



# Indigenous Landscapes and Resource Management in Taiwan and Southeast Asia

February 25-26, 2023

## **Organizers :**

Science and Technology Innovation Center for Taiwan-Philippines Indigenous Knowledge, Local Knowledge, and Sustainable Studies  
Program for Early Modern Southeast Asia, University of California, Los Angeles  
Department of Anthropology, National Taiwan University

## **Co-Organizers :**

Office of Fellowships for Austronesian Studies

## **Sponsor :**

National Science and Technology Council  
Council of Indigenous People



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# Introduction to the Program for Early Modern Southeast Asia, UCLA

The Program for Early Modern Southeast Asia (PEMSEA), funded by the Luce Southeast Asia Initiative, establishes an international network of multidisciplinary scholars, who will conduct an integrative research program focused on the Early Modern Period (EMP) Southeast Asia (1400-1830 CE). The deep integration will provide a more nuanced understanding of the EMP, with particular emphasis on local and indigenous histories. Dominant interpretations of ecological and social transformations in SEA during the EMP attribute primary causality to European penetration, but recent archaeological and historical investigations provide a more distinct views that take into account local and environmental dynamics, such as the importance of intra-Asian dynamics, climate change, and agency. It is in this manner that we argue that most changes we associate with European activities in the region also had substantial East Asian inputs and were mitigated by climatic variation and human impact on SEA landscapes that we do not yet understand.

A broad view of climatic perturbations and political upheavals in mainland Southeast Asia starting from about 900 to 1900 CE has been proposed by scholars, but fine-grained data from most areas in the region is still largely unavailable. To address this dearth, our program aims to build on previous work to encourage the collection of such data, while at the same time emphasizing a bottom-up view of local responses to ecological change in the periods succeeding the arrival of Europeans in SEA.

The research programs sponsored by the PEMSEA will craft a nuanced and region-wide understanding of environmental and social transformations in the EMP in SEA. This includes broader recognition of the impacts of trade in widespread ecological change; the effects of trade on demographic change; and, the consequences of trade upon the rapid urbanization of colonial centers in the region. More importantly, the multidisciplinary nature of the research program promises to generate new methodologies that can help isolate natural and anthropogenic changes in the EMP. The proposed investigations will also provide baseline environmental histories from different localities in SEA using multidisciplinary approaches that will facilitate capacity building in the region, and help train the next generation of multidisciplinary SEA scholars. Finally, this research program promises to bring SEA to ongoing global discussions on environmental change during the Early Modern Period more generally.

# Introduction to the Department of Anthropology, National Taiwan University

The Department of Anthropology at the National Taiwan University, established in the 1940s, is the first anthropology teaching and research institution in Taiwan. The current faculty members are mainly socio-cultural anthropologists and archaeologists, conducting fieldwork around the world, including Taiwan, Japan, China, Indonesia, Palau, Croatia, and Greece. The department also publishes one of the most important anthropological journals in Taiwan, the *Journal of Archaeology and Anthropology*, biannually. For teaching, the department has offered courses encompassing the four subdisciplines of anthropology: socio-cultural anthropology, archaeology, physical anthropology, and linguistics. Furthermore, the faculty members work closely with other disciplines, such as geology, history, geography, in both research and teaching.

The department also houses one of the most important museums in Taiwan, the Anthropology Museum. The collection consists of ethnological and archaeological artifacts curated from various Taiwanese indigenous societies and important archaeological sites, beginning from the Japanese colonial period until the 1990s. Not only does the museum provide research resources, it also collaborates closely with indigenous groups to create ways to revitalize traditional cultural practices through museum collection.

The Anthropology department actively engages in promoting anthropological knowledge to the general public through various outreach programs. The faculty members, at the same time, participate in different social debates, policy developments, and community work. These thus reflect the department's long-term commitment to promoting social justice through anthropological research and teaching.

# Introduction to the Center for Taiwan-Philippines Indigenous Knowledge Local Knowledge and Sustainable Studies

In 2008, the National Chengchi University (NCCU) signed an MOU with the University of California, Los Angeles (UCLA), then signed an exchange agreement between the two universities in 2013. On the basis of this university-level cooperation, the Department of Ethnology, NCCU also signed an MOU with the Department of Anthropology at UCLA. Since 2015, with the support of the National Science and Technology Council in Taiwan, the two departments have worked together in Ifugao, Philippines on field courses.

In response to Taiwan's New Southbound Policy and the long-term research outputs of Southeast Asian Studies, NCCU founded the Center for Southeast Asian Studies (CSEAS) in 2016. In 2017, the Department of Ethnology at NCCU, in collaboration with CSEAS, invited scholars from UCLA, the National University of the Philippines, as well as NGOs of Ifugao and Taiwanese Indigenous communities, to the workshop held in Taiwan on “Academic Research and Community Participation”.

Based on past academic exchanges and collaborations, at the end of 2018, NCCU started implementing the project of "Science and Technology Innovation Center for Taiwan-Philippines Indigenous Knowledge, Local Knowledge and Sustainable Studies (CTPILS)" with the support of the National Science and Technology Council in Taiwan, and founded the CTPILS office at the Lamut Campus of Ifugao State University (IFSU) in the Philippines in July 2019.

CTPILS is jointly operated by NCCU, IFSU and the Save Ifugao Rice Terrace Movement Organization (SITMo). It is also supported by international partners such as the Department of Anthropology at UCLA and the Center for Southeast Asian Studies at the University of Hawai'i at Mānoa (UHM). The establishment of CPTILS also fostered the MOUs signed between NCCU and IFSU, as well as NCCU and UHM.

CTPILS intends to conduct cross-national indigenous knowledge and local knowledge comparative research through exchanges and collaborations between multinational

organizations and looks forward to making the center a platform for engaging more international organizations to achieve the goal of sustainable development.

# Introduction to the Indigenous Landscapes and Resource Management in Taiwan and Southeast Asia Workshop

Taiwan and Southeast Asia are inextricably linked by historical, cultural, and geographic processes that stretch over centuries into the present. Indigenous perspectives throughout Taiwan and Southeast Asia have been marginalized but have now taken the forefront in discussions on climate change and redress. By bringing together the voices of Indigenous peoples and scholars from many disciplines, the workshops aim to bridge contemporary political and academic boundaries to elicit and examine a more nuanced view of Taiwan and Southeast Asia that centers Indigenous perspectives of land and landscapes.

Indigenous peoples in Taiwan and Southeast Asia have innovatively responded to often-dramatic political, social, and environmental changes for centuries. We view these responses in terms of general ecological adaptations and frame our explanations of these transitions through a comparative perspective that emphasizes the unique advantages of a diverse academic and community networks. This workshop examines methodological and theoretical issues relevant to Southeast Asia and Taiwan from: uses of ethnographic analogy and historical records as data sources; applications of anthropological notions of ethnicity, culture change, historical ecology, and political economy to environmental changes; to collaborations with Indigenous and local populations.

# Agenda

Saturday 25 February 2023		
Time	Item	Presenter, Moderator, Discussant
8:30-9:00	<b>Check-In</b>	
9:00-9:05	Opening Remarks	Dr. Shu-Heng Chen / Vice President and Principal Investigator / CTPILS, National Chengchi University
9:05-9:10		Dr. Deng Wen-Ling / Director / Science and Technology Division, TECO in Hanoi, Vietnam (Online)
9:10-9:15		Dr. Stephen Acabado / Director / Program for Early Modern Southeast Asia, University of California, Los Angeles
9:15-9:20	Conference Objectives	Dr. Da-Wei Kuan / Executive Director / CTPILS, National Chengchi University
9:20-9:25	MOU Remarks	Dr. Raul G. Bradecina / SUC President III / Partido State University
9:25-9:40	MOU Signing	Partido State University and CTPILS, NCCU
9:40-10:20	Keynote Speech	Speaker: Marlon Martin / Chief Operating Officer / Save the Ifugao Terraces Movement
10:20-10:30	<b>Break Time</b>	
10:30-10:50	Panel 1: Indigenous Perspectives in Landscapes and History	Presenter: Karminn C. D. Daytec Yañgot / PhD Fellow / University of the Philippines, Baguio
10:50-11:10		Presenter: Dr. Augusto B. Gatmaytan / Associate Professor / Ateneo de Davao University
11:10-11:30		Presenter: Dr. Joy C. Capistrano / College President / Agusan del Sur State College of Agriculture and Technology
11:30-11:50	Panel 1 Discussion	Moderator: Dr. Clement Camposano / Chancellor / University of the Philippines, Visayas
11:50-12:50	<b>Lunch</b>	
12:50-13:10	Panel 2: Taiwan and Southeast Asia Climatic Patterns in the Last Millennium	Presenter: Dr. Paul Barber / Professor / Department of Ecology and Evolutionary Biology, University of California, Los Angeles (Online)
13:10-13:30		Presenter: Dr. Michael Griffiths / Professor / Department of Environmental Science, William Paterson University
13:30-13:50		Presenter: Dr. Liang-Chi Wang / Associate Professor / Department of Earth and Environment Sciences, National Chung Cheng University
13:50-14:10	Panel 2 Discussion	Moderator: Dr. Chih-hua Chiang / Associate Professor / Department of Anthropology, National Taiwan University



14:10-14:20	<b>Break Time</b>	
14:20-14:40	Panel 3: Indigenous Ecological Knowledge and Landscape Management in Taiwan and Southeast Asia	Presenter: Dr. Krispin Fernandes / Advisor to the Infrastructure Fund / Timor Leste (Online)
14:40-15:00		Presenter: Dr. Nicholas Gani / Faculty / Social Sciences and Humanities, Universiti Malaysia Sarawak
15:00-15:20		Presenter: Dr. Chieh-fu Jeff Cheng / Postdoctoral Fellow / Research Institute for the Humanities and Social Sciences, National Taiwan University
15:20-15:40		Presenter: Dr. Adrian Albano / Assistant Professor III and Campus Executive Director / Ifugao State University, Tinoc Campus
15:40-16:00		Presenter: Yi-Chin Wu / Doctoral Researcher / Institute of Development Studies
16:00-16:20	Panel 3 Discussion	Moderator: Dr. Raymundo Rovillos / Professor / Department of History and Philosophy, College of Social Sciences, University of the Philippines, Baguio
16:20-16:30	<b>Break Time</b>	
16:30-18:00	Discussion: CHED-UCLA Collaboration	<p>Discussants:</p> <p>Dr. Ronald Adamat / Commissioner / Commission on Higher Education</p> <p>Dr. Aldrin Darilag / Commissioner / Commission on Higher Education</p> <p>Atty. Septon de la Cruz / Regional Director / Commission on Higher Education, Regional Office 5</p> <p>Dr. Rody P. Garcia / Regional Director / Commission on Higher Education, Regional Office 9</p> <p>Dr. Nelia A. Alibin / Regional Director / Commission on Higher Education, Regional Office 12</p> <p>Ms. Cinderella Jaro / Executive Director / Commission on Higher Education, Regional Office 5</p> <p>Ms. Rachel Casimero / Chief Education Program Specialist / Commission on Higher Education, Regional Office 5</p>
<b>Day 1 Ends</b>		

Sunday 26 February 2023		
Time	Item	Presenter, Moderator, Discussant
8:30-9:00	<b>Check In</b>	
9:00-9:05	Opening Remarks	Dr. Chih-hua Chiang / Associate Professor / Department of Anthropology, National Taiwan University
9:05-9:10		Dr. Da-Wei Kuan / Executive Director / CTPILS, National Chengchi University
9:10-9:30	Panel 4: Partido State University Research Output: Mt. Isarog: History, Communities, and the Environment	Presenter: Robin Meyer-Lorey / Graduate Student / Department of Anthropology, University of California, Los Angeles
9:30-9:50		Presenter: Dr. Danilo M. Gerona / Associate Professor V / Partido State University
9:50-10:10		Presenter: Dr. Cristina Lim / Associate Professor IV and Campus Dean / Partido State University, Sagñay
10:10-10:30		Presenter: Dr. Patricia M. Candelaria / Associate Professor IV and Vice President for Research, Extension and External Affairs / Partido State University
10:30-10:50		Presenter: Ms. Leih Anne R. Odoño / Board Secretary V and Director of International Affairs / Partido State University
10:50-11:10		Presenter: Karen Artiaga / Instructor I and Director of Museo de Isarog / Partido State University
11:10-11:30	Panel 4 Discussion	Moderator: Dr. Raul G. Bradecina / SUC President III / Partido State University
11:30-12:30	<b>Lunch</b>	
12:30-14:30	Roundtable: Conversation with Education Practitioners and Administrators	<p>Discussants:</p> <p>Dr. Ronald Adamat / Commissioner / Commission on Higher Education</p> <p>Dr. Aldrin Darilag / Commissioner / Commission on Higher Education</p> <p>Atty. Septon de la Cruz / Regional Director / Commission on Higher Education, Regional Office 5</p> <p>Dr. Rody P. Garcia / Regional Director / Commission on Higher Education, Regional Office 9</p> <p>Dr. Nelia A. Alibin / Regional Director / Commission on Higher Education, Regional Office 12</p>

		<p>Dr. Ma. Carla A. Ochotorena / University President / Western Mindanao State University</p> <p>Usman D. Aragasi / Chancellor / Mindanao State University, General Santos</p> <p>Chen-Ping Yang / Director of the Department of Culture and Education / Council of Indigenous People, Taiwan</p> <p>Dr. Nga-Ping Ong / Associate Professor and Former Chairperson / Department of Ethnology, National Chengchi University</p> <p>Dr. Yi-Shiuan (Yayut) Chen / Assistant Professor / Master’s Program of Land Policy and Environmental Planning for Indigenous People, National Chengchi University</p>
14:30-14:40	Break Time	
14:40-15:40	General Discussion	Moderator: Dr. Da-Wei Kuan / Executive Director / CTPILS, National Chengchi University
15:40-16:00	Group Photo	
Day 2 Ends		

➤ Note:

1. Allocated time for the keynote speech is 40 minutes.
2. The total time allotted to each presenter is 20 minutes.
3. Allocated time for panel discussion is 20 minutes.
4. Allocated time for the CHED-UCLA discussion is 90 minutes.
5. Allocated time for the roundtable is 120 minutes.
6. Allocated time for the general discussion is 60 minutes.

## Panel I: Indigenous Perspectives in Landscapes and History

Renewed interest in Indigenous histories and landscape management systems has increased in the last decade. This is partly due to the realization that local histories and Indigenous subsistence systems could help facilitate addressing climate change issues and disaster mitigation. More importantly, however, this interest provides a space for local empowerment, multidisciplinary, and pan-national collaborations. In this panel, we bring together environmental historians and ecologists to discuss the intersections between natural and anthropogenic environmental changes in the past 500 years. Panelists discuss descriptions from documentary sources that chronicle Indigenous and/or local practices that could have contributed to environmental perturbations. The panel will also put forward colonial and state policies that contribute to marginalization of local ecological practices.

Moderator:

**Dr. Clement Camposano**

Chancellor, University of the Philippines, Visayas

# Dispossession of Management by Management of Dispossession:

## *Indigenous-State Land Tenurial Systems in the Philippines*

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***Karminn C.D. Daytec Yañgot***

PhD Fellow, University of the Philippines, Baguio

### **Abstract**

The Philippine Indigenous Peoples' Rights Act (IPRA) of 1997 is appreciated as a progressive landmark law in Asia that recognizes the interlaced bundles of rights of Indigenous peoples to ancestral domains, self-governance and empowerment, social justice and human rights, and cultural integrity. Though its passage was driven by national and global Indigenous movements, the law and land policies implemented in relation to it have been weaponized and officially interpreted in ways destructive to Indigenous communities. This destruction is most glaring in cases of intertwined development aggression on and resource extraction from Indigenous territories.

Philippine state policies on land ownership run counter to Indigenous worldviews and to a large extent, knowledge systems and practices that emanate from communal relationships with the land. Using jurisprudence or cases decided by the Philippine Supreme Court, this paper looks into how official interpretations of laws (re)configure Indigenous lifeways and execute what Tania Li calls the 'management of dispossession.' Li (2010) argues that the legal recognition of Indigenous collective land rights comes with strings attached. It levies a collective land tenure system on diverse peoples, disregarding the plurality of ownership regimes already established by communities. While state recognition of Indigenous rights is a welcome development, the recognition and the forms in which it is expressed need to be interrogated further. This paper presents contesting (alter)native concepts of land ownership, and contends that celebrated Philippine state policies on Indigenous territories are, in effect, cauterized articulations of colonial de-centering of Indigenous agency in land and resource management.



# Ancestral Domains as Contested Landscape: The Case of the Banwaon of Agusan del Sur, southern Philippines

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***Augusto B. Gatmaytan***

Associate Professor, Ateneo de Davao University

## **Abstract**

This paper explores the ecology of political formations among the Banwaon, an indigenous group with ancestral territories in Agusan del Sur province, on Mindanao island, southern Philippines. The Banwaon are historically an uncentralized polity, with autonomous descent-groups represented by *datu* or headmen, each of which groups have their own sector or landholding within the larger Banwaon territory. During the logging-boom of the 1960s and 1970s, however, the timber industry's need to simplify relations with the Banwaon led to the emergence of a '*supreme datu*' or 'supreme headman'. During the intensification of the state-building project and its associated counter-insurgency program from the 2000s onward, the Philippine military recruited the '*supreme datu*' and turned him into a feared paramilitary leader. The state used him as a central political figure who represents all the Banwaon people, and as a 'head claimant' in the titling of Banwaon territory under the Indigenous Peoples Rights Act. This marginalizes the *datu*s and the groups they represent, and threatens their control over their sectors. The paper thus draws attention to the ecological implications of political centralization: It is historically linked to the logging industry, the consequent narrowing of the economic horizon of the Banwaon, the emergence of 'paramilitary elites', and the erosion of the descent-groups' control of, and ecological care for their sectors. Understanding 'landscape' should thus properly include how competing (indigenous) actors alternatively frame authority and control over land and resources in the context of the state-building and counter-insurgency. The paper argues further that political centralization marginalizes the local ecological practices of the various descent-groups, now made dependent on the interests of the '*supreme datu*'. Solidarity work with the Banwaon thus calls for respect for the autonomy of descent-groups, recognition of sectoral landholding and the divided character of Banwaon territory qua landscape, and inclusive dialogues with the descent-groups over economic projects that allow them to deploy their ecological knowledge in a positive manner.

# THE GIANT SWAMP TARO FOR INDIGENOUS PEOPLES'

## PERSPECTIVE

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***Manuel T. Tabada Jr.<sup>1</sup>, Stephen Jhon DLC. Gonzales<sup>1</sup>, Vivian E. Peligro<sup>1</sup>,  
Jenelyn P. Bulawan<sup>1</sup>, Joy C. Capistrano<sup>1\*</sup>***

<sup>1</sup>Agusan del Sur State College of Agriculture and Technology

\*Presenter

### **Abstract**

The Giant Swamp Taro (GST), with scientific name *Cyrtosperma merkusii*, is the largest of the taro family. Its main physical distinction among other aroid types is basically its height that reached up to 5 meters and leaf blades of 1 m wide. Growing this crop requires less maintenance and does not require frequent monitoring. It does not need any fertilizer to grow because natural nutrients coming from the ground were the ones consumed by the crop to develop. It grows on moisty to swampy areas on high islands, and adapts to slightly salty waters in atolls. And since Agusan del Sur has large swampy areas, GST is very abundant. Even with only 80% of the provincial area surveyed, there are more than 30 hectares of GST lumps found. Although the edible, fiber-rich component, and high on starch and carbohydrate GST corm, it is only considered a minor crop in the province. However, the corm is an important starchy staple for several native populations of the province. Some small IP community meetings and gatherings serve GST corms in the form of homemade Filipino delicacies known as “kakanin”. Their conventional method of processing giant swamp taro corms is through boiling or chipping. The corm is usually hard boiled; either mixed with several ingredients served per chunk or its milk is extracted and used to make “suman”, “puto”, and “balisongsong”. With the inventoried weight of the GST corms in the province that ranges from 5 – 25 kg, a single corm can be useful to IP families since food security is a major concern in many regions in underdeveloped and developing countries like the Philippines. Apart from its customary culinary importance, it bears cultural significance to the indigenous population, in which it sometimes serves as their substitute staple food for rice and corn.

## Panel II: Taiwan and Southeast Asia Climatic Patterns in the Last Millennium

It has been established that there were major climatic fluctuations between 1400 and 1820 CE, particularly the Little Ice Age and the preceding Medieval Warm Period. In other parts of the world, studies on LIA and its effect on human behavior have been robust, but mostly top-down, emphasizing the role of climate in the patterns of cultural change observed in the archaeological record. Similarly in Southeast Asia, not only is there a very limited investigation on the relationship between climate change and shifts in cultural patterns, almost all studies favor environmental pressures over the suite of human responses. In this panel, we hope to survey what is currently known in terms of climatic fluctuations in the region during the EMP. We aim to highlight that environmental factors play a significant role in human decision-making, but there is limited knowledge on climatic fluctuations in the region during the EMP. Most archaeological studies use environmental proxies to support a model or an argument rather than as a baseline to develop models. We think that this is a consequence of the limited interactions between paleoclimatologists, archaeologists, and historians. Hence, this panel provides a framework on how environmental scientists, historians, and archaeologists can work with each other. The panel will focus on what is known about Southeast Asian climatic patterns in the EMP and potential effects on human options. The panel also discusses how we study paleoclimates and explains the idea of proxies (dendrochronology, pollen, speleothems, and others (e.g. marine sediments)). Panel members will also provide an overview of what we already know as well as things that we do not know and want to know.

### Moderator

#### **Dr. Chih-hua Chiang**

Associate Professor, Department of Anthropology, National Taiwan University

## Using historical climate and oceanography to infer future challenges to the Coral Triangle

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***Paul Barber***

Professor, Department of Ecology and Evolutionary Biology, University of California, Los Angeles

### **Abstract**

The Coral Triangle is the world's most biologically diverse marine ecosystem, supporting the nutritional and economic needs of 100s of millions of people. Although these valuable ecosystems are threatened from both local processes such as destructive fishing practices and pollution, they also contend with global processes such as climate change and ocean acidification. While these contemporary processes are important to consider in the sustainability of these valuable ecosystems, changes in global ocean circulation patterns associated with climate change could have equally profound impacts on the future of the Coral Triangle and the populations that it supports.

# Uncovering the Past, Bracing for the Future: Paleoclimate in Southeast Asia and Impending Impacts

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***Michael Griffiths***

Professor, Department of Environmental Science, William Paterson University

## **Abstract**

Southeast Asia is a region that is highly vulnerable to the impacts of climate change, with projections indicating increased frequency and intensity of extreme weather events (e.g., typhoons), sea level rise, and changing precipitation patterns. Current trends from instrumental observations show that southeast Asia has witnessed rapid increases in temperature, ocean heat content, and hydroclimate, impacting sea level, ocean circulation, and freshwater availability. The future impacts of these changes are expected to be profound, with sectors such as agriculture, tourism, infrastructure, and fisheries likely to be amongst the hardest hit. Yet, there is much uncertainty as to the natural versus anthropogenic fingerprints of these changes due to the short observational record and uncertainties in climate models. To this end, here I will review the current state of knowledge regarding the natural climate variability across southeast Asia over the last few thousand years using a network of climate archives (or “proxies”). Further, I will explore how this information can be used in conjunction with climate model simulations to delineate the forcing mechanisms, test hypotheses, and project the future impacts in southeast Asia under a warming world. Finally, I will emphasize the need for more longer-term paleoclimate records from the region to help assess climate model skill and in turn enhance disaster management in Taiwan and the Philippines, which is critical for policymakers and stakeholders as they work to develop effective strategies for mitigating and adapting to the impacts of climate change.



## Climate changes over the past millennium in Taiwan: A view from the sediment records

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***Liang-Chi Wang***

Associate Professor, Department of Earth and Environment Sciences, National Chung Cheng University

### **Abstract**

Lake sediments, or wetland peats, are natural achievements for reconstructing the past environment. Based on the results of Pb-210, Cs-137, and C-14, a reliable age-depth model of the sediment profile can be built. The multi-proxy methods for sediments, including pollen, diatom, and geochemistry of organic matter, are commonly used for the interpretation of climate changes or/and human activities. The percentages of fern spores and *Tsuga* pollen from twelve sediment cores in northeastern Taiwan were used as indicators for rainfall and temperature in the past 1000 years. The results revealed the fluctuations in temperature over time matched well with the global climate events, including warmer Medieval Warm Period (MWP), cooler Little Ice Age (LIA), and recent warming. The precipitation has a complex pattern and indicates the intense rainfall in northeastern Taiwan in LIA. The multiproxy data in two remote lakes, two lowland lakes, and one marine sediment suggest the typhoon intensity increased in eastern Taiwan during early LIA and northeastern Taiwan during late LIA. The asymmetric pattern of typhoon intensity during the last 1000 years is interpreted to reflect the control exerted by anomalies in both global temperature and the El Nino-Southern Oscillation intensity on typhoon tracks over several centuries.

## Panel III: Indigenous Ecological Knowledge and Landscape Management in Taiwan and Southeast Asia

Studies of Indigenous and local ecological knowledge systems started in the 1950s with the emergence of ethno-ecological approaches. Such approaches attempt to understand how a culture categorizes their world and explain the logic reflected behind these categorizations. As such, ethno-ecological investigations argued that such Indigenous and local knowledge systems are place-based, contextualized in livelihood practice, and integrated with the cosmological/social complex. In the 1990s, such localized ecological knowledge rose into prominence because of the need to establish alternative/sustainable development strategies. At this juncture, scholars and to some degree, policy makers, have realized the value of such knowledge systems in enriching the human-environment philosophies and in improving land management regimes. This panel aims to encourage such research programs through cross-disciplinary analysis of the studies that focus on Indigenous ecological knowledge, local ecological knowledge, and landscape management in Taiwan and Southeast Asia. Panelists will share their experiences in how they: 1) approach the logic of landscape management in Indigenous ecological and local ecological knowledge; 2) examine current land management regimes that influence Indigenous and local communities; and, 3) rethink the possible contributions indigenous and local ecological knowledge in improving current regimes. The panel also aims to facilitate networking among scholars and provide stronger opportunities to support community involvement in research and policy development.

### Moderator

#### **Dr. Raymundo Rovillos**

Professor, Department of History and Philosophy, College of Social Sciences, University of the Philippines, Baguio, University of the Philippines, Baguio

# Uncovering the Past, Bracing for the Future: Paleoclimate in Southeast Asia and Impending Impacts

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***Krispin Fernandes***

Advisor to the Infrastructure Fund, Timor Leste

## **Abstract**

Infrastructure development is a priority work that Government of Timor – Leste has to focus on in order to create a desirable pre-condition for the development of other sectors (economic and social) that allow the country to achieve the dream of becoming upper middle income country by 2030. However, the sustainability and quality of the project with value for the money are still a main concern for various line ministries as the implementing agencies on one hand and executing agency such as funding agency on the other.

Environmental protection is one aspect of sustainability that need to be considered at the initial stage of the project development in order to asses the negative impacts and method of mitigations prior to the commencement of the project. It is believed that when the impacts are assessed and anticipated with the plan of mitigation, it will lead to a cost saving in the long-run. The regulation of Environmental Impact Assessment (EIA) and licensing in Timor – Leste just started in 2011 and make it a mandatory for every major development to have proper environmental permit prior to the start of the project. During this past ten years practice in the implementation of environmental safeguard principle, various progress have achieved but many lessons learned need to be summarized and followed up with the necessary improvement in the future.

This paper analyzed the progress of infrastructure project that implemented under the implementation of the Timor – Leste strategic plan, in correlation with the environmental safeguard policy to enhance the sustainability of the constructed infrastructure that shall sustain throughout for the design life of the project. Around 2000 infrastructure projects have been considered by the government between 2011 and 2021. The data analysis shows that 50% of the total public investment project did not carry out the environmental impact assessment (EIA) as part of the planning process during project preparation stage. The remaining 50% of the investment project has a sound environmental impact assessment during the preparation of the project planning. The similar figure was prepared for mega project executed by the various private sectors in Timor – Leste between 2010 and 2022. It was concluded that there is a high

probability that the private sector would comply the environmental policy and regulation in the country, as more than 60% of the private projects conducted environmental impact assessment as part of the project preparatory work.

The effectiveness of the implementation of the environmental safeguard policy however, should be the next main concern in order to know the project sustainability in the long-run. Therefore, the task to be done is for the government procure an independent expert agency to conduct the post evaluation of the implementation of environmental management plan (EMP) document for various projects that have already been constructed and currently under the operation and maintenance stages. Moreover, the institutional capacity building, especially an independent entity to overseeing the implementation of the environmental safeguard policy must be strengthen. By doing so, it would be possible to proof (provide an evidence) that having the environmental impact assessment as part of due diligence work in the initial stage of infrastructure project development is a better practice that must be adopted in order to ensure the overall sustainability of the project.

# Contestations of megaliths in the Upper Baram of Sarawak, Malaysian Borneo

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*Nicholas Gani*

Faculty, Social Sciences and Humanities, Universiti Malaysia Sarawa

## **Abstract**

This paper examines the contestations surrounding the history and ownership of the megalithic monuments in the Punang Kelapang region of the Upper Baram in Sarawak, Malaysian Borneo. Unlike the megaliths in the neighbouring Kelabit Highlands, which have been the subject of various studies since the late 1940s, the megaliths in Punang Kelapang are relatively unknown and understudied in terms of its archaeological and historical significance. The results of a recent survey conducted in 2016 have shed light on the typology and distribution of the megaliths. However, due to the present lack of archaeological research and the complicated population history and past movements of peoples, the origins and affiliations of the megalithic remains in the area remain unclear. In the past, the megaliths in Punang Kelapang were commonly attributed to a group of people called the Ngurek. More recently, however, the local Kelabit and the Sa'ban communities have increasingly been exerting their own claims to the stone monuments. Through an analysis of local narratives as well as past and present interactions with and perceptions of the megalithic monuments, this paper explores the ways in which these megaliths, as symbols of cultural heritage and markers of territory, have become sites of conflict and negotiation in the face of rapid development and shifting social and political dynamics. In particular, I argue that the reimagining of the megaliths' origin, as a renegotiation of place and history, is tied to local contestations over ownership and control of land, which in the Upper Baram has become an increasingly limited resource due to pressures from development, growing population, and competition between different local communities. The findings highlight the need for a better understanding of the cultural significance of the megaliths and the interplay between local understandings of cultural heritage, history and land, and the preservation and management of the megalithic monuments.



## Bunun visual network in the mountains of the Lakulaku River

### Basin, eastern Taiwan

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***Chieh-fu Jeff Cheng***

Postdoctoral Fellow, Research Institute for the Humanities and Social Sciences,  
National Taiwan University

#### **Abstract**

Many indigenous groups in Taiwan originally inhabited — wholly or partly — remote mountainous regions. Beginning in the 1930s, because of colonial policy, all mountain settlements were relocated to lower areas so that they could be more easily monitored by the authorities. Modern-day indigenous communities rarely have the chance to visit their ancestors' lands; decades on, their wilderness skills and knowledge are eroding. Some communities do not even know the location of their former settlements. Since 2014, I have been collaborating with Bunun group, conducting archaeological surveys in their traditional territory in the Lakulaku River Basin. In this research, I introduce how I incorporated data from pre-1935 Japanese maps and digital elevation model (DEM) generated airborne LiDAR, help identifying the settlements that were unfamiliar to the descendant communities. Also, I discuss how the distribution of settlements in the landscape represented relations among Bunun tribes in the Lakulaku River Basin.

## Knowledgeable but powerless indigenous land owners: Landscape (mis)management in Western Ifugao, Philippines

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***Adrian L. Albano***

Assistant Professor III and Campus Executive Director, Ifugao State University,  
Tinoc Campus

### **Abstract**

The Kalanguya Indigenous Peoples (IPs) of Western Ifugao, are CADT (Certificate of Ancestral Domain Title) holders of the land area following the territory of the Municipality of Tinoc, Ifugao. The Kalanguya IPs, linguistically and culturally similar to the Ikalahan IPs in Nueva Vizcaya, were also known to have sustainable resource management practices, just like their neighboring Tuwali Indigenous Peoples in Central Ifugao. The current landscape within their Kalanguya Ancestral Domain in Municipality of Tinoc, however, shows large-scale land clearings and patches of vegetable gardens more recently converted from traditional land-uses such as rice terraces, swidden farms and natural forests. This trend is largely attributed to the boom in temperate vegetable production triggered by the construction of farm-to-market roads to these high-altitude and once-highly isolated mountains. There were many times that these land conversions and deforestation have caught national attention. As a result, there have been local pressure to stop or at least minimize forest clearances and the mismanagement of natural resources. In fact, many Kalanguya within the Ancestral Domain are aware and knowledgeable of the negative consequences of the ongoing forest clearings and vegetable garden expansion. However, the fact that forest clearings and clearly unsustainable agricultural practices continue reveal a current land management regime or regimes where everyone can clearly see the resource mismanagement happening but everyone seems powerless to stop it. The national government agencies (DENR, DA) pass the responsibility to their field offices and the local governments. Local government legislative bodies and executives are hesitant to strictly regulate land and forest conversion due to fear of it affecting their political reputation and their chance for re-election. On the ground, the Kalanguya Indigenous Peoples are left seemingly powerless in resolving their community sustainability issues as most of them have benefited or are benefiting from the local vegetable industry. No matter how very challenging, there needs a concerted effort among various stakeholders involved – from the national agencies (DENR, DA) down to the Local Government Units (LGUs) and the Indigenous Peoples Organizations (IPOs) – to strictly implement

regulations and at least slow down deforestation in the remaining montane forests in Western Ifugao, Philippines.

# Land is Life? – Negotiation of Sustainable Development of the Indigenous People in the Case of the Alimit Dam

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*Yi-Chin Wu*

Doctoral Researcher, Institute of Development Studies

## **Abstract**

Since the 1990s, to challenge the dominant development agenda that is in many cases destructive to the environment and local community, scholars and indigenous activists have been emphasising indigenous knowledge which is based on a more harmonious human-environment relationship as a sustainable approach of development and land management. Despite the political power it consolidates against the dominant development paradigm, the discourse in indigenous movement presents a somehow homogeneous image of the indigenous people in visioning development and essentialises the meaning of land as the source of culture, identity and livelihood of indigenous peoples. In this study on the Alimit Dam project in the Ifugao Province of the Philippines in which a ‘conditional yes’ was proposed by the Indigenous Peoples Organisations (IPOs) during the consultation process, I attempt to problematise this narrative of ‘land is life’. Through discussing the strategies of the people in responding to the proposed dam project, this article aims to demonstrate the contested understanding of sustainable development and value of land among the people in the process of modernisation under which the material conditions are transforming. This study shows that the understandings among the people are constantly negotiated and largely shaped by the interplay of social relations, state power, and materiality. I argue that, to enable sustainable development for the indigenous people that could meet both their current demands and the needs for the future generations, these negotiation and interplay of power relations need to be understood and addressed in indigenous discourse to facilitate an inclusive space among the indigenous society.

## Panel IV: Partido State University Research Output: Mt. Isarog: History, Communities, and the Environment

A successful and continuing research on community resource and disaster management is the collaboration between the Partido State University (Goa, Camarines Sur, Philippines) and UCLA. This panel highlights the research produced by this partnership through presentations that look at the ecology and environment of Mt. Isarog. The panel aims to encourage such research programs and collaborations that exemplify cross-disciplinary analysis of the studies that focus on local ecological knowledge and landscape management in the Partido District of Camarines Sur. Panelists will share their experiences on how they: 1) approach the logic of landscape management in the region; 2) examine current land management regimes that influence local communities; and, 3) rethink the possible contributions of local ecological knowledge in improving current regimes. The panel also aims to facilitate networking among scholars and provide stronger opportunities to support community involvement in research and policy development.

### Moderator

**Dr. Raul G. Bradecina**

SUC President III, Partido State University

# Remote Sensing and the Long-Term Effects of Industry on Landscape in Siruma, Philippines

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***Robin Meyer-Lorey***

Graduate Student, Department of Anthropology, University of California, Los Angeles

## **Abstract**

At the turn of the 20<sup>th</sup> Century, American logging companies, empowered by the U.S. colonial regime, set up shop in Bikol with the goal of extracting hardwood lumber for export to U.S. and European markets. The construction of industrial infrastructure and the choices of a newly gathered Bikolano workforce had profound effects on the region's landscape—from 1900 clear through the 1930s, Japanese occupation in WW2, Philippine independence, the 1980s; and these effects even continue today. In 2022, a collaborative project combining archival maps and photographs, modern place-name analysis, satellite mapping, and drone-mounted LiDAR scans of former industrial sites has revealed new insight into the ongoing legacy of American colonialism and the logging industry in Siruma, with implications for environmental history, disaster mitigation, and industrial archaeology.

# COLONIALISM, URBANIZATION AND THE UTILIZATION OF MOUNT ISAROG RESOURCES (1701- 1898)

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***Danilo M. Gerona***

Associate Professor V, Partido State University

## **Abstract**

Known to the natives as Isarog or Isaroc, this volcanic mountain, towering at the center of the province of Camarines Sur in the main island of Luzon in the Philippines, was home to small bands of indigenous nomadic black people, centuries prior to the Spanish arrival. The Spanish regime however set off an exodus of lowland refugees escaping from colonial obligations into the freedom of the mountain forests. Failing to persuade and coerce to rejoin their original lowland communities, colonial authorities dispatched Franciscan missionaries to found upland missions for these recalcitrant fugitives. This laid the genesis of invasive settlements of Mount Isarog.

To regulate control of these remote and inaccessible villages in this vast forested and rugged landscape, the regime introduced basic urban features: intersecting streets highlighted by a central colonial complex, and long stretch of road networks. But the rise in population demanded wider reclamation of spaces deep into the forests which also enhanced utilization of their resources.

It was the frenzied search for alternative local industries to fill up the economic vacuum consequent to the demise of the Manila-Acapulco galleon trade in 1815, which spawned the exponential industrial exploration and exploitation of its resources. The subsequent rise of abaca as an iconic capitalist fiber, attracting enterprising Spanish and native mestizo migrants to these booming municipalities which transformed hundreds of acres of volcanic lands into commercially profitable latifundia.

Drawing from vast sources in the Spanish archives, this presents a historical panorama retracing and critically examining how the incipient urbanization generated irreversible and irreparable damage on the mountain's ecological resources.



# ABACA UTILIZATION AND MANAGEMENT PRACTICES BY INDIGENOUS PEOPLE OF MT. ISAROG

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***Cristina Lim***

Associate Professor IV and Campus Dean, Partido State University

## **Abstract**

Used to be a prominent business, Abaca production is one of the economic activities engaged in by the traditional dwellers of indigenous people (Agta-Tabangnon and Agta-Cimarron) of Mt. Isarog. Their important engagement, however, is not widely recognized because of lack of available information. Among others, this study provides an avenue where their voices are heard and abaca performance is given light. Using literature review, key informant interviews, focus group discussions, photo documentation, this study attempted to provide an understanding of the Agta-Tabangnon's engagement in abaca utilization, management practices, perceived factors affecting their utilization and management practices, and some policy recommendations. Results show that Agta-Tabangnon's utilization of abaca is very limited and management practices need improvement. Perceived factors affecting their utilization and management practices include financial difficulties, lack of technological know how on abaca production and management practices, lack of government support to abaca farmers and abaca products, promotion of selected agricultural products (corn and sugarcane) and local tourism, climate change, population growth, unregulated entry into ancestral domain, and others. Several policy recommendations are set forth in this study.

# Traditional Resource Utilization and Management of Indigenous Communities in Mt Isarog in the Early Modern Period

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***Patricia Mae Candelaria and Raul G. Bradecina***

Partido State University Sagñay Campus, Sagñay Camarines Sur, Philippines

## **Abstract**

Mt. Isarog is considered is one of the key biodiversity areas in the southern faunal region of Luzon and is a natural protected area. This highlights the importance of traditional knowledge, innovations and traditional practices of indigenous and other traditional peoples in its management. This paper discusses the traditional resource utilization and management of indigenous communities in Mt. Isarog in the Early Modern Period to inform local policies and contribute to the growing body of knowledge where traditional resource utilization practices and resource management are integrated into their sustainable management to promote the livelihood and culture of indigenous communities, conserve biodiversity and ensure ecological balance so that it may continue to provide essential ecological services to all life forms.

# Socio-Psychological Factors Supporting the Sustainable Management of Riverine Ecosystems in the Municipality of Goa, within Mt Isarog Natural Park

***Leih Anne R. Odoño<sup>1\*</sup>, Raul G. Bradecina<sup>1</sup>, and Yoshinori Morooka<sup>2</sup>***

<sup>1</sup>Partido State University, Philippines

<sup>2</sup>Kochi University, Japan

\*Presenter

## **Abstract**

Interventions promoting sustainable resource governance seek to alter human behavior to promote change and achieve desired outcomes. Considering that successfully implementing development interventions depends on managing human behavior, researchers working within natural resource management and conservation need to determine the factors that motivate human behavior to guide policies. This paper determined the factors that influence positive behavior for protecting riverine ecosystems in Goa and examined the socio-psychological antecedents that motivate stakeholders to support its rational management. It applied the theories of reasoned action and planned behavior as models to explicate the socio-psychological underpinnings of respondents' behavior from a survey using socio-psychological measures associated with community motivation supporting riverine conservation. Descriptive statistics were employed to characterize community motivation supporting riverine ecosystem conservation and management. Multiple regression and Structural Equation Modelling (SEM) - Path Analysis were applied to analyze the data. Results showed that the communities along the riverine ecosystems in Goa have moderate extent of concern to address its continued degradation. The concern for action is likely among males who depend much on ecosystem services and resources. The anticipation of favorable outcome from riverine ecosystem protection is the key motivation for addressing the perceived serious river concerns. There is feeling of certainty that their psychological inclination for action is within their control to pursue the motivation precipitated by the rivers' common pool nature. The respondents' level of motivation and the socio-psychological factors associated with conservation behavior augur well for the enhanced initiative for ecosystem governance in Goa. Translating the key socio-psychological factors supportive of sustainable governance of riverine ecosystems into interventions such as capacity development in ecosystem rehabilitation, and restoration, establishment of riverine management councils, and regular allocation of fund for river monitoring among others are proposed.

## Highlights of Partido State University and UCLA Partnership:

### Localizing Community Engagement through Ecological

### Conservation

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***Karen Eyre Moshie O. Artiaga<sup>1\*</sup>, Earl John C. Hernandez<sup>2</sup>,  
Dan Mathew R. Alerta<sup>1</sup>, Patricia Mae Clariño<sup>1</sup>***

<sup>1</sup>Museo de Isarog, Partido State University, Goa, Camarines Sur,

<sup>2</sup>Archaeology Interdepartmental Program, Cotsen Institute of Archeology, UCLA

\*Presenter

#### **Abstract**

Museums and galleries play a critical role in the documentation, conservation, promotion, and education of local cultural heritage and expressions. They provide curatorial programs to promote local heritage and sustainable tourism. Though sustainability programs are important for cash flow and institutional maintenance, museums and galleries should first and foremost cater to the needs of local communities and stakeholders. In this paper, we show how UCLA and Partido State University Museo de Isarog (MDI) partnership had been pivotal in the reconfiguration of the development of programs that enable the incorporation of local communities. Through the collaborative initiatives of the UCLA and MDI, we show highlights of ongoing co-creation and co-curation programs that engage with communities in characterizing inclusive exhibition narratives and programs. MDI's conservation projects and programs were initiated to provide a space for the community to converse about shared ecology, centered on collections-based research and mobile exhibitions of the ethnobotany of Mt. Isarog. These initiatives bring museum collections to life, as they promote engagement with local communities with diverse perspectives and experiences. This paper highlights the initiatives of the MDI in bringing the institution closer to the public through its promotion of a deeper understanding of ecological conservation with local communities. Here we present the preliminary works of the MDI as it aims to sustain community-led programs that forefront collaborative human and environment conservation.

## Roundtable: Conversation with Education Practitioners and Administrators

There is a critical need for indigenous education (IPED) for local ethnic communities in SEAsia. Traditional cultures and village lifeways are being eroded by modern, urban pressures, and without knowledge of their rich cultural heritage, Indigenous communities that maintain traditional ecologies will not survive. In particular, the current pedagogy in the Philippines is designed by the national government and lacks local Indigenous knowledge and history. We propose to draw on over ten years of archaeological and anthropological research that we have done in Ifugao to contribute to education and local communities by developing Instructional Materials (IM) and Learning Modules (LM) for elementary and high school history curricula. This is compounded by the current pedagogy, designed by the national government, which lacks indigenous knowledge and local history components. A recent national policy shift in K-12 education mandates that the Department of Education contextualize history curricula in local realities. However, there is no government initiative to properly train teachers in indigenous history and heritage, so teachers are under equipped to carry out the directive. Using the Ifugao Heritage Galleries that Martin and Acabado helped establish, the panel will explore potential to develop similar programs in other IP communities in SEA and Taiwan.

## Discussants

### **Dr. Ronald Adamat**

Commissioner, Commission on Higher Education

### **Dr. Aldrin Darilag**

Commissioner, Commission on Higher Education

### **Atty. Septon de la Cruz**

Regional Director, Commission on Higher Education, Regional Office 5

### **Dr. Rody P. Garcia**

Regional Director, Commission on Higher Education, Regional Office 9

### **Dr. Nelia A. Alibin**

Regional Director, Commission on Higher Education, Regional Office 12

### **Dr. Ma. Carla A. Ochotorena**

University President, Western Mindanao State University

### **Usman D. Aragasi**

Chancellor, Mindanao State University, General Santos

### **Chen-Ping Yang**

Director of the Department of Culture and Education, Council of Indigenous People,  
Taiwan

### **Dr. Nga-Ping Ong**

Associate Professor and Former Chairperson, Department of Ethnology, National  
Chengchi University

### **Yi-Shiuan (Yayut) Chen**

Assistant Professor, Master's Program of Land Policy and Environmental Planning  
for Indigenous People, National Chengchi University

# Wulai District Tayal Community Field Trip

## Agenda

Monday 27 February 2023		
Time	Item	Themes
9:00	Arrive at Wulai Zhiyi Square	
9:00-10:30	Wulai Suspension Bridge and Wulai Landscape	Imperial forest plunder, postwar sightseeing, and land loss
10:30-11:40	Wulai Forestry Living Museum	
11:40-12:00	Take a Trolley to Wulai Old Street	
12:15-13:15	Traditional Tayal Lunch at Mingyu Landscape Cultural Grounds	
12:00-15:00	Mingyu Landscape Cultural Grounds	The tension in contemporary urban planning between water conservation area restrictions and local development
15:00-17:30	Tampya Cultural Grounds	
17:30-19:00	Traditional Tayal Dinner at Tampya Cultural Grounds	
19:00-20:00	Return to Accommodation	
Day 3 Ends		

## Wulai Map





## Background Information

### **Wulai District History**

*Da-wei Kuan*

*Urai*, or Wulai in the Tayal language refers to “hot spring”. In traditional Tayal knowledge, in the local community, hot springs are where animals often gather, and hunters visit. There are about 10 Tayal settlement in the *Urai* Administrative District nowadays. These settlements were established in the process when Tayal ancestors moved from the central mountain area of Taiwan to the north end. During the Japanese colonial era, logging was introduced, and a hydro-power plant was built in *Urai*. The reallocation policy following the survey and control of forestry immensely changed the Tayal landscape of hunting and gathering. The hot spring tourism boomed after WWII, once again changing the landscape of *Urai*. Even though tourism brought about new job opportunities, land acquisition happened fiercely. This is visible through the fact that there are merely one or two stores actually run by local Tayal people in *Urai* Old Street—the most visited tourist attraction in *Urai*. In the 1980s, the government built a reservoir at the downstream of *Urai* and delineated the Water Resource Protection Area which covers the entirety of the *Urai* Administrative District. Ironically, the hot spring businesses run by outsiders in the tourism industry are still gaining profits, while the housing and farming activities in Tayal settlements are highly restricted due to the regulations of water resource protection. During this field trip, participants will visit the Forestry Life Museum established by the Forestry Bureau that represents the local forestry history from certain perspectives. Then, participants will visit *Urai* Old Street to experience the tourism industry. Finally, participants will visit small businesses run by local Tayal people and hear from the Tayal settlement members about their perspectives on both local development and the restrictions setup for the water consumption downstream.

### **Wulai Community**

*He Rui-Zhen*

Wulai District is the traditional land of the Tayal people. This land with beautiful mountains and rivers is the land where their people lived for generations. However, due to its geographical proximity to the political and economic capital of Greater Taipei, and the abundant water source of Nanshi River in the territory, the government used the means of urban planning to designate the Wulai district as a Water Resource Protection Area, in turn implementing their restrictive regulations in

1984 and once again in 2000. The main purposes are to provide clean drinking water for Greater Taipei, prevent the pollution of upstream water sources, restrict land use by means of urban planning and land use control, and use the tribe's land as a frontier to serve the city. In turn, the houses built by the tribe's people due to the increase in family size and insufficient housing, are deemed illegal and are forcibly demolished or fined. Greenhouses are not allowed on their farmland and their *taktak* which they use for hunting, working, and resting are considered illegal constructions. Even their small-scale cultural exhibition was required to be demolished. As it is in the Tayal tribe's culture to share, folks sought to share Tayal ingredients and dishes through a restaurant and earn income which was ultimately deemed illegal. For the Tayal people in Wulai, water source protection is necessary, but the only land they own is here. This land is their root and the land that breeds and embodies the Tayal culture. I hope the government can create better policies to make water conservation compatible with tribal development, restricting use in a non-zero-sum manner.

## **Tampya Community**

### *Kinga Tazing*

The Tampya community is the closest Tayal community in proximity to the capital of Taiwan. These community members live in the Nanshi River Basin in the upper reaches of Taipei, therefore, their livelihood is subject to various restrictions. This entails urban planning areas, state-owned forest lands, designated water resource protection areas, etc. When building houses or applying for business registration, they are often constrained by the legal regulations of these restrictions, causing the tribe to gradually lose connection and emotion with their tribal land. Therefore, after 2001, the land loss of the Tampya tribe accelerated. Additionally, the Tampya Cultural Grounds was established in 2001. The original plan was to create a homestay, but due to the location, they planned to establish a Tayal Art Museum, requiring business registration. During its constructions, they faced restrictions by the district government through the water resource protection area regulations and due to the intensive government management, they turned the space into a coffee shop. Unexpectedly, in 2015, the Soudelor typhoon caused severe land disasters for the Tampya tribe. This led the community members to discover the importance of the Tayal people's ecological knowledge. Currently, the Tampya Cultural Grounds has become an ecological education center which looks forward to restarting the protection and practice of land through the ecological knowledge of the Tayal people.

## List of Staff

Name	Title
Sayun Nomin	Event Organizer
Naomi Yuen-Schat	Event Organizer
Ying Chi Liang	Event Assistant
Nguyet Tong	Event Assistant
Karen Artiaga	Event Assistant
Lynne Ho	Event Assistant
Tseng Hsin	Event Assistant
Losing	Event Staff
Abigail	Event Staff
Jill	Event Staff
Guan Zhu	Event Staff
Rimuy	Event Staff
Sheldon	Event Staff
Behuy Hsu	Poster Designer