BOOK OF ABSTRACTS

1. SESSION DESCRIPTION

ID: T16a

Title of session:

Financing mechanisms (incl. PES) for sustainable landscapes and ecosystem services

Hosts:

	Title	Name	Organisation	E-mail
Host:	Dr	Silvie Daniels	Univ. Hasselt	Silvie.daniels@uhasselt.be
Co-host:	Dr	Nele Witters [T9]	Univ. Hasselt	Nele.witters@uhasselt.be
Others involved:	Dr	Beria Leimona/ Florence Bernard	CGIAR	l.beria@cgiar.org f.bernard@cgiar.org

Session description:

In this session, we aim to strengthen the case for innovative financing mechanisms for sustainable landscapes, biodiversity and ecosystem services, in order to advance the implementation of good practices. Evidence-based data, and models of innovative finance mechanisms are of interest to various stakeholders: medical professionals, landscape architects, urban designers, economic experts, etc.

More in particular, we welcome case study results that report on and evaluate the implementation process, the financial structure or the financial viability of finance mechanisms for sustainable landscapes, biodiversity and ecosystem services.

Goals and objectives of the session:

Strengthen the case for innovative financing mechanisms, if possible leading to the start of a database.

Planned output / Deliverables:

Overview of best practices. And the gathering of interested partners and ideas for (implementation) projects on innovative financing of green (link to session T16b).

Related to ESP Working Group or National Network:

TWG 16 – ES Financing mechanisms (incl. PES)

2. SESSION PROGRAM

Date of session: 14 December 2017
Time of session: 10:30 – 12:30

Timetable speakers

Time	First name	Name	Organization	Title of presentation
10:30	Flor-ence	Bernard	World Agroforestry Centre	Launch of the e-PES book "Co-investment in ecosystem services: global lessons from payment and incentive schemes"
10:45	Rob	Bugter	Wageningen Environmental Research (Alterra), Wageningen Economic Reseach	Facilitating investments in Nature through an alternative use of Habitat Banking
11:00	Jaime	Erazo	International Center of Physics, Biotechnology Group (former)	Oil palm plantations voluntary biodiversity offsets: opportunity to finance innovative conservation initiatives in Colombia's Orinoco grasslands
11:15	Rao	Fu	EBP Schweiz AG	Demonstration projects to promote investments in watershed services in six countries:

Time	First name	Name	Organization	Title of presentation
				experiences and lessons learned
11:30	Trong	Hoan-Do	World Agroforestry Centre	Assessing willingness to pay and willingness to accept agroforestry-based PES contract in central Vietnam: what would impede voluntary transaction?
11:45	Benja-min	Thomp-son	National University of Singapore	The intersection of payments for ecosystem services (PES) and corporate social responsibility (CSR)
12:00	Gao-chao	Zhang	IGN, University of Copenhagen	Health-promoting nature accessible for people with mobility impairments: a systematic review
12:15	Discussion			

3. ABSTRACTS

Type of submission: *Abstract*

T. Thematic Working Group sessions: T16a Financing mechanisms (incl. PES) for sustainable landscapes and ecosystem services

Facilitating investments in Nature through an alternative use of Habitat Banking

Author(s): Rob Bugter, Janneke Vader

Affiliation(s): Wageningen Environmental Research (Alterra), Wageningen Economic Reseach

Other author(s): Mark van den Hoven

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Private parties are often interested in investing in nature, for example from the perspective of Corporate Social Responsibility, but this interest is not often turned into actual implementation. The impression is that especially facilitation and clear rewards are missed.

Habitat Banking is designed to facilitate (mandatory) offsets of damage to Nature, but is basically also usable for channeling money from other sources into nature. In a brief study in the Netherlands we explored if this instrument can

help to make investing in Nature easier. We explored the interest in three projects in which nature development was an integral part of the strategy to improve the quality of the environment.

We found that private parties in principle are interested in investing in the quality of the environment, including nature and landscape. The investment interest is much wider than Nature itself. Quality of life in general and services like recreation and CO2 sequestration were often specifically mentioned as worth investing in. The motivation for possible investments is the general social desire to manage the environment in a better, more sustainable way. For companies it is often both useful and necessary to visibly invest in sustainability.

Important factors determining the willingness to invest were indeed the effort needed and the returns on the investment. Returns may take various forms. Most often mentioned were: expansion space, preferential treatment for tenders, certification and PR purposes. Companies may also want some extent of control over where there money is invested in, for example in their own region.

Overall, there is a need for an appropriate, transparent and above all flexible system of rewards and returns. There is a need for regulations and a regulatory organisation, which

must have a much broader base than a traditional offset bank. However, such an offset bank could easily be included if required, and in the process hugely benefit.

Keywords: Habitat Banking, ecosystem services, investing in nature

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Shenzhen, China 11-15 Dec 2017
Ecosystem Services for Eco-civilization
Restoring connections between people & landscapes through nature-based solutions

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Oil palm plantations voluntary biodiversity offsets: opportunity to finance innovative conservation initiatives in Colombia's Orinoco grasslands

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Palm oil harvest area increased 100% between 2001 and 2010 in Colombia's Orinoco Grasslands. Palm oil production is one of the three most important agriculture products and harvest area is nearly 36% of total country's area. Flooding savannas, located between Colombia and Venezuela's Orinoco Grasslands are one of the most threatened and less preserved areas in Latin America, and has an important palm oil area increase. Only 4% of the area has protected areas. Flooding savannas present

ecological dynamics that generates important species exchange between ecosystems.

Palm oil plantations identify High Conservation Values, following Round Table on Sustainable Palm Oil (RSPO) principles and criteria. Plantations can prevent, minimize, restore and compensate for generated biodiversity impacts on a voluntary basis.

The objectives of this study were: identify and quantify compensation areas for flooding savannas affected by palm oil plantations; apply cost-effectiveness criteria to compare compensation alternatives like Payment for Environmental Services (PES) implementation to promote sustainable cattle ranching adoption, conservation easements establishment, land purchase and public protected areas establishment.

Some results are: promoting sustainable ranching can be a cost-effective alternative for promoting conservation activities on flooding savannas, because they increase livestock productivity and grasslands landscape conservation; land purchase and establishment of conservation easements generate a higher security on the conservation return on investments, although there are other cost-effective alternatives like establishment of new protected areas; it is possible to analyze other intermediate options such as leases, usufruct or purchase of land for

donation to conservation NGOs; establishment of conservation easements is more cost-effective than land buying, but for some municipalities low land prices can be more attractive for land buying activities; a portfolio of conservation strategies should be considered, based on site specific characteristics (opportunity costs), along with donation's tax benefits, that can generate additional conservation costs reduction.

Keywords: flooding savannas, cost-effectiveness, biodiversity offsets, conservation portfolio strategies

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Demonstration projects to promote investments in watershed services in six coun-tries: experiences and lessons learned

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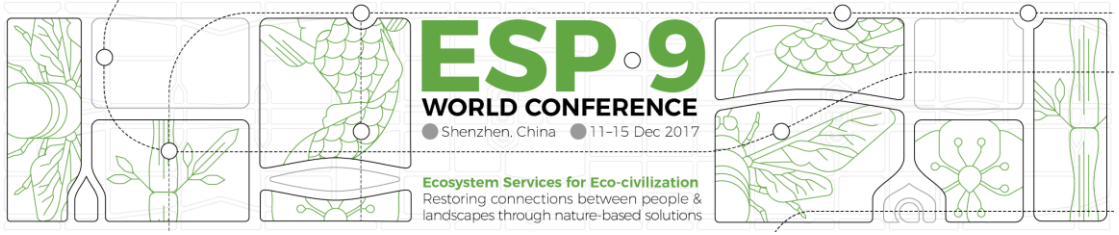
Since 2011, the Global Programme Water Initiative (GPWI) of the Swiss Agency for Develop-ment and Cooperation (SDC) is funding the project “Developing and Scaling-Up Payment in Wa-tershed Services to face the Global Water Crisis” implemented by Forest Trends together with a network of partners. The project aimed at promoting investments in green infrastructure through demonstration projects in Brazil, Bolivia, China, Ghana, Mexico and Peru. An evaluation team of EBP was mandated by SDC to evaluate the project progress, allowing for an insight into the chal-lenges, success factors and lessons learned in those six projects. The projects showed both distinct and common challenges in promoting investments in green infrastructure. Our lessons learned concern three key

areas: 1)Technical tools and instruments: models and toolsets for mapping priority areas, impact indicators, or monitoring impact are key elements, often dealing with environmental complexity, reliability and broad acceptance at the same time; 2)Adequate institutions and stakeholder ownership and capacities: besides impressive regulatory ad-vancements in some countries such as Peru, the key challenges and sometimes bottlenecks remain the multi-stakeholder approaches required by the holistic watershed perspective, the need for effective institutions and for building up green infrastructure know-how; 3)Financing mechanisms: to attract the private sector and private or public investors, mechanisms for in-vestments in watershed services must find strategies to predict and quantify input-output rela-tions more efficiently. Scalability of projects has proven to be possible only under distinct favor-able circumstances.

EBP presents a global roadmap towards promoting effective mechanism for investments in watershed services, focusing on lessons learnt and key challenges to be tackled by various fields of society (academia, private sector, finance institutions, industries).

Keywords: payment of watershed services, demonstration projects, financing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T. Thematic Working Group sessions: T16a Financing mechanisms (incl. PES) for sustainable landscapes and ecosystem services

Assessing willingness to pay and willingness to accept agroforestry-based PES contract in central Vietnam: what would impede voluntary transaction?

Author(s): Trong Hoan Do
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The mandatory payment for forest environmental service (PFES) policy in Vietnam limits the potential of expanding the scope of PES based on stakeholders' actual needs. In this study, we investigated the potential of a PES mechanism that incentivizes agroforestry development outside natural forests by determining the willingness of ecosystem service (ES) beneficiaries/users' to pay for delivery of services via

adoption of agroforestry practices by upland communities, and vice versa, the willingness of upland communities to adopt agroforestry, to deliver ES in Song Thanh Natural Reserve, central Vietnam. Contingent Valuation Method (CVM) and Discrete Choice Experiment (DCE) were used to understand ES users' Willingness to Pay (WTP) and farmers' willingness to accept (WTA) the agroforestry-based PES contract, respectively. From the users' side, 64% of pooled respondents said they would be willing to pay a higher rate for their water consumption to improve upstream watershed management, whereas 56% were willing to pay higher electricity rates. Their WTP, however, is only for a scenario where upstream watershed management will be actually improved. On the providers' side, WTA is high if the conditionality is relaxed. Upfront cash payment is the third important factor for farmer's WTA, while monitoring level (representing conditionality) is most important to all farmer groups (gender, age, education). Our findings suggest a fundamental challenge in developing a voluntary PES transaction, that is, matching the needs of buyers and providers through a well-established system, which monitors and demonstrates environmental service flows, but that does not

impose stringent rules and standards that limit stakeholders' participation.

Keywords: agroforestry, choice experiment, PES, willingness to pay, willingness to accept

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The intersection of payments for ecosystem services (PES) and corporate social responsibility (CSR)

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The conservation of biodiversity and ecosystem services remains severely underfunded, and private sector investment can play a vital role in filling this void. Corporate social responsibility (CSR) remains a primary mechanism for conservationists to access such funds. Meanwhile, corporations are increasingly integrating ecosystem services (or natural capital) into their sustainability strategies. Payments for ecosystem services (PES) has been widely touted as a promising option for corporate-financed conservation; one that can simultaneously benefit

corporations – especially those that use ecosystem services as production inputs.

This talk considers the suitability of CSR as a point of engagement between the private sector and PES. It begins by conceptualising the conduciveness of PES to different CSR strategies: for example, the timeframe and location of their CSR activities, whether firms have a proactive or reactive CSR strategy, and whether they are looking for a direct or indirect return on investment (ROI) – or none at all. I will then outline key challenges with engaging the private sector in PES; drawing on interviews with corporations, sustainable business groups, NGOs, and Government agencies in Thailand and the Philippines. These challenges revolve around the high costs, implementation effort, and uncertainties involved with PES relative to more traditional CSR activities. Finally, I will present the evaluations of two new corporate-financed 'PES' schemes in Thailand. These schemes were evaluated against PES criteria, to ascertain how 'PES-like' they really are. I conclude that PES may be being customized by corporations, to adhere to the CSR policies and financial practices that they are more bound and attuned to.

Keywords: corporate sustainability, natural capital, return on investment, Thailand, Philippines

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Health-promoting nature accessible for people with mobility impairments: a systematic review

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This study systematically evaluated the scientific evidence for health benefits of natural environments for people with mobility impairments. Literature searches based on five categories of terms — target group, nature type, health-related impacts, nature-related activities and accessibility issues — were conducted in four databases (Web of Science, Scopus, CAB ABSTRACT and Medline). Twenty-seven articles

from 4196 hits were included in the systematic reviews. We concluded that people with mobility disabilities could gain different health benefits, including physical health benefits, mental health benefits and social health benefits from nature in different kinds of nature contacts ranging from passive contact, active involvement to rehabilitative interventions. Among the three identified categories of health benefits, mental health benefits are supported by the most studies. The various health benefits may come from the natural elements in nature, change of environment and the accomplishment of activities that the target group thought to be beyond their abilities. Issues related to the accessibility and use of nature for people with mobility impairments need attention from professionals such as landscape architects, rehabilitative therapists and policy makers. Our systematic review indicates that barriers are common when it comes to the usage of nature for the target group, and that the barriers are not merely the lack of physical accessibility, but also comprise invisible intrapersonal and interpersonal barriers. People with mobility impairments also expressed clear preferences for natural features such as trees and

described feeling pleasure from other senses such as the sounds of water and birds. However, further research with high quality, especially random controlled trials and longitudinal studies, are needed. More interdisciplinary collaborations focusing on health-promoting nature among the target group, therapists, landscape architects, policy makers etc. should be established to make the health benefits, a key component of nature's benefits, be offered to all.

Keywords: green spaces, nature-related activities, disabilities, health benefits, accessibility