and documentation. Data analysis using qualitative descriptive. Results of this study showed that the impact of the flood hazard occurred in the district of North Pekalongan is to cause direct impact and indirect impact. The direct impact of the flood is the destruction of the house, home furnishings, school buildings, school furniture, vehicles, and the range of public health due to the famine. Meanwhile, the indirect impact caused by disaster floods Rob that is the disruption of the activities of social and economic life of the community in the district of North Pekalongan.

Keywords : disaster, flood, impact, rob, and society

ABS-IGEOS-20146

Hydrogeomorphology of Spring at the Junction of Sumbing-Sindoro Twin Stratovolcanoes, Central Java

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A study of the potential of springs is urgently needed to support sustainable development in the stratovolcano area. This study was conducted in the junction of twin stratovolcano, Sumbing and Sindoro, to analyze the characteristics of springs which include the pattern of distribution, discharge, and water quality. The data were collected by employing observation, literature study, and documentation. The data then analysed using GIS employs average nearest neighbor, statistical analysis employs t-test and simple linear regression, and descriptive analysis by considering the application of basic concepts of geomorphology. The results show that springs patterns are clustered, regularly form in Sindoro while in the Sumbing area are irregular. The spring discharge in both volcanoes varies between class V to VI. Between the Sumbing and Sindoro there is no difference in the average of discharge, water temperature, DO, and pH, but different in the average of TDS and EC. Water temperature has a strong influence on EC in Sumbing ($R^2 = 0.65$) but weak in Sindoro ($R^2 = 0.10$). The increase in water temperature has a weak effect on the decrease of DO both in Sumbing ($R^2 = 0.19$) and Sindoro ($R^2 = 0.08$). The decrease of spring elevation influences the increase in water temperature, strong in Sumbing ($R^2 = 0.73$) but weak in Sindoro ($R^2 = 0.03$). The difference in geomorphological conditions between Sumbing and Sindoro contributes to the variation of the spring's characteristics. Overall, this paper presents new insights to understand the effect of different geomorphological conditions in two adjacent stratovolcanoes on the characteristics of springs in the region.

Keywords : Spring, Stratovolcanoes, Sumbing, Sindoro

ABS-IGEOS-20106

The Identification of Flood Susceptibility And Its Contributing Factors in Kabupaten Sampang

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Kabupaten Sampang is susceptible to flood which caused by river overflow due to rainfall peak period and rising seawater. Kamoning watershed is one of an area that got annual overflow flood. While the coastal area of Kabupaten Sampang faces rising-seawater flood/high-tide flooding. This research aimed to map the flood susceptibility class in Kabupaten Sampang using a morphological approach. Remote sensing and GIS analysis was used to classify the area into three flood susceptibility classes: high, moderate, and low. After that, the map is verified using hydrostratigraphy analysis using the geoelectric Schlumberger method. Based on the identification, 6 villages in 9 subdistricts located alongside the Kamoning River have a high flood susceptibility owing to river overflow. On the other hand, rising seawater is causing floods in Kecamatan Sreseh, Kecamatan Jrengik, Kecamatan Pangarengan, Kecamatan Sampang and Kecamatan Camplong in the southern part of Kabupaten Sampang, whereas Kecamatan Banyuates, Kecamatan Ketapang and Kecamatan Sokobanah in the northern part. Consequently, those areas are also classified as high flood susceptibility areas. The hydrostratigraphy analysis showed that the surface of Kabupaten Sampang is mainly composed of clay. With low permeability level (0.0002 m/day), water pools and surface runoff could easily be generated when rainfalls.

Keywords : Flood, Susceptibility, Morphological, Remote Sensing, GIS

GIS AND REMOTE SENSING

ABS-IGEOS-20006

Application of Remote Sensing and GIS to Identify the Vulnerability of Ground Water Pollution in Topographic Karts

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Abstract. Karst or limestone is a landscape in the form of unique, because the shape of a cool and specific surface can not be found in other morphological areas. Karst or limestone has sensitive properties and is easily dissolved in water so that the karst topography has a subsurface water system in the form of holes that are susceptible to degradation due to the very fast flow of water so that it is easy to pass water underground. Water is a major requirement for people in the karst region who have abundant groundwater potential. Human activity that is very dense will produce waste and pollutants that cause groundwater in the karst area is vulnerable to pollution. The purpose of this study was to determine the level of vulnerability of karst underground water pollution based on remote sensing data and GIS in the Rengel karst region. This type of research is quantitative research. The location of the study was conducted in the Rengel karst region in Tuban Regency- east Java-Indonesia. Sampling uses a systematic sampling method based on the specular index of the population of the Landsat 8 OLI and GDEM ASTER remote sensing image data in the form of pixels. Data analysis techniques in this study used image interpretation and logistic regression tests. The results showed that in the karst region of Rengel classified as vulnerable to pollution. Remote sensing imagery and GIS as a tool to identify the level of vulnerability of underground water pollution in the karst region. Utilization of remote sensing imagery and GIS is presented as information in the form of maps that can be used as a reference to find out how high the level of vulnerability of underground water pollution in karst areas so that people know and better protect the environment of karst areas, especially in water needs so as not to be polluted.

Keywords : Application; Remote Sensing; GIS; Pollution; Groundwater; Topographic Karst

ABS-IGEOS-20013

Cimandiri Estuary Zonation Based on Sea Surface Salinity from Sentinel-2 Imagery and its Relation with the Catching Spots Distribution of *Anguilla* spp. Larvae

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Estuary zone is a transition zone between river environment and marine environment. The meeting between river and sea in the estuary zone causes a mixture of fresh water that has a low salinity value and sea water that has a high salinity value. The meeting of both cause the value of salinity in the estuary zone to fluctuate. This makes the estuary region inhabited by various biota. This study focused on Cimandiri Estuary, where Cimandiri Estuary is a catching area for eel larvae (*Anguilla* spp.). Cimandiri Estuary zonation mapping in this study using Sentinel-2 imagery. In addition to mapping the estuary zone, this study also aims to analyze the relationship between the catch of Sidat fish larvae with the level of salinity in the wet and dry months. Estuary zone mapping is done by applying the Cilamaya Algorithm to the Sentinel-2 image to get the distribution of surface salinity values. In wet months where the amount of rainfall is high, the value of salinity and catch will decrease. But on the contrary in the dry months where rainfall is low, the salinity value and catch of Sidat fish larvae will increase.

Keywords : *Anguilla* spp., Estuary, Cimandiri, Sea Surface Salinity, Sentinel-2

ABS-IGEOS-20019

Application of Split-Windows Algorithm (SWA) Method in Forest Canopy Density (FCD) Model on Landsat 8 OLI/TIRS

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This research objective to know how much of the influence of the SWA method on the Forest Canopy Density (FCD) model. This technique became imperative because of the FCD model for some research used with three variables for the identification of vegetation cover. The original FCD Model had four variables that had a sensitivity to vegetation cover, such as; Vegetation index (Advanced Vegetation Index/AVI), shadow Index (Shadow Index/SI), soil index (Bare Soil Index/BI), and thermal index. Changes in the FCD Model based on the difficulty of extracting the thermal index to surface temperature level. Comparison has made between the FCD model with three variables and the FCD model with the SWA method as a thermal index. The results showed that the FCD model with SWA showed a more accurate result of 84% compared to the FCD model with three variables of 78%. It evidenced in areas with low vegetation, such as the Awakened land and toll Road area. Based on the findings, it concluded that the use of a thermal index called SWA has a role in improving accuracy in the FCD model.

Keywords : Forest Canopy Density, SWA, Vegetation Index, Shadow Index, Soil Index

ABS-IGEOS-20025

Using NDVI, ARVI, MSAVI Algorithm for Paddy Growth Phase and Estimation of Rice Productivity in Cikakak Sub- District, Sukabumi Regency

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Paddy is the main food crop consumed by most of the Indonesian on a daily basis. It is supported by the fact that rice consumption reached up to 1.55 tons in 2018, and Sukabumi Regency is among the five largest rice producer in Indonesia. The goal of this study is to determine the rice crop phenology and estimate rice productivity in one year of the planting season. The rice crop phenology analyzed by comparing vegetation indices such as NDVI, ARVI, and MSAVI in different temporal situations. Vegetation indices derived from Sentinel-2 imageries via Google Earth Engine. A rice crop productivity model developed from the statistical relationship between in-situ-based productivity data and vegetation indices applied to estimate productivity per each paddy field in a sub-district level. In addition, the estimation will be associated with the elevation data. The results of this study are the pattern of the rice crop phenology and the number of harvesting time in one year-planting season. The rice productivity in Cikakak sub-district estimates at the range between 6.50 to 8.87 tonnes per hectare. Estimation models utilizing NDVI and MSAVI are showing similar results, which averagely at 8.89 and 8.87 tonnes per hectare, respectively. Rice fields with high productivity are mostly located at 250 to 500 meters above sea level.

Keywords : Paddy Field, Sentinel-2A, NDVI, ARVI, MSAVI

ABS-IGEOS-20039

Probabilistic Projections of Total Fertility Rates for Indonesia and its Regions using the Bayesian Hierarchical Model

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Unlike the official projection of Total Fertility Rate (TFR), this research produced probabilistic projections at the national and provincial levels in Indonesia using a Bayesian hierarchical model (BHM). Estimates of five-year average TFR worldwide were obtained from the World Population Prospects (WPP) 2019 by the United Nations, except for Indonesia. For the national and provincial estimates, they were prepared using a logistic function from the actual TFR in the Population Censuses and Intercensal Population Surveys in different years, and the bayesTFR package for R was employed to compute these BHM-based projections. The out-of-sample forecasting for the 2010-2015 period revealed that the BHM-based projection using Asian countries as prior distribution had nearly identical performance to when all countries were used as one. It means that both projections can calibrate prediction intervals so that the proportion of actual TFR that falls within the 80% and 95% prediction intervals can reach upwards of 90% and that the officially projected TFR is within the prediction intervals of the BHM-based projections for the 2015-2045 period. Findings imply that the TFR produced in the BHM-based projections is recommended for the making of official population projections that are based on the 2020 Population Census.

Keywords : probabilistic projection, TFR, Bayesian hierarchical model, Indonesia

ABS-IGEOS-20049

**The rice production of paddy field and relationship with elevation using Sentinel-1A SAR
in Subang Regency**

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Subang Regency is the third largest rice producer in West Java. The Total area of Subang 41% is the paddy field. This research aims to determine how the spatial pattern of the paddy field and its relation to altitude using the Sentinel-1A SAR satellite imagery in Subang district. The Sentinel-1A image data used is in January-June 2018 and 2019. The study used Google Earth Engine to process Sentinel-1A image data. Classification of the harvest and not harvest using the maximum method likelihood. The results of this research show that the calculation of ice production on the paddy field has a value of R2 of 0.58 for low elevation and flat area, then the value will be smaller in high elevation and hilly areas. The research found that the Sentinel-1A is better used to calculate rice production in low elevation and flat areas. The conclusion validated by the result in low elevation and flat areas, which is rice productions more than rice productions in high elevation and hilly areas with the highest rice production in April-May.

Keywords : Rice production, Sentinel-1, elevation

ABS-IGEOS-20053

**Spatial-temporal of the growth phase and rice varieties using Sentinel-1A radar imagery
in Ciasem District, Subang Regency**

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Most Indonesians people consume rice as a staple food and monitoring of sufficient rice crop growth required for national food security. Remote sensing with Synthetic Aperture Radar (SAR) data could use to observe the growth and classification of agricultural plants with high accuracy. The purpose of this research is to analyze spatial-temporal patterns of the growth phase and rice varieties in Ciasem District, Subang Regency. The Sentinel-1A radar image used to align research objectives based on VH backscatter polarization value in the planting period of 2018-2019. Google Earth Engine and maximum likelihood classification method used to process Sentinel-1A image data. The results showed that the rice-growing phase characteristic resulted in a trend of average backscatter value, which increased in the vegetative phase to the maturation phase and decreasing again after the harvest phase. Temporal average backscatter values in the rice planting period I was higher compared to the rice planting period II. The spatial pattern of rice growing phase on planting period I starts from the north to south, and planting period II starts from the south to north. The spatial patterns of rice varieties in the first and second planting periods were categorized as random (test z NNA = 0.68) with the dominance of Inpari 42, Ciherang, and Mekongga varieties. Meanwhile, the Inpari 33 and PB 42 varieties are only spread in some parts of the Ciasem District.

Keywords : rice growing phase, rice varieties, backscatter, Sentinel-1A imagery, spatial, temporal

ABS-IGEOS-20078

Mapping Build-Up Area Density Using Normalized Difference Built-Up Index (NDBI) and Urban Index (UI) Wetland In The City Banjarmasin

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Density and undeveloped land can be identified using digital transformation through remote sensing data. This study aims to map the distribution of building densities with the Normalized Difference Built-Up Index (NDBI) and Urban Index (UI), analyze the comparison of building densities of the NDBI and UI methods, and analyze the relationship between the transformation of NDBI and UI on building densities in Banjarmasin City. The data used to obtain building density image Landsat 8 Oli Tirs. The method used to separate the built area and non-building area using digital classification. The area was developed from the results of the multispectral classification filtered with NDBI and UI transformation for the classification of the building density level. The results of this study indicate that building density has a positive relationship with the transformation of NDBI and UI because the high building density in the transformation of NDBI and UI has a high value. Non-built area and constructed land show an NDBI accuracy of 91.4505% and 92.5359% accuracy of UI, there is a difference of 1.0854% greater accuracy UI. Overall accuracy exceeding 80% indicates very high accuracy for building density mapping.

Keywords : Density of built-up area, Normalized Difference Built-Up Index, Urban Index, Landsat 8 Oli Tirs.

ABS-IGEOS-20077

Utilization of Online Geospatial Data Sources for Oikonym Study: Mapping and Analysis of Housing Name in Capital Area of Kulon Progo Regency

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Oikonym is a part of toponym that focus the study on the name given to inhabited place. In the past, availability of data was one of the obstacles in the study of toponym as well as oikonym. Now days, the development of digital mapping and information technology particularly internet enables oikonym data obtained from a variety of sources. This study aimed to explore the typology of housing names as well as the geographical characteristic of the housing location by means of mapping and spatial analysis. Data required for mapping and analysis were obtained via internet therefore referred as online geospatial data sources. Housing names were analyzed based on their generic and specific elements and language of origin used for naming. Spatial analyses i.e., 3D analysis and network analysis were performed to obtain geographical characteristic of the housing location. This study shows, about 57% of housings which have generic name, use indigenous element i.e., local language. In addition to this, about 80% of housings use indigenous element for their specific names. Housings mostly located in low land and gentle slope. On average, distance of housings to the center of capital area is 3.3 km and road density is 6.6 km/km².

Keywords : Geospatial data, mapping, spatial analysis, toponym, oikonym, housing name

ABS-IGEOS-20073

An integrated method to develop high temporal Landsat images using free and open-source (FOSS) GIS application

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Landsat image series have a long-time duration in observing the earth surface at a relatively high spatial resolution of 30 m on the visible and infrared channels. However, due to cloud cover, it is hardly possible to have a high spatial resolution of the Landsat also in high temporal resolution. This case is mainly found in a high humidity region such as Indonesia, particularly in the rainy season. Whereas some studies such as a long term phenological observation and detailed land use/land cover change detection may require a high spatial and temporal Landsat images. A higher temporal resolution image which has a similar spectral characteristic such as MODIS image can be used to fill the gap; however, it has a coarse spatial resolution. Thus, some methods have been developed to blend Landsat and MODIS to create a high spatial and temporal resolution image. Unfortunately, the blending methods are usually not straight forward, which the complete steps required to find and combine several techniques with advance computational skill. This study, therefore, aims to develop an integrated method to create high temporal Landsat images using free and open-source (FOSS) GIS application which easily accessible and applied.

Keywords : High temporal landsat, image blending, integrated method, FOSS GIS

ABS-IGEOS-20091

Applied Geographic Information System for disaster based on smong's local wisdom

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Simeulue's regency was one of the most affected by the Aceh tsunami on December 26, 2004. It is located \pm 40 km from the epicenter of the earthquake was hit by a tsunami wave with a height of 10-15 m. Catastrphic tsu-namis disaster have left 1700 houses and coastal villages devastated and total death toll of 7. Smong as a local wisdom reflecting the tsunami of 1907 has led the Simeulue society to take appropriate actions to escape the 2004 tsunami. This research aims to map out the levels of vulnerability and to mitigate the tsunami of Simeulue regency based on smong's local wisdom. The research method used is a qualitative method with data collection techniques come from indirect observation and literature studies. This research applied overlay, scoring, and weighting techniques to obtain information on tsunami vulnerabilities. The parameters of the vulnerability of the region used consist of altitude, slope, distance from the coastline, and distance from the river. Logistics backfill recommends using sata parameters for vulnerabilities of the area overlay with Simeulue county road data. The results showed that Simeulue regency had a high tsunami vulnerability level of 353.52 km², a medium vulnera-bility level of 643,815 km², and a low vulnerability level of 802.308 km². Additionally, there are 19 recommen-dation points that can be used for logistics buildup. This research has become a form of smong local wisdom publication to preserve its existence and is expected to contribute thoughts in terms of area vulnerability and disaster mitigation, creating a volatile society that exists alongside the disaster.

Keywords : Tsunami, Smong, Regional Vulnerability, Disaster Mitigation

ABS-IGEOS-20105

Analysis of Urban Heat Island and Urban Ecological Quality Based on Remote Sensing Imagery Transformation in Semarang City

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Urban physical and biotic heterogeneity phenomena that caused by the decrease of vegetation and the expansion of built-up land can influence the urban climate response. The increase of land surface temperature brings on the Urban Heat Island (UHI) phenomenon. Spectral resolution, temporal resolution, and the synoptic overview capability of remote sensing data are capable in urban study. Remote sensing imagery is able to extract the land surface temperature changes widely and simultaneously. The aims of this research are to identify UHI phenomenon and analyze the ecological condition in Semarang City using Landsat 7 ETM+ in 2002 and Landsat 8 OLI in 2019. Urban Thermal Field Variance Index (UTFVI) transformation is used to measure the intensity of UHI. Remote Sensing Ecological Index (RSEI) that based on principal component analysis transformation is used to analyze the urban ecological quality with the occurrence of UHI phenomenon. The results show that the land surface temperature mean value increase to 3,37 celsius so that some parts of Semarang occurred UHI. The trend is also increased and stronger. It is consistent with the decrease of RSEI. The increase of temperature and UHI phenomenon during 2002-2019 impact on the degradation of urban ecological quality in Semarang City.

Keywords : Urban Heat Island, UTFVI, RSEI, Remote Sensing

ABS-IGEOS-20103

Probabilistic Projections of Life Expectancy for Indonesia and its Region using the Joint Probabilistic Projection Model

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This research aims to project the life expectancy of women (e0F) and men (e0M) at birth for national and provincial levels in Indonesia using a joint probabilistic projection model (JPP). Estimates of five-year average e0 worldwide were obtained from the World Population Prospects (WPP) 2019 by the United Nations, except for Indonesia. For the national and provincial estimates, they were prepared using a logistic function from the actual e0 in the Population Censuses and Intercensal Population Surveys in different years, and the bayesLife package for R was employed to compute these JPP-based projections. The out-of-sample forecasting for the 2010-2015 period revealed that JPP-based projections with Asian countries are the most accurate compared to the other two JPP based projections. This projection can calibrate the prediction interval so that the actual e0F and e0M located in the prediction interval at a confidence level of 80 and 95 percent reach more than 80 percent. In line with this, this projection can calibrate prediction intervals so that e0F and e0M from official projections are in the prediction interval of JPP-based projections during the 2015-2050 projection period, except for Papua and West Papua.

Keywords : joint probabilistic projection, e0, bayesLife, Indonesia

ABS-IGEOS-20144

Morphometric Analysis Using Geographical Information System Techniques in Serpeng and Sumurup Watersheds

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Serpeng and Sumurup are allogenic rivers in Wonosari's basin, which derive water to the Gunungsewu karst drainage system. The river flow characteristics of their allogenic system are influenced by the watershed and weather conditions of the area. In addition, quantitative morphometry plays an important role in hydrological processes with remote sensing and geospatial techniques used to carry out a morphometric analysis. SRTM (DEM) was an efficient tool for extracting morphometric parameters. The watershed of the Sumurup river was much wider, and covers a total area of 42.80 km², with a length of the main river being 21.44 km, while the Serpeng watershed covers an area of 10.58 km² and length of the main river has 8.85 km. However, morphometry of the drainage density of both of them was classified on a medium category which indicates the basin is moderate permeability and has susceptible to flooding and erosion process. The highest order of Sumurup river has 4th level stream orders with has an elongated shape and the Serpeng has 3rd level stream orders with an oval shape. The average slope of the watersheds shows a flat categorize that implies the area in longer travel time. Comparative analysis of watershed in the allogenic system could represent the geomorphological expression on the spatiotemporal variation of hydrology behavior of both rivers.

Keywords : allogenic river, watershed, morphometry, geospatial techniques

ABS-IGEOS-20178

Spatial Pattern of Propagation Digital Terrestrial Television System in East Jakarta City

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Television media is one of the media that can convey information and entertainment for all Indonesian people on a Free to Air basis. The development of television has entered the digital terrestrial system which has many advantages over the previous system (analog). The nature of radio waves for broadcasting digital terrestrial television that propagates or propagation causes reflection and diffraction due to interference or obstacles in the form of tall buildings and trees. Thus, there is a variation in the value of the propagation of digital terrestrial television systems. This is the purpose of this research in knowing the propagation patterns of digital terrestrial television systems and knowing the effect of physical conditions on the propagation value of digital terrestrial television systems. The total sample locations taken amounted to 63 locations selected based on the unit of analysis in the form of a 2x2 km grid by considering variations in the characteristics of the variables used, namely land cover, relief, the direction of the slope, distance from the transmitter, height, and building height barriers. The analytical method used uses spatial analysis in the form of a 1x1 km grid of research and correlation analysis. The results of this study indicate that the pattern of propagation digital terrestrial television systems in the southern area of East Jakarta is better than the northern area of East Jakarta. This also proves that the influence of height and height of buildings on the propagation pattern of digital terrestrial television systems.

Keywords : Spatial Analysis, Correlation, Propagation, Digital Television, East Jakarta

ABS-IGEOS-20171

GIS Network Analysis to Optimize Zoning System Implementation for Public Junior High Schools in Yogyakarta City

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Education is an important sector for the country to form a higher quality of human resources. The availability of schools as public facilities in education is the government duty and responsibility, especially for the primary education (elementary and junior high school). The government has implemented a policy of a school zoning system to increase society access to education. This policy requires children to choose the school closest to their home. However, the facts denoted that many problems occur with the zoning system. School zoning techniques using buffer system become an obstacle due to the emergence of the blankspot area. This study aims to provide an alternative solution to the blankspot area problem in the school zoning system. This study applies network analysis using the p-median model of the location-allocation analysis and service area analysis as a zoning determination technique. The network analysis used impedance modification as a standard for zoning based on the road network. ArcGIS is used as a spatial analysis tool to provide better illustration of this network analysis. The results indicated that the service area analysis was more effective in solving zoning technique problems compared to the p-median model analysis because it provided a higher percentage of demand coverage when using the same impedance constraints. However, the p-median analysis technique is able to provide a more realistic picture of the allocation for each demand without impedance. This research still emphasizes the importance of adding schools in order to optimize the school services according to the government standards. The addition of school is expected to reduce the minimum average school-home distance.

Keywords : network analysis, p-median, service area, zoning

ABS-IGEOS-20183

Cartography Training: Thematic Mapping Related to the Covid-19 Outbreak for Government Staff

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Geospatial information and data is one of the instruments used by the government in taking action and determining policies on a problem. One of them was during the Covid-19 pandemic, geospatial information and data were used to map the rate of spread of the Covid-19 disease, the level of Covid-19 vulnerability in an area, and facilitate the distribution of social assistance to people affected by Covid-19. The ability to process geospatial information is needed for the parties who make use of the data. On that basis, the Geographical Information Science Study Program encourages increased ability to manage geospatial data among government staff and the general public in Indonesia through cartography training by utilizing the ArcGIS Online application. This training activity was carried out by providing material in the form of theory and practice on thematic mapping, data collection, data processing, and data presentation in the form of thematic maps related to Covid-19 using ArcGIS Online to all 527 participants. The majority of participants who have never used the ArcGIS Online application appreciate and are enthusiastic about participating in cartography training, especially since the training is carried out with a tutor model and the participants complete all the work until it's finished. The next follow-up, the participants will implement the use of the application in the agencies where they work. Therefore, not a few participants asked for this training to be continued intensively.

Keywords : cartography training, thematic mapping, Covid-19 outbreak

ABS-IGEOS-20203

Vegetation Spectral Characteristics Based on Altitude Zone in Galunggung Volcano

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Galunggung is an active volcano with an altitude of 2168 meter above sea level. Galunggung Volcano has a diversity of vegetation and habitat for various fauna. Previous research explained that Galunggung Volcano has at least 43 species of typical plants, which are divided into categories of mature trees, poles, saplings, and seedlings / undergrowth. However, the spectral characteristics of these plant types are still unknown. On the other hand, remote sensing with infrared channels is the right technology to analyze the spectral characteristics of vegetation in Galunggung Volcano. Therefore this study aims to analyze the specific characteristics of vegetation on Galunggung Volcano based on height zones. This research uses Landsat 8 imagery, Aster GDEM imagery, and Hyperion imagery. It is expected that the results of image processing can show how the altitude affects the different spectral characteristics and types of vegetation in the study area.

Keywords : Galunggung Volcano, Spectral Characteristics, Remote Sensing

HUMANKIND AND ENVIRONMENT

ABS-IGEOS-20021

Model for Culinary Destination Planning and Management on Tourism Village in Coastal Area: Case Study of Gebang Mekar Tourism Village in Cirebon West Java

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The vast Indonesian sea provides abundant marine resources such as seafood. In addition to it, Indonesia also has an enormous coastline that can be utilized for tourism activities. The planning and management of culinary tourism in Indonesia often does not meet the standards of sanitation and hygiene which make it worthy of being an international culinary destination. Situation of Covid-19 also changes tourism safety and secure protocol usually in cleanliness, hygiene, sanitation and environment sector. This study aims to find a model of planning and managing culinary tourism destinations in terms of physical and operational in culinary tourism destinations. The study approach was carried out with a case study of Gebang Mekar Culinary Tourism Village in Cirebon, West Java. The method used is literature review, field survey and stakeholder interviews to obtain data that is processed into a model produced by this research. This research found that there are several indicators that influence the planning and management of culinary tourism destinations including physical, culinary products, gastronomy knowledge, and food management indicators. This research should be useful for tourism destination planner, local government, coastal and small island tourism manager, and also tourism academician.

Keywords : coastal tourism, culinary tourism, tourism planning, tourism management, sanitation hygiene

ABS-IGEOS-20020

**The Kadu Lexicon Local Wisdom of Geographic's Toponymic at Pandeglang Regency,
Banten Province**

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Kadu lexicon is a form of language phenomenon as a product of cultural development that is unique. The lexicon of kadu is found of geographic's toponymic at Pandeglang Regency, Banten. The development of toponymy at Pandeglang can never be separated from various aspects or various geographic phenomena that are present behind the name of the place, because the naming of the place is based on the experience and considerations of the community as cultural actors. This study is a study that aims to describe: (a) the use of kadu lexicon in geographic's toponymic with socio-cultural conditions at Pandeglang Regency. Analytical description becomes the method in this study with written data sources and oral data sources. From the results of the study found toponyms at Pandeglang Regency using kadu lexicon, which is 47. Of all the toponyms there are 12 categorizations based on words that follow kadu lexicon and 4 groups of elements forming geographic toponymic words at Pandeglang Regency.

Keywords : local wisdom, kadu lexicon, geographic's toponymic, and Pandeglang Regency.

ABS-IGEOS-20055

Environmental Efforts Through “Lembur Kaulinan Lebaksiuh”

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Environmental damage occurred in the Bandung area resulting from the development of settlements that are less concerned about preserving the environment. The environmental damage that occurred resulting in a flash flood disaster in 2018 that resulted in the area surrounding the Cicaheum suffered. To mitigate environmental damage the awareness of the various circles is committed to maintaining the environment. This research is to study and analyze the efforts undertaken by the people of Lebaksiuh Village, Ciburial Village, District Cimencyan, Bandung Regency in protecting the environment through the program "Lembur Kaulinan Lebaksiuh". Approach in research conducted using qualitative approach and case study method by conducting an in-depth interview of manager Lembur Kaulinan Lebaksiuh. The results of the research obtained that Lembur Kaulinan Lebaksiuh has a program that gives awareness to the community to have the character of the environment by doing the planting of palm trees on the Cidurian River on the bank so that there is no flood in the rainy season and preserving "Seke Air" so that there is no shortage of clean water in the dry season. The conclusion of this research is that the program conducted by Lembur Kaulinan Lebaksiuh has shown efforts to protect the environment by giving awareness to the community to care about the environment. Lembur Kaulinan Lebaksiuh Program needs to be followed by the community or other kampong to keep the environment together.

Keywords : Lembur Kaulinan Lebaksiuh, environment, character care
environmentLembur Kaulinan Lebaksiuh, environ

ABS-IGEOS-20085

**Demographic issues in local area: insight from Kretek Sub District, Regency of Bantul,
Yogyakarta Special Region, Indonesia**

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So far, the issue of demographic conditions in relation to development has been more discussed at the national and provincial levels. There has not been much discussion at the administrative level below, the regency and moreover at the Sub District level. In line with decentralization, demographic issues at the local level have become very important. Because it will be a consideration in the preparation of development programs at the local level. This study aims to identify demographic conditions, including their potential and challenges, at the Sub District level. The research will emphasize the use of available secondary data obtained from various related sources. The results showed that the potential of human resources in the Kretek Sub District was very large. This can be seen from the number of productive age population, which is three times the population of non productive age. This indicates that the demographic bonus and window of opportunity will be won by the Kretek Sub District. The challenge ahead is of course how to take advantage of this large amount. The goal is that the productive population is able to access the economy well, which leads to the welfare of the population.

Keywords : Demographic issues, Sub-district of Kretek, Yogyakarta

ABS-IGEOS-20097

Landscape Archaeology as a Key Concept for Cultural Resources Management in Indonesia

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“A lady left her apartment during the World War II and never returned. She kept paying the bills for it, so the flat stood untouched for 70 years, until it was opened again in 2010. When the first eyes were laid on it in 2010, it was probably like a snapshot from the middle of the 20th century. It was a past landscape – not reconstructed, but saved – a supposedly real past landscape”. A short illustration above is the simplest way to define landscape archaeology. Archaeological remains are one of cultural resources owned by every state, including Indonesia. These remains have several categories: Objects, Buildings, Structures, Sites and Cultural Heritage Areas. All of these remains need a proper management in order to be preserved for future generations. The strategy of cultural resources management has to be developed by practicing interdisciplinary approach from other relevant disciplines that have significant contribution to it. This paper is a conceptual idea that is constructed based on literature study of theory and concept of landscape archaeology. The theory and concept are derivative from geography discipline specifically landscape ecology, which will be compared to the currently used concept. Obtaining a new concept of cultural resources management based on characteristics of landscape archaeology that is based on landscape ecology, which is much different from previous concept that was used. Theory and concept of landscape archaeology based on landscape ecology are closely related and able to give contributions to the strategy of cultural resources management in Indonesia.

Keywords : Landscape Archaeology, Concept, Cultural Resources Management

ABS-IGEOS-20094

**Contracting the values of Environment Care Characters through Duduk Ngelmu program
as an effort to increase civic Disposition**

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Nature provides a captivating appearance that makes an extraordinary attraction for humans. Today, nature does not only attract the attention of its lovers, but it also attracts the attention of its connoisseurs. The perspective of both shows a different form of appreciation. Interest in nature is not accompanied by the values of environmental care, so that knowledge of nature, balance of nature, and conservation is not so mastered. The character of environmental care becomes the main cornerstone for every human being to love nature. The character values of environmental care are indicated by the appropriate attitudes and actions that seek to preserve nature and prevent environmental damage. Cultivate of environmentally caring characters is the responsibility of all parties. As shown by the Tampomas Bicara Community, through the Duduk Ngelmu program the Tampomas Bicara community seeks to study and discuss about nature conservation. Duduk Ngelmu Program is one of the responsibilities and love of Sumedang peoples about the problems and environmental issues in Mount Tampomas. To examine the values of the environmental care character in this study, researchers used a qualitative approach with case study methods. This research shows that Duduk NGELMU program can increase the civic disposition of natural activists in Sumedang.

Keywords : Duduk Ngelmu, Civic Disposition

ABS-IGEOS-20124

Pawang Uteun Local Wisdom Values in Managing Aceh Forest

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Environmental damage on earth is mostly caused by human activities in overexploiting nature. This activity shows that people's attitudes are still low in environmental preservation. Local people still carry out the traditions passed down by their ancestors in managing the forest wisely and wisely. This study aims to see the perceptions of the Acehese community towards the pawang uteun and to formulate the local wisdom values of the pawang uteun in maintaining and managing forests in a manner. The method used in this research is a survey method with a descriptive approach. This research shows that the values contained in the local wisdom of pawang uteun are very suitable to be taught to students. Conclusion The community's perception of the importance of forests is very high and this is why they want this forest to be managed by indigenous peoples with their wisdom. There are conservative values in customary forest management by pawang uteun, religious values as well as togetherness and deliberation. Pawang uteun traditional wisdom values in managing forests must be socialized to the community so that the community knows and obeys in protecting customary forests. It is hoped that it can increase awareness and concern for the environment, besides that it can also maintain the existence of culture in the era of globalization

Keywords : Local wisdom, perception, Forest management

ABS-IGEOS-20122

**Tour Guide Level of Understanding on Geodiversity, Biodiversity; and Culture Diversity -
Study at Ciletuh Palabuhanratu Global Geopark**

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One of the competencies that must be mastered by guides is the ability to communicate ideas and information about physical, social, and cultural conditions at tourist sites. The ideas and information that need to be communicated in the geopark area are three elements namely Geodiversity, Biodiversity; and Culture Diversity. In addition, it must be able to communicate in interesting and communicative language. This study wants to find out the level of understanding of guides on these three aspects. The research method used was a survey and through testing of research subjects, namely members of the Indonesian Tour Guides Association in Sukabumi Regency, especially those serving tourists in the Ciletuh Palabuhanratu Global Geopark. The results showed the average mastery of the material was still lacking and the distribution of the material under its control was uneven. Thus, it is considered necessary to increase competence, especially regarding the knowledge and understanding of the three aspects of the geopark.

Keywords : Biodiversity; Ciletuh, Culture Diversity, Geodiversity, Geopark

ABS-IGEOS-20101

Rimbo Larangan Revitalization of Minangkabau Community to Foster High School Students Environmental Awareness

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Minangkabau community of West Sumatra is familiar for its local wisdom called rimbo larangan particularly on concept dealing with environmental conservation. There some occurrences of excessive forest exploitation so the local wisdom of rimbo larangan needs to be revitalized by the community. This study used a qualitative descriptive method which revealed the conditions and management of rimbo larangan in Nagari Alam Pauh Duo, South Solok Regency and Koto Malintang Nagari, Agam Regency, West Sumatra Province. The results of the study illustrate good conditions of rimbo larangan in those two locations though there are a number of differences in its management. The existence of rimbo larangan in both Nagari provided direct and indirect benefits to the local community. Lastly, the efforts to revitalize the local wisdom of rimbo larangan can be connected to geography learning in high school to develop students' environmental awareness.

Keywords : Rimbo Larangan, Local Wisdom, Environmental Awareness, Geography Learning

ABS-IGEOS-20152

Indigenous Knowledge in "Sundanese Land" Kawih to Introduce Geographical Conditions to Elementary School Students

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The current of globalization and modernization has eroded the sense of love of the younger generation of Sundanese towards the area they occupy, all the peculiarities of the Sundanese land that should be the main attraction for people who trace the wealth of Sundanese gradually began to be abandoned. One of the cultural heritage of the Sundanese is "kakawihan". Kakawihan contains local values and wisdom of Sundanese people in general. These values and local wisdom must be maintained and used as the philosophy of Sundanese life. Local wisdom is essentially an activity that protects and preserves nature and the environment. This study uses a qualitative method with a phenomenological approach. The subject of the research was the community of the District District Village. Data collected from primary and secondary sources. Primary sources are done by direct observation (natural observation), for deepening (indepth review) interviews are conducted with snowball sampling techniques. Secondary data obtained through exploration journals, research reports and relevant library sources. The analysis uses an interactive approach that includes data reduction, data display and conclusion drawing and verification and validation (triangulation). The results of the study concluded that kawih "Sunda Land" has many functions, namely individual functions, so that the community always takes care of their heritage land (heritage of ancestors), as a medium of entertainment (welcoming guests to be fascinated by the wealth of Sundanese land and its arts) and as a medium of education (moral message in the form of the obligation to maintain and care for the inheritance).

Keywords : Indigenous knowledge, kakawihan, elementary school students

ABS-IGEOS-20148

The Vantage Point of Geopolitics: Capturing Indonesia's Maritime Axis Policy
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After the East Asia Summit in 2014, Indonesia's Maritime Axis became a priority under Joko Widodo's administration. The maritime development aspect once articulated in the Djuanda Declaration in 1957, however, during several periods of leadership, the government marginalized the Maritime realm and was more directed to encourage agricultural as well as inland centric development. Truly unfortunate, it became contrast with the fact that Indonesia, as an archipelagic country according to the United Nations Convention for the Law of the Sea (UNCLOS) in 1982, hibernated over periods to maritime development. This study examined Indonesia's Maritime Axis policy from a geopolitics perspective in international relations and national interests. The research method utilized qualitative with a descriptive analysis approach. The main argument rest in a state which performed geopolitics in regional dynamics, prominently towards Indo-Asia-Pacific rim to achieve national interests. The United States and China tried to anchor down their influence over this vast and vibrant region while Indonesia seeks opportunities towards cooperation to increase economic growth. Furthermore, Indonesia firmly showcased a rising middle power, as well as an archipelagic country, which struggle to protect its maritime sovereignty.

Keywords : Indonesia's Maritime Axis, geopolitics, national interests.

ABS-IGEOS-20142

The Suitability of Mangrove Tourism in The District of Cilamaya Wetan, Karawang Regency, West Java Province

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The study was conducted in the District of Cilamaya Wetan, Karawang Regency, West Java Province from November to December 2019. The purpose of this study was to analyze the suitability of mangrove tourism. Based on the results in the field, the mangrove ecosystem of Cilamaya Wetan District has an average thickness of 114.62 m, consisting of 4 types of mangroves namely *Rizophora stylosa*, *Rizophora apiculata*, *Rizophora mucronata*, *Avicennia alba*, *Bruguiera gymnorhiza*, and *Sonneratia* with an average density of 19 trees/100 m² based on the transect method and a 10x10 meter sample plot. While the biota associated with this mangrove ecosystem, namely Gobiidae, *Portunus pelagicus*, *Mycteria cinerea*, and *Solenoceridae*. Based on the suitability assessment of mangrove tourism, this district has 2 classifications, which are appropriate and in accordance with the conditions. Appropriate classifications are found in Sukakerta Village, Muara Baru Village, and Muara Village with a total area of 685 Ha. Whereas conditional classification is found in the village of Rawagempol Kulon with an area of 110 hectares.

Keywords : tourism suitability, mangrove, karawang district

ABS-IGEOS-20133

The Demographic Dynamics of Bandung City 1907-1996 in Haryoto Kunto's View

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This article discusses the demographic development of Bandung City from 1907-1996 which recorded in the works of "Kuncen Bandung" Haryoto Kunto. Haryoto Kunto explored the history of Bandung from old books and arranged in such a way to get a general description of Bandung from time to time. His works use very loose language, almost the same as the colloquial language used in daily conversation. However, his works have important information regarding Bandung's demographic change, especially in terms of the emergence of immigrants. This study uses a qualitative content analysis method to describe and analyze in detail the description of the demographic dynamics of Bandung in 1907-1996 in Haryoto Kunto's books, such as *Wajah Bandoeng Tempo Doeloe* (1984), *Semberbak Bunga di Bandung Raya* (1986), *Savoy Homann Persinggahan Orang Penting* (1989), *Balai Agung di Kota Bandung* (1996), *Ramadhan di Priangan* (1996), and *Tempo Doeloe Cepat Berlalu* (1996). The railway line to Bandung was first entranced in 1884 and it encouraged the rate of developmental dynamics getting faster than before. As a result, in the late 19th- and early 20th- century, the city of Bandung was actively built so that encourage the newcomers to come to Bandung. In 1907, the number of newcomers who came to Bandung estimated to increase tenfold as much as the early residents. The names of places in the city of Bandung such as Babakan Ciamis, Babakan Surabaya, Chinatown, and others are traces of the growth and development of the demographics of Bandung.

Keywords : Bandung, Demographics, Haryanto Kunto, Priangan, Wajah Bandoeng Tempo Doeloe

ABS-IGEOS-20176

**Coastal Communities Mobility Pattern Around Mangrove Ecotourism Sukakarta Village,
Cilamaya Wetan, Karawang Regency.**

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Sukakarta Village is a coastal area located in the north of Karawang Regency. Its location on the coast makes people dependent on coastal natural resources for their lives. In this village there is a new mangrove ecotourism that has the potential to be utilized by the surrounding coastal communities. Coastal communities in this study are divided into two age groups, namely the younger generation and the older generation. This research will describe the movement of coastal communities in carrying out daily activities that are divided into these two generations. The movement includes the activities and the time used. The method used in this study is a qualitative method. Data was collected by conducting interviews with coastal communities around ecotourism. The results of this study indicate the movement of diverse coastal communities but still related to the coast one of them is by utilizing the mangrove ecotourism. The younger generation has a wider space for movement, while the older generation has a narrower space for movement. Therefore, the conclusion of this study is that movement is influenced by the age and ability of the individual itself.

Keywords : Sukakarta Village, Mangrove Ecotourism, Coastal Communities, Mobility, Generation

ABS-IGEOS-20172

Ecological Citizenship: Environmental Care Program for Young Citizen in Digital Era

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Young citizens have a strategic role in the movement to care for the environment. The ecological citizenship movement can be a bridge to bring young citizens to the success of environmentally sustainable development. The ecological citizenship movement is a social activity that focuses its activities on saving the environment from human selfish actions. In the digital society, the development of e-commerce has led to a variety of negative impacts such as consumerism, massive exploitation of nature as well as the problem of electronic waste but the digital age has also opened opportunities in building environmental awareness. This study uses qualitative research methods and descriptive research approaches. The research technique used was purposive sampling. Data collection uses interviews, observation, document analysis. Testing data validity using data triangulation and methods. The results show that ecological citizenship is needed to accommodate the environmental concerns of young citizens through 3E programs (eco-structures, eco-literacy and ecopreneurship). This strategy is carried to build awareness, ethics, morals of citizens to their environment, especially related to the problem of waste. The hope is the realization of responsible behavior in managing and preserving the environment for every young citizen.

Keywords : ecological Citizenship, Environment, Digital Citizenship, young citizen

ABS-IGEOS-20107

Geographical Information: Walking Tour Opportunities in The Karst Area

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Karst area is an area where many non-renewable natural resources (NRNR) are found, such as limestone that resulted from nature's formation process. However, the limited Karst area has exploited for raw materials, namely cement, ceramics industry, road stabilizers, and others and thus overtimes the land will be exhausted. Meanwhile, Karst area in the West Bandung Regency which already occupied with limestone factories closes the archaeological and geological and in that area. Not to mention fossil combustion of karst soils can reduce acid rain which harmed the environment and humans. For that reason, this paper introduces the necessity for a Walking Tour (WT) for sustainable tourism aimed at preserving karst area by conducting land use. WT is a program that invites tourists to be guided through several attractions by foot or using public transportation. Local people empowerment by marketing environmental and natural services through checkpoint facilities construction to elevate the economy. Data collected through a survey of 300 respondents showed great interest in conducting WT in the karst area. Tourists are aware of the effects of environmental damage and expecting protection measures for karst area. It became an urge to develop further communication between government, tourism organizations, and local people in regards to walking tour implementation as guidelines to build the utilities.

Keywords : Karst, mapping tourism, walking tour

ABS-IGEOS-20153

Genius Loci: Heritage Tourism as a Special Interest Social Space

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Bandung is a city that is familiar to everyone, the selection of tourist destinations in the city of Bandung is very diverse. One of them is a special interest tourism heritage building located in the city of Bandung. The distribution of heritage buildings in the city of Bandung decreased due to changes in a city. The purpose of this study provides an analysis of the potential of the city of Bandung as a special interest tour that is heritage buildings. Descriptive analytical methods are used in this study to explain the potential tourism interest of heritage buildings. The research results obtained that the city of Bandung has a wealth of heritage that must be preserved by the Government, tourism managers, and the community. This can be seen from the response of tourists visiting the city of Bandung stating that 58.7% Bandung has a variety of recreation areas and is suitable for visiting. Genius loci is an effort to awaken the soul of space and place in optimizing heritage buildings in the city of Bandung.

Keywords : Heritage tourism, genius loci, Bandung city, special interest tours.

ABS-IGEOS-20130

New Normal in the Hotel Industry: How to apply cleanliness, health, safety, and environmental sustainability standards of Hotel in Bandung.

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Abstract. The purpose of this study is to determine the extent of the implementation of health protocols according to cleanliness, health, safety, and environmental sustainability (CHSE) standards in order to enter the era of adaptation of new habits in the hotel industry, especially in the city of Bandung. Using a qualitative method carried out through descriptive analysis based on data in the hotel industry in the face of the Covid-19 pandemic which took place in April to May 2020. The hotel industry area that researchers chose is the Bandung city area because the city of Bandung is one of the most desirable tourist destinations by domestic and foreign tourists. In addition, the hotel industry is getting a big impact from the Covid-19 pandemic. The results of this study are a mapping of the hotel industry in the city of Bandung in implementing health protocols that comply with cleanliness, health, safety, and environmental sustainability (CHSE) standards. Further development of this kit is implemented as a strategic tool for the hotel industry, government, and tourists when traveling in the New Normal era.

Keywords : Covid-19, Hotel Industry, cleanliness, health, safety, and environmental sustainability

ABS-IGEOS-20065

Media Coverage and People's Perspective: Non-Muslims Perception of Human Rights

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The study was conducted based on the Indonesian media coverage on the eruption and after-effect of the Rohingya humanitarian crisis from a geopolitical and cultural perspective of a fellow Southeast Asian country. This research paper aims at investigating the public perception of the human rights crisis in Myanmar. The quasi-experimental method was used to investigate as well as to answer the following research question: What is the difference from the Indonesian Non-Muslim audience's perception toward the Rohingya news coverage?. This study is focused on obtaining data from different religious segments of society as the subject of the study. Non-Muslim students were set as the population of the study. Subsequently, purposive sampling is conducted by selecting 150 respondents based on particular criteria relevant to the study. The samples were taken from a university in Indonesia. The participants were asked to fill the initial questionnaire, and then they were required to read five online news articles related to human rights issues in Rakhine State, Myanmar. Following the treatment, the respondents were asked to fill in the final questionnaire regarding their perceptions of human rights violations. The results of the study indicated that there were differences in perceptions in the experimental group before and after being treated in the difference test.

Keywords : human rights, media coverage, Indonesia, non-muslim, perception

ABS-IGEOS-20114

Passengers' Deviant Behavior Mapping in Duri Train Station

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Passenger's deviant behavior occurred and could not be separated with the lack of station facilities. The purpose of this paper is to analyze the Pattern of Commuter Line passenger's behavior in the Duri Station. Passenger's behavior is observed by using Place Centered Mapping method. This observation technique aimed to understand how people utilize or accommodate their behavior at a particular time and location in the train station. This research model is divided into two stages. The first stage are observation and semi-structured interview to passengers. The second stage is examined the passenger's behavior based on location within the train station. Triangulation and spatial analysis are used in this study with several theoretical discussion about where, when and why passengers did deviant behavior. The results showed passenger's deviant behavior based on three components of station zone: arrival zone, main facility zone and platform zone. The main facility and platform zone are more vulnerable for passengers' deviant behavior. The most common deviant behavior are pickpocket and verbal harassment, the least is sitting in the bottom of the platform. This deviant behavior occurs mainly because at the peak hour, the number of security guard officers is inadequate compared to the number of passengers.

Keywords : Commuter Line, Passengers' Deviant Behaviour, Train Station, Place Centered Mapping

ABS-IGEOS-20168

Relationship Between Fishermen Wife's Characteristics and Decision Making in Household and Social Communities at Depok Beach

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Depok Beach is one of the attractions in Parangtritis Village and pioneered the fisheries business in Bantul, 1995. Fish Auction Place (TPI) on the Depok Beach coast became the TPI with the highest fish production in Bantul in 2013-2017 and contributed to economic value the highest fishery resources on the South Coast of Bantul. But the fishermen have not escaped poverty. They get higher incomes only in certain seasons. The lack of certainty of income every day in a fisherman's household, makes women adapt as one of the pillars supporting the needs of the household life. Not only in the household, coastal women are also a milestone in the development of coastal villages, women with an average age of 20-40 years are involved in fisheries activities business on the coast of Depok Beach. Women who work and have an economic position are also decisive factors in dealing with men, both in the field of activity in the family and society. This study aims to determine the relationship between characteristics of fishermen's wives on household and social decision making as well as spatial variations in typology of fishermen wives. Method used for data analysis is chi square model which is one of the non-parametric comparative test models by two variables, namely the level level of income and education towards decision making. Significance results between the relationship of two variables were then compared with the results of spatial analysis related to the distance of the residence of the fishermen's wife.

Keywords : fishermen's wife, decision making, Depok Beach, distance

ABS-IGEOS-20217

**Correlation of Socio-Regional Characteristics of Women's and Children's Violence
Distribution in Indonesia**

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Women's and children's violence in Indonesia tend to increase according to spatial development. Many socio-regional factors have a potential influence on women's and children's violence. Large areas with diverse socio-regional characteristics need a better understanding of the violence in term spatial distribution. This study aims to analyze the correlation between socio-regional characteristics and the distribution of women's and children's violence in Indonesia. Socio-regional characteristics data consist of literacy, household internet access, and urban population ratio are obtained from the Indonesia Statistics Agency (BPS), whereas women's and children's violence obtained from the Ministry of Women's Empowerment and Child Protection. The relationship between socio-regional characteristics and women's and children's violence cases were examined quantitatively through the Spearman-Rank correlation and spatial tendency analysis. This research shows that household internet access and urban ratio have a positive and significant correlation with women's violence, where women's violence is also correlated with children's violence. In the spatial tendency shows that literacy, women's and children's violence cases have random-spatial patterns and difference with parameters of household internet access and urban population ratio are clustered-spatial pattern. From these results, the socio-regional characteristics in western Indonesia lead to high cases of women's violence which triggers children's violence.

Keywords : child abuse, spatial tendency, sosio-regional characteristic, women abuse.

ABS-IGEOS-20227

Construction of Spatial & Tourism Perspective for Wali Nagari, Customs Leader and Community Figure in Nagari Batuhampar, Limapuluh Kota

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Abstract. The Minangkabau community is a society that highly upholds customary values, one of which is in the Batuhampar Nagari administrative area. This Nagari (village level area) in Limapuluh Kota District has dynamic social and physical conditions. The Minangkabau people hold the values of "Adat Basandi Syara", "Syara Basandi Kitabullah" (Adat bersendi Syariah, Syariah bersendi Kitabullah) in life. This has also colored the administrative aspects of regional development, one of which is the implementation of tourism policies in Nagari Batuhampar. Wali Nagari, Chairman of Customs and Community Figures believes that sustainable tourism and culture can go hand in hand. This is because Minangkabau culture is currently under pressure from the influence of the era of technology, information and communication. The younger generation is starting to be faced with various kinds of information flows and foreign cultural exchanges, some of which are not in line with Minangkabau culture. This research is classified as a qualitative construction research. The purpose of this study is to understand the meaning constructed by individuals at certain times. The results of the study state that the spatial perspective in Minangkabau culture has three (3) meanings, namely darek (high area), pasisia (west and central coastal areas of Sumatra Island) and rantau (eastern area of the river estuary-Malacca Strait) used in identifying the location of the village for regional development, one of which is tourism. The tourism that will be developed is not only to improve the economic level of the community, but Wali Nagari will focus more on preserving Minangkabau culture in Nagari Batuhampar such as studying in surau and so on.

Keywords : Minangkabau Culture, Spatial, Tourism

ABS-IGEOS-20226

Mapping Force Migration From survivor of Domestic Violence in Refuge WAO

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This study aims to map the pattern of forced migration by survivors of domestic violence who seek help at the shelters of the Women's Aid Organization (WAO). Three problems are discussed in this study the behaviour of other assistance by the survivor, the type of resources that enable survivor assistance in WAO and a survivor would go to shelters. To answer this question, document analysis methods were conducted using WAO survivor records in 2016, 2017 and 2018 and Geographic Information System (GIS) was used to visualize the data that had been analyzed. The result shows that the police and hospitals are the most helpful assistance received by survivors before getting help at WAO. 20 of 87 survivors have been getting information to get help from the hospital. The results of the analysis also show that the longest distance travelled by the survivor to the shelter is 320 km while the shortest distance is only 2.7 km. This study can have implications for non-governmental organizations (NGOs) responsible for combating violence against women. NGOs are also able to identify key sources of information obtained by survivors before seeking assistance at shelters.

Keywords : Survivor, journey, WAO

ABS-IGEOS-20233

Political Contestation of Public Space on Local Community

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Contestation of public space is now used as further option due to the lack of land availability caused by the increasing demand for space. The presence of a public space provides various benefits for social, economic and political lives in society. Politics in this study is about power in the micro-scale formed by local actors. The space is used by local actors who have certain interest which cause a conflict of space or contestation for the existence of social identity. Banjir Kanal Timur (BKT) is one of the public space that is contested by several actors such as government, street vendor and ruler figures. The purpose of this research is to see how local actors use results from space contestation for their interest, especially in maintaining social identity from existence, extending their territory and exploiting available resources. This is a qualitative research which use field observations, in-depth interview, and description analysis. Establishing informant with interviewing the gate keeper first. The results show that political space in Banjir Kanal Timur not only marked from the activities and matters but also communication. This condition gives birth to negotiation, space formation and deals in it. Banjir Kanal Timur divided into several zones that have their rulers. These zone are marked by sign such as installing banners, pegging with community flags, and also establishing posts and large meeting place in the area.

Keywords : contestation, local actors, social identity, public space, territory

ABS-IGEOS-20230

**The Impact of Tourism Development on The Changes of Households Economy in Ciwidey
Tourism Area, Bandung Regency, West Java**

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Ciwidey Tourism Area is a tourism destination in the Province of West Java which having rapid development. In 2007, the provincial government officially declared the area as the agropolitan region. It stimulated the fundamental impact on household economy in the area. This study aims to elaborate spatial pattern of households economy alteration due to tourism penetration. It is a descriptive study that rely on primary data which comes from field observation and questionnaire-interview with local people. The study exercises spatial dan time series analysis to analyse the change of occupation and income of households between before and after the year of 2007. The results showed that the development of tourism is situated at a distance of 2.5 km-5 km outside the core of tourism area. It was marked by the development of tourism objects, tourism attractions, and secondary facilities. Such development resulted in changes in the type of household economy, from both the “unemployed” and “agricultural” to the “tourism” households. This change in household types was followed by an increase in population income, mostly around tourism core

Keywords : Ciwidey Tourism Area, tourism development, tourism core, household economy

ABS-IGEOS-20247

Local Wisdom of the Indigenous Society of Kampung Kuta in Maintaining Leuweung Gede as a Form of Environmental Conservation Efforts

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Environmental conservation is an issue that has never stopped being discussed. Human awareness in protecting and preserving the environment today is decreasing, and it has an impact on the quality of the environment which is getting worse. Knowledge of the local wisdom of indigenous society in managing nature and preserving the environment in Indonesia is a very valuable instrument to raise public awareness of the importance of environmental conservation. The indigenous society of Kampung Kuta have a form of local wisdom in environmental conservation. This study aims at identifying the local wisdom of indigenous society of Kampung Kuta in protecting Leuweung Gede as a form of environmental conservation efforts. Descriptive method, with a qualitative approach, is used in this study. Observations, in-depth interviews, and literature studies from various related articles were done to collect the data. Data analysis techniques by performing data reduction, data presentation, and drawing conclusions. The results showed that the indigenous society of Kampung Kuta have local wisdom in the form of prohibitions as customary rules for the local community and visitors in protecting Leuweung Gede as a form of environmental conservation efforts in the area of Kampung Kuta.

Keywords : Local Wisdom, Environmental Conservation, Indigenous Society of Kampung Kuta

ABS-IGEOS-20072

Physical Vulnerability Analysis of Cultural Heritage for Strong Winds in the City of Yogyakarta, Indonesia

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This study aimed to analyse which variable(s) had the most contribution to the vulnerability of strong winds in Yogyakarta. Strong winds are the second-largest disaster in Yogyakarta, Indonesia. The city has at least five cultural heritage regions, including Kotabaru, Kotagede, Malioboro, Pakualaman, and Kraton. It employed Spatial Multi-Criteria Evaluation (SMCE) to process 11 variables, i.e. age, height, and physical condition of the building, landmark, spatial design/architectural style, roads, regional effect, shape of the region, building density, also built-up land patterns. These ten variables processed by scoring and cluster sampling. Meanwhile, the remaining variable, hazard, analysed using scoring. The results were two types of vulnerability scenarios. (1) The Equal Vulnerability Scenario (2) The Vulnerability Scenarios used research variables that were grouped into three levels of spatial patterns, namely, Spatial Pattern I (landmark, road, and the physical condition of the building), Spatial Pattern II (regional effect, building density, and hazard), and Spatial Pattern III (built-up land pattern, building age, building height, architectural style, and the shape of the region). All scenarios proved that CHR Kotagede was extremely vulnerable. This strong pattern determines hazard as the most contribution variable, since the similarities to Equal, Building Density, and Regional Effect.

Keywords : vulnerability, urban, heritage, strong-winds, Indonesia.

ABS-IGEOS-20027

Toponyms and Flood Disaster in The Capital Region of Jakarta, Indonesia

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The Capital Region of Jakarta is known as flood-prone area in Indonesia. This region is an estuary for thirteen watersheds in Java Island and has specific places that are related to water. People perpetuate this phenomenon in the place names (toponyms) as a form of local wisdom. This study aims to analyze toponyms and its relationship with flood disaster in DKI Jakarta. This research is a qualitative study with descriptive approach to finding out the meaning of toponyms and flood events. Toponymy data includes 104 toponyms of urban villages in the flood-prone area according to the Bureau of Regional Disaster Management (BPBD) of Jakarta. The toponyms data is compiled based on Indonesia Statistics Agency (BPS) and the Dutch East-Indies Topographic Maps. This research shows that many the toponyms of flood-prone areas in DKI Jakarta are originated from several languages and cultures such as Betawi, Malay, Javanese, Sundanese, Buginese, Chinese, Arabic, Portuguese, and Dutch. The toponyms in flood-prone areas show meaning which related to water from aspects of vegetation, swamps, rice fields, lakes, rivers, and landforms. Landscape changes analysis from 1940-2019 shows that flood-prone areas in DKI Jakarta are built-up areas that were previously derived from swamps, lakes, and rice fields. Hence, toponym conservation is an important effort to memorize flood disasters potential by giving names to the urban anthropogenic landscapes such as housing, industrial areas, and commercial areas.

Keywords : toponimy, flood disaster, region of jakarta.

ABS-IGEOS-20092

Geography Teachers' Skills: Higher Order Thinking Skills (HOTS) Oriented Assessment Instrument

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Assessment is a crucial activity carried out by every teacher after the learning process ends. The assessment activity is one of the pedagogical abilities that must be possessed by professional teachers. Nowadays, higher order thinking skills (HOTS) oriented assessment activities become hot issues on the education system in Indonesia. This study aims to analyse the skills of geography teachers in developing higher order thinking skills (HOTS) oriented questions. The research method used in this study is survey method with a quantitative approach. The data were obtained from the questionnaires and study documentation of questions made by teachers recently or in the past 3 years. The research subjects in this study are all high school geography teachers in Metro City. The results of this study indicate that the ability of geography teachers in developing questions is still dominated by low order thinking skills oriented (LOTS) and middle order thinking skills (MOTS) assessment. In conclusions, it is necessary to support an increase of geography teachers' skills in developing higher order thinking skills (HOTS) oriented assessments such as through teacher training related to HOTS learning and assessment.

Keywords : Teachers' skills, geography assessment, higher order thinking skills (HOTS)

ABS-IGEOS-20081

Geography Teachers' Innovativeness on TPACK Framework Based Learning Technology

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Computer-based technology and internet networks are increasingly easily developed by teachers, so ideally technological innovation that is developing now is easily accepted by teachers with a high level of adoption. But the fact is, in Indonesia there are still many teachers who are not ready to accept and utilize learning technology. The symptom that can be observed is that there are still many cases of prevention and prohibition of students to carry smartphones in the classroom. The ban was carried out by the teacher personally even regulated in school policy. In some schools there is even a smartphone destruction ceremony using a hammer which is witnessed by all students. All of these actions indicate the existence of Laggards' attitude of rejecting innovation (Rogers, 1961). This study wants to know the level of readiness of geography teachers (as a case study) in adopting learning technology in the context of the TPACK framework. The method used is a survey. Based on the results of the study, geography teachers at the high school level in Indonesia are included in the Early Majority group with the characteristics they have the enthusiasm and initiative to carry out internal interactions to master technology but there are still many considerations.

Keywords : Geography, Innovativeness, Learning, Technology , TPACK.



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ABS-IGEOS-20120

The Effect of Media Literacy on Geography Skills in Geography Education Students

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Indonesian society is now included in the information community stage, with the main characteristics of actively accessing information from a growing range of information media. Literacy is seen as a meaningful activity in translating any information presented by various media. Media literacy is the most important element in educational projects in the era of globalization. 21st-century education is the beginning of the formulation of learning aimed at shaping character, career and life skills, learning and innovation skills, and skills in using communication technology media. College students are intellectuals who have awareness in developing their potential into intellectuals, scientists, practitioners, and professionals on their educational skills. Geography skills are a systematic means of thinking about geography. Geography skills play an important role in making decisions, regarding important outcomes in the information. Geography skills have an important role to play in making decisions, analyzing information conclude. This article uses a systematic literature review method, presenting proposed theories and data on the effect of media literacy on geography skills on geography education students. The overall results show that media literacy and geography skills in geography education can encourage critical thinking, have extensive knowledge, and are ready to compete in an era of globalization in the world of work.

Keywords : media literacy, geography skills, geography education students

ABS-IGEOS-20118

The Effectiveness of Video Usage as Learning Resource for Students

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Learning resources in the form of videos can help students better understand learning material, because students will receive information or knowledge through vision and audio. This study describes the people of Pengayuan into a video and makes it a source of learning in schools. This study uses a qualitative approach with descriptive methods and data collection techniques through observation, interviews, and documentation. Data analysis through data reduction, data exposure, and data verification as drawing conclusions. The results showed that the people of Pengayuan began with selective logging of galam wood, the production process, the distribution process, the sales process to the consumers of galam wood. The use of audiovisual video media as a source of learning by making it a new learning atmosphere and building the learning concrete patterns of learners. The existence of learning resources in the form of videos makes students look enthusiastic and become enthusiasm for learning.

Keywords : Effectiveness, Video, Learning Resource

ABS-IGEOS-20209

Rural and Urban Education: Challenges for Future Geography Education

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Rural education is one of the important factors in regional development supported by the central government. Implementing policies, it facilitates the effective functioning of the new roles assumed by other actors. Meanwhile, Urban education is a method of schooling that takes place in large, densely populated areas with diverse populations. Both of them are elements that really crucial in education development of nation and also future challenges for geography education. This paper is explaining the comparison study between rural and urban education in Indonesia, particularly how to deal with several things such as the government versus private or mission schools, access to the first year of schooling for male versus female pupils, the standard of facilities and resources, the education and experience of teachers, the quality of education offered, and the language of instruction. The result of research is expected to get an insight the different description of rural and urban education based on the standard basis of education of the nation and also in accordance with the character of geography education as a subject that integrates the interaction between humans and their environment.

Keywords : Rural education, urban education, regional development, geography education

ABS-IGEOS-20137

Implications of Inquiry Approach Against Understanding Geography Concept Material By Utilizing Customary Environments in Kampung Naga

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Abstract. The purpose of development education to create competent people and improve the quality of education. In the realm of conceptual understanding, students do not merely remember information related to learning, while geography learning in class X of SMAN 1 Manonjaya is still use conventional learning. The corrective action actions that will be carried out are by applying learning methods that are in accordance with current developments, for example we can use inquiry learning approach. The formulation of the problem in this research is the learning implications of using the inquiry approach to the level of understanding of geographic concept material. Data was collected using a quasi experimental research method. The process of collecting data uses pretest and posttest as well as observations made on site directly. The results showed in the experimental class an increase in students' understanding of the concept with an average score obtained by students at the time of the pretest was 78.4 and an increase in the posttest with an average of 81.2. Whereas in the control class shows the average score obtained by students at the time of the pretest was 48.4 and at the time of the posttest was 52.6. Thus the level of student understanding tends to be higher in classes using the inquiri approach compared to the control class. Further analysis shows the level of student understanding shows how deep the implications are contained from the results of the study.

Keywords: Inquiry Approach, conceptual understanding, student implication

ABS-IGEOS-20254

Tourists' Motivation Towards The Sustainable Tourism Attraction

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Sustainable tourism is a term that is currently popular in the world tourism community, including in Indonesia. Most of Indonesia's tourist destinations are natural attractions such as beach, mountain, lake, river, and others which are natural resources. The concept of sustainable tourism is part of tourism development because it is sustainable and maintains the environment and local culture. The implementation of sustainable tourism is considered to have a positive impact on the environment, economy and socio-culture. Someone who takes a trip is motivated by several things including Physical or physiological motivation, Cultural motivation, Social motivation or interpersonal motivation, Fantasy motivation or prestige motivation. This research describes how a tourist attraction that has the concept of ecotourism can attract tourists' motivation to visit by implementing the pillars of the sustainable tourism aspect. Tourist attraction has products and services that are needed by tourists in enjoying their tourism activities. Tourist motivation is a psychological factor from someone who appears before deciding where he will visit, which in the end the tourist has a decision to visit. A qualitative approach was used. Direct observation in the research site and in-depth interviews were used to obtain primary data while literature review is used to obtain the secondary data. The literature presents lines of research in the tourists' motivations.

Keywords : ecotourism, motivation, sustainable tourism, tourist Attraction,

ABS-IGEOS-20011

Local Aspiration About Tourism. How People Thought About Their Living Space and How Far Do They Want to Participate in Tourism Sector. A Study of Community Based Tourism at Batu Burung Beach, Singkawang City of West Kalimantan.

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Abstract. Tourism areas are generally managed by a handful of capital owners who are in charge of determining how to organize and run tourism activities. People who live around the tourist area rarely have the opportunity to voice their aspirations. Due to this lack of local people aspiration lead into the low participation of the community in the tourism sector around, as happened in the Batu Burung Beach of Singkawang City, West Kalimantan Province, Indonesia. This study intends to identify local people's aspirations about tourism in multiphase research, started with a survey which was then followed by a Focus Group Discussion of local communities around the Batu Burung Beach tourist area. The results of this study reveal people's perceptions about their living space as tourism destination; as well as whether and how do they want to participate in tourism sector. This study shows 60,4 percent of respondent belief that local people should manage the tourism area by their own, 71,7 percent said local community have a responsibility to keep environment clean and sustainable. There are about 64,15 percent of respondents want to take part in tourism while they face exclusive access of the area.

Keywords : local people, tourism, aspiration

HAZARD, RISK, LAND DEGRADATION AND DISASTER

ABS-IGEOS-20029

Variation of Coastal Resource Potential in Tejakula District

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This research was conducted in Tejakula District, Buleleng Regency with the aim of (1) describing the potential of coastal resources in Tejakula District, (2) analyzing the level of potential coastal resources in each coastal village in Tejakula District. This research uses descriptive design. Data were collected through observation, interview, and documentation techniques and then analyzed qualitatively. The results showed the highest potential of biological resources in the form of fish resources, coral reefs and turtles, non-biological resources in the form of salt ponds, artificial resources in the form of boats and environmental services in the form of marine tourism including (dolphin attraction, snorkeling, and dive). Second, variations in the potential of coastal resources in Tejakula District are grouped into three. The potential of coastal resources with a high category is in Tejakula Village because coastal resources have been fully managed, especially the utilization of tourism potential, coastal resources with moderate potential namely in Bondalem Village, Les Village, and Penuktukan Village because coastal resources are still in management such as developing tourism potential, and coastal resources with low potential are found in Tembok Village, Sambirenteng Village, Julah Village, Sambiran Village, and Pacung because they have not developed tourism potential and only develop fisheries resources.

Keywords : Variation Potential of Coastal Resources, Coastal Areas

ABS-IGEOS-20040

Impact of the Climate on Fishing Locations of Fish Larvae in Palabuhanratu Bay

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The phenomenon of climate change influences primary production, food chain interactions, and distribution of fisheries species. Sukabumi Regency, especially Palabuhanratu Bay, is a fishing ground for fish larvae. Fish larvae are an essential phase in supporting the existence of fish resources. The study aims to determine the spatial distribution of fish larvae locations in Palabuhanratu Bay and analyze the relationship between the phenomenon of climate change and fish larvae locations. The variables are rainfall, salinity, sea surface temperature, currents, and tides. The phenomenon of climate change using rainfall data years 2000-2019, Landsat 5 TM and Landsat 8 OLI/TIRS. Salinity estimation generated from Landsat 5 TM and Landsat 8 OLI/TIRS using the Cimandiri Algorithm. The Split-Window Algorithm with the sea surface temperature value. The results found fishing larvae located around the estuary and the beach towards the sea along the Palabuhanratu Bay. The biggest catches from these fish larvae are in Cimandiri estuary and Citepus estuary. This research concluded that rainfall affects the catches of fish larvae because it is directly related to the oceanographic condition of the bay waters.

Keywords : Fish Larvae, Rainfall, Climate Change, Palabuhanratu Bay, Remote Sensing

ABS-IGEOS-20099

Water-Related Disasters in Pemali-Comal River Basin - Indonesia: Typology and Policy Support

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Water-related disasters, such as floods and drought, continue to occur in the Pemali-Comal River Basin area because of several reasons such as high growth of land conversion and insufficient policy support. Each type of disaster happens in a particular prone area that can be identified based on certain characteristics. Accordingly, this paper aims to identify the typology of the occurring disaster and subsequently assess the disaster risk reduction efforts that have been implemented. Content analysis was applied to further explore the disaster phenomena in the area. Data obtained from various secondary data sources such as mass media and planning documents related to the selected basin. The results of the study show that catastrophic disasters take place in particular natural physical conditions of the river basin. Other than that, disaster risk reduction efforts have been conducted in accordance with the efforts of integrated water resources management

Keywords : disasters, river basin, pemali-comal, typology, policy support

ABS-IGEOS-20157

Geochemistry Characteristics of The Hungayono geothermal Area for The Development of Clean Energy in Gorontalo Province

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Geothermal energy has great potential to provide clean energy so that the Sustainable Development Goals (SDGs) can be achieved. The purpose of this study was to identify the geochemical characteristics of the geothermal fluid in the Hungayono area. Geothermal fluid sampling is performed at two points of manifestation which have the highest temperature. The cation and anion testing of geothermal fluid using Atomic Absorption Spectrophotometer (AAS) and isotope testing using the Picarro Water Isotope Analyzer. Data analysis using Giggenbach diagrams. Hot spring temperatures are 54 - 60°C. The deposits at the point of manifestation are iron oxide with neutral fluid pH. Based on the results of the analysis of cations, anions, and isotopes, the Hungayono geothermal fluid is a type of chloride fluid that has been mixed with meteoric water. Based on the geothermometer calculation, reservoir temperature is 232-234°C. Hungayono Geothermal is a type of system with moderate to high concentration.

Keywords : Geothermal, geochemistry, cation, anion, isotope, giggenbach, geothermometer.

ABS-IGEOS-20237

Adsorption of Ammonium IONS in Aqueous Solution Using Raw and Acid Washed Peat Soil

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Peat exists in abundance in many parts of the world, but has low economic value. The presence of active functional groups, in the form of carboxyl and phenolic groups, makes peat an alternative sorbent having high porosity and ion exchange ability. Washing peat soil prior to adsorption has been reported to be effective in increasing its ion exchange capacity. In this study, the effect of peat washing using NaOH on its adsorption capacity for ammonium ions was investigated. The FTIR analysis indicated decreases in -OH absorption at 3300-3600 cm⁻¹, C=O (carboxylate) at 1625 cm⁻¹ and C-O at 1300-1000 cm⁻¹ possibly due to the replacement of H⁺ by Na⁺ upon peat washing using NaOH. SEM analyses of peat samples showed a more homogeneous surface morphology upon washing. BET analysis results showed a reduction in surface area, pore size, and pore volume. However, the adsorption study conducted in batch mode indicated that the adsorption capacities of washed and raw peats were 28.08 mg/g and 14.48 mg/g, respectively. It can be concluded that washing peat soil using NaOH solution may alter its surface properties and may be beneficial in improving its adsorption capacity towards ammonium ions in aqueous solution.

Keywords : Peat, NaOH, washing, adsorption, Ammonium ion

ABS-IGEOS-20253

The susceptibility of landslide zone using weight of evidence method in nagari tanjung sani and nagari sungai batang, west sumatera.

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Landslides naturally occur to create slope stability, especially in mountainous areas. Disaster management is needed to minimize the impact of losses incurred. Management of landslide is formed based on knowledge of characteristics, types, and processes of disaster occurrence. Map of landslide susceptibility was one of that. This research aims to determine and analyze the type, landslide density based on event control factors, and zonation of susceptibility. The method used was the statistical method of Weight of Evidence (WOE) and field observation. The results showed that Nagari Sungai Batang has a translational and rotational type of landslide with a medium density of landslide and medium susceptibility of landslide. Nagari Tanjung Sani has landslide type rockfall and topple with a high density of landslide and highest susceptibility. Based on these conditions there were some differences in type, the controlling factor, and susceptibility of landslide degree, although they were formed from the same geomorphological process as Caldera shape by Andesit Maninjau Formation

Keywords : Landslide, WOE , Density, Susceptibility

ABS-IGEOS-20026

Priority Regions of Mitigation for Drought and Food Insecurity in Lebak Regency, Banten Province

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Drought is the availability of water under the needs of humans, plants, animals in an area that occurs during the dry season. The drought regions of Lebak Regency can be an obstacle to meet the needs of life, agricultural activities, and the environment. The population of Lebak Regency is mostly poor and the main problem is food. Food insecurity is a condition of the inability to obtain adequate food and suitable for healthy living and good activities. Research objectives: (1) Determine the region of drought and food insecurity in the Lebak Regency; (2) Arranging priority regions for mitigation of drought and food insecurity. The method used spatial and statistical analysis (Cartesius). The results showed: (1) Drought in Lebak Regency occurred in June to September; (2) The drought region tends to be in the north (northeast) region, close to the regency capital and the south (southwest) part is relatively far from the capital; (3) Based on correlation of drought and food insecurity regions, it was found that the priority region was concentrated in the southwestern part of Lebak Regency; (4) The priority region covers 5 districts and spreads in eighteen villages; (5) The Department of Agriculture and Plantation of the Lebak Regency has increased the production of rice and secondary crops (palawija), but has not been evenly distributed to all villages. (5) Mitigation of drought have been done with water pumps, small lakes (setu), river dams, but have not been evenly distributed to all villages.

Keywords : priority regions, drought, mitigation, food insecurity

ABS-IGEOS-20034

Spatial assessment of socio-economic vulnerability to climate-related disasters at the local level: Study of coastal villages in Indramayu, Indonesia

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Climate change, along with coastal development, has brought ecological impacts in the coastal area. These impacts include seawater intrusion, coastal flood, and erosion, which have caused wider effects on non-physical aspects of human activities. This study aims to assess the socio-economic vulnerability to climate-related disasters in the coastal villages of Indramayu, Indonesia. Secondary data were collected based on available sources. Spatial and statistical analysis was applied. This study uses ten indicators to measure the socio-economic vulnerability of 41 coastal villages. These indicators include seven socio-demographic indicators and three economic indicators. The analysis shows that ten villages (24.39%) are socially vulnerable and five villages (4.87%) are economically vulnerable. Overall, two out of seven socio-demographic indicators have high degrees of vulnerability, namely disaster mitigation systems and community institutions. Two out of three economic indicators also have high degrees of vulnerability, namely commercial facilities and types of work. The other indicators with medium to low degrees of vulnerability are population density, the elderly population, the disabled population (socio-demographic indicators), and poverty (economic indicator). Furthermore, several strategies are formed based on the analysis result. The local governments can consider these strategies as an attempt to reduce the degree of socio-economic vulnerability in the coastal villages, such as building agricultural adaptation, improving disaster mitigation system, enhancing community's understanding, and improving community institutions and community welfare.

Keywords : Climate-related disaster, coastal village, socio-economic vulnerability, spatial analysis, Indramayu

ABS-IGEOS-20145

Tidal Flood Hazard Modelling Using the National DEM (DEMNAS) and SPOT 6 Imagery in Part of Sayung District, Demak Regency

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Sayung, a district in the coastal area of Demak Regency, has been left behind in development as it has to continuously alleviate the impact of frequent and localized tidal floods due to massive coastal erosion and land subsidence. This research was intended to 1) construct a tidal flood hazard model using the National DEM (DEMNAS) and SPOT 6 imagery and 2) validate the model. It used several Geographic Information System and Remote Sensing analyses, namely neighborhood operation, confusion matrix, and band ratio thresholding. Here, tidal flood hazards were modeled at a scale of 1:20,000 using the DEMNAS with a spatial resolution of 8.3 m and the data is more updated. Meanwhile, shoreline as the supporting data was extracted from SPOT 6 imagery that has a radiometric resolution of 12 bits or 4096 gray levels and, therefore, can distinguish between land and sea accurately. Besides, this imagery has also blue band to enhance shoreline boundary. Tidal flood hazard modelling based on the Highest High-Water Level (HHWL) scenario of 214 cm can be used to provide the distribution of 1.5m-deep tidal flooding in the field. This model has a total accuracy of 84.25% owing to the 1.5m vertical resolution of the DEMNAS

Keywords : Hazard, Tidal flood, GIS, Remote Sensing, DEMNAS, SPOT 6, Demak

ABS-IGEOS-20014

Factor Analysis and Consensus Contributing to Undergraduate Students' Ecoliteracy on Disaster Risk Reduction

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Ecoliteracy implies a holistic understanding of the relationship between environment and disaster. Ecoliteracy strengthening in educational institutions is the first step in building disaster-aware communities. This pilot study aims to explore the perspective of students' ecoliteracy on disaster mitigation while examining the set of Q statements as research instruments. This study applies the Q methodology since it has components that can measure the diversity of human subjectivity. Fourteen undergraduate students at the Faculty of Geography, Gadjah Mada University, were selected as participants. The results construct five factors and two consensus statements with a cumulative variance percentage of 68%. These factors are (1) knowledge (ecology and environmental problems), cognitive, and behavior factors; (2) knowledge (environmental and social-political problems), cognitive, and behavior factors; (3) affect and knowledge factors; (4) affect, cognitive and knowledge factors; and (5) knowledge factor. The consensus consists of two statements in agreement. As this study is still in a pilot stage, research only focuses on the interpretation of qualitative analysis results. The procedure for quantitative data is not presented in this paper.

Keywords : ecoliteracy, disaster risk reduction, Q methodology, factor analysis, consensus

ABS-IGEOS-20113

Content Analysis in Geography Textbooks of Natural Disaster Mitigation using Beck and McKeown Model

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Textbooks are one of the teaching media used at every level of education. The student textbooks must be of high quality and can develop students' critical thinking and analysis skills. The study aimed to analyze the content of geographic textbook about natural disaster mitigation using the Beck and McKeown model. The research was qualitative research using content analysis method with the coding technique. The results of the study showed that 1) textbooks did not present problems that can be discussed by students, 2) presented many material concepts in one paragraph, 3) discourse presented in textbooks was very unclear, 4) displayed many main ideas in each paragraph 5) the comparison between contents and examples was not following the concept, and 6) the explanation of the material was arranged illogically. The research showed that the content in the books required improvement to develop students' critical thinking and analytical thinking skills. Further research on content analysis was needed to develop other media so that students will get a better learning medias.

Keywords : Content Analysis, Beck and McKeown Model, Geography Education

ABS-IGEOS-20166

Contribution of Critical Thinking in Disaster Preparedness of Geographic Students

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Abstract. Disaster Risk Reduction Efforts (PRB) continue to be built and addressed through various activities considering that Indonesia is a country that is prone to disasters. In the era of the Industrial Revolution 4.0, with an abundance of information The educational community as one of the important stakeholders Risk Reduction Efforts (PRB) were required to be critical of the information that was spread out including disaster information. However, students do not aware with the abundance of information available that is appropriate for the basis of disaster preparedness. Therefore the writing of this article aims to measure the level of critical thinking and its contribution to disaster preparedness, especially flooding, in geography education students. The research method chosen in this study is the Quantitative Survey. The results showed that the level of critical thinking and disaster preparedness of students included in the medium category. The results of the contribution of critical thinking to disaster preparedness showed the result of R square (R²) determination of 50.4%. This shows that critical thinking has an influence on student disaster preparedness. Therefore, it is time to think critically about information to be the focus in one of the efforts in disaster risk reduction activities.

Keywords : critical thinking, disaster preparedness

ABS-IGEOS-20158

Role Playing: Disaster Mitigation Literacy Strategies in Primary School Students

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Disaster Mitigation Literacy is an important thing that must be understood from an early age, including in classroom learning, but in reality there are still many students who ignore it. The purpose of this study is to explore and analyze the application of environmentally sensitive attitudes through role play. The research method used is descriptive qualitative. The results of this study indicate that role playing is quite effective as an effort to mitigate disaster among elementary school students.

Keywords : Disaster Mitigation Literacy, Role Playing, Elementary School Students

ABS-IGEOS-20195

Disaster Mitigation Through Comic Moral Dilemmas for Elementary School Students

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The number of fatalities in the series of earthquakes so far shows that mitigation against disasters is still weak. Earthquake and tsunami experts from a number of countries called on Indonesia to learn from the recurring disasters and claimed thousands of lives. Considering that Indonesia is vulnerable to disasters, early disaster awareness education is needed to minimize the impact of disasters. Disaster management through disaster education and mitigation to reduce risk should become the main stream of development. The formal education sector is considered to be the most effective countermeasure to reduce the impact of disasters. One alternative to disaster awareness early education is to socialize disaster mitigation. Overall, this research was carried out through research and development methods carried out in several stages, namely the exploration, formulation, and examination stages and involved five elementary schools in West Java. The results of the study show that understanding of disaster mitigation through comic on elementary education students is one of the solutions that needs to be done in Indonesia to create a generation that is resilient to disasters and with comic students' understanding of disaster preparedness is getting better.

Keywords : disaster mitigation, picture story, elementary school

ABS-IGEOS-20246

Religious Constructivism Approach in Disaster Mitigation Learning for Environmentally Caring Character Development

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Abstract. The religious constructivism approach, which is a combination of problem-based learning, peer instruction, inquiry learning, blended learning, flipped classroom, and insertion method, needs to be applied in disaster mitigation learning for the development of environmentally caring characters. The purposes of this study are: (1) to evaluate the effectiveness of religious constructivism approaches in improving disaster mitigation learning outcomes in students of SMA Negeri 1 Ajibarang – Banyumas Regency, and (2) to analyze the effectiveness of the application of religious constructivism approaches in the development of environmentally caring characters. Designed in this study using true experiments, the subjects in this study were grade XI IPS 1 students as an experimental group taught with a religious constructivism approach, and grade XI IPS 3 students as a control group taught with a deductive approach. Data collection techniques use observation, test, and questionnaire, while data analysis techniques are a combination of quantitative and qualitative analysis. The results showed that: (1) the application of religious constructivism approaches can improve disaster mitigation learning outcomes, and (2) the application of religious constructivism approaches can improve the character of environmental care, especially in the attitude of living harmony with disaster. **Keywords:** Religious constructivism, disaster mitigation, environmental care characters.

Keywords : Keywords: Religious constructivism, disaster mitigation, environmental care characters.

LAND USE AND LAND COVER CHANGE

ABS-IGEOS-20037

Oceanographic Factors and Land Cover Change in Cimandiri Watershed Against Phytoplankton Distribution in Cimandiri Estuary, West Java with Sentinel-2A Imagery

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An estuary is a region with high waters productivity because it is a confluence between sea and river waters that can carry a lot of material from the surrounding watersheds. High productivity in the estuary region is due to the presence of organism's producer such as phytoplankton that can affect primary productivity in water areas. Cimandiri Estuary is the largest and more productive estuary region in Sukabumi Regency. According to it, the factor can influence the ecosystem of Cimandiri estuary it is necessary to pay attention to the surrounding ecosystems. The oceanographic factors need to be considered, such as salinity, suspended solids, tidal currents, and the value of chlorophyll-a concentration to indicate the presence of phytoplankton and also physical factors such as land cover around the watershed. This study aims to detect the effect of land cover changes in cimandiri watershed toward oceanographic conditions that affected the distribution of phytoplankton. The method used spatial analysis method through processing remote sensing data with Sentinel-2A imagery in 2016 - 2020 which is supported by data field validation. The results showed that the distribution of phytoplankton was more influenced by oceanographic factors such as salinity, suspended solids, and tidal currents. Land cover changes are not too significant to occur in Cimandiri watershed this makes the factor of land changes not too significantly affected the distribution of phytoplankton contained in the cimandiri estuary.

Keywords : Estuary, Phytoplankton, Chlorophyll-a, Land Cover, Sentinel-2A

ABS-IGEOS-20051

Spatial Dynamics Model for Land Carrying Capacity Prediction in Ambon City

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Ambon is a city with the highest economic and population growth in Maluku Province which makes the built-up land have high and rapid growth so that it can reduce the land carrying capacity of the city. This causes the predictions on the land carrying capacity needs to be done so that the status of the land carrying capacity can be detected before declining. The aim of this study is to produce a spatial dynamics model of land carrying capacity in Ambon City. This study uses population data of 2008-2018, Landsat 5 TM (2008) images, and Landsat 8 OLI images (2013 and 2018). The land carrying capacity is predicted from 2008-2100 using the system dynamics model method based on the relationship between land requirements based on population growth and land availability based on built-up land, which then converted to spatial to see the spatial distribution with spatial dynamics model method. Research shows that in 2033 the land carrying capacity in Ambon City has reached 30% and in 2051 the land carrying capacity has been exhausted.

Keywords : Spatial Dynamics; System Dynamics; Land Carrying Capacity.

ABS-IGEOS-20062

Spatial Distribution of Rice Planting Pattern using Sentinel-1A SAR in Pabuaran District, Subang Regency

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The Monitoring of paddy fields conducts to guarantee national food data. One of the ways is to use the Sentinel-1A (Synthetic-Aperture Radar) system with a spatial resolution of 10 meters and able to penetrate the clouds. The purpose of this research is the identification of spatial distribution rice planting period and planting patterns within one year. The variable was a value of rice plating period based on backscattered value on Sentinel-1 imagery. The image analysis method used supervised maximum likelihood classification with training sample based on ground truth survey to generate rice planting period. The rice planting periods was land preparation, vegetative, reproductive, generative and harvesting, and fallow phase. The results showed that the backscatter value in the land preparation phase was very low (-25.81 dB), then continued to increase upon entering the vegetative phase (-20.64 dB), which achieve maximum value on reproductive phase (-14.82 dB). At the time of paddy field entering generative and harvest phases, the backscatter value would drop to averages -17.76 dB. The fallow phase is characterized by backscatter values that are ascending or not patterned due to the absence of roughness changes on the surface of the paddy field. The results of the study found there are three times of rice planting period in Pabuaran District. Moreover, the research found there are six of rice planting patterns, which are (1) paddy-paddy-paddy, (2) paddy-paddy-fallow, (3) paddy-fallow-paddy, (4) fallow-paddy-paddy, (5) paddy-fallow-fallow, and (6) fallow-paddy-fallow. This research concludes that spatial distribution dominated with rice planting patterns is paddy-fallow-paddy and distributed spread around Pabuaran District.

Keywords : Sentinel-1A, maximum likelihood, rice planting period, rice planting pattern, spatial distribution

ABS-IGEOS-20116

Spatiotemporal Analysis of Rice Crops in the Covid-19 Pandemic Period for Local Food Security Using Sentinel 2B Imagery Case Study: Tasikmalaya City

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According to data from the FAO, in 2015 Indonesia ranked third after India and China as the world rice producing countries with a total production of 75.6 million tons. Depletion of agricultural land due to land conversion is one of the factors causing the deterioration of the agricultural sector in Indonesia today. Narrowing of paddy fields not only has an impact on reducing rice production but also on the income of Indonesian people who make a living as farmers. Data and information about the development of the function of rice cover land cover is very important as a database for the preparation of policies for the protection of sustainable agricultural food crops as mandated in the Law of the Republic of Indonesia Number 41 Year 2009. Besides the covid-19 pandemic that is now sweeping the world, requires the government adopting large-scale social restrictions. It also needs to be examined whether it also influences the production of agricultural products. The use of modern remote sensing technology is one alternative for spatial and temporal monitoring in obtaining information on rice land cover. Through the classification of multispectral imagery using supervised classification, information is obtained from the decrease in the area of rice crop cover from year to year in the City of Tasikmalaya. Classification accuracy test results obtained using the Short method show reliable results. The government policy is needed to guarantee the availability of local food security, one of which is by controlling the conversion of rice land cover.

Keywords : Sentinel 2B, Rice Crops, Food Security

ABS-IGEOS-20164

**Sustainable Agricultural Landscape as a Food Security Effort in Cisolok Sub-district,
Sukabumi Regency, West Java, Indonesia**

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Rice is the main topic of food security in Indonesia as rice is the strategic food for more than 85% of Indonesian. Paddy fields as a producer of rice are part of the agricultural landscape in the study area. Agricultural landscape in the study area located in various terrain-shape, from flat to very-step mountainous. The purpose of this study is to see and analyze the agricultural landscape and its suitability to become a sustainable landscape. The data in this study were obtained from interviews with key informants, field observation, and spatial analysis. Spatial analysis using weighted overlay method and also cross-section line to capture the relationship between land use and terrain-shape which identifies the agricultural landscape in the study area. The results suggest that the majority of agricultural activities were in step mountainous terrain-shape. The agriculture landscape in the study area was generally sustainable so that the existing paddy fields can be able to produce rice in optimal quantities continuously.

Keywords : Agricultural Landscape, Food Security, Paddy Field, Terrain-Shape

ABS-IGEOS-20163

The effect of tollroad development on land-use change in exit tollroad, Batang District

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Development of tollroad infrastructure is the government's priority to increase the mobility of goods and economy in the region. But be aware that there will be changes in land use, especially in the exit toll, this is because tollroad gates are the entrance and exit of the movement between regions so that it can be said that is a strategic location. It will trigger a new growth centre and land-use changes have occurred in the areas from agricultural land use changed to be non-agriculture land use. This research was located in the Batang Toll exit, Batang Regency with the objective is to determine the effect of tollroad development on land-use change. This research will use the GIS method in analyzing land-use change, then will be conducted correlation analysis related to tollroad development effect on land-use change. Landuse change will be analysis for 3 years which is in 2018 (opened) until 2020. Result in this research is the land-use change map and effect related to tollroad development on land-use change. In Juni 2020, Mr Joko Widodo, The President Of Republic Indonesia establish Batang regency into an integrated industrial area, so it will impact the economic development in Batang Regency, no exception in toll Exit Batang.

Keywords : Land-use change, GIS

ABS-IGEOS-20155

**Land Use Change as An Indicators to Formulate the Gentrification Phase at the
Diponegoro University Semarang**

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The campus or education area is one of the area with the most potential for gentrification. This happened in the Diponegoro University area, which first began in 1980 until now. Many factors can be used to assess the development of the gentrification phase, one of which is analyzes at land cover and changes. This research was conducted to formulate the phase of gentrfication that occurred in the Diponegoro University area based on land use changes from 2006 to the present. The method used is spatial analysis of image processing series. The results of this study are the phase of gentrification ranging from reduced agricultural land area, to the increasing number of housing clusters and the emergence of city-scale commercial facilities.

Keywords : education's area, gentrification, land cover and change

ABS-IGEOS-20173

Model Cellular Automata-Markov Chain for Prediction of Development and Land Carrying Capacity of Settlement in Balikpapan City, East Kalimantan Province

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Model Cellular Automata-Markov Chain for simulation of settlement development has developed in recent years because it is sufficient to predict spatial and temporal variations of land use. Population growth causes the need for settlement land to increase and makes the ability of an area in providing settlement land needs to consider. Balikpapan city has a strategic position in the cross position of national and international transportation lines. It close to the prospective capital city of Indonesia has the potential to increase population growth. The purpose of this study is to provide input in the policy-making of capital relocation, especially as a land-use management strategy and spatial planning. The method used in this study is the CA-MC model to predict the development of settlements in Balikpapan City in 2032. The variables of this study are the population, distance from the road, distance from the coastline, distance from the river, height, and slope that will be used for simulation of the spatial distribution of settlement land development. The results showed an increase in settlement land in Balikpapan city. The event of settlement land occurs in areas with the right physical conditions and accessibility. The model shows the changes that occur linearly with the driving factor in the study. The availability of settlement land is less than the need, so a good land use management strategy is needed to balance the expansion of settlements in the city of Balikpapan.

Keywords : Balikpapan City, CA-MC, land carrying capacity, prediction, settlement.

ABS-IGEOS-20234

Spatial Segregation at Large-Scale Planned Residential Bintaro Jaya

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The local government of Jakarta has limited capacity to meet the needs for residential. Therefore, A private developer has the opportunity to help local government respond by building large-scale planned residential named Bintaro Jaya. It is developed in the South Jakarta Area and the South Tangerang Region. The development caused a gated community and led to physical and social segregation with previous local community. This research is aimed to identify the spatial segregation in Bintaro Jaya. These hypotheses are analyzed by using socio-spatial approach and descriptive analysis. The method is interpreted from Google Earth Imagery map data CNES/Airbus 2020 based on masterplan of Bintaro Jaya to identify delinied settlement status and field observation as an image interpretation data validation. This paper describes the phenomenon of spatial segregation that potentially can be exclusive and inclusive space. The form of segregation is identified by walls, roads and economic centers. In which the economic center can be a transitional space that functions as a communal space between segregations.

Keywords : segregation, gated community, socio-spatial, residence.

ABS-IGEOS-20232

The Influences of Farmer Group Institution on Agricultural Land Use Change in Ciwidey Agropolitan Area, Bandung Regency, West Java

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In the cycle of human development, as technology advances, human will progress to the more efficient economy. Thus, primary economic activities like agriculture would slowly reduce in number and shifted into secondary and tertiary activities. The Ciwidey Agropolitan Area is a region which currently being developed as an agriculture-focused economy which also undergoes an agricultural tourism development as its complement. The region had long serving agricultural activity with various horticulture products since 1979. Looking at its role both as an agropolitan center and agrotourism destination, it is interesting to understand how the farming group system in the region, tightly related to the land and how it might affect the agricultural land use. The research aims to understand how farmer groups affect agricultural land uses. By using a spatial-qualitative approach which rely on verbatim data, the study concluded that the farming group had a tendency to produce a resistance activities against land use change. As more effective systems and rules implemented in a farming group, its agricultural land vulnerability would also be lower. Thus, the agricultural land vulnerability pattern follows the condition and effectivity of related area's farmer group

Keywords : Land Use Change, Agricultural Land Vulnerability, Farming Group, Spatial-Qualitative Approach

ABS-IGEOS-20046

Population Impact Analysis : Consequences of Population Policy on Demographic Variables in Yogyakarta Special Region

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One of the main issues in population policy is to answer the question of what is the impact on the change in demographic structure. This is important because the changes will have a significant impact on political, economic and socio-economic development. This paper aims to analyze the impact of population policies on changes in population structure as a proxy of demographic bonuses in the Special Region of Yogyakarta. Analysis will be based on available secondary data and carried out at districts / cities, considering that demographic bonus has so far been discussed limited to national and provincial levels. It is challenging from academic point of view, but also practically the results of this analysis can be used as input for development plan at the local level. It refers to the mandates of regulations, which states that the regional development priority is how to utilize the demographic bonus optimally to support economic development.

Keywords : population policy, demographic structure, demographic bonus,

ABS-IGEOS-20207

Community characteristic as a foundation in planting hilly areas, a case study

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Involving the community is a way of protecting the environment. The area of Mount Gede Pangrango is the tourist destination of Jakarta and its surroundings. Changes in land use happen rapidly, as well as hilly deforestation. The community participation to reforest the hills, is one of the ways that is carried out in community service activities. Based on the community characteristics, the purpose of this study is to evaluate the procedures of community participation in planting bamboo and vetiver in Mount Gede Pangrango. The method of collecting data is by observing and interviewing various stakeholders. The community that gets involved come from various backgrounds and intentions. The analysis shows that the most important stage in community participation is in planning action. In this stage, the community leader is an important position. According to the community, the less important phase was evaluating the activities results. In this stage, the organizer could complete the stage itself. The conclusion of this study shows that community leaders and the community member background are the keys to the program. A direct economic benefit could strengthen community participation. The community will offer their support unless the program offering direct economic profit.

Keywords : community characteristic, community participation, leadership, planting activity

ABS-IGEOS-20229

The Spatial Relationship between The Horticultural Farming and Household Welfare at Rancabali District, Bandung, West Java

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Agriculture is one of the important sectors for economic development in West Java. Unfortunately, agricultural land continues to decrease. This trend is also seen in the Ciwidey Agropolitan Area, Bandung. Horticultural farmers are forced to manage crops on a narrow land. The purpose of this study is to explain the spatial relationship between horticultural patterns and household welfare in Rancabali District, which is part of Ciwidey Agropolitan Area. This study is a descriptive study using map interpretation and cross tabulation. Data comes from systematic interview, field observation, and secondary sources. For analysis purposes, this study uses land conditions and accessibility as a spatial framework. The results show that most of the horticultural farming is a monoculture that is cultivated independently by farmers without involving labor. Labor involvement is only found on agricultural lands with a lower accessibility. This spatial pattern is closely related to the welfare of farmers. The better the accessibility, the higher the welfare of the farmer household. However, in areas with a lower accessibility, the level of welfare will only increase if they have a more spacious land.

Keywords : Spatial relationship, horticultural farming, accessibility, agricultural land, household welfare.

ABS-IGEOS-20063

Tea Smallholder Livelihood Development

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The sustainability Livelihood Approach is an approach that is used to measure the efforts of a household to continue its source of livelihood. Livelihood that is currently facing problems is becoming a tea smallholder. Tea smallholdings managed by tea smallholders are a phenomenon that can be found in several districts in West Java, one of them is in the Sukabumi Regency. As a tea smallholder, farmers also have various other sources of livelihood. Based on the assets ownership, this study aims to determine the pattern of livelihood development of the tea smallholder households. The weighting of each asset from the SLA approach is based on the geographical settings of the study site. As a household that lives from primary economic activities, natural assets ownership is very important. Households with high natural assets are always followed by high financial asset ownership. While high physical assets, followed by superior human assets. This makes farmers able to develop various economic activities in the village so that they can maintain their tea smallholdings production. Whereas farmers with low natural asset ownership face difficulties in diversifying economic activities within the village. The option to maintain the tea smallholdings is by migrating, working outside the village. Based on these facts, the conclusion of this study shows that the sustainability of tea smallholdings that owned by tea smallholder is highly dependent on the ownership of natural assets in the form of the extent of their smallholdings.

Keywords : tea smallholder, sustainable livelihood, village economic activities, migration

ABS-IGEOS-20170

Suitability of Seaweed Cultivation Areas on Serangan Island, Denpasar City, Bali Province

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Seaweed cultivation is an alternative for the use of coastal and marine areas. Increasing the production of seaweed cultivation is necessary given the high carrying capacity and potential of the development area that is still wide open to be utilized. The seaweed cultivation on Serangan Island continues to be pressured by the development of tourism and human activities. This study aims to analyze the suitability of the seaweed cultivation area in Serangan Island. The variables used in this study are water conditions such as sea surface temperature, salinity, total suspended solid, and dissolved oxygen. The data obtained through processing Landsat 8 image data in January and May 2020. The research method used is a scoring method and overlaps all variables, which are then analyzed spatially. The results showed that the suitability of the seaweed cultivation area in the rainy season contained two classes, that are suitable area covering an area of 4 Ha and quite suitable area covering 271 Ha. Whereas in the dry season contained three classes, which are suitable area covering 10 Ha, quite suitable area covering 258 Ha, and not suitable area covering 2 Ha.

Keywords : Landsat 8, scoring method, seaweed cultivation, Serangan Island, suitability area.

GENDER, RELIGIUS, POLITICS AND ENVIRONMENT

ABS-IGEOS-20005

Voting Behavior of West Javanese Women in Terms of Geographical Location and Cultural

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Based on geographical location, West Java is the buffer zone of the capital. This condition makes it easier for West Java women to obtain information including gender development and access to education as well as information about the legislative membership of the members. Various studies reveal that even though the state has given women the right to sit in parliament, this has never been fulfilled. This article reveals how the voting behavior of West Javanese women is viewed from gender geography. The study was conducted over three months involving five families interviewed. The result is that geographical conditions do not affect the views of Sundanese women that the husband is more important, so in determining the choice of candidates is dominated by the husband. Likewise in terms of work, the average Sundanese woman has two main tasks namely raising children and making a living. this is in accordance with Sundanese proverb "awewe dulang tinande" (women must follow their husbands).

Keywords : gender, Voting behaviour and geographical location

ABS-IGEOS-20245

Diffusion: Dowry Change in Maba Belu Selambar Culture (a Case Study on Marriage between Karo and Kupang Tribes in Indonesia)

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Cultures and traditions that are trusted through generations are national identities that must be protected and preserved by the nation's successors. The Karo tribe is one of the Indonesian ethnic groups that has special cultures and customs. There is one culture held firmly by the Karo people, namely Maba Belo Selambar, which is a ceremony to propose a girl. The approach of this study was qualitative method that described how the socio-cultural changes in dowry in the implementation of the Maba Belo Selambar traditional ceremony that occurred due to cultural diffusion. The data collection in this study is using participatory observation for 6 months in Bandung Indonesia, depth interviews with 8 informants, which are divided into 3 elder of Karo tribe, 5 community leader and the Karo people who experienced changes in the socio-cultural of Maba Belo Selambar. The result The results showed that social changes in the culture of Maba Belo Selambar occurred in the Karo tribe society in Bandung because of the impact of cultural diffusion in which there were marriages between the Karo and Kupang tribes. This study can be implemented in indigeneous knowledge that the Karo tribe who living in Bandung must be able to think openly to the culture inherited from their ancestors.

Keywords : Diffusion Culture, Dowry Change, Karo Tribe, Maba Belo Selambar, Marriage

ABS-IGEOS-20012

Internalizing Islamic Values in Building Green Education

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ABSTRACT

The reality of life illustrates how far human concern is to the environment. This resulted in environmental damage, both globally, nationally, and internationally. The destruction of ecosystems in various places and regions has become a serious threat to the survival of the universe. Education has full responsibility to address issues and bring an environmentally friendly attitude. This study aims to provide an overview of the internalization of Islamic values in building Green Education. The approach used in this research is a qualitative approach, with the study of the library in data-abusing techniques. Based on findings and analysis, the Green Education is an effort to create a learning environment and learning process in shaping the personalities of students who are environmentally conscious, understanding the eco-friendly concepts, and mastering the environmentally-friendly culture of life. This concept can be implemented through the activities of the learning process, whether it is in curricular, co-curricular, extracurricular, and non-curricular, taking into account the principle of educative, participatory and sustainable and involve all stakeholders in the effort to build awareness and Bathiniyyah awareness to maintain and preserve the environment to remain quality and healthy.

Keywords : Keywords: internalization, Islamic values, and Green Education.

ABS-IGEOS-20016

Indigenous Concepts of Gender, Communication and their Link to Spatial Processes: A Case Study in Kasepuhan Ciptagelar, Indonesia

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Cultural factors arguably are significant in relation to how humans, thoughts, and products progress and organize spatially. In terms of indigenous people, they carry a symbol of irreplaceable diversity where men and women have different gender roles and responsibilities compared to contemporary communities. Hence, this paper attempts to explore the indigenous understandings of gender in one of the most distinctive indigenous communities in Indonesia, known as Kasepuhan Ciptagelar. The authors conducted a qualitative case study to investigate how spatial processes are linked to gender identities and activism in the community. The Findings show that the traditional community has implemented a form of gender equity, unlike the common practice in modern Indonesian society. The concept of gender equity was established as a form of social cooperation as a result of a geographical process where natural factors notably shaped their day to day life.

Keywords : Ciptagelar, Communication, Gender, Indigenous people, Spatial Processes,

ABS-IGEOS-20056

Perceptions of Racism Based on Regional Indigenous

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The word racism began to make its first manifestation in the early twentieth century, but the idea that a certain group of people is superior to others has been around in the world for a long time. For example, Indonesians from a certain area of origin were regarded as lower than others. Racism has multiple concepts, as well as many types of racism that we could find, and it definitely has a cause and effect. This research considers the definitions of racism that occur in Indonesia by analyzing 64 people of different backgrounds in different regions of origin. The paper will focus on how the use of qualitative approaches could contribute to understanding of the racism encountered. A ready-structured questioner is used to alert the persistent prevalence of racism. The result of this research is showing that the most of respondents were a part of west of Indonesia. The majority of respondents stated they have been a victim of racism or have unconsciously been the perpetrators of racism itself. And the result shows more of 50% doesn't agree with the existence of racism for mainly most of the respondents have close friends with a number of diverse origin region background or tribes

Keywords : Perceptions, Racism, Regional

ABS-IGEOS-20033

Exploring indigenous knowledge values of bahuma as a preservation of the national culture of Indonesia

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Preservation of culture in the life of modern society today is something that deserves the attention of all parties, especially the local culture that contains the noble values of the Indonesian nation. If the effect of globalization is not balanced with the readiness of the people, a borderless world will create a fear. The limited readiness of the people in the regions to face the era of globalization makes the lack of preventive measures that can be taken to prevent borderless world shocks. One effort to deal with the negative impact of globalization is to use indigenous knowledge values as a power. This study aims to explore and identify indigenous knowledge values of bahuma that's owned by the Banjar Tribe farmers as an effort to preserve culture to face the negative effects of globalization. This research uses a qualitative method with an ethnographic approach. The subjects in this study were the Banjar tribe farmers. Data analysis was performed using the Miles & Huberman interactive analysis model. The results showed that the values of local wisdom of Bahuma from Banjar Tribe include: religious, hard work, never give up, responsibility, environmental care, team work, not hurt each other, togetherness, sharing, patience, sincerity, kinship, and the

Keywords : indigenous knowledge, Bahuma

ABS-IGEOS-20038

Pemali as a Defense of Ecovillage Values in the Kampung Kasepuhan Babakan Lama
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Exploitation of the environment occurs because there is economic value generated for human benefit. Damaged environment can cause a lot of harm to humans later on. The aim of the study was to analyze and synthesize the concept of pemali in Kampung Kasepuhan Babakan Lama with ecovillage values maintained in the village. Then analyze the scheme of environmental conservation models that are applied in Kampung Kasepuhan. The research using in-depth interviews with informants who were prominent figures in the village. The interview resulted in the finding that environmental preservation efforts carried out in Kasepuhan Babakan Lama Village were in accordance with ecovillage values. Environmental preservation is closely monitored by every community living in the village and instilled the concept of using the environment wisely through the concept of pemali. Pemali is trusted by the community to be a positive dogma for environmental sustainability. Pemali is applied in social, cultural, environmental, economic, architectural and trust aspects. This is identical to ecovillage values. Thus, society and nature can co-exist in harmony. This is starting to disappear in the current paradigm of environmental use, where only humans benefit without regard to environmental sustainability.

Keywords : Pemali, Ecovillage Values, Conservation of Ecovillage Values, Pemali to Protect the Environment.

ABS-IGEOS-20045

Internalization of Green Moral community of Kuta Village Ciamis Regency

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Global warming occurs resulting in environmental damage, such as floods, forest fires, landslides, and droughts. Global warming can be reduced by public awareness of the efforts to safeguard and preserve the environment. This research aims to study and analyze the internalization efforts of green moral that is done by Village Kuta Ciamis District in order to preserve the environment. Kuta Village people have been awarded the National level Kalpataru Award in 2002 with the surrender of awards delivered directly by the president in Bali. Approach in research conducted using qualitative approach and case study method by conducting an in-depth interview on the informant. The result of this research is the community of Kuta Village Ciamis Regency has internalization activities of green moral through the implementation of the traditional ceremony Nyuguh. The conclusion of this research is internalizing green moral community of Kuta Village Ciamis through the implementation of traditional ceremony Nyuguh has an ethics in the efforts of environmental preservation based on the value of divinity, social value and cultural value. Society and the environment must coexist to create a harmonious world condition.

Keywords : Green Moral, community of Kuta Village, traditional ceremony of Nyuguh

ABS-IGEOS-20047

Religion as a Solution to Behavioral Problems Faced by Street Children: A Case Study in Indonesia

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Some children live in conditions that are detrimental to their growth. They live in a disadvantaged circumstance. Children who are victims of war, forced labor, child abuse at the hand of their parents, and human trafficking and who are street kids are examples of unlucky children. In Indonesia, the growth of these unlucky children is extremely rapid due to several factors. Some of these children live on the street and in an abusive environment. They spend almost eight hours per day wandering the street. This research sought to reveal the uniqueness of street children around the tomb of the saint who spread Islam (Wali). The children spend time on the street due to the presence of pilgrims (people who do ziarah). Events of Islamic holidays provide the momentum for the children to come down to the street to ask for alms from the pilgrims. This study used a phenomenological approach to explain the motives of the children and the big events that attract the children to come down to the street as well as communication behaviors that those children establish to draw the pilgrims' attention. The results indicate that, first, economic motives and joining other children encourage children to come down to the street. Second, sacred events such as Muludan and Malam Pelal, Syawalan or Grebeg Syawal (welcoming Syawal), Serenan, Sedekah Bumi/Nadran, and Kliwonan (eve of Friday Kliwon) are peak times at which street children beg. The ceremony or ritual concerns the phenomenon of poverty and children's begging behavior.

Keywords : Street children, communication behavior, ritual, phenomenology, children's motives

ABS-IGEOS-20052

Effectiveness of Peacecamp in Eastern Indonesia

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This study aims to analyze the effect of the Peacecamp program on changes experienced by participants in Eastern Indonesia after participating in these activities. This study uses qualitative research methods by distributing questionnaires to participants. The results showed that there were 82.6% of participants said they were very satisfied with the Peace Camp activity and there were 60.8% of participants who got a change from the perspective to the attitude of tolerance possessed. 99% Peace Camp participants agreed and understood that the value of peace is needed in life. Participants also want to be a peace maker / peacemaker for people around him.

Keywords : Effectiveness, Peacecamp, Eastern Indonesia

ABS-IGEOS-20061

Sunni-Shiite Harmony and Conflict in Jepara (Central Java) and Sampang (Madura)

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Shi'a Islam in its early days was a fringe and opposition movement amidst the hegemony of Sunni Islam. After the decline of the Shi'a Abbasid caliphate, it grew and grew until the establishment of Shi'a sultanates with Iran as its primary base. The Sunni-Shi'a conflict in the Middle East is historical. In this century, the Wahhabi-Salafi are most incessantly preaching deviant Shiites, infidels, and outside of Islam. Whereas international ulama conferences emphasized that Shia is the same as Sunni, they are equally Islamic. The Indonesian Muslim community adheres to Sunni Islam. However, the Indonesian people, with their primary base of Javanese and Minang culture, are open to and accept differences. Meanwhile, Madura is more closed. The research aims to produce a model of Sunni-Shia relationship in Bangsri Jepara District (Central Java) and Omben Sampang District (Madura). Facto expos research method. The data sources are investigative reports of national media and scientific journals. The results showed that the Sunni-Shi'a relationship in Jepara was harmonious. The contributing factor is that religious and local community leaders accept the Shi'a, joint social-religious activities, and support from peace activists and Islamic mass organizations. Meanwhile, Sunni-Shi'a relations in Sampang are terrible. The local Sunnis prevented the religious activities of the Shi'is. They even burned mosques, Islamic boarding schools, and houses, thus driving the Shi'a residents out of Madura. The contributing factor is that the Ulama and local Islamic organizations reject the Shi'a, and the community obeys the Ulama. Meanwhile, Shi'a residents are not accommodating with local religions.

Keywords : harmony; conflict; Sunni-Shi'a_relationship; Jepara_(Central_Jawa); Sampang_(Madura)

ABS-IGEOS-20058

Takmir's (mosque administrator) response to the suitability of the mosque's qibla direction in Banjarmasin

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Muslim prayer services in the Qur'an are required to face the direction of the Qibla wherever they are, but the direction of the mosque partially built by the community is doubtful because it is determined using simple equipment and methods. The concentration of the study identified takmir responses by applying measurements of the suitability of the qibla direction of the mosque in Banjarmasin based on spherical trigonometry formulas using GPS and Compass in 258 mosques. Takmir's response to the direction of the mosque's qibla is appropriate to 47 mosques, most of the measurements are based on instructions from the Regional Office of the Ministry of Religion that uses the spherical method trigonometry formula, and a small portion uses a compass and Sun Qibla Time. Takmir responds that the direction of the mosque's qibla is not as much as 211 mosques using the compass and the setting direction of the sun, so that most of them directly adjust the qibla direction according to the measurement results, while a small portion of the qibla direction adjustment awaits the results of the mosque management meeting, even though all deviations of the qibla direction are at the level which is acceptable in terms of Islamic criteria.

Keywords : Response Takmir, Qibla Direction, Mosque

ABS-IGEOS-20030

A Media-Based Campaign to Protect Watershed of Citarum River, West Java Province, Indonesia

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Indonesian government has been planning to create a 7-year Citarum river protection namely Citarum Harum involving rehabilitation and watershed revitalization through an integrated and synergic collaboration of both central and local governments covering West Java province, Kota and Kabupaten (equal to urban and rural districts) Bandung, which are cities crossed by the river. To this relation, media play an important role to shape the society's perception to create a better environment. This study aims to identify how media convey the messages of Citarum Harum, how they involve local wisdom within the environmental preservation campaign, and how they create a public discussion space to socialize the program. This case study investigated an in-depth longitudinal analysis towards the program. Data collection in this study consisted of analyses, data collection, information analysis, and result report. The results showed that printed media, television, and radio had social responsibility ideology to educate the society of the river protection. In addition, policies in several media were considered quite consistent in spreading out the messages and ideas as they also created innovations in structural, social, and cultural approaches.

Keywords : Media-based campaign, Citarum Harum program, social and cultural approaches, West Java province

ABS-IGEOS-20079

Perceptions of Influential Transgender in Malaysia: A Social Media Analysis

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Discrimination against transgender people has become an important topic for discussion in various fields, especially in social sciences, health and law. Through social media, the emergence of transgender people can be seen by society in general, and society has reacted in different ways, either accepting or rejecting these groups. Social media space is used as a forum for transgender people to promote services they provide until can putting them among the influential community, especially in Malaysia. However, the community's reaction needs to be taken into account to show the true position of transgender people in society based on the study performed. The research seeks to analyze types of discrimination faced by transgender people via social media, in addition to exploring the justification on such discrimination. This also covers factors that contribute to transgender people's success. The research approach is qualitative by netnography analysis based on online experiences and interactions. The resulting cultural reflection helps to explain the actual situation facing transgender people. Data used in this study were taken via Malaysia's influential transgender social media. This research is important as it will give us a bigger image on how the society perception toward the transgender society and provide knowledge to the public not to be punitive until cause discrimination against transgender people.

Keywords : Discrimination, Transgender, Social Media, Netnography Analysis

ABS-IGEOS-20243

Emotional Geography of eternity: A case study of spiritual tolerance of religion in the family of a widow whose husband dies of a different religion

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This article explores the experiential and emotional dimensions of the eternal practice of religious tolerance, 'Emotional Geography,' concerning the activities of Muslim women. With the prayer relationship approach as a symbol of love and personal meaning - psycho-social-religious space - this article offers important insights into the complex, intricate process of internal manifestation and public manifestations of interfaith spiritual identities. Based on a narrative analysis of the case of a Muslim woman's family in a city in West Java, Indonesia; concluded that public visibility through interfaith tolerance to the level of death (eternal) requires social-spatial and emotional/internal processes. This analysis of women's narratives explores how religious practices can guide personal piety and self-transformation and contribute to community solidification in a spirit that can be identified politically and religiously. Further similar research concerning broader spiritual-emotional tolerance in-depth is recommended for a peaceful life together in this world.

Keywords : Emotional Geography, Interfaith, tolerance, piety, prayer, grave pilgrimage

HEALTH ENVIRONMENT AND SUSTAINABLE DEVELOPMENT GOALS (SDGs)

ABS-IGEOS-20188

Challenges and Opportunities of Biodiversity Park as a Togong-Tanga Indigenous Peoples Conservation Area in Banggai Kepulauan, Central Sulawesi

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Biodiversity Park has a function as a center for research and biodiversity. Protected areas owned by the state and become a conservation strategy area. This research aims to look at the opportunities and challenges of a biodiversity park as a conservation area with a spatial, descriptive and SWOT analysis that includes physical and social factors. Land use spatial variables uses land use, slope, and function of forest area. Social factors focus on the local ecology of indigenous peoples and also HHBK at the park. On the physical factor, some points of the park are of attractive natural beauty such as beautiful cliffs seen from the top. In terms of social factors, local ecological knowledge of indigenous peoples can be said to be quite good. The indigenous peoples at all points and also the biodiversity park landlords already have good knowledge about the diversity of flora and fauna in their area. The challenge of the biodiversity park as a conservation area is that the general public in the whole village does not understand how to protect the environment. In a focus group discussion at the point of Mangais village, that the community is more concerned with wages that can be obtained in the short term.

Keywords : biodiversity park, indigenous peoples, local ecological knowledge, conservation areas

ABS-IGEOS-20182

The Local Wisdom of Communities in Maintaining the Sustainability of Telaga Mangunan in Tlogohendro Village, Petungkriyono District, Pekalongan Regency

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The people of Tlogohendro village are very strict in maintaining and preserving the traditions inherited from their ancestors. The community supports local wisdom because it can have a positive impact on life. Local wisdom is important to be preserved in order to maintain balance with the environment and preserve the environment. The research objective was to discover the local wisdom of the Tlogohendro community in preserving Telaga Mangunan and analyzing its impact on the preservation of Telaga Mangunan. This study used qualitative research methods with a case study approach. The research location was in Tlogohendro Village, Petungkriyono District, Pekalongan Regency. The informants of this research were the 'gatekeepers', village heads, and influential communities. Data collection techniques used were in-depth interviews, observation, and study of documentation. The data validity test used source triangulation and theory triangulation. The data analysis technique used was qualitative data analysis following the concept of Miles and Huberman. The results showed that the local wisdom of the Tlogohendro community in preserving the lake was in the form of traditional ceremonies, various local advice and prohibitions, and myths. These local wisdom have positive impacts on the village of Tlogohendro, beginning with the growth of community awareness in preserving nature. In addition, through the tradition of nyadran and sedekah bumi, the community does mutual assistance. Through local wisdom, the community managed to preserve the environment and avoid the problem of water shortages.

Keywords : Local Wisdom, Telaga Mangunan, Environmental Conservation

ABS-IGEOS-20008

Identification of *Wuchereria bancrofti* in *Culex quinquefasciatus* Post-Mass Drug Administration (MDA) Lymphatic Filariasis in Bekasi District, Indonesia

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Mass drug administration (MDA) of lymphatic filariasis (LF) has been applied in Bekasi since 2010. Subsequently, two-rounds transmission assessment survey (TAS) were performed to evaluate the efficacy of the MDA program. No evidence on the recent status of the microfilaria in LF vector mosquitoes in Bekasi after the MDA and TAS. This study was aimed to provide updated evidence on the presence of *W. bancrofti* in *Culex quinquefasciatus*, which is useful for the accomplishment of LF elimination in Bekasi. Entomological surveys were conducted from October to November 2019 in Jatimulya village, Bekasi. Adult *Cx. quinquefasciatus* mosquitoes were captured using human-baited double net traps (HDNs), both indoor and outdoor, within 12-hrs (6 PM to 6 AM) collection timeframe. Ovary dissection was assigned to female mosquitoes to estimate its longevity. Man-biting rate (MBR), man-hour density (MHD), daily survival rate and estimated longevity were also calculated. Dissected mosquitoes were pooled and examined by PCR to detect *W. bancrofti*. Total of 673 female *Cx. quinquefasciatus* were collected. Peak landing time of *Cx. quinquefasciatus* was observed between 12 AM to 3 AM. Mosquito parity rate and daily survival rate was 22.88 and 0.692, respectively, thus its estimated longevity ranged up to 3 days. The MBR and MHD was 14.04/person/night and 0.39/person/hour, respectively. Based on PCR examination, from the total of 48 pooled samples of *Cx. quinquefasciatus*, none showed *W. bancrofti* positive. This study revealed the nonexistence of microfilaria *W. bancrofti* in LF vector *Cx. quinquefasciatus*, however, routine vector surveillance and monitoring and evaluation (M&E) remain essential to be done to ensure the sustainability of LF elimination program.

Keywords : *Culex quinquefasciatus*, Lymphatic filariasis, MDA, *Wuchereria bancrofti*

ABS-IGEOS-20023

Health Campaign of COVID-19 Prevention through New Media in an Urban Area

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Using new media in health campaign, particularly amid COVID-19 global pandemic, plays a key role both in urban and rural areas. Within the context of urban area, Universitas Pendidikan Indonesia (herein referred to as UPI), keeps updating the adjustments of campus life amidst the pandemic through a variety of platform, including social media as social media are the most frequently used platform by both lecturers and students. This study investigates the use of new media in campaigning the awareness of COVID-19 prevention at UPI. A case study method was selected to analyze the issues of COVID-19 prevention at the university as it aims to identify a special case specifically. The results showed that UPI's strategies of using the new media in the health campaign were not monotonous since it did not only pay attention to the content of the campaign but also feature interesting visual aspects. It has been confirmed that the e-posters could not content fear factors and had to promote neutrality, either in the content or in the color and back sound selection.

Keywords : Health campaign, new media, anticipation of COVID-19, Universitas Pendidikan Indonesia.

ABS-IGEOS-20032

Effect of climate change on the geographical distribution of leptospirosis risk in Western Java, Indonesia

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Climate change is known to have a significant impact on public health as it could speed the spread of zoonotic infections. The purpose of this study is to estimate the potential geographical distribution of the risk of leptospirosis – a bacterial infection caused by *Leptospira* spp and transmitted by rodents, in Western Java islands. The possible distribution of *Leptospira* was modelled by using MaxEnt ecological niche (EN) framework under various climate scenarios. Data for elevation and nineteen bioclimatic variables associated with temperature and precipitation were obtained from climate database. In general, the shift in the geographical distribution in leptospirosis occurrence is evident. The model shows that the probability of the leptospirosis occurrence is predicted to be high in the northern and central part of the islands. The annual mean temperature, annual precipitation, and precipitation of wettest quarter were the more significant contributors to the dynamic of leptospirosis emergence. The study reveals that climate change will likely increase the probability for leptospirosis emergence over the islands, suggesting the importance of substantial mitigation efforts towards improving sanitation, hygiene and flood management, in addition to strengthening public health preventive and surveillance strategies at a local level.

Keywords : climate change, bacterial infection, modeling, Java, zoonosis, public health, rodent-borne

ABS-IGEOS-20057

Sustainability of the Indonesian energy for the transportation sector: Impact of the global agenda and national environmental policies on institutional development

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The Indonesian transportation energy sector has always been an important concern of various stakeholders because of its involvement with the issues of global trade, the declining quality of the environment, technology trajectory and the suitability of institutional arrangements for emerging technologies. This study conducts cross-border domestic-global by combining multi-disciplinary research in economy, politics, socio-technical and eco-innovation. This study uses the historical institutionalism approach to analyze the underlying changes ideas, path dependence, identification of key events that become critical junctures, institutional types of change and stability of the energy for transportation sustainability development. This study indicates that the influence of the global agenda and national environmental policy is divided into four stages: the initial Indonesian transportation energy institutions and the rising awareness of energy source diversification (1945-1979); increased of transportation energy production capacity and the emergence of environmental protection (1980-2003); development of environmentally friendly alternative vehicle fuels (2004-2010); and, sustainable institutional development of alternative vehicle fuels (2011-now). This study concludes that the institutional change in the Indonesian transportation energy sector takes place in the duality of exogenous and endogenous. Government policies in responding to critical junctures form the path dependence that results in continuity and stability in sustainability development.

Keywords : Sustainable development; historical institutionalism; path dependence; institutional change

ABS-IGEOS-20070

Ecological Criteria for Sustainability in Global, National, and Local Scales: A Review of the Literature and Case Study in the Indonesian Palm Oil Sector

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Current sustainability assessment methods are mostly disseminated at global or national scales. However, the sustainability criteria are often derived from a top-down approach, which, although useful, fails to capture many ecological characteristics that are very important to the local population. This article aims to review the literatures on the important aspects of the implementation of ecological criteria in global, national, and local scales. This study uses qualitative content analysis by examining secondary data searches such as journal articles and research reports regarding the topics. We use the NVIVO software to do the theme coding. Moreover, we also use a case study in the oil palm plantation in Belitung Island specifically and the Indonesian palm oil sector generally to see how global and national ecological criteria for sustainable palm oil was designed and whether it is adaptable and suitable with the local context. We concluded that although global and national criteria for sustainable palm oil have been established, the characteristics of local biodiversity and social value and its prioritization are needed to ensure sustainability reached the lowest scale.

Keywords : ecological criteria, sustainability, palm oil sector, global and local scales.

ABS-IGEOS-20076

Covid-19 Implications for Demographic Parameters and Demographic Bonus Achievements in Indonesia

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The Covid-19 pandemic was officially mapped as a national outbreak in Indonesia in April 2020. This pandemic significantly affected every aspect of life at both the individual, local and national levels. At the national level, one of the impacts is demographic parameters. This study will explain what demographic parameters are affected by the Covid-19 pandemic in Indonesia. In addition, it was also explained the potential change in demographic bonus achievements due to this pandemic. The research method used is secondary data analysis. The data used is sourced from BPS and data from other relevant agencies. Data analysis was performed by descriptive analysis. The results showed that the demographic parameters affected by Covid-19 were fertility, mortality and migration. The impact of these three demographic parameters affects the achievement of demographic bonuses in Indonesia. The prediction is that the demographic bonus in Indonesia will slow down due to increased fertility and mortality.

Keywords : Covid-19 impact, Demographic parameters, demographic bonus

ABS-IGEOS-20084

Government Instagram Study in An Urban Area in Pandemic Covid-19

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Urban areas have high spatial interactions, therefore the deployment of covid-19 virus spread quickly. Geographical conditions, especially in urban areas affect conditions of society, such as the pattern of communication of a region in handling covid-19. The central government until regions trying to reduce the number of virus spread covid-19 in various ways, one of them provide understanding and persuade people about risk of covid-19 through social media. This study tries to analyze messages were uploaded by a city government bandung and bogor through social media platform instagram by using quantitative content analysis. The Results in this study show is 393 content that were uploaded by instagram accounts @humasbdg and @pemkotbogor related to covid-19. Based on the visual aspects of the content uploaded @humasbdg account is dominated by photo-shaped content, while @pemkotbogor is dominated by content in the form of illustrations. The contents of messages uploaded by both Instagram accounts are dominated by information regarding handling of covid-19 in terms of health, social and economic aspects. Based on our research findings, we conclude that content uploaded through official Instagram accounts belonging to the municipalities of Bandung and Bogor, considers these three aspects important to be known by urban communities in their efforts to handle Covid-19 in similar geographical conditions.

Keywords : Content Analysis, Social Media, Covid-19, Urban Society

ABS-IGEOS-20082

the importance of environmental awareness and industrial hygiene for workers

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Environmental damage in the region of PT. X Bojenegara, Banten still occur. Most of the causes of environmental damage in the region of PT. X such as air pollution, water, and soil as a result of the behavior of workers who don't have an attitude of environmental awareness in the work. Several factors, namely environmental awareness and Industrial Hygiene program used to see the connection with the behavior of workers at PT. X. This research was conducted at PT. X Bojonegara, Banten in February 2015 to March 2015 by using a quantitative approach and the data collection methods such as questionnaires, field observation and in-depth interviews. There are 79 respondents and 5 informants were statistically analyzed by univariate, bivariate and multivariate. The result there is a relationship between environmental awareness and Industrial Hygiene program with worker behavior ($R = 0.292$). The correlation value of 0.292 indicates that the relationship between environmental awareness and Industrial Hygiene program with worker behavior is moderate.

Keywords : Public Health, Hygiene, Behavior, Industrial Hygiene, Worker Behavior

ABS-IGEOS-20080

An Analysis of Sustainable Tourism Development Planning of Geopark in Nglanggeran Region, Patuk District, Gunungkidul Regency, Special Region of Yogyakarta

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Indonesia is a rich country in geological heritage such as volcanoes, caves, rivers and other natural panoramas that have the potential to become tourism objects. This research is based on the importance of improving the regional economy through efforts to develop sustainable geopark tourism destinations as a leading sector in the region. In its management, it requires a plan that will ensure the sustainability and benefits of tourism. This study aims to determine the strategy of developing sustainable Tourism of Geopark in Nglanggeran area, Patuk District, Gunung Kidul Regency, Yogyakarta, Indonesia. SWOT and PBRW methods that were divided into four stages to produce a sustainable development of Geopark Tourism in the Nglanggeran Region of Yogyakarta were used to analyse the data. By applying the SWOT and PBRW methods, it can provide the benefits of Nglanggeran geopark tourism in terms of economic, social and environmental sustainability.

Keywords : Sustainable tourism of Geopark, Geopark Nglanggeran Yogyakarta, SWOT Analysis, PBRW Method

ABS-IGEOS-20096

Child Marriage in Urban Areas: Gender Quality Perspectives in Sustainable Development Goals (SDGs) Programs

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This study aims to analyze the social life of household perpetrators of child marriages from the aspect of gender equality. The research location was in Gunung Terang Sub-District, Langkapura District, Bandarlampung City (urban area). The determination of the location of the study was carried out by purposive sampling with the consideration that many cases of child marriages were found in the area. The population in this study were all households with one spouse and / or partner of child marriages, that is, married before 18 years old as many as 32 couples. Data were collected using interview techniques and analyzed by non-parametric statistics. The results of this study found that there were inequalities in gender equality in terms of access, participation, control and benefits in the social life of the child marital household. Male child marriages get greater access, participation, and benefits in obtaining education, work, and social community activities than female child marriages.

Keywords : Keywords: child marriage, urban, gender, SDGs.

ABS-IGEOS-20090

Integrated Waste Processing in Pangandaran Beach Tourism Area

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Pangandaran Beach is one of the iconic tourist destinations in the province of West Java. This beach tourism area is a favorite of local tourists with a number of 3.9 million tourists at the end of 2018. The large number of tourist visits to Pangandaran Beach in addition to being economically profitable, also has a negative impact in the form of waste generation. Tourism activities produce organic waste in the form of hotel and restaurant food scraps and then inorganic waste such as plastic food wrappers, plastic bottles and others. Based on these problems in the research plan for three years, divided into three main focuses, namely in the first year is how integrated waste management for Pangandaran Beach tourism area. The focus of the second year research is the processing of waste from the food and beverage industry in Pangandaran Regency and in the third year is processing organic waste for freshwater fish feed. The research method used in the first year research is a descriptive method that aims to describe how waste processing has been done so far, community participation and how integrated waste management is in the Pangandaran Beach tourism area. Based on the results of the study, it was found that the processing of waste in the tourist area is still by collecting-transporting-dumping, the final disposal site (TPA) uses an open dumping system that is the garbage is disposed of without any treatment. Community participation in waste processing is in the medium category (score 56.5%) and integrated waste processing is still in the early stages of development.

Keywords : beach tourism area, waste, integrated waste processing

ABS-IGEOS-20117

Level of Community Vulnerability in the Slums of Palembang City

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Slums are locations known as vulnerable communities. The importance of this research was conducted to determine the vulnerability and distribution of the level of vulnerability of the community in the slums of Palembang City. This research method is a mixed method that uses quantitative methods with k-means cluster analysis and spatial analysis, for qualitative data reduction, data presentation and conclusion or verification. The results showed that slum gave a high level of vulnerability, especially affecting the number of pregnant women, the number of children, buildings on the banks of the Musi River, types of buildings that are semi-permanent and non-permanent, and low incomes make people living in urban slums Palembang is increasingly vulnerable. Another result is spatially that almost the average area is at a moderate level of vulnerability and partly high is in the Musi Riverbanks and Musi River branch areas. The conclusion of this study is that the level of vulnerability in the slums of Palembang City is dominated at the moderate level of vulnerability. When viewed spatially, almost the average community area that is at the level of moderate and high vulnerability is in the Musi Riverbanks and Musi River branch areas.

Keywords : Level, Community Vulnerability, Slums

ABS-IGEOS-20108

Effects of Land Use on The Number of Coliform Bacteria in Boyong River, Sleman

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Watershed management is important, especially to water management. River water pollution in the upstream has an impact on the water quality in the midstream and downstream. Boyong River is an upstream part of Code Watershed which has three dominant land uses. Land use activities in the Boyong River cause faecal pollution from animals or humans waste in river bodies. This can cause the presence of coliform bacteria in rivers, both total coliform (TC) and fecal coliform (FC). This study aims to determine the effect of land use on the number of TC and FC in the Boyong River. The study focused on three dominant land uses, mixed-use gardens, irrigated fields, and settlements. Sampling was carried out during the dry season and rainy season, using a purposive sampling method. Based on laboratory tests with the Most Probable Number method, the number of TC ranged from <1,8 – 350.000 MPN/100mL and the number of FC ranged from <1,8 – 79.000 MPN/100mL. Third land use contributes to river pollution. Settlements have the highest number of TC and FC changing. During the rainy season, the number of TC and FC tends to be higher than during the dry season. Almost all sample points exceed the Boyong River allotment quality standard.

Keywords : Coliform Bacteria, Land Use, River Water Pollution

ABS-IGEOS-20251

Spatial Analysis on Influence of Elevation Toward Infection Fatality Ratio of Coronavirus Disease 2019 in Bandung Regency and Bandung City

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Bandung Metropolitan Area located on elevation span between 666 masl (Kecamatan Gedebage) to 2608 masl (Kendang Mountain, Kecamatan Kertasari). Bandung Metropolitan Area consist of Bandung City, Cimahi City, Bandung Regency, West Bandung Regency, and Sumedang Regency. Within Coronavirus Disease 2019 (COVID 19) pandemic, Bandung City and Bandung Regency are among the top on COVID 19 cases statistic. Despite of that, Infection Fatality Ratio between region units has significant differences. Aims of this research is to analyze correlation between elevation factor and COVID 19 Infection Fatality Ratio in case-study area. Methods applied on this research is non-experimental quantitative research by comparative analysis type based on COVID 19 cases statistic. Therefore Technics used is spatial analysis based on case-study area mapping. Result of this research shows that there is correlation between elevation toward Infection Fatality Ratio, in which Bandung City with average elevation 723 masl records 0,08% on fatality ratio, while Bandung Regency with average elevation 891 masl records 0,01% on fatality ratio. On sub-district (kecamatan) level, both sub-districts with highest elevation in Bandung City and Bandung Regency, which are Kecamatan Sukasari (850 masl) and Kecamatan Rancabali (1600 masl) records 0% on Infection Fatality Ratio.

Keywords : Bandung City, Bandung Regency, Coronavirus Disease 2019, Elevation, Infection Fatality Ratio

ABS-IGEOS-20250

Mapping the level of regional vulnerability due to the pandemic Covid-19: Case study of Bandung Municipality

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The direct impact of the Covid-19 Pandemic has claimed many lives around the world. The indirect impact of this pandemic, among others, disrupted economic conditions with an increase in the poor, vulnerable to poverty and unemployment. With the outbreak of many positive cases of Covid-19 and the increased impact it causes, an analysis of regional vulnerability due to the pandemic is needed, as a basis for making decisions in dealing with the impact of the Pandemic, especially on spatial impacts. The purpose of this research is to map the level of regional vulnerability due to Covid-19 in Bandung. By knowing the level of regional vulnerability, the government can formulate policies to reduce the impact and spread of Covid-19 effectively and efficiently.

Keywords : Geospatial, Pandemic Covid-19, regional vulnerability

ABS-IGEOS-20174

Mapping Threat of Crisis Due to Covid 19 Towards the Management of the Indonesian Border

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Corona Virus Disease 2019 or abbreviated as Covid 19 has become a threat to the sovereignty and safety of various countries in the world, including Indonesia. On the other hand, in the current era of globalization, a country is required to develop by increasing interaction with other countries, especially with their neighbors. This becomes an anomaly. In this situation, the position of the border gate of Indonesia becomes an important aspect. What are the potential threats arising from neighboring countries due to the Covid 19 phenomenon both now and in the future?. This paper discusses the policy of neighboring countries in dealing with the covid 19 phenomenon in order to identify the potential crisis towards Indonesia. The method that is used in this paper is qualitative with the principle of phenomenology. Various experiences and policy patterns issued by neighboring countries are part of the analysis. The result of this research is the construction of actors (countries) in mapping the potential threats to the Indonesian state starting from how to overcome the understanding of Indonesian border gate, so that a distinguish between neighboring countries and friendly countries appears. Spatial patterns can be mapped in both countries. In the end, its characteristics can be challenging in politics, economics, and also socio-cultural institutions for Management in Indonesian Border Area.

Keywords : Crisis, Covid 19, Indonesian Border, Political Geography

URBAN AND RURAL ENVIRONMENTAL GEOGRAPHY

ABS-IGEOS-20001

Household Livelihood Strategies of Inhabitant Traditional Javanese House in Brayut Tourist Village

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The traditional house as a tourist attraction in Brayut Tourism Village is an asset need of great treatment. This study tries to describe the livelihood condition of household in traditional Javanese house in Brayut Tourist Village and identify the household livelihood strategy in traditional Javanese house in Brayut Tourist Village. Combination quantitative and qualitative methods with sequential explanatory model are used with census techniques. Assets in households participate in the tourist village activities show human capital having the highest score. Physical capital like electronic, transportation, and household furnishings is the highest capital the household not participate in the tourist village activities. Households capable of inhabiting of Javanese traditional house is divided into two categories that is households that have only able to survive the occupies a house, consist of survival and passive income strategies. And households that have high capabilities and capital. This category consists of an intensification consolidation, diversification consolidation, and accumulation strategies.

Keywords : livelihood strategy, traditional Javanese house, tourist village

ABS-IGEOS-20004

**The Role of Local Culture “MASAGI” in Developing Indonesian Education Spirituality
Becomes Insan Kamil**

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The phenomenon of moral degradation moral has spread around the world, this matter can cause moral depletion of the nation and effect social disorientation and culture, as this matter happened in West Java, as the widest province of muslim live in Indonesia. It is important to strengthen the role of local culture of constructing Indonesian education spirituality in order to become Insan Kamil. This article aims to analyze the role of local culture “masagi” in developing Indonesian education spirituality. This research uses qualitative approach by descriptive analysis method. The results of research shows that the birth of local culture “masagi” has great enough role to develop Indonesian education spirituality based on the philosophy of Sundanese local wisdom which emphasize religion, culture, defense the country, and environmental care to anticipate the problem of the low character of the nation, so that the strength of Indonesian Education Spirituality can bring human personality to be Insan kamil. Insan Kamil is the final purpose of human who obey Allah, the final purpose of human who obey Allah are have faith, knowledgeable, noble character and useful for others.

Keywords : Keywords : Roles, Masagi, educational Spirituality and Insan Kami

ABS-IGEOS-20024

Spatial-Ecological Approach in Cirebon's Peri-Urban Regionalization

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The environmental transformation from rural into urban is a regional development process, it usually happens to industrial countries and formed a peri-urban region. Understanding the peri-urban development is an attempt to analyze the potential changes in environmental quality due to landscape changes in Cirebon Regency. The method of determining a peri-urban region is based on the spatial-ecological approach that is not only to use administrative boundaries. This study aims to analyze the regionalization of Cirebon's peri-urban using the spatial-ecological approach. Parameters to determine the region based on built-up area, road density, distance from city center, and residential population density. The Cirebon's peri-urban was obtained from overlay analysis and defined interval reclassification. This study shows that the Cirebon's peri-urban has an area of 76.828 km² which is divided into five sub-districts and 48 villages surrounding Cirebon City. This peri-urban is mostly in the western of Cirebon Regency. This phenomenon shows the development direction of Cirebon City (urban sprawl) is more dominant towards the western because of massive development in industries, services, and transportations.

Keywords : Cirebon, peri-urban, regionalization, spatial-ecological approach

ABS-IGEOS-20064

Social Capital Role in Enhancing the Middle Eastern Investment in Warung Kaleng Area

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Since the Dutch era, the Cisarua Subdistrict is an area that has been turned into a tea plantation, with workers brought in from the surrounding area. As migrants, the people who live in Cisarua are accustomed to adjusting to find a source of livelihood. In the early 2000s, migrants from the Middle East who are initially only intended to visit then began to settle down and even develop economic activities in Cisarua. The residents of Warung Kaleng, being the center of the Middle East migrant settlements, settle into adapting to new sources of livelihood, especially in the tourism sector. By using the concept of social capital that is applied to individuals and communities, this study aims to determine the adaptation patterns of Warung Kaleng residents in tertiary economic activities. Social capital is a concept that can be measured from the norm, trust, and network factors. The results showed that the norm factor did not influence the people adaptation pattern, but the trust and the network strengthened the people adaptation pattern. Those who are based on these two factors have a wide and strong network. People with strong relationship with formal and informal leaders can be involved with the Middle Eastern investment. The expansion of the economic activity areas is not affected by the existence of road or the distance to the center of activity, but by the kinship. The conclusion of this study shows that trust and networking are a series of processes. Build a strong trust will result in wider networks and solid community, with no influence from it's location.

Keywords : Social Capital, Middle Eastern Investment, Service Sector, Area of Influence, Adaptation

ABS-IGEOS-20075

Spatial Analysis Of Uninhabitable Houses (Rtlh) Tanggamus Regency, Lampung Province

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This study aims to analyze the spatial based on Non-Habitable Houses based on coordinates and create a distribution map in Tanggamus Regency, Lampung Province. This research uses survey method. The object of this research is that the house is not livable. Data collection uses observation methods, literature studies, interviews, and documentation supported by data from related agencies. Analysis of the data used is descriptive with a spatial approach. The results of the study, are: (1) the location of uninhabitable houses (Rumah Tidak Layak Huni/RTLH) based on coordinates totaling 6042 houses; (2) Map of distribution of RTLH in each district. The conclusions in this study indicate that the RTLH distribution map for each district can be used for regional development planning, especially in Tanggamus Regency.

Keywords : Spatial approach, RTLH, coordinate based.

ABS-IGEOS-20074

**Sustainable development from the view of Village Development Index Implementation at
Landslide Prone Area in Kulon Progo**

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Disaster has two folded sides, the destructive and the early stage of development. A disaster prone area can be seen as an evaluation of planning and program implemented. The National Government through Ministry of Villages, Development of Disadvantaged Areas, and Transmigration allocates annual budget for villages to enhance and improve their regional development. Two villages, namely Pendowoharjo dan Pagerharjo at landslide disaster prone area in Kulon Progo are depicted as study area in the implementation development index village (Indeks Desa Membangun/IDM). The two villages are at high risk landslide area but show different progress of development based on The village budget application or the IDM. This study tries to seek the difference of development progress based on the hazard and disaster related issues. Desk study or literature review and online interview are applied in this study. Spatial approach supports the spatial analysis in this study and show that anthropogenic parameter is the constraints factors for development progress and the sustainability

Keywords : disaster, landslide, village budget, sustainable development

ABS-IGEOS-20088

**Locations and Tourist Characteristics of Culinary Tourism in West Bandung Regency,
West Java Province**

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West Bandung Regency, besides having the beauty of famous natural attractions, but also has another renowned tourism such as culinary tourism. Culinary tourism in West Bandung Regency has developed rapidly. Many new culinary tourism locations have emerged with different characteristics from other regions. The selection of various culinary tourism locations inseparable from the characteristics of the location and the characteristics of tourists who come in each culinary tourist location. This research aims to determine how the characteristics of locations and tourists in each culinary tourism location in West Bandung Regency and analyze the relationship between the location characteristics with the characteristics of tourists in culinary tourism locations. In this research, the variables used are characteristic of tourists' location and characteristics, consisting of indicators of distance from natural or artificial tourist sites, road networks, land use, types of food, the origin of tourists, and travel companions. The methods used are spatial comparison analysis and chi-square statistical analysis. The results showed that the characteristics of culinary tourism with a traditional food type and has the strategic location were mostly visited by tourists and the characteristics of tourists from West Java, with their families being the most visited culinary tourism locations. Chi-square statistical test results show that there is a significant relationship between the characteristics of culinary tourism locations with the characteristics of tourists in culinary tourism locations in West Bandung Regency.

Keywords : Characteristics of the Location, Tourist Characteristics, Culinary Tourism

ABS-IGEOS-20086

An analysis of Settlement Areas Development in the 2010-2020 Period in Blambangan Umpu, Way Kanan Regency, Lampung Province

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One of the land use changes is affected by population growth in a particular area since human needs a place to live and settle so that there is land changes occurring in the area. Land use in each region is a form of meeting the needs of the community. Changes in land that are used for settlements can occur in certain areas such as Blambangan Umpu District, Way Kanan Regency, Lampung Province. Meanwhile, the purpose of this study is to analyse the development of settlements in Blambangan Umpu District, Way Kanan Regency, Lampung Province in the 2010-2020 period. The method used in this study is descriptive method with qualitative approach. The data were collected by several techniques including field observations, literature study, and documentation study. The data were then analysed by using descriptive analysis technique. The results of the study show that the land use changes for settlements occurred in Blambangan Umpu District according to the map published in 2010, 2015 and 2020 that is analysed by the researcher. The distribution of settlements from the results of the analysis leads to the northern and southern parts of Blambangan Umpu District, Way Kanan Regency, Lampung Province within 10 years.

Keywords : Land change, settlement, region

ABS-IGEOS-20159

The Efficiency of Semarang – Pekalongan Toll Road in Goods Transportation

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Trans Java toll road was the priority development program of the Indonesian Government. The road promotes connectivity among all of the city on Java island. Through connectivity, the government want to enhance the efficiency of goods production and transportation. Towards toll roads, the goods transportation can be shorted then the production cost can be lower. Semarang – Pkalongan Toll road is part of the trans java toll road. This road connects Semarang City and Pekalongan City. Semarang is identified as the trading city. In this area, many of product can be promoted un national or regional area. Pekalongan City is known as the centre of Batik. Through the toll road, the government want to promote batik Pekalongan. However, many of driver and seller prefer the Pantura Road than Toll Road. The reasons are the high cost of toll roads, expensive food and goods in the rest area, no fixing machine and so on. By that fact, this research aims to ensure the efficiency of Semarang – Pekalongan toll road. The research is conducted by deductive – rationalistic approach. The analytical method is statistic descriptive. Based on the analysis, the toll road is not efficient to goods movement in mid-distance (up to 100 km) and non-agriculture product. The average cost of goods movement in the mid-distance in Pantura Road is 70 % lower compared to the toll road.

Keywords : Efficient, Toll, Goods, Transportation

ABS-IGEOS-20156

Tourism and Housing Transformation Process

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Tourism is one of the way to increase local economic income especially in Kudus Refency. Colo village as the main route for pilgrimage was produce 80% of tourist. Furthermore colo village can be absorb human resources around that area to provide tourism services. The purpose of this study is to Identify the housing transformation process because of increasing income in tourism services. The method used in this research is descriptive qualitative approaches. The result show that house transformed from the residence function into bussines function.

Keywords : Tourism, Housing Transformation, Local Economic.

ABS-IGEOS-20151

Livelihood sustainability of small-scale fishermen on Depok Beach, Special Region of Yogyakarta

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Marine fisheries activities on the southern coast of Special Region of Yogyakarta province, especially in the Depok Beach area, has gradually developed. Small-scale fishermen as a group of people classified as poor rely on livelihood assets that can be accessed by them. Sustainable Livelihood Approach (SLA) is used to enhance understanding of the livelihoods of the poor. This research aims to analyze how the livelihood level of small-scale fishermen at Depok Beach in 2020. The methods used in this research are quantitative descriptive analysis to determine the level of sustainability and spatial analysis by dividing the study area into three radii, i.e. 0-500 meters, 500-1000 meters, and 1000-1500 meters from the coast.

Keywords : Small-scale fishermen, Depok Beach, Sustainable Livelihood Approach

ABS-IGEOS-20149

The Influence of Mudik Tradition on The Corona Case Escalation In Central Java

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Corona Virus Disease 2019 (COVID – 19) is the shocking pandemic in this year. Almost all of the country around the world is infected. In Indonesia, the number of positive confirmations reaches 100 thousand. Specifically, in central java Province, about 10.000 cases are confirmed (corona.jatengprov.go.id). A mount before Ramadan fasting, the COVID case in Central Java is about 100 case. However, this number was increasing significantly after Eid Al-Fitr. The positive case confirmation was about 800 cases. Indicatively, the huge escalation of the case is affected by the Mudik tradition. Mudik is the people movement for their workplace in the big city to their hometown to celebrate the Eid Al-Fitr. At the moment, many worker move form a big city such as Jakarta, Surabaya, Denpasar and so on to the Central Java Province. The people movement may carry the coronavirus from epicentre to the rural area. This research has a goal to ensure the influence of people moving in the mudik tradition to the COVID 19 case escalation. This research is conducted by deductive – rationalistic approach. The analytical methods are spatial, crosstab, regression and correlation. According to the analysis, the people who come from Jakarta has a strong correlation to the increasing case of coronavirus.

Keywords : Mudik, Coronavirus, Movement

ABS-IGEOS-20147

CO2 Emissions and Sequestration with Land Use and Land Cover Changes According to the Spatial Plan in Banyuasin Regency, South Sumatra

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Abstract. Spatial planning determines changes in land use and cover, has an effect on the distribution of terrestrial carbon in the region, CO₂ emissions / sequestration to the atmosphere and controlling global warming. The study aims to test the Regional Spatial Plan in Banyuasin District in 2012-2032 on carbon distribution and CO₂ emissions/sequestration. The carbon balance method uses a matrix of land use change, the carbon calculation of each pool by the allometric method, the calculation of organic C by the Walkley and Black method and CO₂ emissions / sequestration using the stock difference method. The results of the total carbon storage will change from 346,123,373.30 tons in 2012 to 279,309,266.95 tons in 2032. Carbon losses from terrestrial systems into the atmosphere are 58,814,106.38 tons, equivalent to CO₂ emissions 215,847,770 , 42 tons, the most dominant land use change is primary mangrove forest which contributed 335,059,764.24 tons of CO₂ emissions and secondary mangrove forest 188,777,002.19 tons. Sequestration of CO₂ is dominated by changes in shrubs, secondary peat swamp forests, grasslands, peat shrubs, swamp shrubs and paddy fields once a year. The conclusion of this study is that spatial planning can control CO₂ emissions from terrestrial to atmosphere.

Keywords : CO₂ Emissions and Sequestration, Land Use and Land Cover Changes, Spatial Plan

ABS-IGEOS-20139

Overtourism Threat in Kuta District, Badung Regency, Bali Province

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Bali is one of the international leading tourist destinations in Indonesia. Various attractions are found in this province, both in terms of culture, natural beauty, and artificial objects. One of the most famous tourist areas is Kuta District, located in Badung Regency. There are many popular attractions in the district, such as Kuta Beach, Seminyak Beach, Waterbom Bali, Beachwalk Shopping Center, and Ground Zero Monument. Therefore, it is not surprising that the number of tourists tends to increase every year. However, it can cause a threat, named overtourism, which is marked by the number of tourists exceeding the number of local population. Overtourism can have a negative impact on environmental, economic, social, and cultural conditions in the area, contrary to the concept of sustainability. This study determines the threat of overtourism in Kuta District, both in terms of environmental, social, and cultural quality using descriptive research method by primary data sources from online questionnaires given to tourists who have visited Kuta District and secondary data obtained from BPS of Bali Province. The data then analyzed using multiple linear regression tests to determine the most significant impact of overtourism threat from the perspective of tourists who have visited Kuta District.

Keywords : Bali, Kuta, overtourism, sustainable tourism

ABS-IGEOS-20212

The Spatial Structure of Cirebon City in 1918 Based on Archeological Heritage of Sugar Industry and Railroad Transportation

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The City of Cirebon is very strategically located as a port city, developing during the Dutch Colonial period. Sugar exploitation by the colonial government triggered the development of railroad transportation modes for freight. The emergence of the sugar industry and railroad infrastructure in 1918 was followed by the development of settlements and the economic center of society, affecting the spatial structure of Cirebon City in 1918. Through a spatial approach and descriptive survey method, this study describes the spatial structure of Cirebon City in 1918. Data were collected through observation, literature, documentation, and interviews to obtain archeological data from the sugar industry and railroad transportation. Data were analyzed with Geographic Information Systems to be described based on concentric theory. The results showed the central business district zone is located near the port as the final hub of transportation, then these developments were followed concentrically including transition zones, low-class residential homes, better residents, and commuter zones following the infrastructure of the sugar industry and rail transportation.

Keywords : Spatial Structure, Archeological Heritage, Sugar Industry, Railroad Transportation

ABS-IGEOS-20223

Urban water governance: Lesson learned from urban water problems in Surakarta

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Urban water is one of the most important natural resources to support urban growth. However, conflicted interest from different sectoral needs interferes the management of the resource as the demand for water is getting higher along with the phenomenon of rapid urbanization. In this regard, integrated urban water governance involving urban water stakeholders is crucial. This paper is intended to compare theory and practice of urban water governance, particularly to what extent the concept of urban water governance is able to be implemented and provide lessons learned for practitioners. This study applies qualitative single case study method with in-depth interview to seven key players of seven institutions of urban water governance (Planning Agency, Public Works Agency, Health Agency, Water Provision Agency, Environmental Agency, Local Parliament, Regional Water Cooperation Body, Mitigation Disaster Agency, and Housing Agency). For the case, as medium sized-cities remain under research for most studies on water problems, this study uses Surakarta City in Central Java Province, a rapidly growing medium-sized city confronted by a challenge of urban clean water provision as a case study. The results indicate that even though to certain extent the gap of theory and practice exist, all the stakeholders have realized and started initiating collaboration of urban water management. The most important point forward is to create an effective regular-established platform for more solid collaboration to attain an integrated urban water governance for Surakarta

Keywords : urban water, water governance, sustainability, Surakarta

ABS-IGEOS-20231

Transformation of Public Space Utilization by Online Ojek

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This study aims to see the transformation of the use of public space by online ojek. The use of technology in the concept of online ojek makes it different from earlier concept of conventional ojek, which online ojek can choose where it wants to get service requests and does not depend on personal knowledge. Therefore, online ojek does not have a designated place to wait for service requests. It makes online ojek to make use of pre-existing public spaces as their places to wait or seek for service requests. Especially public spaces that are close to their target of service. This case can be seen on one of the main roads in South Jakarta, named St. Prof. DR. Satrio, which is one of the roads included in the revitalization program by the DKI Jakarta Provincial Government to become a pedestrian public space. This research uses qualitative method with ethnographic approach which data collection process consisted of participatory observation and direct interviews with onsite online ojek drivers. The results show the transformation in functional form, which was changed from a green open space as a road divider into pelican sidewalk and public recreation areas. However, the purpose of revitalization is not in line with real condition where the space is used on by certain community (online ojek drivers) that do not have designated places.

Keywords : Public Space, ride-hailing, revitalization, pedestrian, community.

Cultural Heritage and History-Based Tourism Potentials in Bandung City

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Bandung city has so many buildings categorized as premium cultural heritages that should be carefully preserved for the sake of tourism and for information center for elaborating the history of the city. This writing mainly focuses on cultural heritage buildings in Bojonagara, Tegalega, and Cibeunying areas. Those buildings within those areas have been offering cultural experiences, especially through telling the stories of historical places through heritage trails of the remaining of the buildings. Those buildings have experienced changes in their functions, rather unwell managed in the maintenance, and thus those changes cannot be avoided by the city of Bandung that has continuously improved itself as the requirement of the newest modern era. Methods used in the study is narrative descriptive methods, which aim to describe, explain, and validate the social phenomena of happenings being researched. From the trail results it has been found that the existence of cultural heritage as milestones of representing the development of era, as well as points of remembering to the process of the city history, that should be maintained and preserved. Therefore, the ancient cultural heritage buildings remained in Bandung is worth propagandized to the youths, so they do not resolve in the euphoria of modernity. Heritage originality, complicity, and the related cultural lines artifacts have determined the uniqueness and the authenticity of the tourism products. The stronger the historical values are, the wider the coverage of heritage trail for tourism would be.

Keywords : Cultural Heritage Buildings, Cultural Heritage Trails, Tourism Potentials, Local (City) History

ABS-IGEOS-20210

Geography of Fear: Tourists and their experiences in Kuala Lumpur Urban Tourist Spot

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This article aims to explore the perception of local and international tourists from various demographic backgrounds with the fear that potentially exists in urban tourism locations in the city centre of Kuala Lumpur by making SOGO and the Sultan Abdul Samad Building / Dataran Merdeka as tourist spots. The study involved grounded data from local and international tourists from the Participatory Action Research (PAR) process. Respondents were interviewed informally and semi-structured to discuss their experiences while travelling at the study site after that their answers were recorded using a mobile phone. Tourists are also provided with disposable cameras to record places that they are felt unsafe while travelling in the two urban tourist spot. A total of 8 local tourists and 14 international tourists who agreed to participate in this research were taken as respondents. Findings from PAR are used as a guide in the construction of grounded models that can be referenced by Tourism Malaysia, local authorities and the public. Data were analyzed qualitatively along with other data from photovoice and interview methods to produce the development of safe urban tourism model. This study is important in terms of helping to develop the urban tourism industry in Malaysia by increasing the effectiveness of safe urban planning and management in line with JPBD organized throughout the operating urban tourism locations. This research can improve the sense of safety as a local or an international tourist in Malaysia, and broadly in another relevant context.

Keywords : Fear, tourist, urban tourism spot, PAR, disposable cameras, photovoice

ABS-IGEOS-20126

Effectiveness of ginger supply chains in rural communities as a form of farming sustainability (study case in Cianjur district)

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Ginger has a high economic value. It has benefits for health and doesn't require complicated processing. But, ginger required a long period to cultivate (10 to 12 months). It makes farmer's interest to cultivate ginger decrease. That makes ginger production continues to decline every year. Aside from that, the ginger cultivation area continues to decline due to the conversion of agricultural land to industrial land, as well as the limited of certified seeds. Meanwhile, demand for ginger continues to rise. To meet these demands an effective and efficient supply chain management is needed. One of the largest ginger production in West Java is located on Cianjur district. So the purpose of this research is to determine an efficiency ginger supply chain of farming sustainability in Cianjur. The method used is descriptive analysis use framework of the Asian Productivity Organization (APO). Then developed it as a strategy used SWOT-AHP method. The results showed ginger supply chain's members in Cianjur consisted of farmers, collectors, wholesale market, local market, and consumers. Ginger supply chain management in Cianjur isn't effective because there are still some obstacles in each member. The strategy chosen is to provide facilities and infrastructure by the governments for farmers.

Keywords : APO, ginger, Cianjur Regency, supply chain management, SWOT-AHP

GEOGRAPHY EDUCATION

ABS-IGEOS-20238

Dimension of critical thinking students on Project Citizen Learning to Build Awareness In Natural Resource Utilization

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This research explains how critical thinking dimensions are growing and consistent with citizens through the learning of citizen projects. Research used experimental methods with one group post-test only design. The Data was collected by involving 40 students who were randomly selected and given the learning of Project citizen. Measurements were conducted toward four critical thinking stages including: Hunting assumptions, shecking assumptions, seeing thinks form different view point and taking informed action. The four critical thinking levels were poured into 14 (fourteen) poll items that were arranged to measure the increase and consistency of the respondent's critical thinking scheme after learning with a citizen project model. The results of the study were found that students ' critical thinking ability to environmental issues belonged to the high category with $\bar{X} = 4.6$ (ideal = 5) While the student thought consistency was obtained there was no significant difference between the acquisition of positive items (dimensions to 1,2, and 4) and negative (3rd dimension of "Seeing thinks form different view point"). Thus it can be concluded: (1) Students can understand the environmental problems by assuming problems; (2) Students ' critical thinking skills have a theoretical foundation in looking at environmental issues; (3) Students are consistent with the way of thinking when faced with a different view; (4) Students have awareness to act in the handling of natural resources.

Keywords : dimension of critical thinking, project citizen, civic consciousness, natural resource

ABS-IGEOS-20035

Geographical Position and Society Literacy Skill: Implementation of Literacy Model Based on Local Culture, Life Ability, and Independent Business in the Underdeveloped Regions

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The condition of the level of education that has not been evenly distributed especially in disadvantaged areas whose geographical location is quite far from urban areas makes the society's literacy ability is still low. This encourages the writer to conduct research in order to improve the literacy ability of the Society in disadvantaged areas. This study uses an experimental method by applying literacy models based on local culture, life skills, and independent business. Participants are society members of one of the disadvantaged villages in Indonesia. The results of this study are the significance of the application of the literacy model and the design of the literacy model (literacy) in accordance with the characteristics of disadvantaged areas. The resulting design is a literacy model based on local culture, life skills and independent business. The researcher adjusts the design and implementation of this literacy model with the characteristics of the society and the region. This model is able to help people living in one of the disadvantaged areas to develop their literacy abilities. The literacy ability gained from training through this literacy model is able to develop its economy in a certain period of time. Literacy training in residential areas will not be the same as training conducted in urban areas need to be adjusted to the characteristics of the society and the geographical location.

Keywords : Geographical Position, Society Literacy Skill, Literacy model, Underdeveloped Region

ABS-IGEOS-20048

**The Urgency of Technological Pedagogical and Content Knowledge (TPACK) in Integrating
Geography Learning**

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During the era of the industrial revolution 4.0, there were many demands for skills that must be possessed by a teacher in the teaching and learning process in the classroom. One of these skills requires a teacher to be able to package learning into learning that uses or utilizes technology to make learning meaningful and students have their own experience in following the learning process. In this case TPACK is a skill dimension that should be possessed by a teacher in the current 4.0 industrial revolution era on all subjects, especially in Geography. The urgency of TPACK in integrating geography learning at this time needs to be implemented in the teaching and learning process in the classroom so that students can easily get a factual information. This study aims to (1) Urgency of Technological Pedagogical Content Knowledge (TPACK) in learning Geography, and (2) Implementation of TPACK in Learning Geography. The method used is descriptive with a qualitative approach, data collection techniques with literature study that is collecting and analyzing relevant journals. The results of the study in this article analysis (1) The urgency of TPACK in integrating learning in geography is very important considering that 21st century learning cannot be separated from the technology base. (2) Implementation of TPACK in learning geography in the classroom can be in the form of the use of Google Earth, GPS, GIS application media, and others. The conclusion in this article is the ability of teachers in this TPACK needs to be developed in addition to increasing teacher competence, can also improve the quality of learning in class

Keywords : TPACK, Geography Learning, 21st Century Learning

ABS-IGEOS-20068

The Contribution Eco-Literacy in Environmental Care Behavior Students of State High School in The City of Medan

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Global environmental problems that occur on earth include global warming, urban air pollution, water crisis, noise pollution and loss of biodiversity, which are environmental problems caused by human activities. Environmental problems have not been resolved due to the lack of environmental awareness of the community. It is hoped that educational institutions ranging from elementary schools to tertiary institutions will be able to contribute and play their role in realizing the goals and protection of environmental management. The purpose of this study was to determine the level of Eco-literacy of students in Medan, the environmental care behavior of students, and the contribution of Eco-literacy to environmental care behavior. This research uses a survey method, with a quantitative approach. The data were collected using a questionnaire, while the data analysis technique used the normality test, data linearity test, linear regression test, and correlation coefficient test. The variables in this study were Eco-literacy as the independent variable and environmental care behavior as the dependent variable. The sample in this study was 243 students. The results showed that the level of Eco-literacy was included in the moderate category of 62%, while the environmental care behavior was also in the moderate category of 53% and the Eco-literacy of students contributed to the environmental care behavior of students with the coefficient of determination of R square (R^2) of 0.254 (25.4 %) while the rest (74.6%) is influenced by other factors. The conclusion is that a good level of Eco literacy can provide a good understanding of the environmental care behavior of students.

Keywords : Keywords: Environment, Eco-literacy, Environmental Care Behavior

ABS-IGEOS-20115

Scientific Learning Implementation during the Covid-19 Pandemic in Geography Subject

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During the Covid-19 pandemic, students' learning activities were carried out at home and carried out online. In theory, although distance learning but scientific learning can still be done. This is what we want to know in this study, whether the assumptions are proven significantly. Another thing you want to know is how the teacher attempts to manage the classroom using an online scientific approach; whether learning geography with a scientific approach can be implemented optimally; learning models whether from a scientific approach that can be done by teachers in online learning; and what are the obstacles faced by teachers and students in online learning. The research method used was a survey method with an instrument in the form of a questionnaire filled out through Googleform. The results showed that online learning in tennis ran and was effective at around 78%, classroom management by teachers was still dominated by lectures and still lacked the diversity of media and learning resources available. Constraints faced are generally problems of limitation to provide quotas so that almost 50% of students have difficulty to participate in learning in full.

Keywords : Geography, Learning, Online, Pandemic, Scientific

ABS-IGEOS-20112

The Development of Creative Thinking Oriented Instructional Material of Geography Subject

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This research aims at developing creative thinking oriented instructional material of geography subject for tenth grade students of senior high school. This research used stages of research and development proposed by Dick and Carey model for developing creative thinking oriented instructional material of Geography subject for grade tenth senior high school students. To determine the appropriateness of instructional material, developed validation testing is done by Bahasa Indonesia expert, content expert, and design expert, small group testing, and large group testing. The result of research and development showing the evaluation from Bahasa Indonesia expert, content expert, and design expert showed that this instructional material on the Geography subject of the tenth-grade senior high school students is proven to be effectively used in teaching and learning process. The average of appropriateness value reached 83%. On small group testing, the value of efficiency reached 84%, the criteria of students' creative thinking reached 6.7% very good, 80% good, 13.3 sufficient. The average of creative thing value is 68.2. On large group testing the value of efficiency reached 82.6%, the criteria of students' creative thinking reached 11% very good, 81.2% good, and 7.7 sufficient.

Keywords : Creative Thinking, Dick and Carey Model, Instructional Material

ABS-IGEOS-20111
Student Perception of E-Learning in Geographical Perspective
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The present study was design to investigate e-learning perception by Indonesian students with various majors and various aspect that students need when using e-learning. With descriptive method, collecting randomly data from the questioners. The result of this studies with impression good perceptions with need more improvement in several sector problem meets after analysis and evaluated by instrument given to student as participant from random location to better learning strategy in e-learning and readiness at Covid-19 pandemic situation.

Keywords : student perception, e-learning, geographical perspective

ABS-IGEOS-20161

The Effect of Problem Based Learning Model on Students' Spatial Thinking (Quasi-Experimental Study, In Class XI IIS SMAN 1 Lunang, Kab. Pesisir Selatan).

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Geography learning in high school has not been able to develop spatial thinking skills, various problems in learning are considered as boring subjects so that they do not stimulate students to think spatially and are less able to solve problems. This study aims to determine the effect of PBL on spatial thinking skills in the field of geography. The orientation of the issues to be raised is related to the material distribution of natural disaster-prone areas in Indonesia. This research was conducted with a quasi-experimental design. The approach used is a quantitative descriptive approach. Data analysis using t-test. The research subjects were students of class XI IIS at SMA Negeri 1 Lunang. The resulting significance value is $0.00 \leq 0.05$ and the gain score for the experimental class is $31.17 > 12.41$ for the control class and the N-gain score for the experimental class is $0.61 > 0.25$ for the control class. The results showed that there was an effect of problem-based learning (PBL) model on students' spatial thinking skills. The problem-based learning (PBL) model can be used as an alternative for teachers in learning geography to improve spatial thinking skills because this model makes geography learning more effective, interesting, and fun and trains spatial thinking skills so that students' spatial thinking skills can be improved.

Keywords : Spatial thinking, Geography, Problem Based Learning

ABS-IGEOS-20150

The Influence of Guided Inquiry Learning with Geo-Literacy and Scheme on Spatial Thinking Ability

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Spatial thinking capability is needed in geography because it examines the geosphere phenomena. Students with low spatial thinking may have difficulty to identify and analyze the geosphere phenomena. This study was conducted to determine the effect of the Guided Inquiry model with Geo-Literacy (GIGL) on the students' spatial thinking skills. The method used was quasi-experiment with research design of 2x2 factorial groups. The study was conducted in Senior High School 1 Pracimantoro by using two sample groups and selected with the random method based on students' characteristic. The GIGL model was applied to the experimental group and conventional method was applied to the control group. The instrument used an essay to measure students' spatial thinking ability and schematic taken before and after study. The data analysis was used two-way anova assisted by SPSS 22 for Windows with a significant probability of 5%. The result concluded that there are effects from the interaction of GIGL model and scheme to students' ability of spatial thinking.

Keywords : Guided Inquiry Learning with Geo-Literacy, Spatial Thinking, Geography Learning, Scheme, Cognitive

ABS-IGEOS-20135

The development of a conceptual model of environment-problem-based geography instructional materials

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The availability of teaching materials that presents the perspective of the environmental problem is very important in order to make the geography learning more effective and contextual. The purpose of this study is to develop a conceptual model of environment-problem-based geography instructional materials. This research type is research and development (R&D). The development model of the teaching materials was developed by adapting the model of Plomp, namely 1) preliminary investigation, 2) design, 3) visualisation/construction, 4) test, evaluation, and revision, and 4) implementation. Data collection was in the form of response to the product carried out by administering a questionnaire to the validator expert of geography learning and the students as many as 30 people. The instrument used is questionnaire sheets consisting of 5 statements with a likert scale of 1 (strongly disagree) to 4 (strongly agree). Data analysis that used descriptive quantitative with the eligibility criteria which is determined from the average score of the questionnaire. This research development is to produce a conceptual model of Environment-Problem-based Instructional Materials (EPBIM) with a category based on the results of the average worthiness score, that is 3.48. EPBIM consists of the following stages; Determine, Identification, Investigation, Development, and Evaluation (DIIDE). In detail, these stages consist of: 1) determining the topic of the problems of the surrounding environment; 2) identify the environmental problems; 3) conduct an investigation to resolve the problem; 4) develop measures to solve the problems; and 5) evaluate the results of problem solving.

Keywords : development, conceptual model, geography instructional materials, environment-problem-based

ABS-IGEOS-20134

**Exploring the Potential of Galunggung Volcano Region to Develop Geographic Education
Field Laboratory**

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Open space offers opportunities that are not found indoors in the learning process. The physical environment contributes to students' learning by exploring their abilities. This requires the world community to be aware of the location, understand the relationship between locations, cause-effect (analysis), and the consequences caused internally and externally. The need for a comprehensive geographic study model is needed, so that it can show the public a geographical solution to certain environmental problems. Geography Education field laboratory can be used as a support for learning in the classroom. The development of knowledge in the field of Geographic Information Systems makes it easier to study and visualize mapping modeling in 3D. The map becomes an important reference for the community in understanding the conditions of the community's residence, but the information made by the government is still too widespread so that the level of error caused will be even greater. Geographical information systems are used as a tool in the analysis of zoning of the region for modeling Geographic Pendidikan Field Laboratories. Potential analysis techniques are carried out by location inventory that is suitable with geographic scientific studies. The data obtained is then used to overlay that results in a 3-dimensional map. This research explores the potential of the Galunggung Mountain Region by utilizing citra media and then made in the form of 3-dimensional maps that can be utilized as a geography education field laboratory modeling.

Keywords : Potential, Geography Education, Field Laboratory

ABS-IGEOS-20131

Integration of Spatial Intelligence-Based Learning with Utilization of the Ecovillage Program in the Citanduy Watershed, West Java, Indonesia

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This environment can be a self-regulating system that is integrated with limited tolerance which if damaged can begin the process of damage. Geographical thinking requires intellectual knowledge about space. Knowledge of space consists of recognition and elaboration of the relationship between spatial concepts, advanced associations derived from these concepts, and formal relations of associations into theory and generalization. The purpose of this study is the integration of spatial intelligence-based learning models through the use of the Citanduy River Watershed Ecovillage Program. The method used in this research is descriptive. The research location was carried out in the Citanduy Watershed Area which has an area by implementing the Ecovillage Program which is located in two sub-districts, namely: Pagerageung District, Tasikmalaya District, Panumbangan District, Ciamis Regency. Intelligence is defined as the ability to solve complex problems. Space in geography is a major object of study. The concept of place is twofold: absolute place and relative place. Spatial intelligence in geographical thinking is a continuous series that is very important in the Revolutionary Era 4.0.

Keywords : Spatial Intelligence, Utilization, Ecovillage

ABS-IGEOS-20198

Need Analysis to Identify Hypermedia Lite Droid for Spatial Thinking

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In this 4.0 revolution era, geography learning is expected to be able to provide visualization for students because basically learning geography is spatial and spatial science, supported by 21st century skills, it is expected to provide spatial ability or spatial intelligence to students. This paper aims to express students' perceptions about geography learning and the need to use the latest technology as a learning companion and provide spatial and spatial knowledge. This research uses a qualitative paradigm, questionnaire and literature study. Observed data generated from the questionnaire were categorized and analyzed descriptively. The results show that students' views on geography learning require the development of Hyper Media to Improve Spatial Thinking and learning through Smart Phone media will be more practical to do anywhere and anytime so that it can make students easier to learn.

Keywords : Need Analysis, Hypermedia, Spatial Thinking

ABS-IGEOS-2020

The Role of Geographic Learning on Breakdown Behavior in Pandeglang High School

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Abstract. The attitude of caring for the environment and spatial behavior is very important for students related to the affective domain of learning outcomes and can be induced through learning, one of the learning materials that encourages environmental awareness attitudes in schools is the subject of geography, geography learning, what is learned, how to seek help and assistance the formation of attitudes and behavior of students who care about the environment. Qualitative research methods, The purpose of this study is to analyze the role of geography learning on environmental awareness in Pandeglang District Public High School. Data is collected through surveys and in-depth interviews, and data is processed using the SPSS application. The results of the descriptive analysis table results obtained significant results from the variable learning geography will increase financial motivation in SMA Kab. Pandeglang has the lowest value of 65 and the highest value of 94, so that in this case can be enlarged, spatial habits will increasingly increase.

Keywords : The role of geography learning, spatial behavior

ABS-IGEOS-20202

Cognitive Assessment of Students in Geographic Learning at The Senior High School of Bandung City

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Learning is a process to develop understanding and critical thinking of the changing process phenomena, therefore the research objectives are: 1) Analyzing the steps of learning in the lesson plan, 2) the form of assessment instruments, and 3) Evaluating the assessment instruments in the lesson plan of Geography in Bandung City. The method used is descriptive with a qualitative approach. Classroom learning examines perspectives that are interactive and flexible for understanding and thinking of students. Collecting data with literature studies, lesson plans analysis and assessment instruments and interviews with geography teachers. The steps of learning in the form of lesson plans, because lesson plans as a guide in learning. The form of assessment in the cognitive domain is done qualitatively. Assessment for students is made in the form of questions given by the teacher namely; description or multiple choice. This form of question is a lot of testing the ability of students in the aspects of Remember, Understand, Apply which are still categorized in LOTS. While the aspects of Analyze, Evaluate and Create (HOTS) are not done, so that the assessment does not support the ability of students to think logically, creatively and innovatively (HOTS).

Keywords : Keywords: Lesson plan, Assessment, Geography, LOTS, HOTS

ABS-IGEOS-20211

**Utilization of Microteaching to Develop Teaching Skills Students of Geography Education
Study Program Universitas Pendidikan Indonesia**

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Teaching skills competencies must have be mastered by students at the bachelor level. Microteaching mean a tool teaching practice activities for students. Aim concern of this research to identify the implementation, assessment, reflection, and follow-up of teaching practice in microteaching learning subject cluster. Qualitative research approach with descriptive methods with focus study is teaching skills. The instrument research base on observation sheets, field notes, interviews, and documentation. The subjects involved by two lecturers and three students. Descriptive data analysis with interpretation on each indicator of teaching skills. The results showed: (1) microteaching was carried out after students received theoretical material. Students act as students, teachers, and observers; (2) the assessment using observation sheets carried out by students as observers and lecturers; (3) reflection is carried out directly by observing videos and observation sheets which are followed by all students and lecturers; and (4) follow-up by providing input to students who act as teachers. Students outcome final make a list consisting of aspects that have been mastered and which have not been achieved and plans for improvement to increase teaching competence.

Keywords : teaching skills, microteaching, training.

ABS-IGEOS-20244

The Effect of the Availability of Non-Textbooks in Geography Learning on Students' Reading Interest in Geographic Literacy

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One of the sources of information in learning geography is non-textbook. Non-textbooks are books that act as a complementary of textbooks or become reference sources that help developing material in textbooks. Non-textbooks are sources of information that function to support the learning process. This study aims at determining how the availability of non-textbooks supporting geography learning so that students' reading interest in geographic literacy is built. This is a qualitative research with descriptive methods, and survey as well as library research were conducted to collect the data. The results show that the availability of non-textbooks in learning geography was still quite sufficient, while the fulfilment of supporting competencies in geography learning was not available well enough. There is a link between the availability of books and reading interest of students. When the books available in the library are few or inadequate, it will affect a person's interest in reading because the required sources cannot be met to fulfil information needed. Thus, the procurement of non-textbooks must be considered by school parties. Furthermore, non-textbooks contribute as a source of independent learning, fostering student motivation and activeness in understanding learning material, especially in geographic literacy, which is very much needed in learning because the ability to understand geography and geographic reasoning are needed to make decisions.

Keywords : Keywords: Availability, Non-textbook, Reading Interest, Geographic Literacy

ABS-IGEOS-20098

Geography Trajectory in the High School History Textbook's Historiography Based on the 2013 Curriculum

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History is inseparable from space and time issue. Space, where and when the event took place signifies the event's time. Space and time concept in history are the two main concepts in reconstructing history, including in the writing of history textbook or historiography. To prove a space and time issue in history, this study aimed to reveal how much and how was the delivery of space (geography) elements in history textbooks based on the 2013 curriculum. Method research utilized critical discourse analysis for analysing the content of narrative text relating to spatial elements in images form. Finding result in each event discussed, the textbook's author was delivered a space element where an event took place in full-length, and some did not. Likewise, with images/photos that support the narrative, the textbook writer very rare in inscribing space element in which the event took place. In conclusion, the writing of spatial or geographic element in history textbooks was very minimal, especially events that showcased in pictures/photos form.

Keywords : History, History Textbook, Space and Time

ABS-IGEOS-20255

The Role of Disaster Knowledge in the Preparedness of Students in West Bandung Regency

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Landslides in West Bandung Regency have incidents that continue to increase every year. One of the causes of landslides is the relatively high intensity of precipitation which facilitates weathering of rocks and soil. To anticipate and minimize the impacts that occur, the transformation of knowledge about disasters is a sufficient preventive measure to improve community preparedness in the face of disasters. The purpose of this research is to identify students' disaster knowledge on preparedness, to explore students' preparedness through disaster education in schools. The method used in this research literature, references used are related to disaster preparedness, disaster knowledge, and disaster education. The data sources used include Science Direct, Springer, Emerald, Taylor and Francis Group Journal, and Google Scholar. The results showed that disaster knowledge can build individual preparedness behavior and, formal education can improve cognitive abilities to process information obtained as a basis for someone to act. However, preparedness behavior is not only built by school education, there is community education, family and self-education to create awareness of disasters, especially disasters in the school environment and where students live.

Keywords : Landslide, Knowledge, Disaster Education

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