

About us

The overall goal of this five-year programme of multidisciplinary research is to further our understanding of key issues in the sustainable development of the ecological commons in Southeast Asia from a transboundary governance perspective.

- i) Biomass burning and haze
- ii) Hydropower development and water resources

Hosting Institution







Partner Institutions

















Context within Southeast Asia

Southeast Asia (SEA) is one of the most rapidly changing regions of the world. While standards of living have increased dramatically over the last half a century, these improvements have come with substantial environmental costs.

- The damage of fisheries, forests, peatlands, soil fertility, freshwater and other natural resources is becoming profound
- Long-term challenge to the resilience of communities and economies
- Collective resources defy national borders and are used by diverse actors – challenges of governance
- Absence of enforceable international legal instruments leaves CPR open to unrestrained exploitation
- Ecological commons lens seeks to identify best practice in governing shared resources within and beyond the context of ASEAN and Southeast Asia.





International consortium collaborating partners



Prof. David **Taylor** Principal Investigator



Rigg Co-Principal Investigator



Dr. Michelle Miller Senior Research Fellow





Alberto SALVO National University of Singapore



Carl MIDDLETON Chulalongkorn University



Daniel FRIESS National University of Singapore



Diana SUHARDIMAN International Water Management Institute LAOS



Louis LEBEL Chiang Mai University



Marcel BANDUR National University of Singapore



Melissa MARSCHKE University of Ottawa



Rini ASTUTI National University of Singapore



Roman CARRASCO National University of Singapore



KIM Soo Yeon National University of Singapore



Helena VARKKEY University of Malaya



Sumiya BILEGSAIKHAN National University of Singapore



Thong TRAN National University of Singapore



Zu Dienle TAN University of Michigan





Common Pool Resources (CPRs)

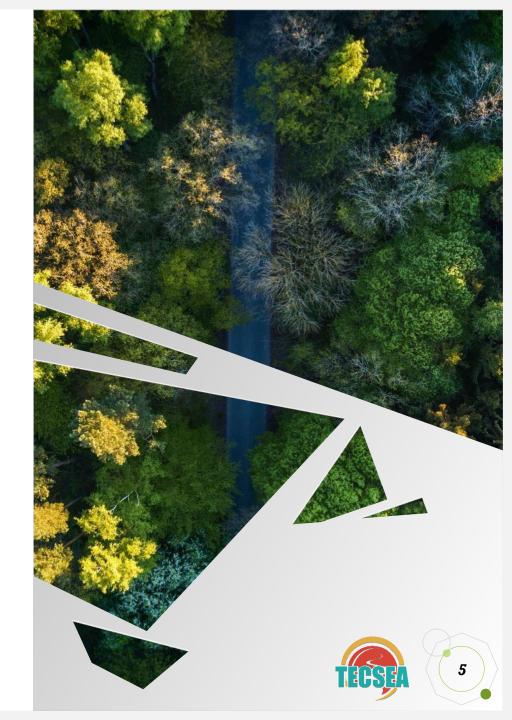


Commoning – set of social practices through which shared resources are managed.

Commodification and **Privatisation** threaten local governance regimes, like communal forests and customary land rights (indigenous rights)

Our challenge: To understand how the commons function at the transboundary scale, and by this we mean:

- (a) commons within jurisdictions that are governed by a transboundary coalition around a common environmental good (Peatlands in Riau)
- (b) commons that traverse territories and cannot be contained within borders, like wildlife and rivers (Mekong River Commission)





Work Packages (WPs)



WP1: Atmosphere: Biomass burning and haze

(Thematic)



WP2: Water: Hydropower (Energy)

(Thematic)



WP3: Transboundary Environmental Commons

(Policy-Oriented, foundation for decision-making)



Atmosphere: Biomass burning and haze

Haze has become an almost annual problem that severely affects environmental quality in Singapore and the broader SE Asia region.

Problem statement:

While much haze-producing biomass burning originates in Indonesia (burning of peatland), there are other sources of haze in the region. Moreover there exists a range of incentives that lead to the production of haze.

Economic development through national policies = peatland conversion to palm oil plantation

Peatland fires are hard to extinguish, particularly in remote areas. Emissions from peatland burning are particularly harmful to human health.

Focal areas:

- 1. Factors that make certain areas (e.g. peatlands) more prone to highly harmful haze-generating biomass fires compared with others
- 2. Ultimate causes of haze (e.g. characteristicts of the oil palm product value chain)
- 3. Ecological impacts of biomass burning







Water: Hydropower (Energy)

Rising demand for electricity is a key driver of plans for large hydropower dams on transboundary rivers like Mekong, affecting biodiversity and rural livelihoods of millions of people.

Problem statement:

Proliferation of large-scale hydropower projects, like Xayaburi dam in Laos (1st of 11 dams on lower Mekong)

Governance of major hydropower dams is complex and multi-scaled. Regulatory attempts are weak.

Hydropower projects are dominated by public-private partnerships.

Mekong basin as one of the most contested transboundary environmental commons.

Focal areas:

- The shift to private-sector development of hydropower in international river basins.
- 2. Understand how these processes are redefining the relationship between water as a public good or as a private resource, and its governance as a CPR







Governance of CPRs

Governance of transboundary CPRs takes a multistakeholder and multi-sectoral approach. Transboundary networks of cooperation are bringing people together across jurisdictional divides in SEA, creating opportunities to build more inclusive and effective environmental governance regimes.

Leading Questions:

What are the appropriate governance mechanisms to address these environmental challenges?

What are the commonalities and intersections that link major environmental challenges in SE Asia?

Can governance solutions be devised to address the contradictions between increasing economic integration and the sustainable utilisation of resources?

Focal areas:

- 1. Investigate at what scales different kinds of governance and legal solutions best operate, and what types of formal and informal institutions and rules might be promoted.
- 2. Identify socio-political conditions and governance features that cultivate more informed, inclusive, accountable and sustainable transboundary environmental commons in SEA.

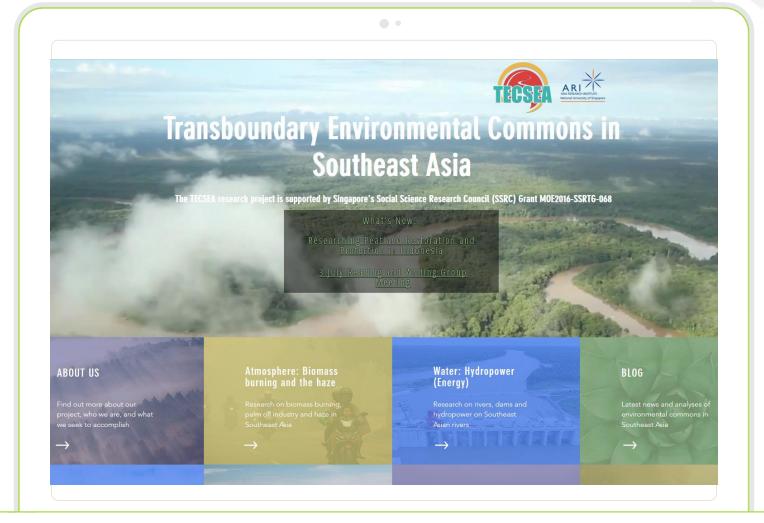




Website (www.TECSEA.info)

Main Features:

- Blog
- Events
- Publications
- Resources
- Newsletter

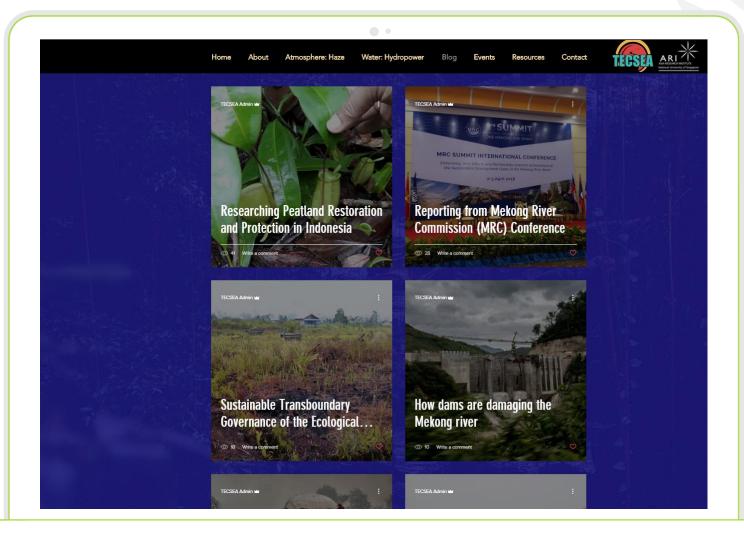




Blog (www.TECSEA.info/blog)

Including

- Fieldwork Notes
- Conference Reports
- Analyses
- Theme-based articles







Conference Announcement







1 – 2 **November** 2018

Asia Research Institute, NUS, Singapore

Registration is free

"Sustainable Transboundary Governance of the Environmental Commons in Southeast Asia"

- Everyone is welcome to register and come along if you're in Singapore.
- We will be convening more of these sorts of events in coming years and we welcome your involvement get in touch!

