WORKSHOP

Forestry in Nepal: Preliminary findings of two research projects in Nepal

18 March 2024 | ICIMOD Headquarters, Kathmandu

Co-organised by International Centre for Integrated Mountain Development (ICIMOD), SANDEE, Forest Action, and Paris School of Economics

About the event

ICIMOD's Action Area on Restoring and Regenerating Landscape, in collaboration with SANDEE, is hosting a one-day workshop to share the preliminary findings of two research projects related to forestry in Nepal. These projects are 'Local Governance of Forest Resources: Development, Environment and Political Economy in Nepal' (GoLFor-DEEPN) led by the Paris School of Economics (PSE) and 'Economics of Forest Restoration' led by SANDEE. ICIMOD will also be sharing some of our work on the use and application of EO and GIS (under the SERVIR-HKH Initiative) and incentive measures for forests landscape restoration to reinforce positive forest landscape management decisions. The idea is to also explore future research innovations and outlook.

Objectives

This workshop will share research results with stakeholders involved in community and other types of forests and with those working on energy access and livelihoods in Nepal. ICIMOD, SANDEE, and Forest Action have been collaborating to examine the economics of private tree planation in Madhesh Province of Nepal, where some preliminary findings are now available for sharing and feedback. PSE has been engaged in the GoLFor-DEEPN project in Nepal and intends to share the preliminary findings from the research. The workshop plans to engage a discussion on some of the new knowledge – some of it being produced within these research projects - about private tree planting (trees outside forests), community forestry, mapping of forests managed by CFUGs and their temporal monitoring, etc.

Background

In Nepal, after decades of continuous deforestation, forest cover has increased over the last 20+ years, but yet there are limited studies that adequately explain this growth scientifically. Economic growth, expansion of rural roads, migration from rural areas and associated remittances, conflict, alternative energy development, and plantation of trees on private land are some of the factors that could explain why there is a change in deforestation and forest degradation and even reversal of the part trend. SANDEE has been

evaluating the impact of private tree plantation program in Madhesh Province of Nepal in collaboration with Forest Action. The research project, GoLFor-DEEPN aims at evaluating at the national level, the effect of handing over the management of forest from the Nepal Department of Forest to Community Forest User Groups on (i) forest cover, (ii) public good provision at the local level, and (iii) local (political) governance.

Related to the seminal work about collective action (Olson, 1965), the tragedy of the commons (Hardin, 1968), and the governance of commons by communities (Ostrom, 1990) or their failure (Diamond, 2005), GoLFor-DEEPN builds on the results of Kosfeld and Rustagi (2015), Mansuri and Rao (2013), Baland et al. (2010a) and Somanathan et al. (2009). Both of these projects (led by SANDEE and PSE) innovate in several dimensions: the methodologies do take into account the environmental and institutional spillovers on areas not managed by communities combining advanced methods in remote sensing with econometrics techniques; they combine qualitative work in villages to country-wide scale statistical analysis at the frontier of the most recent standards in economics research; and analyse how local governance can shape an emergent democracy at the local level, a bottom-up approach that is not much discussed in the literature.

At ICIMOD, we are promoting measures to protect and manage critical mountain ecosystems and ecosystem services through a dedicated Action Area on Restoring and Regenerating Landscape. In relation to forest landscape restoration, there are efforts to understand and compare the economics of various forest landscape restoration programme in countries, understand landcover dynamics, forest loss, forest carbon stock and more. We have applied and demonstrated the remote sensing applications in supporting ICIMOD's regional member countries (RMCs) and their decisions since 1990 (Bajracharya et al, 2021). Monitoring of land cover and forest resources change is remained one of the many priorities of SERVIR-HKH Initiative. Most recently, we have developed land cover monitoring (RLCMS & NLCMS) products utilising the available free online satellite data and cloud computing platforms. These products provide annual landcover maps from 2000-2022 and will continue upcoming years. Similarly, we also developed forest fire detection and monitoring system (FFDMS) of Nepal which provides real time satellite-based forest fires observation and fire outlook for next two days. Methodology development for tracking of forest carbon stock is progressing. All these efforts are contributing RMCs to analyse forest cover change and ecosystem condition with high frequencies and accuracies.

Agenda

Time	Topics	Speakers/Resource persons
9:00 – 09:30	Registration	**Manashree Newa**, Programme Associate, SANDEE
9:30 – 9:35	Programme Introduction	**Mani Nepal,** Programme Coordinator SANDEE, ICIMOD.
9:35 – 9:45	Welcome Address	**Pema Gyamtsho**, Director General, ICIMOD
9:45 – 9:55	Opening Remarks	**Nawaraj Pudasaini,** Joint-Secretary and Chief, Ministry of Forest and Environment, Nepal
09:55 – 10:05	Introductory Remarks	**Naya Sharma Paudel**, Environment and Governance Specialist, Forest Action Nepal **François Libois**, Researcher, INRAE & Professor, Paris School of Economics
10:05 – 10:15	Group photo	
	Technical Session I: Remote sensing session	Moderator: **Bhaskar Karky,** Resource Economist and Carbon Finance Specialist, ICIMOD
10:15 – 10:30	Remote sensing of forests: recent efforts at ICIMOD	**Rajesh B Thapa**, Senior Remote Sensing and Geoinformation Specialist, ICIMOD
10:30 – 10:50	Leveraging the Leaf Area Index to measure the densification of Nepalese community forests	**Nicolas Delbart,** Professor, University Paris-Cité, France
10:50 – 11:05	Forest fire detection and monitoring in Nepal	**Birendra Bajracharya**, Programme Coordinator, SERVIR, ICIMOD
11:05 – 11:20	Discussions (Q&As)	
	Technical Session II: Work in progress	Moderator: **Mani Nepal**
11:20 – 11:40	Large scale mapping of CFUG	**Le Quang Thang,** PhD student, University Paris-Cité and **François Libois,** Researcher, INRAE & Professor, Paris School of Economics
11:40 – 11:50	Comprehensive analysis of Chure restoration enhanced by geospatial insight	**Upama Koju**, Senior Researcher, Forest Action, Nepal
11:50 – 12:00	Discussions	
12:00 – 12:10	Coffee break	
	Technical Session III: Keynote	**Moderator: Francois Libois**
12:10 – 12:50	Close to nature forestry: continuous cover forestry, an opportunity to square up to	**Maude Vandenabeele,** Pro Silva Project Manager, ForetNature, Belgium

	tomorrow's expectations and uncertainties based on the multi-functionality of forests	
12:50 – 13:00	Discussions	
13.00 – 14:00	Lunch	
	Technical Session IV: Human geography session	Moderator: **Sunita Chaudhary,** Ecosystem Services Specialist, ICIMOD
14:00 – 14:15	Beyond Forest Management: the politics of forest user groups in Chitwan	**Sanjaya Mahato,** Kathmandu University, Nepal
14:15 – 14:30	Forest User Groups and Water User Associations: the politics of participatory management of natural resources in Nepal	**Olivia Aubriot,** Researcher CNRS, France, and **Joëlle Smadja**, Emeritus senior researcher, France
14:30 -14:45	Institutional issues and challenges for forest restoration in Nepal (preliminary results)	**Naya Sharma Paudel,** Forest Action, Nepal.
14:45- 15:00	Work in progress session: Seedlings of democracy? quantitative approach on community forestry and local politics	**Marine Gueben**, PhD student, University of Namur, Belgium
15:00 – 15:20	Discussions	
15.20 – 15:40	Coffee break	
15.40 – 16:40	**Technical Session V: Economics and quantitative social science session**	Moderator: **Rajesh B. Thapa**
15:40 – 16:00	Community forest management in Nepal: quantifying and explaining a success.	**François Libois,** Professor, Paris School of Economics, France
16:00 – 16:20	Forest degradation and public policies: insights form Himalayan forests.	**Jean-Marie Baland,** Professor, University of Namur, Belgium
16:20 – 16:30	Incentives and finances around forest landscape restoration	**Bhaskar S. Karky,** Resource Economist, ICIMOD
16:30 – 16:45	Discussion	
16:45 – 16:50	Concluding words	**Srabani Roy**, Lead, Strategic Group on Resilient Mountain Economies and Landscapes, ICIMOD

Rapporteur: Bhawana Syangden (Programme Officer, ICIMOD); Sujaan Aryal (Research Associate, SANDEE, ICIMOD);

About the organising institutions

The International Centre for Integrated Mountain Development (ICIMOD) is an intergovernmental knowledge and learning centre that develops and shares research, information, and innovations to empower people in the eight countries of the HKH – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. We serve the region through information and knowledge generation and sharing to find innovative solutions to critical mountain problems. We bridge science with policies and on-the-ground practices. We provide a regional platform where experts, planners, policy makers, and practitioners can exchange ideas and perspectives towards the achievement of sustainable mountain development. We facilitate knowledge exchange across the region, help customize international knowledge and tailor it to the region's needs and bring regional issues to the global stage.

The South Asian Network for Development and Environmental Economics (SANDEE) at ICIMOD supports ICIMOD's programmatic work and strengthens the Centre's economic and policy analysis. It is a research capacity and academic leadership development network that works in South Asia and the HKH region and supports researchers from the region and institutions interested in understanding the inter-connections between economic development, the environment, and the use of natural resources through rigorous research.

Paris School of Economics is a Foundation for Scientific Cooperation (*Fondation de Coopération Scientifique*) by the CNRS, the EHESS, the École des Ponts ParisTech, the École normale supérieure (ENS-PSL), the INRAE and the University Paris 1 Panthéon-Sorbonne. PSE comprises a community of nearly 150 researchers and 155 doctoral candidates. The PSE conducts research and teaches economics courses at the highest international level. It actively encourages exchanges between economic analysts and the other social scientists, contributes to economic policy debates and makes its scholarly research accessible via its Partnership Programme and its actions "Economics for everybody". PSE co-organizes this workshop as part of its environment initiative. Indeed, in the face of the climate emergency, the economy must transform itself to drastically reduce our pressure on the environment, by reducing pollution and damage to biodiversity. The objective for PSE economists is to propose answers to these challenges, both to lay the foundations for a new model of sustainable growth in terms of production and consumption and to make the transition socially acceptable and economically viable. These issues are at the heart of the environmental problems facing the international community.

ForestAction (Forest Resources Studies and Action Team) Nepal, established in 2000, is a learning oriented, not-for-profit, professional organization working in the areas of Forestry, Agriculture and Climate Change. It adopts an interactive approach to policy research and advocacy in collaboration with research community, civil society groups and government agencies to build deliberative and collaborative policy practices. It envisions achieving productive, sustainable and equitable natural resource management by blending professional knowledge with citizen power to build pressure for transformative change.