



VIBRANT FOREST LANDSCAPES

Research Agenda Vibrant Forest Landscapes



Annual Report 2022

1. Summary

In the year 2022 the world slowly began to re-open after the COVID-19 pandemic. For the **Vibrant Forest Landscapes** team, this meant a return to travel, re-establishing connections and developing new plans for fieldwork in 2023. The year began with a workshop at ECUAD Aboriginal Gathering Place. We learnt about Indigenous material practice and connections with story-telling, sustainability, and relationship building. In April, Adinda and Emilio graduated from their MSc program successfully defending their theses. From May to June, the team travelled to Indonesia (Maluku, Bali, and Riau), and visited villages, university seminars, and two workshops. In Riau, four Master of International Forestry students joined the workshop as part of their internships. In July we travelled to Cameroon, signing MOUs with WWF and IUCN to re-commence collaboration. Our two graduate students, Fidelity Mborongong and Shintia Arwida joined these trips and arrived to UBC in September 2022 to commence their studies. The year ended with a workshop in Bali on exploring the power of Balinese Art and Culture, in collaboration with the team from ECUAD. In this report we provide updates on all our activities in 2022 and discuss next steps for the **Vibrant Forest Landscapes** Lab at UBC Faculty of Forestry.

Members:

Jeff Sayer, Professor

Intu Boedhihartono, Associate Professor

Chris Gaston, Associate Professor

James Langston, Lecturer

Rebecca Riggs, Post-doctoral fellow

Emilio Valeri, MSc student [Graduated 2022]

Adinda Herdianti, MSc student [Graduated 2022]

Lauren Nerfa, Doctoral student (based at University of Hawaii)

Ayumi Ono, Msc student

Shintia Arwida, PhD student

Fidelity Mborongong, Msc student

Find us online:

Web: <https://vibrantforestlandscapes.forestry.ubc.ca>

Twitter: [@VibrantForests](https://twitter.com/VibrantForests)

Instagram: [@vibrantforests_UBC](https://www.instagram.com/vibrantforests_UBC)

2. Awarded Grants

The following grants form the core activities of the Vibrant Forest Landscapes Lab:

Award	Title	Amount	Grant period
SSHRC Insight Grant	Small and medium forest industries for vibrant local economies: conditions for success in communally managed lands	\$263,550	Awarded in 2019 (5 years)
New Frontiers in Research Fund	Exploring the power of Indigenous art as a catalyst for linking economic growth to sustainable landscapes	\$250,000	Awarded in 2020 (2 years)
SSHRC Insight Grant	Learning from Customary Governance: Achieving Broader Societal Benefits from Forest Landscapes	\$297,600	Awarded in 2021 (5 years)
SSHRC Insight Development Grant	Uncovering leverage points for inclusive, resilient, and sustainable infrastructure expansion in forest landscapes	\$73,913	September 2022-September 2024
SSHRC Insight Development Grant (Co-PI with Laval University)	Comment la foresterie communautaire influence-t-elle l'accès aux ressources foncières et forestières collectives ? Une analyse comparative entre l'Indonésie et le Cameroun	\$72 672,00	Awarded in 2021 (2 years)

3. Landscapes

3.1 Quesnel & British Columbia

Following their fieldwork in Quesnel in 2021, Emilio and Adinda presented their research findings to participants and stakeholders and finalized their theses (see end of report), which included both Quesnel and Seram (Indonesia) as landscapes. Their report to the FIP can be [found here](#). Rebecca and Chris are working with Erin to continue this work on enhancing diversity and innovation in the forest sector. We also submitted two manuscripts for publication based on our work in British Columbia. The descriptions of the manuscripts are below. In September a third annual MIF fieldtrip to Quesnel was very successful, providing even more motivation to continue our engagement. We continue to work with the Quesnel Forestry Initiatives Program and will join the next Think Tank in May 2023. A positive outcome from our collaboration was MIF student Rory Tassonyi completing his internship with the Wells-Barkerville Community Forest and staying on to work with the Wells community and Lhtako Dene partnership. Rory will join the VFL lab as an associate in 2023.

Transdisciplinary science for strengthening forest systems in British Columbia: Quesnel as a Learning landscape

Rebecca Anne Riggs^{1*}, Jasmine Arora¹, Agni Klintuni Boedhihartono¹, Chris Gaston¹, Adinda Rizky Herdianti¹, James Douglas Langston¹, Erin Robinson², Jeffrey Sayer¹, Emilio Valeri¹

Submitted to *Environmental Science and Policy*

Abstract

The growing complexity of forestry from pluralistic societal demands, including the need to address Indigenous peoples' reconciliation and grappling with climate change, calls for research that embraces transdisciplinarity, reciprocity, and problem-focused learning. Landscapes offer useful geographic settings to explore interactions between forests and societies, identify challenges and opportunities, and develop transdisciplinary research agendas that guide and learn from policies and implementation pathways. We describe recent progress and experiences from transdisciplinary research and learning in the landscape of Quesnel, British Columbia, where local institutions aim to strengthen resilience and innovation in the forest sector. To meet this objective and guide local policy, we developed a collaborative agenda for holistic landscape diagnosis, drawing from concepts of boundary work and sustainability science. We conducted asset mapping and compared asset compatibility with potential forestry pathways identified through a 'best bets' framework. We found that the Quesnel landscape is well-positioned to develop regional capacity for integrated forest management and high-value forest products, but greater stakeholder buy-in is needed to stimulate this transition. We propose a theory of change as a way forward, in which governments, First Nations, universities, and industry make their priorities and commitments explicit. We reflect on our process of transdisciplinary research and engaging with a 'learning landscape' and discuss contributions to knowledge generation, experiential learning, and institutional development. Globally, there is growing recognition of the need for evidence-based forest policy that builds from the ground-up. Strategic partnerships that integrate local priorities, practice-based learning, and holistic research agendas in forest landscapes can further this cause.

One size does not fit all: Constraints and opportunities for small-scale forestry in British Columbia, Canada

Rebecca Anne Riggs^{1*}, Chris Gaston¹, James Douglas Langston¹, Jeffrey Sayer¹

Abstract

Forestry in British Columbia, Canada, is in transition. Social and environmental concerns, such as the conservation of old growth forests, reconciliation with indigenous peoples, increasing wildfires, climate change, and tree diseases are driving changes in forest management, production, stewardship, and tenure. Government, industry, and local communities are seeking ways to achieve a resilient, diverse, and innovative forest sector that reflects local and indigenous values. We explore the role of small-scale forestry in contributing to this objective. Drawing from an online survey of small-scale foresters, discussions, relevant literature, and policy documents, we examine the management priorities, definitions of success, opportunities, and challenges of small-scale forestry in British Columbia. We find a wide range of views among survey respondents, but some consensus on key policy and management issues. Small-scale foresters would like to see greater opportunities for diversification, increased revenues, opportunities for partnerships, and the removal of barriers that inhibit innovation and local decision-making. The diverse range of local perceptions demonstrates the richness of British Columbia's forestry communities, and the problems of a one-size-fits-all forest policy. A long-term vision accommodating diverse preferences of small-scale forestry in British Columbia is missing from provincial forest policy. We summarize emerging opportunities for small-scale forestry and the ways in which governments,

communities, industry, research institutions, and indigenous rights-holders can contribute towards resilient forest systems.

3.2 Indonesia

Maluku

In June, Rebecca, James, and Shintia spent 2 weeks in Maluku, hosted by UNPATTI. As the first trip post-covid, the focus of the visit was to reconnect with colleagues and communities. We visited Sawai, Melinani, and Masihulan villages, joined by 3 UNPATTI students and Prof Agus Kastanya. Over the entire trip, we met with 37 people (government & community members), learning about forest governance, adat (customary systems), social forestry, the impacts of social forestry, and social-economic changes in Maluku. We ended the trip with a presentation to UNPATTI on “sustainable landscape and seascape management to achieve resilience and prosperity”. The plan is to return to Seram in 2023 to collaborate on a research project exploring indigenous tenure rights and traditional forest practices, with a focus on sago forests.

A blog reflecting on time in Quesnel can be found here:

<https://vibrantforestlandscapes.forestry.ubc.ca/blog/evolution-of-a-different-kind-in-the-heart-of-wallacea/>





Riau

Tanah Air Beta hosted its annual retreat for landscape practitioners at the [Riau Ecosystem Restoration](#) (RER) Eco-Camp from 10-15 June. Conservation practitioners from across Indonesia were invited to share experiences on emerging issues in biodiversity conservation, focusing on “Other Effective Conservation Measures”. Participants came from conservation NGOs, research institutions, and from APRIL-RER. Four MIF students joined in the workshop and together with VFL developed plans for their study of the Kampar landscape – part of our collaboration with RER.

The workshop summary and report can be found here: <https://tanahairbeta.org/annual-retreat-for-landscape-practitioners/>



Bali

In the same month, Ayumi Ono and Celine Wright (former VFL member) spent time in Wongaya Gede village in Bali, learning about the UNESCO world heritage landscape and developing plans for their MSc theses. Ayumi will return to Wongaya Gede in January 2023 for her studies, focusing on “The resilience of Subak system in Bali, Indonesia: learning from the Satoyama approach”. Tanah Air Beta also hosted their annual meeting in the village, reconnecting with JCU alumni.



3.3 Cameroon

In July we visited Cameroon, hosted by Fideline and Dominique Endamana (IUCN). We signed MOUs with IUCN and WWF and met with several government and non-government organization involved in conservation and forest policy. Long-time friends Samuel Nguiffo and Leonardo Usongo shared valuable insights on emerging issues for forest landscapes. In addition to numerous discussions, we held a workshop at IUCN on “research challenges to achieve vibrant forest landscapes in Cameroon”. The workshop concluded with interest in further dialogue on strengthening research capacity and partnerships, and commitment to work closely with IUCN, WWF, CED, CIFOR-ICRAF and the SCTNS (Scientific Committee for the Tri-National Sangha) to support landscape scale conservation and development in Cameroon.

[Link to workshop summary in Yaoundé](#)

Following the workshop, Fideline, Rebecca and James travelled to the TRIDOM (Tri-National Dja-Odzala-Minkebe) landscape to discuss research objectives with communities, government, and local organizations. We spent time in the Ngoyla-Mintom area, with community forests, Indigenous Baka peoples, local government, NGOs, and traditional leaders. The objective of the visit was to build understanding of the landscape to inform Fideline’s graduate studies and future collaboration. Fideline will return to the landscape in 2023. We reflect on some of our discussions from the TRIDOM and Yaoundé in the blog below.

[Link to blog](#)





4. Other activities

COP15 in Montreal

James, Fidelity, Shintia and some MIF students attended the United Nations Biodiversity Convention, COP15, in Montreal, Canada from the 07-19th of December 2022. The COP was attended by representatives from 188 countries and resulted in a landmark agreement to guide global action on nature through to 2030. The COP was chaired by China and hosted by Canada, COP 15 resulted in the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) on the last day of negotiations. The GBF addresses issues of biodiversity loss, ecosystem restoration, and protection of Indigenous Peoples' rights. The plan includes concrete measures to halt and reverse nature loss, including the ambitious 30 by 30 target which aims to put 30 percent of the planet and 30 percent of degraded ecosystems under protection by 2030 (Target 2 and Target 3 in Decision 15/4). It also contains proposals to increase finance to developing countries – a major sticking point during talks.

With the adoption of the Kunming Montreal Framework, the implementation is the next step. The COP decision was accompanied by five other key decisions that will be pivotal for the implementation. These decisions include; The Monitoring framework for the Kunming-Montreal Global Biodiversity Framework, Mechanisms for planning, monitoring, reporting and review, Resource mobilization, Capacity-building and development and technical and scientific cooperation, and Digital sequence information on genetic resources. The team had the opportunity to follow the discussions and different site events on diverse topics such as; investments in biodiversity and sustainable use, restoration, natural capital accounting, 30 by 30 targets etc. These different engagements gave us an understanding of what is happening in the regions and identification of areas of focus for the future. The VFL team was especially interested in the debates around OECMs and how they will be managed and how their effectiveness will be assessed.

Based on our observation, the transparency and accountability of funding utilization were not adequately covered throughout the talks. Whereas, how guaranteeing that the cash will be used effectively in an open and accountable manner is equally crucial to securing the funding. It is important to prevent elite capture and assure that the money will flow and benefit people who actually protect the biodiversity on the ground. It is expected that the funds will go through GEF due to the necessary rigorous standards. However, how each country manages the funds and projects will be the key factor in determining outcomes. [Link to COP 15 Decision here](#)



Crossing boundaries: Exploring the power of Art and Culture

Workshop convened by VFL, Emily Carr University of Art + Design Aboriginal Gathering Place, and Tanah Air Beta at Prana Dewi Mountain Resort, Desa Wongaya Gede, Bali

As part of our New Frontiers in Research Fund, in December 2022 we convened a workshop focused on collaborations to explore different ways in which artistic expressions and cultural processes can act as “boundary tools” for sustainable landscapes. Drawing from approaches in Indigenous material practice and participatory art, the workshop aimed to understand **how artistic expression and processes can create access to different ways of knowing and bridge different views** among diverse groups. We invited participants to share their experiences using various forms of artistic expression to cross boundaries in a diversity of contexts such as environmental management, sharing traditional knowledge, science communication, and cultural understanding on human-nature relations. Participants included conservation practitioners, researchers, artists, and traditional leaders, each of whom shared their experiences with art and cultural processes.

Our goal for the workshop was to connect with each other, connect with place, and advance understanding of how the power of artistic expression can be applied in different contexts for sustainability. Drawing from the power of place, we dedicated significant time in the workshop to learning from Balinese culture. Participants joined in Balinese artistic and cultural activities, including preparing offerings (Banten), gamelan music and dance, a visit to the Batu Kau temple, and a discussion led by high priest Mpu Jaya Brahmananda Pitana. As Prana Dewi is located in Wongaya Gede village adjacent to the World Heritage Jatiluwih Rice Terraces, we were joined by local leaders and learnt about the traditional *Subak* water management system as an integral part of Balinese culture. We closed the workshop with a shared goal of bringing the ideas that emerged in the workshop to other parts of our work and life. We hope to maintain a network interested in artistic expression for sustainability and facilitate cultural exchange between Canada and Indonesia.

A blog sharing some of the reflections of the project so far can be found here: [link to blog](#)





5. Conclusion and next steps

In 2023 we will maintain the focus of our work on our long-term “learning landscapes” around Quesnel in BC, the Tri-national de la Sangha and the TRIDOM in Cameroon and Seram, North Kalimantan, Bali and Riau in Indonesia. The work in these landscapes will further develop the themes of our funded SHHRC projects. We wind down our work on small forest enterprises, focusing more on customary governance, responsible land investment, and continuing the collaboration with Emily Carr ABG. We will attempt to bring together some of our learning about “how change happens” in forest landscapes. This will draw upon our long-term engagement with each of our landscapes. We will attempt to intensify our collaboration with our local partners in each of these landscapes. We will give more attention to cultural differences and various forms of artistic expression and ensuring equity, inclusiveness and diversity in all of our work. With COVID no longer inhibiting travel we expect to dive deep into fieldwork, ensuring that our researchers can spend quality time in the field with partners in our focal landscapes.. In 2023 we hope to achieve:

- Ayumi Ono will graduate her MSc degree, publishing her thesis on “The resilience of Subak system in Bali, Indonesia: learning from the Satoyama approach”. Her work will open-up further opportunities for working with the village of Wongaya Gede in Bali.
- Shintia will lead a team of MIF students to Indonesia, working in collaboration with UNPATTI in Maluku and begin her PhD fieldwork in Kalimantan.
- Fideline will conduct fieldwork in Cameroon, focusing on decision-making and sustainability of land investments in the TRIDOM landscape.
- Bec will travel to Indonesia to continue collaboration with UNPATTI. She will also return to Cambodia to re-establish research collaboration with WCS in Mondulkiri.
- The collaboration with Emily Carr ABG will move into the second and third phases, focusing on activities in landscapes and the final exhibition.
- We will attend the Quesnel ThinkTank in May 2023, supporting the Forest Initiatives Program in the development of training and capacity building for forest management and innovation.

- We will convene another landscape workshop with Tanah Air Beta in Indonesia. The workshop will be held in one of our focal landscapes and will focus on the issues of attaining and assessing resilience.

6. Theses abstracts

Business ecosystems to provide incentives and opportunities for sustainable and resilient livelihoods in forest landscapes

Adinda Rizky Herdianti MSc thesis:

Abstract

Initiatives to strengthen small-scale forestry have proliferated in the recent decades. Existing literature has identified multiple factors that may hinder or improve the adaptive capacity of small-scale forestry, considering small-scale operations or business activities as an alternative to the large-scale industrial model that has long dominated the world's forests. More recent research on business systems and strategies suggests a need to employ systems thinking, or business ecosystem approaches, to decipher complex relationships between different types and sizes of businesses rather than focusing on a specific business type or size. This thesis addresses this knowledge gap by combining insights from business literature and practices, and previous studies on sustainable and resilient livelihoods. Case studies of British Columbia, Canada, and Maluku Province, Indonesia were investigated to understand how business ecosystems unfolded in forest landscapes with different ecological and socioeconomic backgrounds. The study in British Columbia focused on a local forest initiative created by the City of Quesnel to encourage innovation and improve the resilience of the local forest industry. The data was collected through interviews with government officials, non-governmental organizations, tertiary education institutions, and industry actors and applied actor network analysis methods to examine the role of different forest actors in the knowledge and business networks. The study in Indonesia investigated the way in which local communities in two villages on Seram Island, in Eastern Indonesia, used business activities to improve their livelihoods and adapt to their changing landscapes. Government regulations and previous participatory appraisal data obtained by non-governmental organizations were used to identify business network and landscape conditions that influence the operation of small-scale businesses and tenure holders. The findings reveal that business ecosystems in British Columbia and Indonesia are shaped by policy frameworks concerning land and tenure rights, which influence the dynamics of business and knowledge networks. This thesis highlights the importance of analysing how the underpinning policy framework affects the role and positions of each actor in their respective business ecosystem. The findings of this thesis suggest further research on the application of the business ecosystem framework to achieve sustainable and resilient livelihoods in forest landscapes.

[Link to full thesis here](#)

Challenges of participation in local forest initiatives

Muhammad Emilio Valeri MSc thesis:

Abstract

Local forest initiatives such as Community Forests and Social Forestry have been growing in recent decades to improve community participation and address landscape problems where factors such as poverty and forest degradation interact. Although participation has broadly increased, some communities still struggle to utilize these initiatives to improve forest governance. This thesis aims to address this phenomenon through a social relational approach to resource governance and policy analysis to understand how participation in decentralized forestry processes, as a function of policy context, influences local forest governance. Case studies of different communities in British Columbia, Canada and Indonesia are at different stages of developing and I have examined their local forest initiatives to provide insights on this phenomenon. The study in British Columbia (Chapter 2) focuses on local forest initiatives in Cariboo Regional District and Central Kootenay District to understand the challenges and opportunities of different communities in attempts to establish and manage their community forests. Data were collected through online interviews with governments, non-governmental organizations, and community members. The study in Indonesia (Chapter 3) investigates the implementation of Indonesia's Social Forestry program and its influence on community participation in Social Forestry processes in Maluku Province. The research presented here reveals that communities will need to navigate through two crucial phases in developing their local forest initiatives to improve governance. In the first phase, social conflicts tend to be more prevalent as communities struggle to manage differences in aspirations and agendas to establish a common vision for their local forest initiative. This is the phase of heightened social conflicts. Local forest initiatives will then naturally transition to an operational stage marked by harvesting, marketing, and selling of their forest products. At this phase communities are likely to benefit from building forest expertise to improve effectiveness of management. Both phases influence the effectiveness of communities' self-organization in utilizing social or community forests to improve benefits. Throughout each stage, the policy context shapes the way people participate in decentralized forestry processes. Insights from this study can help further research on utilizing community participation for improving local forest decision making.

[Link to full thesis here](#)