Book of Abstract

I. SESSION DESCRIPTION

ID: S9

Title of session:

Mainstreaming Indigenous and local communities connections with nature

Hosts:

	Title	Name	Organisation	E-mail
Host:	Mr.	Kamaljit Sangha	Charles Darwin University	kamaljit.sangha@cdu.edu.au

Abstract:

This workshop will discuss how Indigenous and local communities interact with their traditional estates, and the kind of ecosystems services (ES) that people derive from those estates. The participants will consider methods to evaluate identify and evaluate people-nature links including examining multiple evidence-based, monetary and/or non-monetary valuations, and capability approaches. We will discuss the role of Indigenous and local communities in preserving the natural systems and how to support them in implementing sustainable practices through suitable policy mechanisms such as payments for ecosystem services (PES).
The workshop will be open to discuss related topics that may be of interest to the group, including socio-ecological resilience, impacts of change in ecosystems on local communities, and integration of traditional knowledge with the scientific knowledge applying multi-disciplinary approaches.

Goals and objectives of the session:

1. To develop an outline for mainstreaming ES from Indigenous and local communities perspectives for policy development in a developing world context

Planned output / Deliverables:

possibly a journal article and setting up a group interested to work on the topic

Related to ESP Working Group/Natioanl Network:

SWG 9 – Indigenous people & Local communities

II. SESSION PROGRAM

Date of session: Wednesday, 10 October 2018

Time of session: 11:00 – 12:50, 14:00 – 16:00

Time	First name	Surname	Organization	Title of presentation
11:00-11:10	Kamaljit K.	Sangha	Charles Darwin University, Australia	Introduction of the session
11:10-11:30	Diptimayee	Nayak	Indian Institute of Technology Roorkee	Ecotourism in conservation: Communicating and engaging stakeholders in Recreational Ecosystem services in Bhitarkanika Wildlife Sanctuary, India
11:30-11:50	Rishabh	Maheshwari	Tata Institute of Social Sciences, India	Indigenous Knowledge & its role in Eco-DRR and Biodiversity Conservation Strategies as adopted by community residing near Sahyadri Tiger Reserve
11:50-12:10	Upma	Manral	Wildlife Institute of India	Disturbance status and ecosystem goods extraction under different management regimes in Western Himalayan forests
12:10-12:30	Pariva	Dobriyal	Khulna University	Linkages between provisioning services and status of human wellbeing in Indian Himalayan Region
12:30-12:50	Abdullah-Al-	Masud	Bangalore University	Effect of natural disaster-induced changes in livelihood dependency on ecosystem services of the Sundarbans, Bangladesh
12:50-14:00			LUNCH	

Time	First name	Surname	Organization	Title of presentation
14:00-16:00	**Collective discussion to develop policy tools for mainstreaming ES from local perspectives** (Facilitator will introduce the agenda for the workshop)			

III. ABSTRACTS

Abstracts are clustered based on the last name of the authors. First authors are presenting authors unless indicated otherwise.

1. Type of submission: Abstract

S. Sectoral Working Group sessions: S9 - Mainstreaming Indigenous and local communities connections with nature

Linkages between provisioning services and status of human wellbeing in Indian Himalayan Region

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The wellbeing of rural human societies is determined by the availability and accessibility of goods and services provided by natural resources. We assessed the impact of different accessibility conditions and quality of provisioning services provided by forest resources on human wellbeing of user communities of in Nanda Devi Biosphere Reserve, Indian Himalayan Region. Data regarding status of wellbeing was collected in 22 villages selected on the basis of secondary demographic information, distance and state of the forest resources i.e. degraded and less-degraded. Semi-structured questionnaire-based interviews were conducted in randomly selected households (n=764). To assess the status of wellbeing first seven Millennium Development Goals of United Nations were used as indicators. To assess the quality and quantity of forest resource, transects (n=22) were laid in the forests frequented by the sampled households. It was found that the status of wellbeing of the household located close to forest was better than the households located away from forest. The wellbeing of households using less-degraded forest resources was significantly better than those using degraded resources. Households with access to less-degraded resources also consume wild fruits and vegetables which add to the food security of the user group. Other then quality of forest resources, access to education facilities and availability of alternative livelihoods were also found to be positively associated with the wellbeing of the respondents. Results highlight the importance of forests in human wellbeing. Hence, contribution of natural resources to wellbeing of rural communities should be considered by policy makers and linkages between wellbeing and forest health need to be incorporated in

management and conservation of forest resources.

Keywords: human wellbeing, provisioning services, forest health, local communities, world heritage sites

2. Type of submission: Abstract

S. Sectoral Working Group sessions: S9 - Mainstreaming Indigenous and local communities connections with nature

Indigenous Knowledge & its role in Eco-DRR and Biodiversity Conservation Strategies as adopted by community residing near Sahyadri Tiger Reserve

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Thousands of people around the globe are affected by disasters of different forms. Though, one of most affected and vulnerable are the indigenous community living in remote areas, their knowledge of mitigating the impact of any hazard or to adapt themselves to any hazard is invaluable. Their knowledge is often considered inferior to the knowledge provided by the scientific community and often on some aspect there are differences among them. Scientific knowledge is still struggling to reach to the grass root level, where the vulnerability is often highest and here local knowledge and beliefs strengthen the community's resilience and coping power to the hazard which they encounter regularly. This knowledge is often lost or overlooked during hasty development and urbanisation in the modern world where indigenous knowledge is considered sub-standard. But since this knowledge has helped various indigenous communities to survive various hazards from generations there has been arguments and calls for better for the documentation and acceptance of this knowledge worldwide. Indigenous knowledge, which has been attained through intergenerational community experiences, revealed to next generations via folklores and stories, and sometimes via unconventional sources such as intuitions or dreams. Though this knowledge base is still underappreciated, it has helped community to cope up with multiple hazards & disasters, during pre and post phase. Thus, from last two decades this knowledge set has received a lot of attention in academia, but its acceptance in

developmental policy is still subdued.

With Hyogo Framework for Action- Priority 3, and the recent Sendai Framework for Disaster Risk Reduction, high importance is given for inclusion of traditional community knowledge into developmental plans for DRR.

This paper attempts to encapsulate the Indigenous Knowledge pertaining to Eco-DRR and Biodiversity conservation of people living in the Bamnoli Range of Sahyadri Tiger Reserve (UNESCO WHS).

Keywords: Traditional Knowledge, Indigenous Knowledge, Eco-DRR, Biodiversity conservation, Sahyadri

3. Type of submission: Abstract

S. Sectoral Working Group sessions: S9 - Mainstreaming Indigenous and local communities connections with nature

Disturbance status and ecosystem goods extraction under different management regimes in Western Himalayan forests

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In rural Himalaya where very few livelihood options are available, mountain forests form an essential life support system and major contributor to the livelihood security of rural communities. These forests play a multifaceted role in achieving Sustainable Development in the region as they balance conservation and economic growth. Thus, it becomes imperative to study the dynamics of socio-ecological systems to appropriate policy measures for poverty alleviation and for ensuring ecological sustainability.

The study was conducted in the Kedarnath Wildlife Sanctuary landscape in Uttarakhand, India. Plant biomass extraction from forests under various management regimes (state-

owned and community-managed) was assessed through community and household surveys using semi-structured questionnaires. Disturbance in these forests was assessed by studying disturbance signs, tree community composition and regeneration status of trees.

Study indicated that the resource use pattern varied in the area along elevational gradient, with a household's consumption of ecosystem goods predicted by factors such as family size, nearness to the Sanctuary forests and motor-able road, landholding size and livestock numbers. Village councils with strict regulations regarding forests management and strong social fencing had better managed forests. These also ensured an equal and sustainable flow of resources to all member households. Both Sanctuary and open community forests had statistically significant higher disturbance ranks and poorer regeneration pattern than closed community forests.

Himalayan forests, being foundation of local economy, require immediate conservation attention as these face both natural and anthropogenic threats. It is imperative to formulate long-term, sustainable natural resource management strategies supplemented by improved biomass production within human systems and renewable-energy technologies to reduce reliance of local communities on forests biomass. In regions where local communities form prevalent feature of protected area landscapes, a participatory approach of forest conservation and natural resource management will be an ideal governance system for natural areas.

Keywords: Anthropogenic pressure, Local governance institutions, Kedarnath Wildlife Sanctuary, Oak forests

4. Type of submission: Abstract

S. Sectoral Working Group sessions: S9 - Mainstreaming Indigenous and local communities connections with nature

Effect of natural disaster-induced changes in livelihood dependency on ecosystem services of the Sundarbans, Bangladesh

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The South-west coastal region of Bangladesh is one of the most vulnerable regions in the world due to climate change induced natural disasters that affect natural resources provided by mangroves. This research aimed to analyze the relationship between natural disasters and livelihood dependency on mangrove ecosystem services in Koyra Upazila, just beside the Sundarbans as a case study. The study was carried out based on both descriptive and quantitative research approach. To know the local people perception, a household questionnaire-based survey (in total 154 households) and Focus Group Discussion carried out followed by secondary data analysis. Satellite images were analyzed to explore the land use changes pattern in the year of 2000 and 2010. A livelihood analysis was performed on the basis of the respondent's views regarding changes in their livelihood capitals in recent time while trend analysis of resources extraction was performed to explore the changes in the use of provisioning services. The study revealed that local people became more dependent on the use of provisioning services from the Sundarbans because of recent land use change, especially around 31% agricultural land have degraded due to the consecutive cyclone in 2007 and 2009. Thus, the traditional livelihood of agricultural farming has been damaged. Consequently, most of the indicators of livelihood capital have declined over the time. Therefore, the Sundarbans was the source of on average 87% of the total income earned by households, by spending on average around 60-75 hours in a week into the Sundarbans. Due to depletion of timber products, the extraction pattern has shifted to Non-Timber Forest Products (NTFP) especially fisheries resources extraction from the adjacent Sundarbans wetlands. Consequently, the respondents mentioned that the quantity and quality (species diversity) of fishery resources along with plants, fuelwood, thatching materials and honey have declined in the Sundarbans, due to the over-dependence on the

resources.

Keywords: Livelihood, Natural-disaster, Land use change, Ecosystem Services, the Sundarbans

5. Type of submission: Abstract

S. Sectoral Working Group sessions: S9 - Mainstreaming Indigenous and local communities connections with nature

Ecotourism in conservation: Communicating and engaging stakeholders in Recreational Ecosystem services in Bhitarkanika Wildlife Sanctuary, India

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Ecosystem services approach to conservation by recognizing recreational ecosystem services is one of the vital methods in the arena of conservation and policy dialogues of protected areas. However, most protected area ecosystems in India are in fragile conditions which require policy interventions for the conservation of their uninterrupted services. In this context, the guidelines on ecotourism in and around protected areas framed by the Ministry of Environment Forest and climate change (MOEF & CC), 2011 highlighted the friable nature of these wilderness and emphasised on the role, involvement and participation of the local communities as a key stakeholder in conservation and implementation of ecotourism. However, without getting tangible benefits from ecotourism, full involvement and participation in its operation are difficult, which is detrimental to the conservation of protected areas. Hence, in this context, this paper contextualises and critically analyses participation, benefits accrued and acknowledged by the local communities and other stakeholders, the institutions involved, the process and mechanisms of ecotourism operation by reviewing published studies on Indian protected areas in general and taking the case of Bhitarkanika Wildlife Sanctuary in particular to harness the sustainable operation of ecotourism. The paper finds inequitable and polarised involvement of powers in ecotourism operations among stakeholders and concludes that proper communication and engagement of local communities and other stakeholders are urgently required for

sustainable ecotourism and conservation in protected areas.

Keywords: Ecotourism, Conservation, Recreational ecosystem services, stakeholders, Bhitarkanika Wildlife Sanctuary