



A long-term financial mechanism for conservation agreements in the Ecuadorian Chocó

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Short title: Conservation agreements in the Ecuadorian Chocó

Key Message: Threatened forest habitat was conserved through conservation agreements with indigenous communities. The payments provided by the agreements improved the well-being of the communities while conserving biodiversity and ecosystem services.

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1. What was the problem?

The northwestern lowlands of Ecuador are extraordinary for their biological and cultural diversity. In socioeconomic terms, however, this region is one of the poorest of the country. The Chachi indigenous people have legal and ancestral rights over some of the biologically most important lowland forests in the Ecuadorian Chocó and have for centuries proved effective conservation stewards. And yet, these forests and their traditional owners are under intense pressure from external (and mostly economic) threats, especially unsustainable logging, expansion of the agriculture frontier due to colonization of indigenous lands, and expansion of oil palm plantations. Between 1991 and 2000 the province of Esmeraldas lost over 36% of its moist forest cover, at more than 4 times the rate of the national average in this forest type (CLIRSEN, 2003). The majority of the timber produced by the Esmeraldas province is extracted illegally and local people get a very low share of the revenues. The Chachi have often been forced to allowing timber exploitation by companies and informal operators on their lands in exchange for income or services. Timber operators, who exercise significant power in the areas where the Chachi live, have even provided support for Chachi efforts to secure land tenure in exchange for long-term rights to their forest resources. Unfortunately these agreements provide limited economic benefits and, given poor or non-existent silvicultural management, usually lead to degradation of the long-term resource base that is the Chachis' primary asset and means of survival.

2. Which ecosystem services were examined and how?

In 2004, Conservation International (CI) and the German Development Agency GIZ², started working with four Chachi Centers (El Encanto, Corriente Grande, Capuli, and Sabalito)³ on

¹ Special thanks to the 300 members of the Chachi Centers who participated actively in the construction and implementation of the scheme.

² *Deutsche Gesellschaft für Internationale Zusammenarbeit*, which works on behalf of the German Federal Ministry for Development and Economic Cooperation or BMZ.

the valuation of biodiversity and the establishment of a Chachi Reserve, to raise awareness and mobilize financial resources to foster conservation and sustainable use (Mora et al., 2010). For the Chachi, the establishment of the “Chachi reserve” was seen as an opportunity to protect the forest, consolidate their territory and develop their own economic alternatives. Habitat for species and maintenance of genetic diversity were the main ecosystem services considered, because the last remnants of the Ecuadorian Chocó megadiverse natural forests are found in the area. However, other ecosystem services are provided as well: cultural services as basis for local traditions, spiritual services, and aesthetic appreciation; as well as regulating services such as carbon storage. The Chocó is among the richest lowland ecosystems in the world (Dinerstein et al. 1995, Mittermeier et al. 2004). The Chachi Reserve contains some of the last remnants of intact lowland Chocó forest, plays a very important role to connect ecosystems between highlands and lowlands, and builds the basis for the subsistence activities of the Chachi communities. Despite its ecological importance, almost no Chocó lowland or foothill forest is protected in Ecuador’s existing protected area system (Stattersfield et al. 1998; Sierra et al. 1999).

In order to define the level of monetary incentive the Chachi communities would need to motivate their compliance with conservation measures, the opportunity costs of conservation were assessed. In this region, opportunity costs vary from community to community and through time, due to their different sources of livelihoods and the economic opportunities available to them. We used the opportunity cost of sustainable timber extraction over a period of 30 years as a reference. The opportunity cost analysis included a broad quantification of the income that the centers received from timber extraction. No information about the costs related to wild meat, fish or plants obtained from the forest were included. Although the analysis calculated an opportunity cost of \$2.50 per hectare, a compensation amount of \$5/hectare was agreed. This price was considered a maximum potential opportunity cost (Mora, 2009).

3. Did the examination of ecosystem services generate impacts on decision-making or policies and, if so, how?

Based on the study results, in 2005 CI and GIZ, partnered with three of the four Chachi Centers (El Encanto, Corriente Grande and Capuli) to establish an innovative set of conservation agreements integrating community development needs with biodiversity conservation. The fourth Center did not get involved as their commitments to the timber companies were too strong: they had already signed a contract for timber extraction, which was not the case in the other three communities.

Under these voluntary agreements, the Chachi indigenous communities received financial and technical support in exchange for an ongoing commitment to preserve 7,200 hectares of key forest areas within their territories; in an overall initiative they named the “Gran Reserva Chachi”. The agreement included a yearly direct compensation of US\$ 5 per hectare. The design of the agreement also considered additional financial support to cover the salaries of community reserve rangers who maintain boundary trails, participate in biological monitoring, and protect the communal areas from illegal outside incursion and poaching.

The complete compensation package – direct economic incentives and the payment of patrolling costs – was conditioned on the compliance of conservation actions agreed by the parties: no logging and no hunting in the conservation area. The aim was on the one hand to apply a continuous improvement process that could be fine-tuned and improved over time, otherwise known as adaptive management, and on the other hand identify the impacts of the conservation actions included in the agreement. With the participation of EcoCiencia, a local NGO, the conservation agreements were subject to ongoing and periodic biological, socio-

³ An indigenous “center” is a political-administrative unit, often comprising several indigenous communities.

economic and spatial data collection and analysis to prove that logging had not occurred and that species were present and thriving in the forest, as well as to identify improvements in the socio-economic conditions of the communities.

During the first early years the project was financed through GIZ and Conservation International who facilitated donations from the rock band Coldplay, the Global Conservation Fund and others, with the goal of obtaining sufficient capital for a trust fund, to ensure the payments in a long term. At the beginning of 2008, the successful experience of the Gran Reserva Chachi caught the attention of the Ministry of Environment (MAE). MAE decided to design a system of conservation agreements at the national level and created the Socio Bosque Program (de Koning et al., 2011). Through this initiative, the Government of Ecuador provides a direct payment to landowners (individual or community) who agree to conserve native forest or other native ecosystems. These agreements have duration of 20 years, with the option of renewal.

4. Lessons learned

The conservation agreements provided a situation where the communities retained the permanent land titles and use rights to their forests, derived income from the forest by conserving it and maintained biodiversity in a region of global conservation importance. These agreements provided clear benefits in terms of biodiversity conservation, maintaining high-diversity forests intact and extend protection to forest areas adjacent to the Cotacachi Cayapas Ecological Reserve.

As the incentives have been used for health, education, productive activities, infrastructure and communal funds, the project has fostered the development of the local actors. Communities were strongly committed to the initiative and this was achieved through transparency, participation and providing compensation that cover the cost of conservation. To achieve sustainability, it was important to establish the institutional conditions, strengthen organizational structures and local skills.

The Chachi communities have been among the first beneficiaries of Socio Bosque and over 27,000 ha of Chachi territory have already been enrolled in the program. Under this program the benefits for maintaining the forest have been increased. Thus, there are more funds available for the Chachi Centres to invest in the improvement of their living conditions. Moreover, Socio Bosque ensures the sustainability of conservation measures and the sustainable development of the region in the long term.

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