

Scientific conference : Social impacts sociaux of forest conservation.

Wednesday 9th December 14:00 – 16:00

Venue : Amphithéâtre de l'ESSA-Forêt, Antananarivo

14h - Le sucré et l'amer. Impacts sociaux de la compensation écologique ou biodiversity offset -
Cécile Bidaud

14h45 - Estimation des coûts réels locaux de la conservation des forêts avec des modèles de choix discrets- **Sarobidy Rakotonarivo**

15h30 – Débat sur les sauvegardes et compensations sociales des aires protégées

14h - Bittersweet: intertwined positive and negative social impacts of a biodiversity offset

Authors : Cécile Bidaud (Bangor University), Manolotsoa Ramiadantsihoaranarivo (Université d'Antananarivo), Kate Schreckenber (Southampton University), Patrick Ranjatson (ESSA Forêt), James Gibbons (Bangor University), Julia P.G. Jones (Bangor University)

Major developments, such as mines, will often have unavoidable environmental impacts. In such cases, investors, governments, or even a company's own standards, increasingly require implementation of biodiversity offsets (investment in conservation with a measurable outcome) with the aim of achieving 'no net loss' or even a 'net positive impact' on biodiversity. Where conservation is achieved by changing the behaviour of people depending on natural resources, the offset might be expected to have social impacts but such impacts have received very little attention.

Using the case study of Ambatovy, a major nickel mine in the eastern rainforests of Madagascar and a company at the vanguard of developing biodiversity offsets, we explore local perceptions of the magnitude and distribution of impacts of the biodiversity offset project on local well-being. We used both qualitative (key informant interviews and focus group discussions) and quantitative (household survey) methods. We found that the biodiversity offsets which is made up of both conservation restrictions and development activities influence the constituents of wellbeing in a mixture of positive and negative ways however overall respondents felt that they had suffered a net cost from the biodiversity offset. There is concern that the benefits from the development activities do not compensate for the magnitude of the costs of the conservation restrictions, that those who bear the costs are not the same people as those who benefit, and that there is a mismatch in timing between the restrictions which came into force immediately being compensated with development activities which take some time to deliver benefits.

In this paper we show that the consideration of social impacts is an under-considered yet critical aspect of biodiversity offsets: first to answer the legal requirement (compensating for the magnitude of the costs and by considering more the most impacted and poorer), second as an environmental justice issue (not to impose the cost of global conservation to local poor people), third as way to ensure the sustainability of the scheme.

We conclude by developing some concrete proposals to improve biodiversity offset implementation in low income countries.

14h45 - Qualitative and quantitative evidence on the true local costs of conservation: are discrete choice experiments a valid ex-ante tool?

Sarobidy Rakotonarivo, Neal Hockley and Julia Jones (Bangor University)

Jette Jacobsen, Helle Larsen and Martin Nilsen (Copenhagen University)

Bruno Ramamonjisoa and Rina Mandimbiniaina (Antananarivo University)

If protected areas (PAs) aim to achieve conservation through the enforcement of use restrictions, they will inevitably impose local welfare costs. Despite decades of recognition of these costs, evidence suggests that compensation is often delayed, incomplete or non-existent. Predicting the welfare impacts of PAs before their establishment could help with the design of compensation schemes. Discrete choice experiments (DCEs) are increasingly used for ex-ante evaluations but their validity is largely untested in low-income settings. DCE may provide invalid valuations of compensations if they are affected by respondents' prior experience of conservation restrictions. Likewise, they may be biased if they do not conform to the theoretical assumptions of the method (i.e. attribute non-attendance) or lack content validity.

Using a case study of a new REDD+ (Reducing Emissions from Deforestation and Forest Degradation) project in eastern Madagascar, we explore the validity of DCE in two ways: i) whether DCE can predict local welfare costs and required compensations ii) whether DCE results have high theoretical and content validity. We surveyed households who have varying degrees of experience of restrictions on swidden agriculture. We also qualitatively debriefed a sub-sample of respondents to better understand their thought processes. Latent class analysis shows that conservation experience significantly influences DCE outcomes. Households more experienced with forest protection are not willing to trade-off rights to clear forest for swidden agriculture with any compensatory interventions whereas less experienced households highly favour support for alternative agricultural techniques and a secure right to clear one hectare of forest. Although the latent class model shows apparent non-attendance to some attributes (e.g. cash payments), qualitative debriefings suggest that respondents instead expect relatively low or no utility from the given attributes and hence have theoretically valid preferences. Similarly, the DCE has generally high content validity.

We conclude that although DCE can elicit current preferences in this context, DCE is not a valid ex-ante tool for estimating compensations because people who lack experience of restrictions may be unable to estimate the actual welfare impacts of such a long-term and complex intervention. Our study suggests that it is hard to robustly estimate compensation in advance of an intervention, there is therefore a need to rethink conservation approaches, and the feasibility of achieving fair compensations for conservation-imposed restrictions.

15h30 – Débat sur les sauvegardes sociales des aires protégées

Quels sont les défis actuels de la compensation sociale des aires protégées ? Quelles sont les propositions concrètes des chercheurs pour répondre aux politiques de sauvegarde sociale dans le contexte malgache ?