



Collaborative Research Grants

ENVIRONMENT AND
CLIMATE CHANGE
**KNOWLEDGE
PARTNERSHIP
PROFILES**

2
0
2
3

TABLE OF CONTENTS

Table of contents	01
Introduction	05
Strengthening the flood resilience capabilities of vulnerable groups	06
From technical to socio-ecological pathways for climate change adaptation: analysis of floods in Semarang	07
Climate resilient primary health care (PHC) and financing systems in Indonesia: A participatory action research (PAR)	08
Multipurpose coastal reservoir development for Jakarta for water and energy security	09
Building Inclusive Climate Resilience: Enhancing the Adaptive Capacity of Indonesian Children and Youth in Overcoming and Mitigating the Climate Impact	10
Empowering Women in Mitigating Climate Change Impacts on Health	11
The ridge to the reef of Integrated Watershed Management Approach (IWMA) to foster the socio-ecology climate and livelihoods resilience of small islands in eastern Indonesia	12
Aligning indigenous knowledge with innovative methods to measure natural capital and mitigate detrimental environmental, social and cultural impacts	13
Enhancing Food Resilience and Strengthening Animal Health Capacity Through Comprehensive Assessment of Arthropod-borne Diseases in Changing Climate Scenarios in Indonesia	14
Ecosystem-Based Adaptation to Climate Change of Indigenous Women Groups in Indonesia (Sumatra) and Australia (Queensland)	15

TABLE OF CONTENTS

Building a Model of Future-proofing for Climate Resilience by Engaging Communities (MoFCREC) in Eastern Indonesia	16
Building resilience in at-risk rural communities through improving media communication on climate change policies	18
Maintaining blue carbon by learning from Indigenous Papuan women's conservation and adaptation strategies in Papua's mangrove areas	19
Indonesia-Australia Citarum Action Research Program (CARP)- Circular economy transitions for resilient climate and environmental futures	20
Evaluating the contribution of social forestry management rights towards climate proof livelihoods of women and men in Indonesia	21
Using Restorative Justice Techniques to Build Resilience and Address Climate Change Harms in Indonesia	22
Addressing vulnerabilities and enhancing resilience in the smallholder value chains of Java's peri-urban food supply systems	23
Solar-powered desalination using hybrid reverse osmosis for fresh water supply in remote areas	25
Inclusive Climate Adaptation: The roles of women's climate advocacy network	26
Towards future proof society: adaptive social protection against climate change	27
Exploring links between food security and health to inform policy and service priorities for communities living in high flood risk areas of the northern coast of Central Java	28

TABLE OF CONTENTS

Conserving Ridge to Reef: Integrated and Innovative Approach to Enable Sustainable Financing in Supporting Inclusive Climate Change Projects in Indonesia	29
Developing applications of satellite imagery for modelling environmental and social impacts of climate change on seaweed farming in Indonesia	30
Developing an Integrated Approach to Climate Change Adaptation, Food Security and Social Forestry in Vulnerable and Indigenous Communities in Eastern Indonesia	31
Building a Sustainable Future: Developing Nutritious and Climate-Resilient Crop Varieties	32
Understanding Climate Impact on The Grassroot Communities and Rural Livelihood in Indonesia: Catalysing Changes toward Adaptation and Resilience	33
Protecting the Most Vulnerable in Rural Indonesia: How Can We Develop More Adaptive Social Protection?	34
Enabling children as agents of change through inclusive edugames on climate change and disaster resilience	36
Fire Play: Understanding and Documenting Indigenous Fire Governance in Indonesia	37
Contesting loss for Indonesian communities in climate-crisis (CLICCC)	38
Harvesting Hope: Renewable Energy, Clean Water, and Quality Salt for Madura's Saltwork Community Through Seaweed Farming	39
Initiative for an Open, Inclusive, and Integrated Climate Change Model for Indonesia	40

TABLE OF CONTENTS

Understanding social participation and inclusion in jurisdictional approaches to sustainable environmental management	41
CORE-STEP: Advancing Innovative Knowledge-Based Solutions for Inclusive and Climate Ready Primary Health Care Systems	42
Forced labour and climate change: keeping a focus on women and children	43
Agricultural productivity, poverty, and the environment	44
Future proofing a basic social service: climate-resilient community-based rural water supply	45
Tide Eye - AI/IoT-powered Airborne System for Monitoring Water Level and Tidal Floods in North Coast of Central Java	46

INTRODUCTION

KONEKSI is the Australian Government's flagship program in the knowledge and innovation sector in Indonesia. KONEKSI aims to achieve an enduring relationship between Indonesia and Australia that advances mutual interest and supports Indonesia's inclusive and sustainable development. KONEKSI's purpose is to increase the use of knowledge-based solutions for inclusive and sustainable policies and technologies.

In March 2023 KONEKSI launched a pilot call for proposals for collaborative research grants between Australian and Indonesian organisations. The Government of Australia and Government of Indonesian jointly agreed on the priority theme of Environment and Climate Change (ECC) incorporating a focus on policy- and innovation-relevant research related to climate change mitigation, climate change adaptation, and climate change resilience.

The selection process for recipients of the ECC collaborative research grants was highly competitive. Of 610 applications received, KONEKSI shortlisted 105 which were invited to proceed to Stage 2 and submit a full grant application. At the final stage, 38 projects were selected as recipients of the collaborative research grants based on an independent assessment by expert reviewers.

KONEKSI is delighted to feature 38 knowledge partnerships in this booklet as the inaugural recipients of ECC collaborative research grant, recognising their expertise, equitable partnerships and impact on climate change mitigation, adaptation, and resilience.

STRENGTHENING THE FLOOD RESILIENCE CAPABILITIES OF VULNERABLE GROUPS

Keyword: Flood response

Floods are a common occurrence in Indonesia and Australia, and their frequency and severity are expected to worsen with the predicted impacts of climate change. There is an urgent need to strengthen the flood resilience capabilities of local communities, particularly among vulnerable population groups. Vulnerable groups are of concern as they are hard to reach, and have economic, social or physical constraints that limit their ability to prepare for and respond to a flood situation. Using a case study and mixed methods approach, the research will focus on identifying the unique needs of vulnerable groups in a flood situation; and mapping the key information sources used by vulnerable groups. The outcomes of the project will provide essential baseline knowledge to policy makers and emergency teams to guide flood response planning and resource allocation to best support and empower vulnerable groups in a flood situation.

Indonesian Organisations

- Sepuluh Nopember Institute of Technology, Faculty of Civil, Planning, and Geo Engineering
- Surabaya local government municipality

Australian Organisations

- Queensland University of Technology, Faculty of Business and Law
- University of Technology Sydney, Faculty Design Architecture & Building

Lead Researcher/s

- Connie Susilawati

Researchers

- Lilik Arijanto, S.T., M.T.
- Ria Asih Aryani Soemitro
- Sara Wilkinson
- Ashantha Goonetilleke
- Melissa Teo
- Farida Rachmawati

Research locations

- East Java
- New South Wales

FROM TECHNICAL TO SOCIO- ECOLOGICAL PATHWAYS FOR CLIMATE CHANGE ADAPTATION: ANALYSIS OF FLOODS IN SEMARANG

Keyword: Flood control, community resilience, adaptation

The project aims to increase the sustainability of infrastructure-oriented solutions to flooding, providing an assessment framework to improve the knowledge and understanding of the direct and potential impacts of such infrastructure adaptations in Semarang on the livelihoods, socio-economic conditions, and longer-term sustainability of the diverse communities involved. The design of this framework is an innovative approach to address the current negative impacts of some technical interventions, using qualitative methods. The project will contribute to policy and tools that encourage inclusive and sustainable development and facilitate knowledge sharing between Semarang and Brisbane.

Indonesian Organisations

- Universitas Diponegoro, Faculty of Engineering, Dept of Urban and Regional Planning
- Semarang City Government

Research locations

- Semarang, Central Java

Australian Organisations

- The University of Queensland, Faculty of Science, School of the Environment
- Brisbane City Council

Lead Researcher/s

- A/Prof Sonia Roitman

Researchers

- A/Prof Wido Prananing Tyas
- A/Prof Ron Johnstone
- Prof Wiwandari Handayani
- Mr Budi Prakosa
- Ms Sarah Stanilewicz

CLIMATE RESILIENT PRIMARY HEALTH CARE (PHC) AND FINANCING SYSTEMS IN INDONESIA: A PARTICIPATORY ACTION RESEARCH (PAR)

Keyword: Primary health care, participatory research, health adaptation plans

This project will support better climate resilient primary health care systems. Using participatory action research with a broad range of policy actors, health practitioners, research communities, and marginalised communities, the project will develop a proof of concept on health adaptation plans and sustainable financing.

Indonesian Organisations

- Udayana University, Faculty of Medicine

Australian Organisations

- Australian National University, College of Health and Medicine, School of Medicine and Psychology

Lead Researcher/s

- Dr I Nyoman Sutarsa (MD., MPH., PhD., FHEA)

Researchers

- Dr Anak Agung Sagung Sawitri (MD., MPH., PhD)

Research locations

- Bali
- East Nusa Tenggara
- West Nusa Tenggara

MULTIPURPOSE COASTAL RESERVOIR DEVELOPMENT FOR JAKARTA FOR WATER AND ENERGY SECURITY

Keyword: Coastal reservoir

The project will address water quality and energy security in Jakarta. Using a mixed-method approach, the project will investigate the adoption of a large freshwater coastal reservoir within the sea at the mouth of the Cisadane River to develop an innovative multipurpose coastal reservoir for the city of Jakarta for water and energy security to alleviate the reliance of poor-quality ground water and associated land subsidence and also to mitigate the effects of climate change.

Indonesian Organisations

- Bandung Institute of Technology
- Indonesian Agency for National Planning
- Indonesian Institution of Engineers

Research locations

- West Java

Australian Organisations

- University of Wollongong, Australia, School of Civil, Mining, Environmental and Architectural Engineering, Faculty of Engineering and Information Sciences

Lead Researcher/s

- Assoc. Prof Muttucumaru Sivakumar
- Assoc. Prof Shuqing Yang

Researchers

- Dr Andoyo Wurjanto
- Dr Entin Agustini Karjadi
- Abdul Malik Sadat Idris M Eng
- Dr Purba Robert Mangapul Sianipar

BUILDING INCLUSIVE CLIMATE RESILIENCE: ENHANCING THE ADAPTIVE CAPACITY OF INDONESIAN CHILDREN AND YOUTH IN OVERCOMING AND MITIGATING THE CLIMATE IMPACT

Keyword: Climate justice

This project focuses on children and young people to investigate current Government of Indonesia policies and practices that generate climate injustices and explore strategies to integrate climate justice into policy and practice. Through mixed method approaches, the project will identify the underlying causes of climate injustices by: (1) examining and assessing current policies and practices in mitigation, adaptation, and disaster risk reduction and how these might have unintended negative effects on vulnerable communities, particularly children and youths; (2) Understanding the vulnerabilities and injustices experienced by children and young people; and (3) Understanding the opportunities and challenges in integrating a climate justice perspectives and transformative approaches into current policies and practices. The project promotes child and youth centred methodologies to inform the improvement of policy for climate justice while also contributing to innovations for measuring societal exposure, sensitivity, and ability to adapt to the impact of climate change using the social vulnerability index and measuring the integration of climate justice into policies and practices using the climate justice index.

Indonesian Organisations

- Universitas Indonesia, Center on Child Protection and Wellbeing at Universitas Indonesia (PUSKAPA)

Research locations

- Jakarta
- Central Java
- West Kalimantan

Australian Organisations

- Australian National University, Indonesia Project

Lead Researcher/s

- Santi Kusumaningrum
- Firman Witoelar Kartaadipoetra

Researchers

- Widi Laras Sari

EMPOWERING WOMEN IN MITIGATING CLIMATE CHANGE IMPACTS ON HEALTH

Keyword: Health, women health, climate change, women' empowerment, climate change mitigation

This study addresses climate change impacts on the health of women and children. Using nursing expertise and drawing on qualitative methods, the research will document and amplify diverse women's experiences to generate inclusive policy relevant information on how to protect health from increasing climate-change-related pressures; and create long-term partnerships with Indonesian women that will facilitate long-term capacity for the nursing research team to serve the women of Indonesia as they face an uncertain climate future.

Indonesian Organisations

- Universitas Indonesia, Faculty of Nursing

Australian Organisations

- Monash University, Faculty of Medicine, Nursing and Health Science.
- The University of Melbourne, Faculty of Medicine, Dentistry and Health Science

Lead Researcher/s

- Ns. Suryane Sulistiana Susanti, S.Kep., M.A., Ph.D (PI)

Researchers

- Ns. Rona Cahyantari Merduaty, S.Kep., M.AdvN
- Ns. Indah Permata Sari, S.Kep., M.Kep., Sp.Kep.Kom
- Dessie Wanda, S.Kp., M.N., Ph.D
- A/ Prof Zerina Tomkins
- A/Prof Ann Borda

Research locations

- Aceh Besar (Aceh Province)
- Jakarta Utara (Jakarta)
- Karawang (West Java)
- Pekalongan and Demak (Central Java)
- Kupang (East Nusa Tenggara)

THE RIDGE TO THE REEF OF INTEGRATED WATERSHED MANAGEMENT APPROACH (IWMA) TO FOSTER THE SOCIO-ECOLOGY CLIMATE AND LIVELIHOODS RESILIENCE OF SMALL ISLANDS IN EASTERN INDONESIA

Keyword: Integrated agroforestry, sustainable livelihood, ecological resilience, climate change, mitigation & adaptation

This project will address resilience of socio-ecosystems and local livelihoods in small islands in eastern Indonesia. The project will adopt multiple methods that incorporates data on the biophysical, livelihood, food nutrition, gender and extreme natural hazards to develop and test ecosystem resilience and risk reduction modelling; promote gender sensitive agroforestry best practices models and developed manuals; and develop policy and regulatory instruments to implement programs on water conservation and agroforestry practices. Anticipated outcomes include the potential contribution to the pathways for implementing Indonesia Adaptation Strategies promoting socio-ecological climate and livelihood resilience of small islands in Indonesia and beyond.

Indonesian Organisations

- Universitas Gadjah Mada, Faculty of Forestry
- Center for International Forestry Research (CIFOR)
- Universitas Mataram, Faculty of Agriculture
- Universitas Pattimura, Faculty of Agriculture
- Universitas Kristen Artha Wacana, Faculty of Teacher Training and Education
- Center for Instrument Standardization Disaster Resilience and Climate Change (CISDRCC), Ministry of Environment and Forestry (MoEF)

Australian Organisations

- Australian National University,

Institute for Climate, Energy and Disaster Solutions (ICEDS)

Lead Researcher/s

- Prof. Ahmad Maryudi

Researchers

- Prof. Digby Race
- Ani Adiwinata, PhD
- Prof. Muktasam Abdurrahman
- Prof. Agus Kastanya
- Lintje Pellu, PhD
- Kirsfianti L. Ginoga, PhD

Research locations

- East Nusa Tenggara
- Maluku
- West Nusa Tenggara

ALIGNING INDIGENOUS KNOWLEDGE WITH INNOVATIVE METHODS TO MEASURE NATURAL CAPITAL AND MITIGATE DETRIMENTAL ENVIRONMENTAL, SOCIAL AND CULTURAL IMPACTS

Keyword: Natural capital

This research will document living natural capital assets of different marine, coastal and terrestrial environments to be able to assess mitigation strategies. It will provide a robust baseline on the across 40,000 ha adjoining the city of Pontianak, West Kalimantan and surrounding areas. The outcomes of this research are to (1) provide government agencies and communities with an accurate, repeatable, quantitative and objective baseline measure of natural capital across the urban, agricultural and forested landscapes, as well as mangroves and seagrass meadows, (2) develop prediction models of how land use and land cover and targeted species might have shifted with climate change, and (3) provide local indigenous communities with tools and training for data engagement and field validation. This knowledge will inform how successful current or future mitigation strategies are in maintaining or enhancing these natural capital assets across regions and landscapes.

Indonesian Organisations

- Indonesian National Agency for Research and Innovation, Research Center for Society and Culture
- Department of Fisheries Resource Utilisation, Faculty of Marine Science and Fisheries, IPB University
- Department of Fisheries and Marine Science, The State Polytechnic of Pontianak
- Fisheries Resources Center of Indonesia – Rekam Nusantara Foundation
- Universitas Nusa Cendana, Department of Agriculture

Australian Organisations

- Murdoch University, Harry Butler

and Asia Research Centre

- ArborCarbon Pty Ltd
- The Metis Centre

Lead Researcher/s

- Emeritus Prof. G. Hardy
- Emeritus Prof. N. Loneragan
- Ass. Prof. C. Warren

Researchers

- Dr. Endhah Yulia
- Dr Lily Ishaq
- Prof. Budy Wiryawan
- Dr Sutomo
- Dr. B. Vatria
- Dr D. Adhuri
- Dr I. Yulianto
- Adjunct Professor P. Barber
- Dr. M. Metta

Research locations

- West Kalimantan

ENHANCING FOOD RESILIENCE AND STRENGTHENING ANIMAL HEALTH CAPACITY THROUGH COMPREHENSIVE ASSESSMENT OF ARTHROPOD-BORNE DISEASES IN CHANGING CLIMATE SCENARIOS IN INDONESIA

Keyword: Animal health, vector-borne diseases, epidemic prevention, food resilience

This project addresses policies to protect and control arthropod diseases. Employing novel techniques for testing livestock and arthropod populations for various pathogens and identifying risk factors, the project's outcomes will provide important information about the distribution and epidemiology of arthropod vectors and associated diseases, future spread and associated risk factors, improvement of farmers' Knowledge, Attitude, Practices, selective drug choice and innovations, and the preparedness of concerned bodies.

Indonesian Organisations

- Universitas Sebelas Maret, Faculty of Animal Science, Leading Organisation
- Universitas Gadjah Mada, Faculty of Animal Science, Member Organisation
- Badan Riset dan Inovasi Nasional, Pusat Riset Veteriner, Member Organisation

Australian Organisations

- The University of Melbourne, Melbourne Veterinary School, Faculty of Science

Lead Researcher/s

- Dr. med. vet. Penny Humaidah Hamid, DVM., M. Biotech, Universitas Sebelas Maret, Faculty of Animal Science

Researchers

- Prof. Abdul Jabbar, DVM., M.Sc (Hons), PhD., GCUT., The University of Melbourne, Melbourne Veterinary School, Faculty of Science
- Abdul Ghafar, DVM., M.Phil, PhD, The University of Melbourne, Melbourne Veterinary School, Faculty of Science
- Mohammad Zainal Abidin, S.Pt., M. Biotech., PhD, Universitas Gadjah Mada, Faculty of Animal Science
- April Hari Wardhana, S.Si., M.Si., PhD, Badan Riset dan Inovasi Nasional, Pusat Riset Veteriner

Research locations

- Central Java, Indonesia

ECOSYSTEM-BASED ADAPTATION TO CLIMATE CHANGE OF INDIGENOUS WOMEN GROUPS IN INDONESIA (SUMATRA) AND AUSTRALIA (QUEENSLAND)

Keyword: Ecosystem services, traditional ecological knowledge, knowledge sharing, ecosystem-based adaptation

This research uses indigenous women's knowledge and western science to identify ecosystem-based adaptation measures to increase community resilience to climate change. The outcomes will provide policymakers, community leaders, and other stakeholders with valuable insights that will aid in developing more effective, socially just and equitable climate change adaptation policies, strategies, and programs.

Indonesian Organisations

- Department of Agriculture Socioeconomic, Faculty of Agriculture, Universitas Andalas

Australian Organisations

- Griffith University, Australian Rivers Institute

Lead Researcher/s

- Dr Simone Maynard

Researchers

- Prof. Yonariza
- Arrum Harahap

Research locations

- Coastal Singkil-Leuser Ecosystem
- The Mentawai Islands
- Njinda Durlga Protected Area
- Moreton Bay Islands

BUILDING A MODEL OF FUTURE-PROOFING FOR CLIMATE RESILIENCE BY ENGAGING COMMUNITIES (MOFCREC) IN EASTERN INDONESIA

Keyword: Community climate knowledge, participatory research, climate resilience, vulnerable communities, human rights

This project highlights vulnerable community knowledge to identify climate-related challenges and develop strategies to strengthen resilience. Through participatory action research, the project offers three key innovations: (1) Deep community engagement, facilitated through co-design processes at every level of the research program. (2) Demonstration of the intersectional disadvantages accrued through climate change (for example, acknowledging that poverty impacts nutrition, and that older people can also be women living with disabilities) through a constant iterative comparison approach; and (3). Development and consolidation of an interdisciplinary, international team bringing together expertise in climate resilience, environmental governance, human rights, social inclusion, gender, disability, ageing, law and policy. This project seeks to develop a Model of Future-proofing for Climate Resilience by Engaging Communities. This project aims to build strong and enduring partnerships that will promote climate resilience for key vulnerable groups: people with disabilities, diverse women, and older people (and people who live at the nexus of these), in Lombok, Makassar and Sumbawa.

Indonesian Organisations

- Monash University Indonesia, Urban Design Program and the Public Policy and Management Program
- Monash Climate Change Communication Research Hub, Indonesia Node
- Hasanuddin University, Faculty of Public Health, and Centre of Excellence for Interdisciplinary and Sustainability Sciences
- The Indonesian Disability Movement for Equality (Yayasan PerDIK)
- The South Sulawesi Women's Legal Aid Institute (LBH APIK Sulsel)
- Indonesian Ministry of Women and Children Affairs (KPPA)
- DP3AAP2KB of Nusa Tenggara Barat Province
- Regional Development Planning Agency (Bappeda)
- The National Commission on Violence Against Women
- The Society of Indonesian Environmental Journalist

Australian Organisations

- Monash University, Herb Feith Indonesian Engagement Centre, Faculty of Arts, Faculty of Law
- Australia-Indonesia Centre
- ReelOzInd
- 360Info

Lead Researcher/s

- A/Professor Sharyn Davies
- A/Professor Ika Idris

Researchers

- Professor Megan Farrelly
- A/Professor Sudirman Nasir
- A/Professor Narelle Warren
- A/Professor Becky Batagol
- A/Professor Eka Permanasari
- Dr Ronli Sifris
- Dr Sabina Satriyani Puspita
- Dr Eugene Sebastian
- Dr Jemma Purdey
- Joni Putra
- Nur Syarif Ramadhan
- Rosmiati Sain
- Ria Ernunsari
- Eko Novi Ariyanti
- Professor Andrew Jaspan
- Dr. Nurhandini Eka Dewi
- Dr. Iswandi

Research locations

- Makassar, South Sulawesi
- Sumbawa, West Nusa Tenggara
- Lombok, West Nusa Tenggara

BUILDING RESILIENCE IN AT-RISK RURAL COMMUNITIES THROUGH IMPROVING MEDIA COMMUNICATION ON CLIMATE CHANGE POLICIES

Keyword: Media communication

This project will address Indonesia and Australia climate policy coverage in the media. Using quantitative survey, content analysis, and human-centred design methodologies, this research will focus on at-risk rural communities who are especially vulnerable to the direct and indirect impacts of climate change. The project will aim to: (1) produce a comprehensive up-to-date summary report on the knowledge and perception of at-risk rural communities in relation to climate policies, and the first report on identified shared challenges in Indonesia and Australia of media communication towards rural communities regarding specific climate policies; (2) produce a detailed report on the patterns, volume, targeting and factual correctness of media coverage on current climate policies relevant to at-risk rural communities, and the first report on transferable best practices in media communication about climate policies towards at-risk groups like rural communities in Indonesia and Australia; and (3) design and develop a user-friendly online platform serving as the first comprehensive information portal designed to enhance media communication on climate change policies among at-risk rural communities in Indonesia and Australia. The overarching aim of this project is to understand the media communication of climate policy and enhance public capacity – especially among members of at-risk rural communities – to evaluate the reliability of information and engage with climate policies that are relevant to them.

Indonesian Organisations

- Universitas Gadjah Mada

Australian Organisations

- Deakin University

Lead Researcher/s

- A/Prof. Xiao Liu
- Dr. Hilya Mudrika Arini

Researchers

- Dr. Anna Klas
- Dr. Fitri Trapsilawati
- Dr. Adam Cardilini

- Prof. Catherine Bennett
- A/Prof. Hassan Vally
- Dr. Justin Lawson
- Dr. Ming Liu
- Dr. Chathu Ranaweera
- A/Prof. Kevin Lee
- Dr. Yun Mulyani
- Dr. Yunita Sari
- Dr. Arif Nurwidyantoro

Research locations

- Australia and Indonesia

MAINTAINING BLUE CARBON BY LEARNING FROM INDIGENOUS PAPUAN WOMEN'S CONSERVATION AND ADAPTATION STRATEGIES IN PAPUA'S MANGROVE AREAS

Keyword: Indigenous Papuan women's knowledge in mangrove areas

This project will support inclusive and innovative blue carbon initiatives. Using qualitative methodology, the project will document and understand the expertise of Indigenous Papuan women and their adaptation strategies in Papua's mangroves, the main outcomes of this research will be (1) new knowledge about diverse models of climate change adaptation strategies that are based on Indigenous Knowledge, gender inclusive and contribute to gender equality and policy innovation; (2) increased awareness of traditional knowledge that can help maintain the ecological function of mangrove forest including its impact on carbon supply; (3) enhanced women's roles in community knowledge partnerships; (4) improved Gender Equality, Disability, and Social Inclusion research capabilities of early career researchers and students; and (5) enhanced collaboration between researchers in Australia and Indonesia

Indonesian Organisations

- Universitas Papua, Pusat Penelitian Lingkungan Hidup

Australian Organisations

- The University of Queensland, School of Social Science

Lead Researcher/s

- Dr Aplena Elen Siane Bless

Researchers

- Dr Jenny Munro
- Els Tienneke Rieke, PhD;
- Agustina Sylvanie Mori Muzendi, MSi,
- Yustina L.D. Wambrau, M.GFAGRIBUSS

- Yenny Yendri Solosa, M.Sc
- Desi Natalia Edowai, MP
- Hermina Haluk, M.Eng
- Dr. Petrus Dimara
- Dr. Selvi Tebay
- Krisma Lekito, M.Sc
- Dr. Yaved Syufi

Research locations

- Central Papua
- Papua
- Southwest Papua
- West Papua

INDONESIA-AUSTRALIA CITARUM ACTION RESEARCH PROGRAM (CARP)-CIRCULAR ECONOMY TRANSITIONS FOR RESILIENT CLIMATE AND ENVIRONMENTAL FUTURES

Keyword: Circular economy

The objective of the project is to develop and test novel approaches in the field of integrated waste, especially solid waste and wastewater solutions, to achieve zero plastic waste discharge into the Citarum River. Using transdisciplinary expertise and community-led decision making, the project will bring together technological and social innovation to (1) establish a 'living lab' village-based pilot for showcasing, education, training and capacity building, and as the subject of living lab research; (2) design principles for operationalising and upscaling integrated waste-to-resource systems in TPS-3R facilities servicing up to 5,000 households. The team will also develop a proof of concept for integrated waste and waste management, and evidence to evaluate policy effectiveness at local, national and international scales. In the long run, the new knowledge created from this project would be used to inform strategies for addressing river pollution in the Citarum basin and for other degraded rivers in Southeast Asia, improving the lives of vulnerable communities dependent on rivers for water and livelihoods.

Indonesian Organisations

- Universitas Indonesia, Department of Civil Engineering and Department of Political Science
- Yaksa Pelestari Bumi Berkelanjutan (YPBB)
- CSIRO

Australian Organisations

- Monash University, Monash Art, Design & Architecture and Monash Sustainable Development Institute

Lead Researcher/s

- Professor Diego Ramirez-Lovering

- Professor Tony Wong
- Prof Rob Raven
- Dr Paris Hadfield
- Dr Ilya Fridman
- Dr Michaela Prescott
- Dr Jane Holden

Researchers

- Dr Reni Suwarso
- Dr Dwinanti Marthanty
- Dr. Cindy Priadi
- Dr. M. Adhiraga Pratama
- David Sutasurya
- Dr Melissa Skidmore
- Dicky Tanumihardja

Research locations

- West Java

EVALUATING THE CONTRIBUTION OF SOCIAL FORESTRY MANAGEMENT RIGHTS TOWARDS CLIMATE PROOF LIVELIHOODS OF WOMEN AND MEN IN INDONESIA

Keyword: Social forestry

This study contributes to realising social equity and climate mitigation benefits of Indonesia's social forestry scheme. Using mixed method approaches, the study aims to: (1) measure the contribution of social forest management on locally appropriate measures of well-being and sustainable and climate-proof livelihood activities for diverse social groups, especially women's groups within forest residing or adjacent communities that have secured a social forestry management permit within the past five years; (2) measure the forest cover, quality and women's role on forests that have been issued a social forestry management permit within the past five years; and (3) understand what support communities with social forestry permits require in order to climate-proof their livelihoods, enhance forest cover and quality, and to increase women's role in forest management to enhance climate mitigation and gender equity outcomes.

Indonesian Organisations

- Perkumpulan Untuk Peningkatan Usaha Kecil (PUPUK)
- The Asia Foundation
- National Research and Innovation Agency (BRIN), Institute of Social Sciences and Humanities (Research Center for Society and Culture and Research Center for Population Studies)
- Universitas Airlangga, Department of Economics

Australian Organisations

- University of Melbourne, School of Agriculture, Food and Ecosystem Sciences, Faculty of Science

Lead Researcher/s

- Ike Sulistiowati
- Dr Rumayya

Researchers

- Dr Tessa Toumbourou
- Dr Andrea Rawluk
- R. Alam Surya Putra
- Margaretha Tri Wahyuningsih
- Ridwan
- Dr Lilis Mulyani
- Gutomo Bayu Aji
- Marcellinus Mandira Budi Utomo
- Dr Ilmiawan Auwalin
- Mokhammad Farid Fauzi
- Sendri Lentari

Research locations

- Bengkulu
- Central Kalimantan
- South Sulawesi
- West Kalimantan
- Yogyakarta

USING RESTORATIVE JUSTICE TECHNIQUES TO BUILD RESILIENCE AND ADDRESS CLIMATE CHANGE HARMS IN INDONESIA

Keyword: Climate justice

This project brings marginalised voices into responses of restorative justice to environment harm. Using inclusive methodologies that amplify people with disability and women, the program outcomes will create an original database of research for evidence in the development of more inclusive environmental law, policies, and practices to mitigate climate harms communities, locally, regionally and nationally.

Indonesian Organisations

- Brawijaya University, Faculty of Law

Australian Organisations

- Australian Catholic University, Thomas More Law School
- Australia-Indonesia Disability Research and Advocacy Network (AIDRAN)

Lead Researcher/s

- Professor Patrick Keyzer

Researchers

- Dr Aan Eko Widiarto
- Dr Mark Hamilton
- Dr Dina Afrianty
- Rayna Smith
- Linc Yow Yeh
- Prisca Listriningrum
- Daru Adianto
- Arina Hayati
- Unita Werdi Rahajeng
- Filipus Yudianto
- Mahalli

Research locations

- East Java
- East Nusa Tenggara
- South Sulawesi

ADDRESSING VULNERABILITIES AND ENHANCING RESILIENCE IN THE SMALLHOLDER VALUE CHAINS OF JAVA'S PERI-URBAN FOOD SUPPLY SYSTEMS

Keyword: Food systems

This research aims to enhance peri-urban agriculture's resilience to climate change, ensuring a reliable food supply for Indonesia's urban centers. The objectives of this research are: (1) building a comprehensive dataset, enhancing the understanding of peri-urban value chains in these regions, (2) identification of intervention priorities and opportunities for innovation, such as how the value chains can link with market demand for carbon neutral and more sustainable food products, (3) interventions to build resilience and sustainability of food supply at multiple scales, and (4) enhance research team's professional capabilities, gaining in-depth knowledge and skills in systems dynamics modelling and carbon footprint analysis.

Indonesian Organisations

- National Research and Innovation Agency Research organisation for Governance, Economy, and Public Welfare
- IPB University, Faculty of Economics and Management, Department of Agribusiness
- Universitas Gadjah Mada, Faculty of Agriculture, Department of Agricultural Socio-Economics
- Universitas Negeri Malang, Faculty of Social Sciences, Department of Geography
- Universitas Muhammadiyah Yogyakarta, Faculty of Agriculture, Department of Agribusiness

Australian Organisations

- The University of Queensland, Faculty of Science, School of Agriculture and Food Sustainability and School of the Environment

Lead Researcher/s

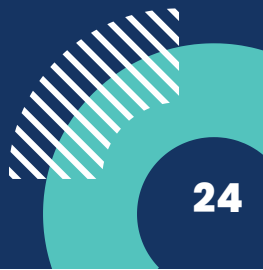
- Associate Professor Ammar Abdul Aziz
- Associate Professor Paul Dargusch
- Dr Risti Permani
- Dr Md Ali Akber

Researchers

- Dr Adhitya Marendra Kiloes
- Dr Nurul Hilmiati
- Professor Amzul Rifin
- Dr Any Suryantini
- Dr Bagus Setiabudi Wiwoho
- Dr Ike Sari Astuti
- Dr Zuhud Rozaki
- Dr Yanti Nuraeni Muflikh
- Dr Julius Harrison Kotir
- Prisca Listriningrum
- Daru Adianto
- Arina Hayati
- Urita Werdi Rahajeng
- Filipus Yudianto
- Mahalli

Research locations

- East Java
- Jakarta
- West Java
- Yogyakarta



SOLAR-POWERED DESALINATION USING HYBRID REVERSE OSMOSIS FOR FRESH WATER SUPPLY IN REMOTE AREAS

Keyword: Desalination

The objective of this project is to create a pilot membrane filtration system for brackish water desalination using reverse osmosis powered predominantly through solar power.

Indonesian Organisations

- Universitas Diponegoro,
Chemical Engineering
Department

Australian Organisations

- Australian National University,
Fenner School of Environment
and Society

Lead Researcher/s

- Dr James Latimer

Researchers

- Professor H. Hadiyanto

Research locations

- Central Java

INCLUSIVE CLIMATE ADAPTATION: THE ROLES OF WOMEN'S CLIMATE ADVOCACY NETWORK

Keyword: Women's advocacy

This research project will investigate the roles of women's climate advocacy networks and focusing on their perspectives to understand the existing gaps in advocating the issues and how adaptation policies can best support their needs and leverage the existing networks. This study uses a combination of feminist perspectives on the environment, critical analysis of societal structures, and an understanding of the ongoing effects of colonialism to explore the role of gender in discussions about the environment, development, and climate change. It will emphasise the significance of gender by investigating issues like who has access to resources and controls them, how gender shapes our understanding of knowledge, and how gender intersects with environmental and climate-related struggles. The goal is to raise awareness and knowledge about the importance of considering gender in these discussions and to encourage a renewed focus on this crucial aspect

Indonesian Organisations

- Universitas Negeri Semarang, Faculty of Languages and Arts
- Universitas Gadjah Mada, Faculty of Social Science and Political Science
- Mosintuwu Institute
- Sri Institute
- Solidaritas Perempuan Kinasih
- Jaringan Perempuan Indonesia Timur (JPIT)

Australian Organisations

- Australian National University, College of Science
- University of Western Australia, Graduate School of Education

Lead Researcher/s

- Dr. Zulfa Sakhiyya
- Dr. Yulida Pangastuti
- Dr. Rini Astuti
- Prof. Vaille Dawson

Researchers

- Lian Gogali
- Dr. Desintha
- Dwi Asriani
- Sanaul Laily
- Pdt. Dr. Merry Kolimon

Research locations

- Central Sulawesi
- East Nusa Tenggara
- Yogyakarta

TOWARDS FUTURE PROOF SOCIETY: ADAPTIVE SOCIAL PROTECTION AGAINST CLIMATE CHANGE

Keyword: Social protection

This project will identify existing formal and informal social protection systems, including multiple climate financing schemes that can facilitate anticipatory actions to enhance climate resilience, particularly among marginalised groups such as women, children, and other socially excluded communities. Specific potential contributions of the project findings to the wider policy discussions include (1) the understanding and potential development of alternative protection through community-based arrangements; (2) the development of a comprehensive approach for climate protection through social protection and alternative protection, (3) the potential improvements of formal social protection for ASP development, and the (4) a formulation of new social protection programs that can be uptaken by the government.

Indonesian Organisations

- Resilience Development Initiative
- Wira Wacana Christian
University, Faculty of Economics,
Business, and Humanities /
Fakultas Ekonomi, Bisnis, dan
Humaniora
- Indonesia University of Education,
Faculty of Economics and
Business Education / Fakultas
Pendidikan Ekonomi dan Bisnis
- Habitat for Humanity Indonesia
- The Prakarsa Indonesia

Australian Organisations

- Charles Darwin University,
Faculty of Arts and Society

Lead Researcher/s

- Dr. Saut Sagala

Researchers

- Dr. Maklon Killa
- Dr. Ayu Krishna
- Andras Hapsoro
- Dr. Victoria Fanggidae
- Dr. Jonatan Lassa

Research locations

- East Nusa Tenggara

EXPLORING LINKS BETWEEN FOOD SECURITY AND HEALTH TO INFORM POLICY AND SERVICE PRIORITIES FOR COMMUNITIES LIVING IN HIGH FLOOD RISK AREAS OF THE NORTHERN COAST OF CENTRAL JAVA

Keyword: Food security

This project focuses on food insecurity, health and the impacts of climate change and environmental degradation on the livelihoods of vulnerable communities. Through a mixed methods approach, the project will produce evidence of (1) the diet and health status of a coastal community, including population groups at greatest risk of poor outcomes; (2) the key challenges for people in maintaining food security and good health; (3) current adaptive practices to overcome these challenges; and (4) community priorities for multisectoral support. The outcomes will target policy and service initiatives to mitigate the negative impacts of climate change on food security and health.

Indonesian Organisations

- University of Brawijaya, Faculty of Medicine
- Sebelas Maret University, Sekolah Pasca Sarjana (Postgraduate school)
- The Institute for Social Research, Democracy and Social Justice (Percik Institute)
- The Habibie Centre

Australian Organisations

- The George Institute for Global Health

Lead Researcher/s

- Dr Anna Palagyi

Researchers

- Dr Sujarwoto
- Dr Haryani Saptaningtyas
- Mr Hery Wibowo Trisaksono
- Dr Julia Novrita
- Dr Kathy Trieu
- Dr Briar McKenzie
- Dr Arpita Ghosh
- Dr Moh Shadiqur Rahman
- Dr Hery Toiba
- Ms Hesti Retno Budi Arini

Research locations

- Central Java

CONSERVING RIDGE TO REEF: INTEGRATED AND INNOVATIVE APPROACH TO ENABLE SUSTAINABLE FINANCING IN SUPPORTING INCLUSIVE CLIMATE CHANGE PROJECTS IN INDONESIA

Keyword: Ridge to reef framework

This research project aims to develop a comprehensive, innovative, and viable approach that fosters inclusive Ridge to Reef projects aiming to contribute to the sustainability of climate change adaptation, mitigation, and resilience, benefiting Indigenous communities, local populations, and women. The anticipated deliverables and outputs of this research encompass three key aspects. (1) a comprehensive feasibility study and strategy will examine the potential for R2R implementation in Indonesia and its contributions to inclusive climate change projects. (2) a mechanism for effective governance will be developed, addressing the area encompassing upland forests, watersheds, and mangrove forests, while prioritizing gender equality, disability, and social inclusion at national and subnational levels. (3) an approach will be formulated to assist project implementers and the government in attracting funding from various public-private sources at the local, national, or transnational levels, to support inclusive Ridge to Reef climate change projects in Indonesia.

Indonesian Organisations

- World Resources Institute (WRI) Indonesia
- Badan Riset dan Inovasi Nasional (BRIN), Organisasi Riset Tata Kelola Pemerintahan, Ekonomi, dan Kesejahteraan Masyarakat

Australian Organisations

- University of Technology Sydney, Institute for Sustainable Futures
- The University of Queensland, Center for Biodiversity and Conservation Science, School of Earth & Environmental Science

Lead Researcher/s

- Mr. Tomi Haryadi

Researchers

- Prof. Dr. Syarif Hidayat
- Dr. Maxensius Tri Sambodo
- Prof. Juliet Willetts
- Prof. Eve McDonald-Madden

Research locations

- West Papua

DEVELOPING APPLICATIONS OF SATELLITE IMAGERY FOR MODELLING ENVIRONMENTAL AND SOCIAL IMPACTS OF CLIMATE CHANGE ON SEAWEED FARMING IN INDONESIA

Keyword: Seaweed

This project will develop an approach to mapping seaweed production areas using satellite imagery to monitor sea use change. Using mixed methods, this project will (1) develop computer vision and machine-learning tools for analysis of satellite imagery to monitor seaweed production; (2) undertake 'ground-truthing' of production estimates using oceanographic measurements and farm production diaries in three case study locations (in South Sulawesi, East Nusa Tenggara and Maluku); and (3) undertake qualitative social research to explore community perceptions of climate variability and their resilience strategies to identify interventions.

Indonesian Organisations

- Universitas Hasanuddin, Research and Development Centre for Marine, Coastal and Small Island Research
- Jaringan Sumber Daya, PT.
- Universitas Nusa Cendana, Faculty of Animal Husbandry, Maritime Affairs and Fisheries
- Universitas Gadjah Mada, Faculty of Geography
- Politeknik Perikanan Negeri Tual, Fisheries Post-Processing Technology Department

Australian Organisations

- Griffith University, Griffith Asia Institute Agribusiness stream
- The University of Queensland, School of Agriculture and Food Sustainability and School of Information Technology and Electrical Engineering

Lead Researcher/s

- Dr Alexandra (Zannie) Langford

Researchers

- Professor Nurjannah Nurdin
- Radhiyah Ruhon
- Boedi Julianto
- Welem Turupadang
- Dr Pramaditya Wicaksono
- Dr Sanjiwana Arjasakusuma
- Wellem Anselmus Teniwut
- Associate Professor Ammar Abdul Aziz
- Professor Scott Chapman
- Dr Xin Yu

Research locations

- East Nusa Tenggara
- Maluku
- South Sulawesi

DEVELOPING AN INTEGRATED APPROACH TO CLIMATE CHANGE ADAPTATION, FOOD SECURITY AND SOCIAL FORESTRY IN VULNERABLE AND INDIGENOUS COMMUNITIES IN EASTERN INDONESIA

Keyword: Social forestry, climate change adaptation, food security

This project connects social forestry policy, food security and climate adaptation to support social inclusion. The project will focus on areas with high stunting capacities to investigate how social forestry can address critical adaptation/food security issues faced by marginal groups in social forestry areas. The project will use mixed methods to combine climate vulnerability, livelihood, and food security analysis to map the drivers of insecurity. The project will undertake and deliver policy analysis of (1) the drivers of livelihood insecurity, the sources of community resilience, and the impact of existing interventions on community wellbeing in social forestry areas; (2) how social forestry policy responses can support climate change adaptation and food security. The project will enhance the resilience of vulnerable communities and contribute to social inclusion by promoting indigenous empowerment and addressing gender-based discrimination and inequalities that affect access to resources and decision-making power.

Indonesian Organisations

- Universitas Nusa Nipa, Department of Agrotechnology
- University of Indonesia, Department of Anthropology
- Universitas Budi Luhur, Pusat Studi Budaya Luhur Nusantara
- Universitas Gadjah Mada, Fakultas Kehutanan
- Universitas Sumatera Utara, Department Sociology
- NGO Sandy Florata
- Dinas Lingkungan dan Kehutanan NTT
- UPT KPH Kabupaten Sikka
- UPT KPH Kabupaten Flores Timur

Australian Organisations

- Australian National University, Crawford School of Public Policy

Centre for the Public Awareness of Science

Lead Researcher/s

- Prof John McCarthy

Researchers

- Yovita Yasintha Bolly, Msi
- Dr Suraya Affif
- Dr Prudensius Maring
- Dr Rini Astuti
- Prof Ahmad Maryudi
- Dr Henri Sitorus
- Desmiwati
- Aloysius Tao
- Dr Mulia Nurhasan
- Kevin Sandy

Research locations

- East Nusa Tenggara

BUILDING A SUSTAINABLE FUTURE: DEVELOPING NUTRITIOUS AND CLIMATE-RESILIENT CROP VARIETIES

Keyword: Future Crop, drought-resilient rice, healthier rice, multi-omics, gene technology, social science

Climate change is leading to extreme weather events, including more severe droughts, floods and temperature extremes that result in poor crop productivity and grain quality. The aims of our 'seeding stage' KONEKSI-PILOT research project are to: (1) Build capability of Indonesian-Australian researchers for climate-ready agri-tech; (2) Define the effect of climate change, specifically drought, on local Indonesian pigmented rice through high-throughput multi-omics technologies; (3) Establish new plant breeding technologies, including gene editing, for Indonesian pigmented rice; and (4) map the regulatory landscapes and societal attitudes to gene technology in Indonesia. Our project's long-term goal is to develop climate-resilient and nutritious rice varieties which aligned with the research priorities of the Australian and Indonesian governments, particularly in the sectors of food, resources, and health. By providing a set of modules and training, our consortium will enhance the sector-wide capacity and capability of Indonesian and Australian researchers. We will also evaluate the regulatory and societal attitudes towards such innovation in both countries. Furthermore, we will bring together all of the aforementioned elements to create a game-shifting nexus that can deliver rice varieties that are healthier and more resilient to climate change.

Indonesian Organisations

- Universitas Gadjah Mada, Research Center for Biotechnology
- BRIN, Research Organization for Agriculture and Food, Research Center for Food Crops
- International Rice Research Institute (IRRI)

Australian Organisations

- The Australian National University, Research School of Biology, ARC Training Centre for Future Crops Development

Lead Researcher/s

- Prof. Barry Pogson FAA
- Prof. Joan Leach
- Dr. Hendry Susila
- Dr. Rini Astuti

Researchers

- Dr. Yekti Asih Purwestri
- Dr. Aris Hairmansis
- Dr. Ajay Kohli

Research locations

- Yogyakarta, Indonesia
- Canberra, Australia

UNDERSTANDING CLIMATE IMPACT ON THE GRASSROOT COMMUNITIES AND RURAL LIVELIHOOD IN INDONESIA: CATALYSING CHANGES TOWARD ADAPTATION AND RESILIENCE

Keyword: Socio-ecological resilience

This research aims to examine impacts of climate change on communities. Using transdisciplinary approaches, the project will reveal how climate change already impacts grassroots communities and rural livelihood shaped by various social variables including culture, socio-agroecological and political economy dimensions at grassroots levels. It further seeks to (1) identify, facilitate and catalyse adaptation measures and collective actions among at risk communities and (2) to understand how Non-Government Organisations, local governments and universities co-develop adaptation and transformation agenda at the grassroots levels in rural settings. Participatory action research is the primary approach or ways of working of this entire research activity to catalysing changes toward climate resilience policies and actions based on a rich and robust understanding of climate-related risks at the grassroots communities and rural people's livelihoods by considering the diversity of socio-ecological contexts. The research's objective and designed approach will contribute to the agreed Government of Indonesia and Government of Australia's priorities in Climate Change Resilience with sub-themes of future-proofing communities and practice areas focusing on socio-ecology resilience and Gender Equality, Disability, and Social Inclusion perspectives.

Indonesian Organisations

- Universitas Mataram, Faculty of Animal Science
- Institut Teknologi Sepuluh November, Department of Development Studies, Faculty of Creative Design and Digital Business
- Konsorsium untuk Studi dan Pengembangan Partisipasi (KONSEPSI)
- Bengkel APPEK
- Yayasan Pengkajian Pengembangan Sosial (YPPS)

- TRANSFORM
- Lembaga Pengkajian dan Pemberdayaan Masyarakat (LP2M)
- Yayasan Konservasi Way Seputih (YKWS)

Australian Organisations

- Charles Darwin University, Faculty of Arts and Society

Lead Researcher/s

- Dr. Moh. Taquiuddin

Researchers

- Risfa Wulan Ayu Wanjani
- Vinsensius Bureni
- Melky Koli Baran
- Suyono
- Yuni Setyaningsih, S.K.Pm., M.Sc
- Ramadhaniati
- Febrilia Ekawati
- Dr. Jonatan Lassa
- Dr. Kerstin Zanders

Research locations

- East Nusa Tenggara
- Lampung
- West Nusa Tenggara
- West Sumatera

PROTECTING THE MOST VULNERABLE IN RURAL INDONESIA: HOW CAN WE DEVELOP MORE ADAPTIVE SOCIAL PROTECTION?

Keyword: Social protection

This project aims to support the social integration of marginal groups in Adaptive Social Protection. It will focus on the two most vulnerable rural groups, dry-land smallholders and small-scale fishers; and explore policy options for Government of Indonesia to better develop Adaptive Social Protection and align it with local conditions and needs. This multidisciplinary project will integrate qualitative and quantitative approaches, apply livelihood, food security, economic and demographic analyses to map vulnerabilities and evaluate how Adaptive Social Protection can best to build adaptive capacity. It will increase the capacity of Indonesia's emerging Adaptive Social Protection system to assist those most vulnerable and build their adaptive capacity while ensuring that gender equality and social inclusion considerations are central to adaptive social protection planning.

Indonesian Organisations

- SMERU Research Institute
- Indonesian International Islamic University, Faculty of Social Sciences

Australian Organisations

- Australian National University, Crawford School of Public Policy
- University of Western Sydney, School of Social Science

Lead Researcher/s

- Athia Yumna
- Nila Warda

Researchers

- Dr. Sirojuddin Arif
- Prof John McCarthy
- Prof Andrew McWilliam

Research locations

- Nusa Tenggara & Sulawesi

ENABLING CHILDREN AS AGENTS OF CHANGE THROUGH INCLUSIVE EDUGAMES ON CLIMATE CHANGE AND DISASTER RESILIENCE

Keyword: Climate education

This research focuses on climate education and children and young people. The action and inclusive methods are aimed to understand how children and young people learn about climate change by developing education materials through a gamification approach action (edugames) using digital and non-digital media designed to be sustainable, affordable, and easily scaled up. The edugames objectives are to develop learners' abilities and confidence to think critically and creatively about climate change, to communicate risk effectively, to develop personal and social responsibility and become concerned citizens in their surrounding environment, and to appreciate diversity and gender equality.

Indonesian Organisations

- PREDIKT Tangguh Indonesia
- Universitas Nusa Cendana, Faculty of Public Health
- Universitas Multimedia Nusantara, Faculty of Arts and Design
- ChildFund Indonesia
- Indonesian Society for Disaster Management (Masyarakat Penanggulangan Bencana Indonesia – MPBI)

Australian Organisations

- Charles Darwin University, Faculty of Arts and Society
- University of Western Australia, Graduate School of Education
- Harkaway Primary School

Lead Researcher/s

- Dr. Avianto Amri

Researchers

- Yusra Tebe
- Rebeka R. Haning
- Dr. Indra Yohanes Kiling
- Aditya Satyagraha, S.Sn., M.Ds
- Fonita Theresia Yoliando, S.Ds., M.A
- Dr. Rina Suryani Oktari
- Dr Jonatan Lassa
- Hermina Manlea, S. Si, M. Env.Sc
- Jamjam Muzaki
- Leigh Johnson

Research locations

- Nusa Tenggara & Sulawesi

FIRE PLAY: UNDERSTANDING AND DOCUMENTING INDIGENOUS FIRE GOVERNANCE IN INDONESIA

Keyword: Fire management

This research focuses on understanding and documenting decentralised fire governance in Indonesia. Using mixed methods, the project will (1) document Indigenous Dayak fire experience at the climate frontier and (2) Inform policy on the lingering impacts of climate injustices to vulnerable groups. The project will generate multi-media documentation of local fire initiatives, in-depth reports on fire knowledge, an evaluation of fire policies, discourse analysis of fires, a socio-economic baseline survey, a fire-related regulatory and policy database, and community-related materials. The project will foster interdisciplinary approaches to learn and record how Indigenous Dayak in Central Kalimantan navigate climate initiatives that require them to end their fire practices, find new ways of life, and sustain anti-fire initiatives in their villages.

Indonesian Organisations

- Lembaga Penelitian dan Pengembangan Sosial dan Politik, Faculty of Social and Political Sciences, Universitas Indonesia
- Yayasan Puter Indonesia
- Badan Riset dan Inovasi Nasional, Pusat Riset Kewilayahan

- Angela Iban
- Edwin Jurriens
- Jemma Purdey

Research locations

- Central Kalimantan

Australian Organisations

- University of Melbourne, Asia Institute, Faculty of Arts

Lead Researcher/s

- Aryo Danusiri
- S. Paramita B. Utami
- Sofyan Ansori

Researchers

- Andaman Muthadir

CONTESTING LOSS FOR INDONESIAN COMMUNITIES IN CLIMATE-CRISIS (CLICCC)

Keyword: Climate reparations

The project aims to build partnerships between the Indonesian government and vulnerable communities experiencing loss and damages due to climate change and to advance Indonesia's interests in and claims for climate reparations through the Warsaw International Mechanism on Loss and Damage. The objectives of the project includes (1) establish an Indonesia-based consortium to research, evidence and empower climate-vulnerable communities experiencing material and non-material loss and damages to pursue inclusive solutions for adaptation and compensation, (2) develop a community-led, socially-inclusive and gender-sensitive, climate-impact monitoring system, and (3) provide relevant Indonesian government ministries with the political, legal and strategic resources to develop strategic policies on the Loss and Damage that will ensure Indonesian communities are compensated for climate-related loss and damages. The project's multi-disciplinary, multi-institutional research consortium uses a co-learning, cooperative inquiry approach to empower rural and urban communities to produce evidence-based knowledge of loss and damages and design planning for climate reparations.

Indonesian Organisations

- Universitas Gadjah Mada, Institute for International Studies
- Rujak Centre for Urban Studies
- Satya Wacana University, Centre for Sustainable Development Studies
- Universitas Indonesia, Asia Research Centre
- Muhammadiyah University Yogyakarta, International Relations
- Hasanuddin University, Faculty of Public Health

Australian Organisations

- Murdoch University, Indo-Pacific Research Centre (formerly Asia Research Centre)

Lead Researcher/s

- Dr. Jacqui Baker

Researchers

- Assoc. Prof. Agung Wardana
- Dr. Luqman Nul Hakim
- Dr. Sudirman Nasir
- Dr Diatyka Widya Permata Yasih
- Elisa Sutanudjaja
- Dr. Faris Al Fadhat
- Dr. Rebecca Meckelburg
- Dr. Charanpal Bal
- Dr Ian Wilson
- Dr Oliver Fritsch
- Assoc. Professor Carol Warren
- Dr. Inaya Rakhmani

Research locations

- Penjaringan, North Jakarta
- Magelang, Central Java
- Pari Island

HARVESTING HOPE: RENEWABLE ENERGY, CLEAN WATER, AND QUALITY SALT FOR MADURA'S SALTWORK COMMUNITY THROUGH SEAWEED FARMING

Keyword: Desalination, seaweed farming, solar salt production, organic rankine cycle

This project aims to combine seaweed farming with solar salt production to produce blue carbon, commercial-grade seaweeds, renewable (electrical) energy, potable water, and quality solar salts. The research involves the development of a coupled seaweed and solar salt farming system through an organic Rankine cycle system and a seawater reverse osmosis desalination system. The pilot project will produce a prototype ready for commercialisation.

Indonesian Organisations

- University of Trunojoyo, Faculty of Engineering
- Ministry of Marine Affairs, Directorate of Seawater Utilisation and Biopharmacology

Australian Organisations

- University of Newcastle, Global Engagement and Partnerships
- RMIT University, College of Business and Law

Lead Researcher/s

- Professor Caroline Chan

Researchers

- Prof. Booi Kam
- A/Prof. Wahyudi Agustiono
- Mr Nizar Amir
- Dr Zaki Mahassin

Research locations

- Madura

INITIATIVE FOR AN OPEN, INCLUSIVE, AND INTEGRATED CLIMATE CHANGE MODEL FOR INDONESIA

Keyword: Energy transition, open climate model, microsimulation

This research project aims to build an energy transition model to guide the development of more effective and equitable climate policies. Using economic and pioneering open climate modelling in Indonesia, the project will develop a robust and inclusive climate and energy model. The goal of this project is to visualize the decarbonization pathways of Indonesia's economy and how the energy transition may influence various aspects such as macroeconomics, employment, inequality, emissions, and its effects on vulnerable groups including women and people with disability.

Indonesian Organisations

- Universitas Indonesia, Institute for Economic and Social Research, Faculty of Economics and Business Universitas Indonesia (LPEM FEB UI)
- Institute for Essential Reform (IESR)
- The SMERU Research Institute
- Dr. Asep Suryahadi
- Lia Amelia
- Affandi ismail
- Fabby Tumiwa
- Dr. Raden Raditya Yudha Wiranegara
- Pintoko Aji
- Alvin Putra Sisdwingraha

Australian Organisations

- Institute for Climate, Energy and Disaster Solutions, The Australian National University

Lead Researcher/s

- Dr. Alin Halimatussadiah
- Dr. Milda Irhamni

Researchers

- Prof. Frank Jotzo
- Prof. Budy Resosudarmo
- Dr. Yeliz Simsek
- Dr. Jorrit Gosens
- Dr. Dharani Sabba
- Muhammad Yudha Pratama
- Fachry Abdul Razak Afifi

Research locations

- Indonesia and Australia

UNDERSTANDING SOCIAL PARTICIPATION AND INCLUSION IN JURISDICTIONAL APPROACHES TO SUSTAINABLE ENVIRONMENTAL MANAGEMENT

Keyword: Jurisdictional Approach

The objective of this research is to strengthen understanding of how to increase participation and social inclusion in Jurisdictional Approaches to sustainable land and forest management, based on lessons from a selection of sites in Indonesia. The research will use mixed methods to evaluate dynamics of representation and influence within the multistakeholder coordinating forums of jurisdictional initiatives; community and stakeholder consultation on policy and planning processes supported by these initiatives; and patterns of inclusion/exclusion in access to economic opportunities such as price premiums, market access and technical support for more productive and climate smart agro-commodity production facilitated by jurisdictional initiatives. The project will explore the ways in which both the design of Jurisdictional Approaches and broader patterns of social inequality in implementation sites shape, enable and constrain social inclusion within Jurisdictional Approaches. The project will contribute to stronger Gender Equality, Disability, and Social Inclusion frameworks and indicators in Jurisdictional Approaches and wider policy engagement and knowledge regarding their importance.

Indonesian Organisations

- Universitas Gadjah Mada, Faculty of Social and Political Sciences (FISIPOL)

Australian Organisations

- University of Melbourne, Faculty of Arts and the Nossal Institute

Lead Researcher/s

- Associate Professor Rachael Diprose
- Associate Professor Kate Macdonald

Researchers

- Dr Bahruddin

Research locations

- Riau
- West Kalimantan

CORE-STEP: ADVANCING INNOVATIVE KNOWLEDGE-BASED SOLUTIONS FOR INCLUSIVE AND CLIMATE READY PRIMARY HEALTH CARE SYSTEMS

Keyword: Primary health care, PUSKESMAS, climate services, marginalized populations

The CORE-STEP project aims to strengthen primary healthcare's ability to provide gender-inclusive climate services addressing the adverse effects of climate change. We will employ a mixed methods approach to collect data in the selected pilot sites in Indonesia (Banda Aceh, Ambon, and Mataram). Targeted primary healthcare centers in Australia will be involved in exchange visits and knowledge sharing. Primary healthcare professionals collaborate to develop climate services that are informed by a gender analysis, design targeted interventions, and enhance the skills of marginalized groups. Deliverables include a report of the evaluation findings, analysis on context-specific climate services, and dashboard with collated real-time data to manage interventions and climate risks. The project focuses on improving access and quality of inclusive and climate-ready primary health care through strengthening the capacity of primary health workers, involving marginalized groups in planning and decision-making, and fostering cross-sectoral collaboration. It serves as a model for other public health initiatives adapting to climate change.

Indonesian Organisations

- Universitas Syiah Kuala, Graduate Program in Disaster Science; Faculty of Medicine; Tsunami & Disaster Mitigation Research Center/ TDMRC

Australian Organisations

- Griffith University, School of Medicine and Dentistry; Griffith Asia Institute/GAI

Lead Researcher/s

- Dr. Rina Suryani Oktari, PhD
- Dr. Connie Cai Ru Gan, PhD, MPH

Researchers

- Prof. Dr. Taufik Fuadi Abidin, M.Tech

- Assoc. Prof. Dr.dr. M. Yani, M.Kes
- dr. Hendra Kurniawan, M.Sc., Sp.P
- dr. Brury Apriandi Husaini, M.Kes,
- Nasliati, S.Kom
- Prof. Sara Davies, PhD
- Assoc. Prof. Bernadette Sebar, PhD
- Lidewij Margriet Vorage, MPH
- dr. Ina Agustina Isturini, MKM
- Ir. Arif Wibowo, M.Sc
- Mizan Bustanul Arifin Bisri, PhD

Research locations

- Aceh
- Maluku
- West Nusa Tenggara

FORCED LABOUR AND CLIMATE CHANGE: KEEPING A FOCUS ON WOMEN AND CHILDREN

Keyword: Forced labour

This project will focus on Indonesian policy and business responses to forced labour and the impacts on vulnerable women and children, especially those exposed to natural disasters, exacerbated by climate change in the context of responses. The project's method will utilise a child rights framework, alongside an intersectional gender focused framework, and encourage local participation and use a mixed-methods approach. The project will take a particular focus on the risks of rising sea levels to coastal villages, the risk of forced migration that arise from land loss, and the intersection with forced labour. The objectives of the research are, (1) apply a gender and child focused analysis to the current policies and business responses to forced labour and climate change related to coastal villages in Indonesia, (2) map the extent of forced labour amongst women and children, (3) gain a better understanding of the experiences of vulnerable women and children in coastal villages, and (4) reach consensus amongst community leaders, business leaders and policy makers on ways to address forced labour in their communities.

Indonesian Organisations

- Universitas Diponegoro, Department of Urban and Regional Planning
- Badan Riset dan Inovasi Nasional, Research Center for Law –National Research and Innovation Agency

Australian Organisations

- Griffith University, Disrupting Violence Beacon

Lead Researcher/s

- Dr Amy Young
- Prof. Dr.-Ing. Wiwandari Handayani
- Dr Laely Nurhidayah

Researchers

- Professor Patrick O'Leary

- Professor Elena Marchetti
- Professor Sara Davies
- Dr Ana Borges Jelinic
- Associate Professor Jennifer Boddy
- Dr Febi Dwirahmadi
- Professor Donna McAuliffe
- Professor Susan Harris Rimmer
- Dr Landung Esariti
- Intan Hapsari Surya Putri
- Dr Aditya Rahmadhony
- Josefhin Mareta
- Vera Bararah Barid

Research locations

- Central Java
- Jakarta

AGRICULTURAL PRODUCTIVITY, POVERTY, AND THE ENVIRONMENT

Keyword: Agricultural productivity

This research is aimed at answering whether improved agricultural technologies and increased farmer productivity can reduce harmful environmental externalities, such as deforestation, fire, and pollution. Using mixed methods, the project will prepare the long-term research by undertaking interviews, pilot testing, and extensive stakeholder engagement. The outcomes of this project will be a framework for understanding the relationship between agricultural technologies and reduction of environmental harm to promote agricultural productivity.

Indonesian Organisations

- J-PAL Southeast Asia
- Institute for Economic and Social Research (LPEM) Faculty of Economics and Business, The University of Indonesia

Australian Organisations

- Australian National University, Crawford School of Public Policy
- Monash University, Centre for Development Economics and Sustainability

Lead Researcher/s

- Dr. Ryan Edwards

Researchers

- Dr. Alin Halimatussadiah
- Dr. Emilia Tjernstrom

Research locations

- Indonesia

FUTURE PROOFING A BASIC SOCIAL SERVICE: CLIMATE-RESILIENT COMMUNITY-BASED RURAL WATER SUPPLY

Keyword: Water resources

This project aims to improve the climate resilience and inclusiveness of rural water systems and their related water resources. Using mixed-methods, the project will strengthen this basic service and its gender equality, disability and social inclusion-responsiveness, towards future-proofing rural water services in the face of climate change impacts.

Indonesian Organisations

- Universitas Indonesia, Faculty of Engineering
- Universitas Ibn Khaldun Bogor, Centre for Policy Regulation and Governance (CPRG)
- Universitas Gadjah Mada, Faculty of Medicine, Public Health and Nursing

Australian Organisations

- University of Technology Sydney, Institute for Sustainable Futures

Lead Researcher/s

- Professor Juliet Willetts

Researchers

- Dr. Cindy Priadi
- Dr. Mova Al'Afghani
- Dr Daniel

Research locations

- East Nusa Tenggara
- Lampung
- West Java
- West Kalimantan
- Yogyakarta

TIDE EYE – AI/IOT-POWERED AIRBORNE SYSTEM FOR MONITORING WATER LEVEL AND TIDAL FLOODS IN NORTH COAST OF CENTRAL JAVA

Keyword: Sea level, monitoring

The project addresses the need of Pemali-Juana River Basin Office in digitally transforming their monitoring of seawater level and tidal flood risks; thus, improving the livelihood of inhabitants in the north coast of Central Java. The project will develop a complete airborne AI/IoT-powered system, a shareable water level database, and a user dashboard. The outcomes include a cost-effective, fit-for-purpose, scalable solution to digitalise the monitoring and predicting flood risks which will improve the monitoring efficiency and accuracy and reduce the losses caused by floods.

Indonesian Organisations

- Telkom University (Tel-U), Faculty of Electrical Engineering
- Pemali-Juana River Basin Office (BBWS) of Ministry of Public Works and People Housing
- PT. Hilmy Anugerah Consulting Engineer Ltd. (PTHA)

Australian Organisations

- University of Wollongong (UOW), Faculty of Engineering and Information Science (EIS)

Lead Researcher/s

- A/Prof Le Chung Tran

Researchers

- Prof Son Lam Phung
- Prof Hoa Khanh Dam
- Prof Christian Ritz
- Prof Faisal Hai
- A/Prof Montse Ros
- Prof Jiangtao Xi
- Prof Farzad Safaei
- Dr Miftadi Sudjai
- A/Prof Aloysius Adya Pramudita

- Dr Erna Sri Sugesti
- Dr Achmad Ali Muayyadi
- Dr Asep Suhendi
- Dr Harya Muldianto
- Mr Mulyadi Sudjai

Research locations

- East Nusa Tenggara
- Lampung
- West Java
- West Kalimantan
- Yogyakarta



KONEKSI

Knowledge Partnership Platform
Australia - Indonesia

KONEKSI is Australia's flagship program in the Indonesia knowledge and innovation sector that supports better use of knowledge-based solutions for inclusive and sustainable policies and technologies.

Mail

admin@koneksi-kpp.id

Site

www.koneksi-kpp.id