Social impacts of biodiversity offset projects

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Theme 2: Natural resources, ecosystem services and environmental quality

2.5. Environmental Justice

Summary

Biodiversity Offset is a new mechanism by which development project compensate for its negative environmental impacts by conserving or restoring another area. If the focus of biodiversity offset projects mainly rests on the conservation, they might also have social impacts. This paper highlights this point through a case study of a mining company which represents the biggest investment ever in Madagascar. The first activities of this biodiversity offset project are to reduce the anthropic pressure on the forest, therefore have great impact on local livelihood. Those projects also help the peasants to intensify agriculture in order to enhance the local livelihood.

Based on a recent field investigation (October 2014 to June 2015), this presentation will develop on the positive and negative impacts of this biodiversity offset project on local community. The issue here concerns environmental justice as biodiversity offset are focusing on forest conservation while imposing changes for local livelihood.

Abstract

The Brundtland report (1987) demonstrated the strong connection between development and environment, but reconciling economic development and environmental conservation remains challenging. For example, a dam may produce electricity for thousands of people, while destroying forests which provide habitat for threatened species but also ecosystem services which benefit the wider society. Biodiversity offsets (BO) are a new mechanism which aim to overcome this contradiction; allowing economically important development to go ahead while ensuring biodiversity and ecosystem services are conserved. BOs are “measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate avoidance, minimization and restoration measures have been taken” (International Finance Corporation, 2012).

The implementation of BO are very different in low and high income countries for several reasons: (i) the legal context is at a different stage, biodiversity markets are already widespread and well regulated in USA, Australia and some other developed countries, while mostly voluntary initiatives are developed in Africa and other less developed country settings (Madsen, Carroll, Kandy, & Bennett, 2011); (ii) the environmental context is different as in many high income countries, habitats of biodiversity importance are already heavily modified by people, whereas conserving natural habitats is the focus in many low income countries; (iii) the social context may show very different level of poverty (standards of living, access to basic needs, education, health, security, freedom of choice and action…). This paper focuses on BO developed in low income countries, with a case study

in Madagascar, in a context of weak national law enforcement capacity (particularly with respect to environmental laws), biodiversity of global importance, and high poverty rate.

BOs have been designed very much as a response to mitigating biodiversity impacts of development, and the majority of controversies focus on the calculation and methods to weight BO outcomes in terms on biodiversity loss and gains (Temple et al., 2012; Virah-Sawmy, Ebeling, & Taplin, 2014; Watson, Joseph, & Fuller, 2010). However BOs have the potential to have both positive and negative impacts on local people's welfare, especially in developing countries where people depend heavily on natural resources. For example, there may be negative impacts felt by households who would have expanded agricultural land into the area designated as an offset. There may be direct positive impacts through livelihood activities introduced as an offset activity, or indirect positive impacts mediated through the conservation of locally valued ecosystem services conserved as part of the offset. The magnitude and distribution of these costs and benefits are critical to understanding the impact of BO on local people. Given the commitment of major developments receiving funding from multilateral financial institutions to meeting the equator principles (which includes consideration of social risks), understanding of how BO can be designed to have the best possible net impact on local livelihoods and poverty is timely.

There is a general acknowledgement in some key BO standards (e.g. BBOP) of the central role of engaging with local people and livelihoods to ensure the offset is effective "The offset will need to address the underlying causes of biodiversity loss at the offset site, which may be linked to unsustainable resources use practices by local stakeholders. Offering local stakeholders a viable and attractive sustainable use alternative will be key to ensuring their willing involvement and to achieving successful long-term conservation outcomes" (BBOP, 2009). However there is little concrete information on how BO can be managed in such a way as to deliver the biodiversity gains needed while minimising negative, and maximising positive, impacts on the local population. In addition to this theory and practice gap, the question of sustainability is of vital importance for companies, as BO should last longer than the project's exploitation. As shown in other conservation activities, the participation of local people is crucial for their efficiency (CBD, 1992; Madagascar, 1997). A critical question therefore is how can equitable and sustainable BO projects be developed which consider local livelihoods and the social context?

This question will be investigated through a case study of the Ambatovy Minerals SA / Dynatec Madagascar SA. This mining company exploiting nickel and cobalt represents the largest-ever foreign investment (US$6,9 billion, being 35% of total investment between 2006 and 2012) in Madagascar (World Bank, 2014) and one of the biggest in sub-Saharan Africa and the Indian Ocean region[1]. Over its lifecycle, and based on current nickel prices, Ambatovy estimated in January 2013 its contributions to the Government of Madagascar at US$ 50 million per year for the next ten years and US$ 4.5 billion over the 29 years life of the mine in taxes, royalties, duties, and other payments[2]. Nickel will be among Madagascar's most valuable exports and then bring a large amount of tax revenue to this very poor country.

Seventy five per cent of people in Madagascar live below the national poverty line (World Bank, 2010), while 92% live with less than 2$ a day (World Bank 2014). Poverty was exacerbated by the recent political crisis (Razafimamonjy, Razafindrakoto, Razafindrazaka, Roubaud, & Wachsberger, 2013). In a country rife with poverty, the government of Madagascar hope that revenue from the Ambatovy mine and others will help stabilise the economic situation of the country. The vice-president of Ambatovy, Louis Roland Gosselin, stated that "the nickel will definitively modify the structure of exportations in Madagascar and will allow reaching the balance of trade close to

[1] http://www.ambatovy.com/docs/?p=10062 the 02/07/14
[2] http://www.ambatovy.com/docs/?p=430 the 02/07/14

equilibrium"[3]. However, as well as bringing jobs and much needed tax revenue, the mine will also damage 2154ha of natural forest habitat (von Hase et al., 2014) in the mine footprint and along the pipeline. Acknowledging the importance of biodiversity of this forest, Ambatovy launched early in its development a BO program which aims to compensate the negative impacts on forest (Ambatovy & BBOP, 2009).

Ambatovy BO project has been used as an example of best practice in BO projects (von Hase et al., 2014). It operates in one of the world's hottest biodiversity hotspots (Myers, Mittermeier, Mittermeier, Fonseca, & Kent, 2000), in what is also an extremely poor country. It is therefore an excellent project to investigate the potential impacts of BO mechanisms on ecosystem services and poverty.

In this communication I will share the first results of fieldwork (sept 2014 – April 2015) and will develop what are the positive and negative impacts of BO as developed by Ambatovy in Madagascar to conclude by environmental justice issues.

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