



CHILEAN INITIATIVE FOR BUSINESS & BIODIVERSITY

Activities Report 2015

During 2015 the main activities conducted by the Chilean Initiative for Business and Biodiversity were related to creating awareness among companies in relation to the importance of natural capital. Some meetings were done with the mining association (SONAMI) to show some projects developed by Fundación Chile. In the future we would like to develop an international project with different countries involved. Some focuses for these projects to be done next year are related to the valuation of ecosystem services useful for offsetting activities and biodiversity scenarios 2050-2100. The main objective will be to estimate what is happening in Chile in terms of changes in biodiversity based on extrapolations from experiments and observed trends. In order to achieve a shared diagnosis it should reflect the interests of the various stakeholders and relevant social groups, on the priorities and measures to adopt long-term activities to preserve biodiversity in Chile.

Below are explanations of three of the projects developed for Fundación Chile related to Business and Biodiversity.

Valuation of ecosystem services

Problem

Forests and other natural areas provide ecosystem services to humans. The economic benefits that forests deliver are not only wood, forests can also serve as a carbon sink, provide non-timber forest products, regulate climate, and be of spiritual purposes, among others. To develop a market for payment for ecosystem services, the first step should be value them. There are companies that have natural areas acquired as compensation commitments under the environmental impact assessment of investment projects. Such areas need to be valued.

Solution

The project is based on the use of a comprehensive and adaptable methodology that can be applied in the semi-arid ecosystems in the north of Chile. It links the perceptions of the community in relation to the value given to their ecosystem services. The study area is located in a biodiversity hotspot of central Chile which belongs to Culimo priority site, in the locality of Caimanes, commune of Los Vilos, Coquimbo region.

The objective of the proposed research is to enhance the value of a private land area by quantifying the importance of ecosystem services. The result of the study will give relevant information to compare, communicate and incorporate the valuation into business decisions, generating benefits for the company and the communities.

The interviews conducted revealed that the Caimanes people give essential uses to 46 varieties of vegetation species of the region, which are used for food, medicine, spiritual purposes, construction and fuel. They still collect dry branches for firewood, and collect fruits and seeds (for food, tincture, liqueur and jam). Other traditions have been lost, such as the collection of coconuts from *Jubaea chilensis* (chilean palm) and the use of *Quillaja saponaria* (quillay) as shampoo.

Stages

To identify the services that are priority to the local community, semi-structured interviews were conducted to the people with main knowledge of the uses given to nature in the region. The interview approach was based on the chain method, which allows establishing a relationship of trust and identifying individuals with a specific knowledge. The valuations were made with different methods; market price, substitute products, replacement cost and information from other studies. Finally the existence of ecosystem services identified by the communities was validated in field, through inspections in the study area.

Impact

The aim of the project is to enhance the value of private land areas, to benefit both the company and the communities, and to quantify the importance of natural capital and ecosystem services, as this will produce relevant information to compare, communicate and incorporated into business decisions.

Guide for developing biodiversity offsets in the Tarapacá region

Problem

The mining industry, like other sectors of the economy, has the potential to generate significant impacts on the environment, especially on biodiversity. For this reason, private companies, governments and the international community have acknowledged the need to adequately manage these impacts. They highlight Chile's System of Environmental Impact Assessment (SEIA) and International Finance Corporation (IFC) standards, an entity of the World Bank, as tools. A critical aspect in demonstrating the sustainability of the sector at the international level is biodiversity protection achieved through impact of investments projects.

Analysis of biodiversity impacts due to the Chilean mining activities during the last 20 years shows the following conclusions:

- There is no consensus on what constitutes biodiversity compensation measure.
- There is not a specific order for the implementation of measures associated with mitigation, reparation or compensation of impacts on biodiversity.
- It is not clear how to determine quantitatively or qualitatively the impact of mining activities on biodiversity.

Expected Results

Generate a Guide for implementation of Biodiversity offsetting focused on mining activities in the region of Tarapacá, which reflects best practices currently driving such initiatives in the world;

- Provide a legal study of the Chilean context to implement the recommended actions and,
- Design methodologies for the Tarapacá region, specifically to protect and preserve terrestrial and inland water ecosystems in the region.

Stages

- Background for the development of biodiversity offsets, historical compensation measures developed in the region were reviewed and a legal analysis was conducted in Chile and international experience in the areas of biodiversity offsets,
- Design the Guide for Biodiversity offsetting.
- Development of the Guide for Biodiversity offsetting.
- Validation of the guide and distribution

Impact

Generating of a guide to assess biodiversity offsets to be applied in the Tarapacá region.

Carbon sinks and Securitization Project (World Bank)

Problem

One of the major global problems is related to the impact of climate change, due to anthropogenic carbon emissions that increase natural climate variability. Thus, countries have made efforts not only to mitigate their greenhouse gas emissions (GHG), but also, in the case of developing countries such as Chile, developing carbon capture projects, where plantations offer an opportunity.

Solution

Fundación Chile has been working in recent years on a project to generate carbon credits obtained through the growth of forest plantations in small and medium land owners, located in the Maule and Biobío regions.

The forest carbon credits were purchased by the World Bank BioCarbon Fund and as part of the deal; Fundación Chile implemented a management plan of native vegetation in an area equivalent to 10% of the project area. The implementation of these management plans aims to improve the overall biodiversity of the project area.

Stages

- Quantification and certification of reducing emissions from forest plantations
- Developing a plan for sustainable management of native forest and wildlife of the farms associated with the emission reductions in the Maule and Biobío.

Impact

The aim of the project is not only to capture greenhouse gas emissions, but also to develop sustainable management plans of native forest and wildlife, and transfer skills to small and medium landowners involved in the project.