









## **CONSERVATION AGREEMENT CASE STUDY No. 2**

## Carmelita Conservation Agreement Maya Biosphere Reserve Multiple Use Zone

## Reduction of Cattle Ranching and Advances in Agricultural Zoning

The Carmelita Management Unit has an area of 53,797 hectares, and is located within the MBR Multiple Use Zone (Figure 1).

90°30'0"W 90°0'0"W 89°30'0"W 89°0'0"W MEXICO Enlarged A Carmelita BELIZE MEXICO El Zotz Buffer Zone Sierra del Lacandón Land use Agriculture Scale 1:1 000 000 (††) **(\*\*) Carmelita Conservation Incentive Agreement** 

Figure 1: Map of the Carmelita Conservation Agreement Area

The Carmelita Conservation Agreement was signed in February 2012. The agreement spanned a two-year period of implementation with the central objective of assisting the community to comply with its obligations under their community forest concession contract signed in 1997 with Guatemala's National Council of Protected Areas (CONAP).

The signatory parties in the Conservation Agreement included the Carmelita Cooperative, as the community organization responsible for the sustainable management of the forest concession; the Carmelita Community Development Council (COCODE); CONAP, as the lead governmental regulatory agency; and Asociación Balam as the "accompanying NGO".

Witness of honor institutions included the Foundation for Maya Cultural and Natural Heritage (PACUNAM) as a donor; the Association of Forest Communities of Peten (ACOFOP), Counterpart International (CPI), Rainforest Alliance (RA), and Wildlife Conservation Society (WCS).

In the agreement, Carmelita community members agreed to prevent forest fires, strengthen patrolling to detect illegal activities, implement an agricultural zoning plan to support farmers and reduce the incursion of agriculture into forest management areas, enhance natural populations of xate, and reduce by 50% the number of cattle in their concession at the time of agreement signature. The agreement helped co-finance many of these activities, and provided additional investments to improve basic education infrastructure, increase health services, and strengthen administrative and financial management of the concession.

Significant effort was focused on assisting Carmelita residents to initiate an updated land use zoning and management plan. This represented a significant challenge since a formal agricultural zone had never been recognized by CONAP. Implementation required sustained negotiations and engagement of farmers because agricultural activities had been slowly advancing into more remote, forested areas, but also since agricultural livelihoods were at stake.



Signature of an agreement to relocate an agricultural area / Photo: Asociación Balam

The agreement also focused on cattle ranching as a major driver of deforestation and land encroachment within the Maya Biosphere Reserve. At the start of agreement implementation, seven cattle owners in the village held a total of 112 head of cattle. Through sustained negotiations, partners identified incentives to extract the cattle from the community concession, and remove them permanently from the MBR's restricted areas. These incentives were based on the number of cattle and included, for example, the donation of roofs for rural sheds, as well as assistance with transportation of cattle to purchasers located outside of the reserve. Carmelita ranchers benefitted by selling their cattle for improved prices as compared to the price they could receive in the concession. Participating ranchers also signed an agreement that they would not purchase and transport any more cattle into the reserve.

By the end of the two-year agreement, 63 cows had been removed from the concession area and the MBR, reducing the herd by 56%. Notably, despite the fact that the Carmelita agreement was not maintained in full force after 2014, by July, 2015 a concession-wide census of cattle indicated that only 35 head of cattle remained in Carmelita; a total reduction of 70%. At present (2016), only three owners retain cattle in Carmelita.



Removal of cattle from the Carmelita Concession / Photo: Asociación Balam

Significant engagement was required by all actors, particularly CONAP, to ensure that reduction in the number of cattle was achieved and sustained over time. In similar fashion the identification of an agricultural zone within the concession required continued engagement by CONAP after the formal end of agreement activities in 2014. Additional support was provided by Asociación Balam, and by witness of honor organizations (ACOFOP, WCS, RA) as the Carmelita Cooperative and CONAP advanced the agricultural zoning plan to fruition.

After one two-year period of full implementation and 2 additional years of partial support, lessons learned of the Carmelita Conservation Agreement include:

- <u>Improved environmental performance:</u> Since the agreement was implemented (2012), annual deforestation has been reduced by 44.2% as compared to the average annual amount of deforestation during the three years prior to the Conservation Agreement. Similarly, the number of fire hot points was reduced by 71.2% when compared to the ten-year baseline prior to the agreement.
- <u>Collaboration essential:</u> Partnership between the Carmelita Cooperative, the COCODE, CONAP, and supporting institutions was essential for the successful reduction in the standing herd of cattle and the implementation of the agricultural zoning plan. Without any one of these actors, and without sustained support from witness of honor organizations, the goals would not have been met;
- Forest management and tourism preferred over ranching: Support existed among the
  vast majority of Carmelita residents for the removal of cattle from the concession,
  reflecting the strength of local support for economic livelihoods based on integrated
  forest management and tourism. This suggests that this approach may be replicable in
  other community-based forest management/tourism areas affected by expanding
  cattle ranching.
- Two-year period inadequate, but initiative nevertheless sustained: A two-year timescale was inadequate to achieve some of the more ambitious goals set in the agreement, including the full implementation of the agricultural zoning plan. That said, the agreement did propel community members and institutional partners to evaluate the status of the concession and set ambitious goals on a number of fronts, including financial management. This led to a blueprint for a strategy that has been sustained despite only partial support being available for the agreement's activities from January 2014, onward;
- Targeted incentives were effective in reducing the prevalence of cattle: The flexibility in the implementation of financial incentives with cattle ranchers led to the achievement in the initial goal of a reduction of 50% in the standing herd in Carmelita. In particular, the transportation of cattle from "the jungle" to "outside the reserve", in an area where ranchers are present, led to the added incentive of Carmelita ranchers receiving a better price for their cattle and their voluntary collaboration with the cattle reduction plan.

 <u>Lack of "leakage":</u> One key condition imposed upon participating ranchers was that cattle could not remain in the MBR's Multiple Use or Core Zone areas. In agreement with CONAP, cattle were purchased by ranchers in the MBR Buffer Zone, since ranching in this area is legal.

## Source:

McNab, R., Castillo, M., Zetina, J, Rodriguez, A., Ramos, V.H., Solis, N., Trujillo, D., Chacon, R., Obando, O., and A. Castellanos. (2016). "Evaluating Conservation Agreements as a Tool for Conserving Nature and Improving Wellbeing of Rural Households in the Maya Biosphere Reserve, Guatemala". Wildlife Conservation Society Guatemala Program, Technical Paper No. 01.