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3RD INTERNATIONAL CONFERENCE ON INTEGRATED NATURAL RESOURCES AND ENVIRONMENT MANAGEMENT (INREM 2021)

Theme: Advancing Ecosystems Restoration, Resilience
and Sustainable Development Through INREM



November 17-19, 2021
Online Platform

3RD INTERNATIONAL CONFERENCE ON INTEGRATED NATURAL RESOURCES AND ENVIRONMENT MANAGEMENT (INREM 2021)

Theme: Advancing Ecosystems Restoration, Resilience and
Sustainable Development Through INREM

Conference Program

DAY ONE

17 November 2021
Wednesday

8:00 – 8:30	Registration	
	Welcome Remarks	Dr. Juan M. Pulhin Chair, INREM-UPLB
8:30 – 8:50	Messages	Assoc. Prof. Marlo D. Mendoza Dean, College of Forestry and Natural Resources, UP Los Banos
		Dr. Jose V. Camacho, Jr. Chancellor, UP Los Banos
8:50-8:55	Introduction of the Keynote Speaker	Asst. Prof. Linus Van O. Plata
8:55 – 9:40	Keynote Address	Dr. Dennis P. Garrity Code Red and Code Green: Reflections on the Future of Landscape Restoration
9:40 – 9:55	Open Forum	
9:55 – 10:00	Awarding of Certificate Group photo Announcements House Rules	
Asst. Prof. Linus Van Plata Master of Ceremonies		
Documenter: Ms. Rhiz Manarpaac and Ms. Aemiris Gill Lapie		
10:00 – 10:05	BREAK	
10:05 – 10:10	Introduction of the Plenary Speaker	
10:10 – 10:40	Plenary Paper 1:	Dr. Rex Victor O. Cruz River-Basin Approach to Integrated Ecosystems Restoration for Resilience and Sustainable Development: Issues and Concerns
10:40 – 10:45	Introduction of the Speaker	
10:45 – 11:15	Plenary Paper 2:	Dr. Bart Johnson A City-Landscape Approach to Regional Sustainability and Climate Resilience
11:15 – 11:20	Introduction of the Speaker	
11:20 – 11:50	Plenary Paper 3:	PASu Angelique Songco Sustainable Seas: The Tubbataha Experience
11:50 – 12:10	Open Forum	
12:10 – 12:15	Announcement	
SESSION MODERATOR: Dr. Juan Carlos T. Gonzalez Documenters: Ms. Angelica T. Magpantay and Mr. Kyle Vincent Singson		

DAY ONE

17 November 2021
Wednesday

12:15 – 12:55	Lunch	
12:55 - 1:00	Presentation of the Mechanics of the Session	Dr. Rex Victor O. Cruz
1:00 - 1:15	LGU INREM Champions	Farm-to-Table: A Successful Story of Vibrant and Sustainable Agriculture in San Luis, Batangas
1:15 - 1:30		Waste is Everybody's Responsibility: Municipality of Botolan, Zambales
1:30 - 1:45		Bantay Danao: A Community-based Initiative in Agusan Marsh Wildlife Sanctuary Province of Agusan del Sur
1:45 - 2:00		Establishing Partnership: A Strategy in Mangrove Establishment in Leganes, Iloilo
2:00 - 2:15	Open Forum	
2:15 - 2:30		Stingless Beekeeping: Environment-Healthy Livelihood Municipality of Alabat, Quezon
2:30 - 2:45		Humanity and Nature for a Blissful Life City of Masbate
2:45 - 3:00		Watershed Protection and Enforcement Program Municipality of General Nakar, Quezon
3:00 - 3:15	Open Forum	
SESSION MODERATOR: Dr. Virginia C. Cuevas Documenters: Adelaine Arganda and Rhiz Manarpaac		
3:15 - 3:20	BREAK	
3:20 – 3:25	Introduction of the Speaker	
3:25 – 3:55	Plenary Paper 4:	Dr. Cora Van Oosten Landscape Governance - from Analysing Challenges to Capacitating Stakeholders
3:55 – 4:00	Introduction of the Speaker	
4:00– 4:30	Plenary Paper 5:	Prof. Andrew Gosler Ethno-ornithology: Towards a Global Voice for Biocultural Diversity
4:30 – 4:35	Introduction of the Speaker	
4:35 – 5:05	Plenary Paper 6:	Dr. Osamu Saito Building Sustainable and Resilient Future of Small Islands under Climate and Ecosystem Changes
5:05 – 5:20	Open Forum	
5:20 – 5:25	Evaluation Announcement(s)	
SESSION MODERATOR: Dr. Juan Carlos T. Gonzalez Documenters: Paola Andrea Burcer and Laizha Lynn C. Lomente		

DAY TWO

18 November 2021
Thursday

8:30 – 8:40	Recap, House Rules,	Dr. Jovita L. Movillon INREM TWG Member
8:40 - 8:45	Introduction of the Speaker	
8:45 – 9:15	Plenary Paper 7:	Dr. Diana S. Aga Contaminants of Emerging Concerns in the Environment: Occurrence, Effects and Treatment
9:15 – 9:20	Introduction of the Speaker	
9:20 – 9:50	Plenary Paper 8:	Dr. Chihiro Yoshimura Nested Environmental Models for Integrated Lake Basin Management: An Example from Tonle Sap Lake, Cambodia
9:50 - 10:00	BREAK	
10:00 – 10:05	Introduction of the Speaker	
10:05 – 10:35	Plenary Paper 9:	Dr. Macrina T. Zafaralla The Aquatic Macrophyte Biosorption System (AMBS) for River Restoration and Rehabilitation
10:35 – 10:50	Open Forum	
SESSION MODERATOR: Dr. Damasa M. Macandog DOCUMENTERS: Joseph Campang and John Vincent Pleto		
10:50 – 11:50	Landscape restoration approaches and narratives: A grantmaking perspective Forest Foundation Philippines	
11:50 – 12:05	Open Forum	
SESSION MODERATOR: Mr. Bryan Joel Mariano DOCUMENTERS: Pandora Timshel Albayda and Marjorae Ignacio		
12:05 – 1:00	Lunch	
1:00 – 2:00	3 Minute-Talk (3MT)	
SESSION MODERATOR: DR. EDGAR M. REYES, JR. DOCUMENTERS: Ms. Cathlyn B. Suizo and Ms. Angel Mae D. Manato		
Parallel Session 1 Session 1A: Landscapes and Seascapes Judges: Dr. Victor S. Ticzon, Dr. Consorcia E. Reano and Dr. Dixon T. Gevana Moderator: Dr. Virginia C. Cuevas Documenters: Romella Beringuela and Estephen Fortela Zoom Meeting Link: www.bit.ly/2021inrem1a		
2:00 – 4:49	Session 1B: Landscapes and Seascapes Judges: Dr. Michelle Grace V. Paraso, Dr. Roger A. Luyun, Jr. and Dr. Rosario V. Tatlonghari Moderator: Assoc. Prof. Pastor L. Malabrigo Documenters: Adelaine Arganda Paola Andrea Burcer Zoom Meeting Link: www.bit.ly/2021inrem1b	



DAY TWO

18 November 2021
Thursday

Session 1C: Lake and River Basins

Judges: Dr. Damasa M. Macandog, Dr. Patrician Ann J. Sanchez and Dr. Noel G. Sabino

Moderator: Dr. Hildie Maria E. Nacorda

Documenters: Pandora Timshel Albayda Marjorae Ignacio

Zoom Meeting Link: www.bit.ly/2021inrem1c

Session 1D: Small Islands

Judges: Dr. Edgar M. Reyes, Jr; Dr. Zenaida M. Sumalde and Dr. Mark Dondi M. Arboleda

Moderator: Dr. Zenaida M. Sumalde

Documenters: Angelica T. Magpantay and Laizha Lynn Lomente

Zoom Meeting Link: www.bit.ly/2021inrem1d

Session 1E: Rural-Urban Linkages

Judges: Dr. Jovita L. Movillon; Dr. Ricardo M. Sandalo and Dr. Bella C. Cruzana

Moderator: Dr. Ricardo M. Sandalo

Documenters: Millicent Joyce Q. Pangilinan and Kyle Vincent Singson

Zoom Meeting Link: www.bit.ly/2021inrem1e

2:00 – 2:04

Introduction of
presenters

1 minute per presenter

2:04 – 3:04

4 speakers @15 minutes

3:04 – 3:19

Open Forum

3:19 – 3:23

Introduction of
presenters

1 minute per presenter

3:23 – 4:23

4 speakers @15 minutes

4:23 – 4:38

Open Forum

4:38 – 4:45

Evaluation
Announcements



DAY THREE

19 November 2021
Friday

8:30 – 8:40	Recap, House Rules, Announcement(s)	Dr. Jennifer Marie S. Amparo INREM TWG Member
8:40 – 8:45	Introduction of the Speaker	
8:45 – 9:15	Plenary Paper 10:	Dr. Laura T. David Marine Protected Areas are Investments Too
9:15 – 9:20	Introduction of the Speaker	
9:20 – 9:50	Plenary Paper 11:	Dr. Wilfredo Roehl Y. Licuanan Insights into the Organization of Reef Seascapes in the Philippines
9:50 - 10:05	Open Forum	
SESSION MODERATOR: Dr. Victor S. Ticzon DOCUMENTERS: Marion Michael Bacabac and Kent Elson Sorgon		
10:05 – 10:15	BREAK	
10:15 – 10:20	Introduction of the Presenters	
10:20 – 11:05	POSTER PRESENTATION	
11:05 – 11:15	Open Forum	
SESSION MODERATOR: Dr. Asa Jose U. Sajise DOCUMENTERS: Paola Andrea Burcer and Kyle Vincent Singson		
11:15 – 11:20	Introduction of the Presenters	
11:20 – 12:20	Undergraduate Student Research	
12:20 – 12:30	Open Forum	
12:30 – 1:00	Lunch	
SESSION MODERATOR: Dr. Wilfredo M. Carandang DOCUMENTERS: For. Ma. Jenna O. de Luna and For. Jayson Arizapa		

DAY THREE

19 November 2021
Friday

1:00 – 3:49

Parallel Session 2

Session 2A: The Seven Lakes of San Pablo: Assessment and Monitoring Strategies Toward Sustainable Lake Ecosystems

Moderator: Dr. Damasa M. Macandog

Documenters: Mr. Michael B. Biguelme and Ms. Julie Zarene de Guzman

Zoom Meeting Link: www.bit.ly/2021inrem2a

Session 2B. 1. Engaging in Global Change Research: Experiences and Lessons of APN-funded Capacity Development Projects

Moderator: Dr. Rose Jane Peras

Documenters: Dr. Josephine E. Garcia and Kyle Singson

Zoom Meeting Link: www.bit.ly/2021inrem2b

Session 2B.2. Retrospects and Prospect of Community-Based Forest Management (CBFM) in the Philippines

Moderator: For. Mark Anthony Ramirez

Documenters: Dr. Josephine E. Garcia and Mr. Kyle Vincent Singson

Zoom Meeting Link: www.bit.ly/2021inrem2b

Session 2C.1 Land-and sea connection in the realm of global carbon and water cycles

Moderator: Dr. Mark Dondi M. Arboleda

Documenters: Asst. Prof. Kristine Dale R. Alcaide and Gaudencio Ramos III

Zoom Meeting Link: www.bit.ly/2021inrem2c

Session 2C.2. Economy and Environment Group (EEG)- Philippines organized session

Moderator: Dr. Margaret M. Calderon

Documenter: Arlene B. Tolentino, EnP

Zoom Meeting Link: www.bit.ly/2021inrem2c

Session 2D.1: Integration of Traditional and Modern Bioproduction Systems for a Sustainable and Resilient Future Under Climate and Ecosystems Changes (ITMoB)

Moderator: Dr. Josefina T. Dizon

Documenters: Rhiz Manarpaac and Laizha Lynn Lomente

Zoom Meeting Link: www.bit.ly/2021inrem2d

Session 2D.2. PCAARRD-supported projects on INREM

Moderator: Dr. Virginia C. Cuevas

Documenters: Rhiz Manarpaac and Laizha Lynn Lomente

Zoom Meeting Link: www.bit.ly/2021inrem2d

Session 2E.1. Integrated Natural Resources Management and Green Growth Nexus: Policy Issues and Governance Challenges for Disaster Risk Reduction

Moderator: Dennis de la Torre

Documenters: Sidney Jam Sibug and Arnulfo Cabarles

Zoom Meeting Link: www.bit.ly/2021inrem2e

Session 2E.2. The urban-rural continuum in the face of climate-change induced natural hazards

Moderator: Director Genaro Cuaresma

Documenters: Anjanette Mariano and April Dawn Tegelan

Zoom Meeting Link: www.bit.ly/2021inrem2e

Session 2F: Oceana

Moderator: Dr. Victor S. Ticzon

Documenters: Marion Michael Bacabac and Kent Elson Sorgon

Zoom Meeting Link: www.bit.ly/2021inrem2f

DAY THREE

19 November 2021
Friday

Awarding of Winners for

- 3:49– 4:30
1. Poster
 2. Undergraduate Student Research
 3. 3MT
 4. Paper
 5. LGU INREM Champions
- (to be announced by Dr. Rex Victor O. Cruz)

4:30 – 4:40 Closing Remarks Dr. Nathaniel C. Bantayan
Vice Chancellor for Research and Extension,
UPLB

4:40 – 4:50 Evaluation
Announcement

Master of Ceremonies: Mr. Guien Eidrefson P. Garma
Documenters: Millicent Joyce Q. Pangilinan and Angelica T. Magpantay

PARALLEL SESSIONS



NOVEMBER 18, 2021
2:00 - 4:49
PARALLEL SESSIONS

Session 1A: Landscapes and Seascapes

Moderator: Dr. Virginia C. Cuevas

Documenters: Romella Beringuela and Estephen Fortela

Judges: Dr. Victor S. Ticzon, Dr. Consorcia E. Reano and Dr. Dixon T. Gevana

Zoom Meeting Link: www.bit.ly/2021inrem1a

2:00 - 2:05	Mechanics of Paper Presentation and Introduction of Paper Presenters
2:05 - 2:20	Biomass and Carbon Storage Dynamics of Three Forest Types Across Different Elevation Gradients in the Mountainous Areas of Benguet and Mt. Province, Philippines Elenita L. Racelis*, Aldin C. Alegre, Ma. Cecilia C. Marza and Ma. Diana DM. Rendon
2:20 - 2:35	Biological and Environmental Profiling of Three Philippines Tetrastigma Species (Vitaceae) in Northeastern Cagayan, Luzon, Philippines Jeff M. Opeña*, Charlot L. Maramag, Calixto B. Alicay, Marvin V. Baloloy, Claribel A. Gaspar, Froilan A. Pacris Jr., Jean S. Torres ² , Lyle B. Sumer, Gerlie U. Bayani, Rachel C. Sotto
2:35 - 2:50	Shadow Price Estimates of Soil Organic Carbon Sequestration in Irrigated Rice Production Systems Using Profit Function Model Rodesca M. Sugay*, Antonio Jesus A. Quillooy, Cenon D. Elca and Canesio D. Predo
2:50 - 3:05	Upland Farmers Settlements in Protected Areas: Lessons from the Mount Makiling Forest Reserve, Philippines Myranel S. Canceran*, Karla Jane P. Gonzalvo, Nicasio M. Balahadia, Leilani A. Castillo, Leonardo D. Barua, Aldin C. Alegre, Valeriana D. Barredo-Parducho, Angela A. Limpiada, Manuel L. Castillo, and Nathaniel C. Bantayan
3:05 - 3:20	OPEN FORUM
3:20 - 3:25	Introduction of Paper Presenters
3:25 - 3:40	Tree Diversity Assessment and Stand Structure of a 2-Hectare Permanent Biodiversity Monitoring Area (PBMA) in Mt. Calavite Wildlife Sanctuary (MCWS) Pastor L. Malabrigo, Jr., Arthur Glenn A. Umali, Adriane B. Tobias, Gerald T. Eduarte*, Jonel O. Hernandez, Luisito B. Terbio
3:40 - 3:55	Integrating an Ecosystem Services-Based Approach to Landscape Planning for Watershed Management: The Case of Nayom Watershed Jonathan D. Austria*, Pablo A. Imbach, Leo Kris M. Palau and Jane Girly C. Balanza
3:55 - 4:10	IUCN Red List Assessment Update on Philippine Endemic Trees and its Implication to National Policies on Conservation Pastor L. Malabrigo, Jr., Arthur Glenn A. Umali, Adriane B. Tobias*, Gerald T. Eduarte, John Marlon Magbuo, Angelica Divina, Roniño C. Gibe, Ernesto De Guzman ⁵ , Jimson S. Solatre, Allan V. Barcena, and Megan Barstow
4:10 - 4:25	Floral Diversity Assessment of Abasig-Matogdon-Mananap Natural Biotic Area (AMMNBA), Camarines Norte, Philippines Luisito B. Terbio*, Pastor L. Malabrigo, Jr. and Arthur Glenn Umali
4:25 - 4:40	OPEN FORUM
4:40 - 4:45	Closing and Announcements for Day 3

Session 1B: Landscapes and Seascapes**Moderator:** Prof. Pastor L. Malabrigo**Documenters:** Adelaine Arganda and Paola Andrea Burcer**Judges:** Dr. Michelle Grace V. Paraso, Dr. Roger A. Luyun, Jr. and Dr. Rosario V. Tatlonghari**Zoom Meeting Link:** www.bit.ly/2021inrem1b

2:00 - 2:05	Mechanics of Paper Presentation and Introduction of Paper Presenters
2:05 - 2:20	Importance of Pollinators Conservation Training on Crop Productivity and Environmental Protection: Insights and Issues Experience of Mango Growers in the Philippines Lorena L. Sabino and Anna A. Locsin
2:20 - 2:35	Local Knowledge and Practices Towards Ecological Restoration of Selected Landscape in Atok, Benguet, Philippines Leila D. Landicho*, Maria Theresa Nemesis P. Ocampo, Rowena Esperanza D. Cabahug, Maryanne G. Abadillos, Russel Son Cosico, Arnold Karl A. Castillo, Ma. Armie Janica Ramirez, Kenneth A. Laruan
2:35 - 2:50	Diversity and Habitat Assessment of Mangrove Forests in Gonzaga, Cagayan Gerlie U. Bayani*, Froilan A. Pacris, Jr. and Marvin V. Baloloy
2:50 - 3:05	Canopy Manipulation as a Tool for Restoring Mature Forest Conifers under an Early-successional Angiosperm Canopy Adrian M. Tulod*, and David A. Norton
3:05 - 3:20	OPEN FORUM
3:20 - 3:25	Introduction of Paper Presenters
3:25 - 3:40	Gall Rust Disease Incidence and Severity in a Falcata (<i>Falcataria moluccana</i> (Miq.) Barneby & J.W.Grimes) Plantation Grown from Select Mother Trees in Mindanao Adrian M. Tulod, Jupiter V. Casas, Mark Jun A. Rojo*, Lowell G. Aribal, Uzzi Kobe Yitzhak F. Libayao, Brian Rey L. Monteroso
3:40 - 3:55	Allelopathic Effect of <i>Lantana camara</i> L. Aqueous Leaf Extract on the Seedling Germination of <i>Zea mays</i> L. (maize) Danielle Joy P. Mistica, Neil Julius S. Magsino, Zachariah C. Tanjusay, and Gicel Christine B. Paclibar*
3:55 - 4:10	A Choice Experiment Study on the Willingness to Pay for Improved Conservation of Mt. Banahaw De Lucban Watershed, Quezon, Philippines Mary Ann Agudilla
4:10 - 4:25	H.A.S.S. Finance: A Framework for Development of Integrated and Sustainable Financing System for Protected Areas and other Forest Management Units Roy Joven R. Amatus and Margaret M. Calderon
4:25 - 4:40	OPEN FORUM
4:40 - 4:45	Closing and Announcements for Day 3

Session 1C: Lake and River Basins**Moderator:** Dr. Hildie Maria E. Nacorda**Documenters:** Pandora Timshel Albayda and Marjorae Ignacio**Judges:** Dr. Damasa M. Macandog, Dr. Patrician Ann J. Sanchez and Dr. Noel G. Sabino**Zoom Meeting Link:** www.bit.ly/2021inrem1c

2:00 - 2:05	Mechanics of Paper Presentation and Introduction of Paper Presenters
2:05 - 2:20	How Time Flies When a Lake Changes So Fast: Laguna de Bay in the Past Three Decades Eslava, Decibel F., Espaldon, Maria Victoria O., Comiso, Josefino C., Cui, Loucel E., Macuroy, Jonathan T., Nastor, Janice S., Peyraube, Jessica V., Padrones, Jenielyn T., and Guotana, Juan Miguel
2:20 - 2:35	Flora Diversity Richness of Caraga River Watershed of Davao Oriental Nympha E. Branzuela, Rhea Lou R. Germo, and Charlyn T. Gorgonio
2:35 - 2:50	Redesigning Waste Analysis and Characterization Study (WACS) Engr. Diosa Marie A. Aguirre, Angelika Vhem S. Baliwag, John Leonel D. Javier, Mark Anthony A. Magboo, Maria Eufatima M. Wagan
2:50 - 3:05	
3:05 - 3:20	OPEN FORUM
3:20 - 3:25	Introduction of Paper Presenters
3:25 - 3:40	Willingness to Pay of Households for Flood Mitigation Benefits from Forest and Agroforestry Ecosystems in Silang-Sta. Rosa Sub-Watershed, Laguna, Philippines Richelle Marie B. Legaspi, Canesio D. Predo, Jintana Kawasaki, Annie Mae Inson, Damasa M. Macandog, Brian Johnson and Isao Endo
3:40 - 3:55	Microplastics In River And Aquaculture Pond Sediments of the Marilao-Meycauayan-Obando River System (MMORS), Bulacan, Philippines Ma. Cherry Ann A. Gorgonio, Ma. Vivian C. Camacho, Veronica P. Migo, Lorele C. Trinidad, and Hildie Maria E. Nacorda
3:55 - 4:10	Extremes of Climate Effects: An Ecosystem based Adaptation strategy for Flood and Drought for Alubijid River Basin Jefferson R. Vallente Jr., Anabel A. Abuzo, Tristan Lindsey K. Ares
4:10 - 4:25	
4:25 - 4:40	OPEN FORUM
4:40 - 4:45	Closing and Announcements for Day 3

Session 1D: Small Islands**Moderator:** Dr. Zenaída M. Sumalde**Documenters:** Angelica T. Magpantay and Laizha Lynn Lomente**Judges:** Dr. Edgar M. Reyes, Jr; Dr. Zenaída M. Sumalde and Dr. Mark Dondi M. Arboleda**Zoom Meeting Link:** www.bit.ly/2021inrem1d

2:00 - 2:05	Mechanics of Paper Presentation and Introduction of Paper Presenters
2:05 - 2:20	Promoting Sustainability, Resilience, and Environmental Rehabilitation in Copper-Contaminated Lowland Rice Fields in Mogpog, Marinduque Using Trichoderma Technologies Charina Gracia B. Banaay and Virginia C. Cuevas
2:20 - 2:35	Water Consumption and Utilization Practices of Domestic Sector in Basco, Batanes, Philippines Jessa O. Aquino, Maria Helen F. Dayo, Patricia Ann J. Sanchez, Catherine B. Gigantone and Unice Faith A. Roa
2:35 - 2:50	Communication in Governance, Participation and Knowledge-Sharing in Coastal Resource Management in San Jose, Occidental Mindoro Anna Nicole R. Teston and Rosario Velasco-Tatlonghari
2:50 - 3:05	
3:05 - 3:20	OPEN FORUM
3:20 - 3:25	Introduction of Paper Presenters
3:25 - 3:40	Indigenous Knowledge on Climate Change Adaptations Among the Tagbanuas of Eastern Palawan, Philippines Ma. Victoria O. Espaldon, Lucille Elna P. de Guzman, Oscar B. Zamora, Rosario V. Tatlonghari, Gloria Luz M. Nelson, Chimmy Boonggaling, Joan Pauline P. Talubo, Lita B. Sopsop
3:40 - 3:55	Fish community structure signal the need for coral reef management: the case for Panaon Island, Southern Leyte Badi R. Samaniego ^{1,2} , Kent Elson S. Sorgon ² , Homer B. Hernandez ³ , Victor S. Ticzon ² , Kristyl Ckaye E. Pardo ² and Marianne P. Saniano ³
3:55 - 4:10	Local Government Unit's Support to Environmental Management Programs as Viewed by the Citizens of Lezo, Aklan Cecilia T. Reyes, Cecile O. Legaspi, Anna Mae C. Relingo and Jyanee Loi D. Yecla
4:10 - 4:25	
4:25 - 4:40	OPEN FORUM
4:40 - 4:45	Closing and Announcements for Day 3

Session 1E: Rural-Urban Linkages

Moderator: Dr. Ricardo M. Sandalo

Documenters: Rhiz Manarpaac and Kyle Vincent Singson

Judges: Prof. Emeritus Jovita L. Movillon; Dr. Ricardo M. Sandalo and Dr. Bella C. Cruzana

Zoom Meeting Link: www.bit.ly/2021inrem1e

2:00 - 2:05	Mechanics of Paper Presentation and Introduction of Paper Presenters
2:05 - 2:20	Tourists' Willingness to Pay for Recreational Use of Botanic Gardens: The Case of the Makiling Botanic Gardens, Mount Makiling Forest Reserve ASEAN Heritage Park, Philippines Kharmina Paola A. Evangelista, Cyreez Bigueras*, Gillian Katherine I. Quillooy, Myranel S. Canceran, Margaret M. Calderon, Rogelio T. Andrada II, Mae Belen L. Putian
2:20 - 2:35	Is Davao City, Philippines, Water Deficit or Water Surplus in the Next 100 Years? Nympha Branzuela
2:35 - 2:50	Exploring Urban Expansion Dynamics in the Baguio-La Trinidad Landscape in the Philippines: A Spatio-Temporal Analysis for Sustainability Planning Clarice Colting-Pulumbarit, Gemmalyn M. Trespalacio and Dante K. Vergara
2:50 - 3:05	Waste Analysis and Characterization: A Planning Tool for Urban Waste Management in Butuan City, Philippines Evaristo Nino T. Cando III* and Jessa O. Aquino
3:05 - 3:20	OPEN FORUM
3:20 - 3:25	Introduction of Paper Presenters
3:25 - 3:40	Assessment of Water Supply System in a Remote and Geographically-disadvantaged Area in Bukidnon Ma. Catherine Q. Arca* and Eric L. Cenabre
3:40 - 3:55	Development of Rehabilitation Plan and Design in Upgrading the Domestic Water System in Barangay Bukang Liwayway, Kibawe, Bukidnon, Philippines Eric L. Cenabre
3:55 - 4:10	Land Rights in Geographically Isolated and Disadvantaged Areas (GIDAS): A Case in Barangay Bukang Liwayway, Kibawe, Bukidnon, Philippines Eric N. Bruno*, Rodriga G. Aguinatan and Laarni F. Lacandula
4:10 - 4:25	
4:25 - 4:40	OPEN FORUM
4:40 - 4:45	Closing and Announcements for Day 3

NOVEMBER 19, 2021
1:00 - 4:00
PARALLEL SESSIONS

Session 2A: The Seven Lakes of San Pablo: Assessment and Monitoring Strategies Toward Sustainable Lake Ecosystems

Moderator: Dr. Damasa M. Macandog/Dr. Michelle Grace V. Paraso

Documenters: Mr. Michael B. Biguelme and Ms. Adelaine Arganda

Zoom Meeting Link: www.bit.ly/2021inrem2a

1:00 - 1:05 Mechanics of Paper Presentation and Introduction of Paper Presenters

1:05 - 1:20 Environmental factors that influence occurrence of waterborne pathogens in the 7 Lakes of San Pablo, Phils
 Jeph Roxy Macaraig, Raisa Mendoza, Gabrielle Ann Posa, Rey Verona, Modesto Bandal, Jr. and Vachel Gay Paller

1:20 - 1:35 Vitellogenin expression and synthesis provide evidence of endocrine disruption in juvenile Nile tilapia (*Oreochromis niloticus*) from the lakes of San Pablo, Philippines
 John Paul D. Biscocho, Marc Aldrich B. Capistrano, Joseph F. Dela Cruz, Amalia G. Elepaño, Rocky T. Marcelino and Michelle Grace V. Paraso

1:35 - 1:50 Shell morphometric variation of the freshwater snail, *Melanoides tuberculata* Müller (1774) across the seven lakes of San Pablo City, Laguna, Philippines
 Giancarl Wincer A. Catalan, Sedney S. Mendoza, Harold B. Lipae and Emmanuel Ryan C. de Chavez

1:50 - 2:05

2:05 - 2:20 OPEN FORUM

2:20 - 2:25 Introduction of Paper Presenters

2:25 - 2:40 Understanding the Timeline of Changes in Native and Introduced Fish Species in the Seven Lakes of San Pablo City, Laguna
 Joseph G. Campang, Damasa B. Magcale-Macandog, John Vincent R. Pleto, Yves Christian L. Cabillon, Ma Grechelle Lyn D. Perez, Fatima A. Natuel, Nethanel Jireh A. Larida, and Vachel Gay V. Paller

2:40 - 2:55 Estimating the Recreational Benefits of Lake Pandin as a Tourism Destination in San Pablo City, Laguna, Philippines
 Ma Grechelle Lyn D. Perez, , Damasa B. Magcale-Macandog, Hildie Maria E. Nacorda, Patricia Ann J. Sanchez, Canesio D. Predo, Josef Settele, John Vincent R. Pleto, Joseph G. Campang, and Yves Christian L. Cabillon

2:55 - 3:10 Ecological Assessment and Tourism Carrying Capacity Determination of the Twin Lakes of San Pablo
 John Vincent R. Pleto, Joseph G. Campang, Damasa B. Magcale-Macandog, Yves Christian L. Cabillon, Ma Grechelle Lyn D. Perez, Fatima A. Natuel, Nethanel Jireh A. Larida, and Vachel Gay V. Paller

3:10 - 3:25

3:25 - 3:40 OPEN FORUM

3:40 - 3:45 Closing and Announcements

Session 2B.1: Engaging in Global Change Research: Experiences and Lessons of APN-funded Capacity Development Projects

Moderator: Dr. Rose Jane Peras/

Documenters: Dr. Josephine E. Garcia and Mr. Kyle Vincent Singson

Zoom Meeting Link: www.bit.ly/2021inrem2b

1:00 - 1:05	Welcome remarks Mr Yoichi Toyama, Director, Asia-Pacific Network for Global Change Research (APN) Secretariat
1:05 - 1:10	Mechanics of Paper Presentation and Introduction of Paper Presenters
1:10 - 1:25	Strengthening policy relevance and impact: APN's capacity development programme in Southeast Asia and prospects towards popularizing Circular and Ecological Sphere (CES) in the region Christmas Uchiyama
1:25 - 1:40	Enhancing resilience through capacity building in LCCAP formulation in the Province of Aurora, Philippines Juan M. Pulhin, Maricel A. Tapia-Villamayor, Catherine C. de Luna, Rex Victor O. Cruz, Aileen S. Peria, Danesto B. Anacio, Wilfredo M. Carandang, Vida Q. Carandang, Rose Jane J. Peras, Lorena L. Sabino, Dixon T. Gevaña, Liezl B. Grefalda, Florencia B. Pulhin, Josephine E. Garcia, Cristino L. Tiburan, Jr. and Nico R. Almarines
1:40 - 1:55	Rainwater Harvesting for Climate Change Adaptation of Smallholder Farmers in Albay Province, Philippines: Experiences, Lessons and Prospects Leila D. Landicho, Rowena Esperanza D. Cabahug, Romnick S. Baliton, Alberto B. Gonzales
1:55 - 2:10	Promoting Climate Change Adaptation Strategies Via Agroforestry Learning Laboratories (ALLs) in Selected Upland Farming Communities in Southeast Asia Leila D. Landicho, Christine Wulandari, Bao Huy
2:10 - 2:20	OPEN FORUM

SESSION 2B.2 Retrospects and Prospect of Community-Based Forest Management (CBFM) in the Philippines

Moderator: For. Mark Anthony Ramirez

Documenters: Dr. Josephine E. Garcia and Mr. Kyle Vincent Singson

Zoom Meeting Link: www.bit.ly/2021inrem2b

2:20 - 2:25	Introduction of Paper Presenters
2:25 - 2:40	Shaping the CBFM Narrative in the Past Decades using NVIVO Juan M. Pulhin, Mark Anthony M. Ramirez, Josephine E. Garcia, Millicent Joyce Q. Pangilinan, Mary Beatrice S. Evaristo*, Angelica T. Magpantay, Sheerah Louise Tasico and Florencia B. Pulhin
2:40 - 2:55	Impacts of the COVID-19 Pandemic on Community-Based Forest Management People's Organizations in the Philippines Juan M. Pulhin, Mark Anthony M. Ramirez, Josephine E. Garcia, Millicent Joyce Q. Pangilinan*, Mary Beatrice S. Evaristo, Angelica T. Magpantay, Sheerah Louise Tasico and Florencia B. Pulhin
2:55 - 3:10	Trends and Drivers of Forest Cover Change in Community-Based Forest Management Areas in the Philippines Juan M. Pulhin, Josephine E. Garcia, Mark Anthony M. Ramirez, Angelica T. Magpantay*, Sheerah Louise Tasico, Millicent Joyce Q. Pangilinan, Mary Beatrice S. Evaristo and Florencia B. Pulhin
3:10 - 3:25	National Assessment of Forest Fragmentation in Community-Based Forest Management Areas in the Philippines Juan M. Pulhin, Josephine E. Garcia, Mark Anthony M. Ramirez, Angelica T. Magpantay, Sheerah Louise Tasico*, Millicent Joyce Q. Pangilinan and Mary Beatrice S. Evaristo and Florencia B. Pulhin
3:25 - 3:40	OPEN FORUM
3:40 - 3:45	Closing and Announcements

SESSION 2C.1 Economy and Environment Group (EEG)- Philippines organized session**Moderator:** Dr. Margaret M. Calderon/Dr. Gem B. Castillo**Documenters:** Aileen Tolentino EnP**Zoom Meeting Link:** www.bit.ly/2021inrem2c

1:00 - 1:05	Mechanics of Paper Presentation and Introduction of Paper Presentors
1:05 - 1:20	Estimating sediment retention capacity of existing land use in Balanac and Sta Cruz Watersheds, Philippines Ureta, J.C., Trespalacio, G., Anastacio, N., Sapugay, A., Ureta, J.
1:20 - 1:35	Using yearly satellite vegetation data to assess the fluxes of key ecosystem services in large surface mining areas of the Philippines Gem Castillo, Arlene Tolentino, Arnan Araza, Canesio Predo, Michael Andrew Manalili, Enrique Tolentino Jr., John Michael Tolentino
1:35 - 1:50	Quantifying the sensitivity of water yield potential of small watersheds in the Philippines: An application of InVEST Water Yield Model Trespalacio, G., Sapugay, A., Ureta, J.C., Anastacio, N.J., Ureta, J.
1:50 - 2:05	Nature-based Solutions in Philippine River Basins Bregje van Wesenbeeck, Femke Schasfoort and Gem Castillo
2:05 - 2:20	OPEN FORUM

Session 2C.2: Land-and sea connection in the realm of global carbon and water cycles**Moderator:** Dr. Mark Dondi M. Arboleda/Dr. Delia Catacutan**Documenters:** Asst. Prof. Kristine Dale R. Alcaide and Ms. Julie Zarene de Guzman**Zoom Meeting Link:** www.bit.ly/2021inrem2c

2:20 - 2:25	Introduction of Paper Presentors
2:25 - 2:40	Keynote speaker: Prof. Meine van-Noordwijk, Distinguished Fellow at ICRAF and Professor, Wageningen University, Netherlands
2:40 - 2:55	Panelist : Dr. Rachmat Mulia, Ecological Modeler at CIFOR-ICRAF Vietnam
2:55 - 3:10	Panelist: Dr Ani Adiwinata, Socioeconomics and Landscape Governance Scientist at CIFOR-ICRAF Indonesia
3:10 - 3:25	Panelist: Dr. Himlal Baral, Forest and Landscape Restoration Scientist at CIFOR-ICRAF Indonesia
3:25 - 3:40	OPEN FORUM
3:40 - 3:45	Closing and Announcements

Session 2D.1: Integration of Traditional and Modern Bioproduction Systems for a Sustainable and Resilient Future Under Climate and Ecosystems Changes (ITMoB)

Moderator: Dr. Josefina T. Dizon/Asst. Prof. Nico R. Almarines (alternate)

Documenters: For. Rhiz Manarpaac and For. Laizha Lynn Lomente

Zoom Meeting Link: www.bit.ly/2021inrem2d

1:00 - 1:05	Mechanics of Paper Presentation and Introduction of Paper Presentors
1:05 - 1:20	Browsing through solutions to enhance the sustainability of traditional bio-production systems in East Asia and South-East Asia Shruti Ashish Lahoti*, Raffaella Kozar, Elson Galang, Sheryl Rose C. Reyes, Juan M. Pulhin, Pampang Parikesit, and Osamu Saito
1:20 - 1:35	Quantifying the Provisioning and Regulating Ecosystem Services of the Pagsanjan-Lumban Watershed, Philippines Nico R. Almarines*, Juan M. Pulhin, Canesio D. Predo, Cristino L. Tiburan, Jr. and Catherine C. De Luna
1:35 - 1:50	Scenario analysis of Nexuses between Renewable Energy, Biodiversity, and Ecosystem Services in the Bekambeushi River Watershed, Japan Chihiro Haga*, Takanori Matsui
1:50 - 2:05	Traditional Bioproduction System Called Kebun Campuran in the Humid Tropics of West Java Indonesia Parikesit*, Susanti Withaningsih, Gemilang Lara Utama, Dika Supyan, Chandra Wirawan
2:05 - 2:20	OPEN FORUM

SESSION 2D.2 PCAARRD-supported project on INREM

Moderator: Academician Virginia C. Cuevas

Documenters: For. Rhiz Manarpaac and For. Laizha Lynn Lomente

Zoom Meeting Link: www.bit.ly/2021inrem2d

2:20 - 2:25	Introduction of Paper Presentors
2:25 - 2:40	Development of GIS-Based Land Capability Model for Agroforestry Development Romnick S. Baliton*, Alfie M. Torres, Roberto G. Visco, Leila D. Landicho, Rowena Esperanza D. Cabahug, Ma. Theresa Nemesis T. Ocampo, Mary Ann G. Abadillos, Russel Son A. Cosico-Canilan, Arnold Karl A. Castillo, Ma. and Armie Janica P. Ramirez
2:40 - 2:55	Preliminary Study on the Ecological Mangrove Restoration of Abandoned Brackishwater Fishponds in the Philippines Alvin S. Gestuada*, John Benrich M. Zuñiga, Demetrius M. Paguirigan, John Rommel F. Manahan and Carmelita I. Villamor
2:55 - 3:10	Factors Affecting Land Use and Land Cover Change and Fragmentation in Selected Protected Areas in the Philippines Anne Frances V. Buhay*, Rex Victor O. Cruz, Cristino L. Tiburan Jr., Juan M. Pulhin
3:10 - 3:25	
3:25 - 3:40	OPEN FORUM
3:40 - 3:45	Closing and Announcements

SESSION 2E-1 Integrated Natural Resources Management and Green Growth Nexus: Policy Issues and Governance Challenges for Disaster Risk Reduction

Moderator: Dennis de la Torre

Documenters: Sidney Jam Sibug and Arnulfo Cabarles

Zoom Meeting Link: www.bit.ly/2021inrem2e

1:00 - 1:05	Mechanics of Paper Presentation and Introduction of Paper Presentors
1:05 - 1:20	Prospects of Green Growth as a Post-Disaster Recovery Strategy Dr. Kristoffer B. Berse
1:20 - 1:35	Green Livelihoods in relation with the forestry sector and indigenous peoples Ms. Easterluna Canoy
1:35 - 1:50	The Nexus of Green Growth and Nature-based Solutions: Focusing on Available Bilateral and Multilateral Climate Finance Mr. Enrique Nuñez
1:50 - 2:05	OPEN FORUM
2:05 - 2:20	

SESSION 2E-2. The urban-rural continuum in the face of climate-change induced natural hazards

Moderator: Director Genaro Cuaresma

Documenters: Ms. Anjanette Mariano and Ms. April Dawn Tegelan

Zoom Meeting Link: www.bit.ly/2021inrem2e

2:20 - 2:25	Introduction of Paper Presentors
2:25 - 2:40	Hazard and Vulnerability Assessment of Social Support Facilities in Rural and Urban Barangays in the Municipality of Padre Garcia, Batangas, Philippines Joy T. Santiago, Arge Louise Joy S. Esquivel, Jerico E. Mendoza, Alfredo Mahar Francisco A. Lagmay
2:40 - 2:55	Local and Endogenous Risk Reduction and Disaster Management Approaches to Flooding in Rural-Urban Communities in the Philippines Emmanuel M. Luna
2:55 - 3:10	Evacuation Planning in BASECO Compound, Manila City, Philippines in the Event of a Storm Surge Raissa R. Arevalo, Joenathan I. Carpio, Charles Aaron B. Leonor, Stephen Joel P. Arevalo, Cielo Ericka Paola R. Aumentado, Micko Jay S. Bajamundi, Roland James Olita, Jacob C. Malaguit, Dylan SJ. Talabis, Anjanette B. Mariano, Genaro A. Cuaresma
3:10 - 3:25	OPEN FORUM
3:25 - 3:40	
3:40 - 3:45	Closing and Announcements

Session 2F: Oceana's Special Session**Moderator:** Diovane de Jesus/Dr. Victor S. Ticzon**Documenters:** Marion Michael Bacabac and Kent Elson Sorgon**Zoom Meeting Link:** www.bit.ly/2021inrem2f

1:00 - 1:05	Mechanics of Paper Presentation and Introduction of Paper Presentors
1:05 - 1:15	Overview and Rationale Atty. Gloria Estenzo Ramos Vice-President Oceana
1:20 - 1:35	Legal and Policy Approaches in Addressing Issues and Emerging Threats in Marine Protected Areas in the Philippines Atty. Rose-Liza Eisma-Osorio, Legal and Policy Director
1:35 - 1:50	The Plastic Crisis and its Environment, Health and Social Impacts Mae Chatto, Campaign Specialist
1:50 - 2:05	Karagatan Patrol: Using Night time satellite images and a game-changing online platform for detecting and reporting illegal fishing in marine protected areas Daniel Ocampo, Senior Campaign Manager
2:05 - 2:20	Fisheries Management Area Scorecard: a tool for a participatory and transparent governance framework Atty. Rhea Yray-Frossard, Fisheries Management and Campaign Research Manager
2:20 - 2:35	CPanao Island's Road to Protection and Sustainable Management Marianne Saniano, Science Campaign Manager
2:35 - 2:45	OPEN FORUM AND SYNTHESIS Diovane de Jesus Campaign and Science Specialist
2:45 - 2:50	Closing Remarks Marianne Saniano, Science Campaign Manager

