

# Empowering Indigenous People One Community at a Time

**SGP** The GEF  
Small Grants  
Programme



UNITED NATIONS  
FOUNDATION

## COMMUNITY-BASED CARBON ACCOUNTING: A PILOT PROJECT ON HOW COMMUNITIES CAN ENGAGE IN REDD+

### Project Description

The U'yool'ché A.C. project began in 2006 with the interest of indigenous communities to develop carbon sequestration techniques in the Mayan Zone. To start, the community conducted a survey to understand this new concept and the applicability of a forest carbon project in the Mayan forest. Since few communities in the region had diversified forest conservation activities and financial alternatives, forest conservation and regeneration were vulnerable to external contingencies. A sustainable management approach was considered a viable alternative to generate revenue to protect the tropical forest and create jobs.

The project aims to generate an alternative way to finance forest conservation activities by exploring carbon markets. As a pilot project, another goal has been to develop methodologies and to generate knowledge for the development of other forest carbon projects in the Corridor region of Sian Ka'an - Calakmul. In recent years, the project has evolved toward generating experience and capabilities in the context of REDD+ preparation in the country.

A first grant from the Community Management of Protected Areas Conservation Programme (COMPACT) of the GEF Small Grants Programme (GEF SGP), implemented by UNDP, supported the creation of a participatory management methodology to preserve the forest and avoid deforestation in the "ejido".

A second GEF SGP grant was approved to help transfer and improve the capacities of the local communities in the ejido, contribute to the carbon credit certification process, and to demonstrate that local communities can engage in REDD+ by providing an example that could be replicated and upscaled by other local communities across the world.

*The project also provided the GEF SGP further experience and expertise to channel effective support to indigenous communities and act as a co-financing partner or grant delivery mechanism for other donors and agencies for similar community-based projects in developing countries.*



Implementing Organization: U'yool'ché A.C. - Ejido Felipe Carrillo Puerto

Location, Yucatan Peninsula, Mexico

GEF SGP (COMPACT) Contribution: Two consecutive projects

US\$ 31,731 (2008) and US\$ 30,000 (2011)

In-cash cofinancing for the two projects: US\$83,314

In-kind cofinancing for the two projects: US\$ 10,663

Number of Beneficiaries: 240

Duration: 2006 - Preparatory phase

2008-2010 - Project 1

2011-2012 - Project 2

An "ejido" is a Mexican model of corporate ownership of the land. It is a society of social interest composed of Mexican peasants by birth that received inalienable property in the form of land, forest or water resources by the Mexican government -free of charge-; provided that its use and exploitation follows the the guidance and rules of the State.

The Community Management of Protected Areas Conservation Programme (COMPACT) was launched in 2000 as an initiative of the GEF SGP, UNESCO, and the United Nations Foundation (UNF) to develop World Heritage Sites, Biosphere Reserves and other socio-ecological production landscapes into "learning laboratories for sustainable development". To date, COMPACT has been demonstrating that strategic support to community-based initiatives can significantly increase the effectiveness of biodiversity conservation and ecosystem service protection within globally significant protected landscapes while helping to improve local livelihoods.

## Background

In Mexico, 80% of forests are owned by ejidos and communities. In this context, it is necessary and important to find means that allow forest owners to become productive and sustainable in using resources while preserving this heritage for future generations.

The Sian Ka'an - Calakmul Corridor is a vast forested area that links two biosphere reserves of great importance in terms of biodiversity, and the sustainability of its local communities.



The project aims to conserve the forest and its associated biodiversity by piloting the participation of local and indigenous communities in carbon sequestration projects that can serve as an example for REDD+. This goal can only be accomplished by identifying the needs and aspirations of local communities and empowering them in the fight against climate change.

The U'yool'ché A.C. , is a non for profit organization founded in 1999 in the heart of the Mayan area in the Yucantan Peninsula by local communities and indigenous people The organization is formed by an interdisciplinary team of professionals and partners with the objective to promote, encourage and assist the conservation of natural resources by local and indigenous communities.

## Implementation

Key activities during the project have been as follows:

2006- Conducted pre-feasibility study with the community, external experts, and the technical support of the GEF SGP

2007- Declaration of 1,230 hectares of the ejido into a community reserve .

2008 – 2010- Established community based management strategies to avoid deforestation and allow carbon capture in the reserve. Prepared certification with the Plan Vivo Foundation for the sale of carbon credits.

2010 – 2011- Certified as a "voluntary conservation area", the first of this kind in the Yucatan Peninsula, by the National Commission of Natural Protected Areas. Development of biodiversity, water, and socio economic monitoring system.

2011- Finish the certification of the project, initiate capacity building activities, and create learning modules for students, farmers and public servants. Increased scale to work with more communities in the region, including 11 more from Calakmul, and one honey producing cooperative.

In addition, local communities worked closely with local NGOs to ensure the success of the project during its implementation. Below are a few elements that make the project stand out:

- Learning process: All courses and workshops were conducted as a dialogue where experts were invited to share their knowledge with the community.
- Community research methods: Instead of hiring outside experts, most of the scientific research was developed by the community supported by the Colegio de la Frontera Sur (ECOSUR), a public institution of scientific research and graduate studies. The most notable experience was the creation of a local allometric equation, which is essential to calculate carbon and to strengthen project ownership by the community.
- Systematization of information: The latest innovation consisted in the systematization of the information and the training of all key projects, which helped sharing capabilities generated by the project.

Since the proponents and beneficiaries of the project include indigenous people (Mayan Yucateca), Mayan language is used in the documents and broadcasting. Some workshops were held in Mayan. Traditional knowledge is always used to develop methodologies including for the field reforestation process.

# Environmental Impact

The most noticeable and important outcome has been the declaration of a community conservation area of 1,230 hectares consisting of semi-evergreen forest. Since the community monitors the biodiversity of the area, 3 baselines were conducted: one for vegetation, one for biodiversity, and one for water resources. The information from these baselines is used by the community to monitor and track progress in all these areas.

For water, the community is using the methodology of "Global Water Watch"; for vegetation the community established 16 permanent sampling sites; and for biodiversity, cameras and other devices are used. It is important to note that the community reserve protects the habitat of many animal and plant species of which 23 are under international protection status or rapidly disappearing.

In addition to the results in forest and biodiversity conservation and management, the "ejido" is now capable to fight forest fires in the 47,000 hectares of the community.

The community has also conducted a number of trainings and workshops and is preparing for the verification of the carbon certification in December 2011. The certifier of the carbon project is Plan Vivo (<http://www.planvivo.org>), a foundation that has a very important community-based approach which requires many environmental and social safeguards in the certification process.

In addition, Plan Vivo Foundation require a participatory process in which the community makes decisions by consensus. To initiate the certification process with Plan Vivo the community, with the support of GEF SGP, submitted a project concept note that was validated in 2010. The community then submitted a project document, and two technical specification documents that explain how many carbon credits would be generated.

For the technical specifications the community is using two approaches: reforestation of native species for carbon capture, and avoided deforestation through community conservation actions. These three documents were sent to the Plan Vivo Foundation for review, which will be followed up by a visit of a verifier, in this case ECOLOGIC, who are scheduled to visit the project on November, 2011.

It is expected that the community will be able to sell its first carbon credits in the voluntary market in the beginning of 2012. U'yool'ché A.C. is already in negotiations with local hotels who are interested in buying the credits.

## Socio-Economic Impacts

One of the most important socio-economic impacts of the project is the enhancement of the capacities of the indigenous people to understand climate change, forest carbon monitoring and other sustainable management issues and methodologies. In particular, the project conducted knowledge exchanges to increase the scale of the project through community-to-community workshops. A two day module where local technicians share their experiences with farmers from other communities, have been developed.

In order to sustain the results of the project in the long term, the project trained students on forest carbon methodologies and approaches through a 5-day seminar for young graduates of the ejido as well as students about to graduate from local universities to transfer knowledge from farmer to students. The community has also created posters to disseminate information of various aspects



of the project, one of which is about REDD+ and it is available in both languages: Mayan and Spanish.

Furthermore, the community trained 5 technicians, 2 of which are in the process of certification with the National Forestry Commission. These two technicians will become the best spokespersons of the project.

Other significant socio-economic contributions of the project include the creation of more than 20 temporary jobs, the improved ability to fight forest fires in the ejido area, and improved access to medicines as 30% of the revenue generated is spent on medicines for the members of the ejido.

## Policy Impacts

Statewide, it has been demonstrated that community engagement can achieve better results to deal with socio-economic and environmental issues. Currently the NGO and the President of the Ejido participate in the technical advisory council of REDD+ and have participated in several forums about this topic.

The project has been discussed and presented in numerous forums and the knowledge generated by it has been shared extensively with other communities and also with government officials. The local, federal and national governments have used the project as an example in the development of other national REDD+ projects.

For example, in the framework of UNFCCC COP16, the project was visited by journalists, students, NGOs, international civil servants and officials to share this experience with a large number of actors. Nationally, along with other projects of local NGOs, the community and SGP are working to establish safeguards for socio-economic and environmental issues.

## Gender Equality and Women's Empowerment

Women's empowerment and intervention were demonstrated by their strong participation at all levels. At the community level, the ejido is composed of 40 women and 200 men.

These women participate in the workshops and decision-making processes. For example, the treasurer position of the ejido, has been filled by a woman for the past 10 years. At the NGO level, women represent 60% of the participants.

In terms of capacity building on climate change, the project has trained more women than men. In three workshops for 35 students, 21 were women.

## Sustainability

Supported by the National Forestry Commission (CONAFOR), the project has been designed to be sustainable financially as it generates income alternatives by investing heavily in forming a team of community technicians and specialists.

In addition, the community works with college students to spread the knowledge and lessons learned generated through the project.

In particular, the SGP COMPACT team has generated learning modules for communities, students, governments and transformed the initial project in a "school of carbon sequestration." The local community is also trying to achieve the targets for carbon credit trading during 2012 – 2015.

## Replication and Upscaling

U'yool'che AC, the local NGO, has been leading the upscaling process in other 12 communities in the region and transmitting capabilities from one community to another.

## Lessons Learned

Strong involvement of the land owners guaranteed the sustainability of the project in the long run. Elements such as community-based research and participatory workshops on forest carbon at different stages allowed for good ownership by members of the community.

The transmission of knowledge and capacities from community

to community laid the foundation for the development of rural sustainable development projects in the future. The project proved that scientific approaches can be developed locally with a direct effect in the community and the project. The development of a local allometric equation and an appropriate biomass sampling method are examples of the capacity of communities to solve complex issues.

The support from local NGOs and scientific institutions such as ECOSUR are fundamental in achieving the project objectives by supporting research activities and generating alternative financial management activities to ensure the sustainability of the project.

The project has revealed several key components to create effective and sustainable projects in the future: proactive mechanism of long-term financial sustainability, strong investment in community capacity transmission process, and linking forest carbon projects with productive activities such as bee keeping, forest management, and ecotourism among others.

The biggest challenge at present is the uncertainty about the future of voluntary carbon forestry projects as to whether they will be counted as part of REDD+ projects, which is decided at the international level by the UNFCCC process.

The communities are making efforts in public policy advocacy by sharing the experience of the project with the responsible federal authorities, and are actively involved in the development of REDD+ preparations through technical advisory councils.



# Community Action Global Impact

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