

BOOK OF ABSTRACTS

- I. SESSION DESCRIPTION
- II. SESSION PROGRAM
- III. ABSTRACTS

I. SESSION DESCRIPTION

ID: S9c

Towards developing effective PES mechanisms suiting Indigenous peoples and local communities

Format: Hybrid

Hosts

	Name	Organisation	E-mail
Host	Marcello Hernandez	Charles Darwin University, Australia	marcello.hernandez.b@gmail.com
Co-Host	Kamaljit K Sangha	Charles Darwin University, Australia	kamaljit.sangha@cdu.edu.au

Abstract

The aim of this session is to understand and incorporate IPLCs' perspectives for developing effective and appropriate PES schemes. The participants in this session will collectively discuss and explore:

1. What are the commonly used Payment for Ecosystem Services (PES) mechanisms?
2. Do the current mechanisms align with Indigenous Peoples' and Local Communities' (IPLCs) interests?
3. How can we develop effective and efficient PES schemes suiting IPLCs' interests?
4. What are the key factors necessary to develop successful IPLC-focused PES schemes?

Goals & Objectives

1. To understand and incorporate IPLCs' perspectives for developing effective and appropriate PES schemes

Planned Output

We will plan to conduct a review of existing literature on PES in relation to IPLCs' perspectives, and develop a framework addressing IPLCs' concerns

Session Format

Time: 2.5–3 hours. Presentations as well as discussion within the group

Acceptance of voluntary contributions

Yes, I allow any abstract to be submitted to my session for review.

Relation to ESP Working Groups or National Networks

Sectoral Working Groups: SWG 9 – Indigenous people & Local communities

II. SESSION PROGRAMME

Date of session: 9 November

Time of session: 11:00–12:30

Timetable speakers

Time	First name	Surname	Organization	Title of presentation
11:00– 11:05	Kamaljit K	Sangha		Introduction to the session: Need to develop IPLCs–specific PES systems
11:05– 11:20	J. Preston	Whitt	World Wildlife Fund	Operacionalizar los "Principios de integridad para la distribución de beneficios en las SbN forestales para la mitigación del cambio climático" de WWF
11:20– 11:35	Dr. Yu– Fang	Lin	Legend Environmental Consulting Co., Ltd.	Achieving sustainable land management in indigenous community with the methods of ecosystem services assessment
11:35– 11:50	Dr. Priyanka Halder	Mallick	University Vidyasagar	Assessing Village–level dependence on Provisioning Ecosystem Services from Tropical Deciduous Forest in Midnapore, West Bengal, India to guide management decisions
11:50– 12:05	Burnice	Karimi Ileri	Egerton University	Prospects of Willingness to Pay in Restoration of Water Quality and Water Quantity Ecosystem Services in Kapingazi Catchment, Embu County, Kenya

Time	First name	Surname	Organization	Title of presentation
12:05– 12:20	DIANA	TOVAR	Instituto de Investigación de Recursos Biológicos Alexander von Humboldt	Pago por Servicios Ambientales en Páramos de Colombia: Lecciones aprendidas
12:20– 12:30				Group Discussion

III. ABSTRACTS

1. *Type of submission:* Abstract / Resumen

S. Sectoral Working Group sessions / Sesiones del Grupo de trabajo Sectoriales S9c – Towards developing effective PES mechanisms suiting Indigenous peoples and local communities

Achieving sustainable land management in indigenous community with the methods of
ecosystem services assessment

First author(s): Yu-Fang Lin

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Taiwan has changed its spatial planning system since almost 8 years and started to include more different opinions in the planning mechanism, which encourage public participation in the planning process and government decision-making. This study aims to enhance a more culture-inclusive and knowledge-integrated institutional environment for spatial planning in indigenous communities. This study took Cinbu community as study area, where has been done the pilot study of indigenous special charter land use planning in Taiwan and reviewed the development effectiveness with ecosystem services assessment. A methodology has

been developed for dialoguing with indigenous elders for gaining traditional wisdom of living in mountain areas, and also contribute to the planning process. Moreover, the mountain areas in Taiwan are facing more challenge of landslides and debris flow due to climate change. Therefore, a systematic planning together with ecosystem services assessment can determine the high-risk areas to relocate land uses for demands of community development and to avoid developing in disaster-prone areas. The purpose of this study is also providing a solution-based spatial planning with consideration of indigenous community development, environmental conservation and disaster reduction. The results of ecosystem services assessment and scenario development will contribute to policy making of spatial planning in indigenous community and adaptation to climate change and disaster reduction at the local level.

Keywords: Ecosystem services, Indigenous community, Traditional wisdom, Disaster risk management

2. *Type of submission:* Abstract / Resumen

S. Sectoral Working Group sessions / Sesiones del Grupo de trabajo Sectoriales S9c –
Towards developing effective PES mechanisms suiting Indigenous peoples and local
communities

Assessing Village-level dependence on Provisioning Ecosystem Services from Tropical
Deciduous Forest in Midnapore, West Bengal, India to guide management decisions

First author(s): Priyanka Halder Mallick

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The management of forest resources and services over the course of time is greatly impacted by community reliance on them for varied demands. Often local people in developing countries are unaware of the exact value of various Ecosystem Services (ES) offered by the forest except for the provisional ones (PES). A scientific approach for uplifting of the Non-Timber Forest Products (NTFPs) sector can substantially cater to achieving the target of rural development and valuable natural resources' conservation. Therefore, the present paper aimed to study: – 1. the range of PES utilized by the people of forest fringe villages in Midnapore; 2. the sociological and ecological factors likely to influence amount of NTFP extraction; 3. the economic valuation of the PES (esp. fuelwood usage) for sustainable management of tropical forests.

An inventory was prepared for the major NTFPs extracted by 11 selected villages (2019–2020). A schedule (structured questionnaire) was used to collect responses (n=200) related to our objectives. Survey revealed that the average range of income of the households was Rs. 32,400 p.a. – Rs. 1,37,333 p.a. implying a reasonably poor livelihood. The monetary contribution of these NTFPs was at US\$ 4264/household/year, wherein fuelwood contributed largest proportion of 80.6%, but the other NTFPs were overlooked.

For the purpose of identifying trends in the production and usage of NTFPs, that may be beneficial to the financial prosperity of the villagers and engage them in judicious use of resources in tune with SDGs, it is necessary to examine the extraction and consumption trends over time and throughout several seasons. For a variety of stakeholders involved in the preservation of forests, flora and fauna, as well as local development, this study can show a detailed path for shaping regional micro-plans.

Keywords: NTFP, community, Jangal-mahal, sustainable development goal, fuelwood

3. *Type of submission:* Abstract / Resumen

S. Sectoral Working Group sessions / Sesiones del Grupo de trabajo Sectoriales S9c –
Towards developing effective PES mechanisms suiting Indigenous peoples and local
communities

Prospects of Willingness to Pay in Restoration of Water Quality and Water Quantity Ecosystem Services in Kapingazi Catchment, Embu County, Kenya.

First author(s): Burnice Karimi Ileri

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Ecosystems provide valuable ecosystem services which are the foundation of man's sustainable development. However, when humans degrade ecosystems in providing for their own sustenance, they lead to loss of ecosystem services such as supply of fresh water undermining the wellbeing of human beings. Kapingazi catchment provides various ecosystem services mainly water provision to downstream users including national hydroelectric power stations that contribute to 52.1% of hydro-electric power of Kenya's electricity. Agricultural and industrial activities have changed the ecosystem structure of the catchment leading to fluctuation of water quality and quantity of Kapingazi River. Payment for ecosystem services is one of the approaches which can enhance adoption of sustainable land management practices leading to improved water services in Kapingazi catchment. The aim of this research was therefore to assess the willingness to pay in improved water services provision in Kapingazi catchment in Embu County, Kenya. Household questionnaires, key informants schedules and focus group discussions were used to collect data from local community, institutions and stakeholder associations respectively. The results showed that 67% of the respondents were willing to pay for improved water services in terms of water quality and water quantity within the catchment. The respondents were willing to pay an average of USD 9.10 per annum in addition to the average water user fee of USD 4.19 per month for improved water services in Kapingazi catchment. Logistic regression analysis revealed that age, education and household size were the factors influencing respondents' willingness to pay (WTP) for improved water service in the study area. Positive WTP for improved water service provision shows the need for improved water service provision in Kapingazi catchment. Thus, decision makers should create enabling policy for implementation of payment for ecosystem services (PES) programme for improved of water services provision in Kapingazi catchment and ultimately in Kenya.

Keywords: Ecosystems, Ecosystem services, Water, Catchment, Willingness to pay

4. *Type of submission:* Abstract / Resumen

S. Sectoral Working Group sessions / Sesiones del Grupo de trabajo Sectoriales S9c –
Towards developing effective PES mechanisms suiting Indigenous peoples and local
communities

Operacionalizar los "Principios de integridad para la distribución de beneficios en las SbN forestales para la mitigación del cambio climático" de WWF

First author(s): J. Preston Whitt

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Las soluciones basadas en la naturaleza (SbN) aprovechan el poder de la naturaleza para fortalecer los ecosistemas naturales, la biodiversidad y el bienestar humano para responder a los retos sociales más serios, como el cambio climático. Aunque el interés y la inversión en SbN están creciendo, especialmente por parte del sector privado, acelerar la aplicación de las SbN sin una orientación concreta y basada en principios también representa un riesgo importante. Sin parámetros y directrices, gran parte de esta inversión puede desperdiciarse o fluir hacia y a través de, y por tanto reforzar, instituciones y estructuras de poder que no respetan los derechos humanos, no protegen a los pueblos indígenas y a las comunidades locales, o no ofrecen una gestión financiera responsable.

Es por ello que WWF sintetizó sus "Principios de integridad para la distribución de beneficios en las SbN forestales para la mitigación del cambio climático" y los presentó en el COP27. Ese documento pretendía centralizar una declaración compartida de directrices éticas ambiciosas para la máxima integridad en la distribución de beneficios en las SbN.

Después, WWF elaboró orientaciones concretas y prácticas para aplicar estos principios a las intervenciones de SbN en varios escenarios de valor extremo en cuanto a servicios ecosistémicos. Con esta presentación, se busca compartir la posición innovadora de la red WWF sobre las SbN y aprender de los expertos participantes para hacer cualquier adaptación o cambio necesario al iniciar la implementación de estas orientaciones.

Keywords: NbS, Integrity, IPLC

5. *Type of submission:* Abstract / Resumen

S. Sectoral Working Group sessions / Sesiones del Grupo de trabajo Sectoriales S9c –
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communities

Pago por Servicios Ambientales en Páramos de Colombia: Lecciones aprendidas

First author(s): Diana Tovar

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Los ecosistemas de páramo son reconocidos por su amplia oferta de servicios ecosistémicos claves para el bienestar humano, como la conservación de la biodiversidad, la provisión de hábitats para distintas especies, la absorción de carbono, el turismo, la investigación e incluso el disfrute espiritual; para Colombia son fundamentales en la regulación hídrica, ya que es en las zonas de páramo donde se originan los nacimientos de los principales ríos, donde se producen procesos de almacenamiento y regulación hídrica de los que se beneficia la población del país. Sin embargo, el desarrollo de actividades productivas como la agricultura, la ganadería o la minería en zonas de páramo generan conflictos socioecológicos en este ecosistema. Por ello, los Pago por Servicios Ambientales (PSA) han sido una opción para incentivar la conservación del ecosistema de páramo y ayudar a mitigar las presiones antrópicas que se generan en estos.

Los procesos PSA tienen una trayectoria desde casi veinte años en Colombia, con avances normativos y de implementación importantes, principalmente para el servicio hídrico; sin embargo, aun existe carencia en la realización de análisis de resultados. El objetivo del presente estudio es analizar lecciones aprendidas que la implementación de estos procesos ha tenido específicamente en el ecosistema de páramo, que sirva para fortalecer procesos futuros. Metodológicamente se parte de la revisión teórica y normativa del instrumento en el país, para luego recopilar las lecciones aprendidas de los actores y procesos de PSA que se han realizado en los complejos de páramos que hacen parte del proyecto GEF – Páramos para la vida, apoyado en una encuesta a actores institucionales.

Keywords: Pago por Servicios Ambientales, Páramos, lecciones aprendidas