



**ITM** INDIGENOUS TERRITORIAL MANAGEMENT

▶ **T A C A N A INDIGENOUS PEOPLE**

# SUSTAINABLE HARVEST OF THE SPECTACLED CAIMAN



**ECONOMIC  
VALUE**



## Sustainable management of the caiman in the Tacana indigenous territory

Matusha Aidha in Tacana means “big caiman” in the Tacana language. Each year the Matusha Aidha Productive Association conducts a harvest of caiman (*Caiman yacare*) to generate economic benefits for the most isolated Tacana communities. The caiman harvest likewise serves to effectively control the water bodies of Tacana territory, where illegal hunting is threatening this species. The association's objective is environmental, social, and economic sustainability through: 1) the maintenance of viable caiman populations; 2) development of actions directed at the livelihoods of the communities; and 3) the commercialization of caiman products that value the management activities of the indigenous communities.

Spectacled caiman harvest activities in the Tacana Indigenous Territory began in 2001 with studies on the distribution, abundance, and population structure of the spectacled caiman in water bodies of several communities in the Tacana indigenous territory (TCO Tacana I). This was executed by WCS in coordination with the Tacana Indigenous Council (CIPTA). A management plan was developed using the information obtained. Approved in 2007 by the Biodiversity and Protected Areas General Directorate (DGBAP), the plan provided the technical guidelines for the subsequent four harvests. The management plan was updated in 2011, taking into account population evaluations of the species carried out in 2001, 2004, 2009, and 2010. Organizational, commercial, and resource management issues were strengthened in the 2011 plan.

The harvest area of the caiman in the Tacana indigenous territory covers a surface area of 1,298 km<sup>2</sup> (34% of the Tacana territory), including sectors of the Beni River, streams, ponds, and lakes. The total harvestable population is of male adults only, conserving females, and is estimated to be 3,884 male individuals (15% of the caiman population). The approved annual harvest is for 630 adult males (16% of the adult male population), with a minimum capture size of 180 cm length (snout-tail). Another conservation measure is the regulation of the hunting season, which takes place in October at the end of the dry season so as not to interfere with the reproductive period of the species.

The monitoring indicators of the harvests – such as capture sites (selection of water bodies), sex, average capture size and weight, and time spent hunting – show that in general the populations of spectacled caiman are stable and that their harvest is sustainable. The success of the management of caiman in Tacana is also contributing to the control of water bodies and the reduction of illegal hunting of the caiman and the vulnerable black caiman (*Melanosuchus niger*).



Mileniusz Spanowicz/WCS

## Significant income generation for the Tacana communities

The productive association “Matusha Aidha” is composed of 27 members from four Tacana communities – Cachichira, San Antonio del Tequeje, Carmen del Emero, and Copacabana – that are situated close to the banks of the Beni River. Between 2015 and 2017 there have been eight caiman harvests, which have been carried out according to the established management plans and approved harvest quotas, benefiting 63 families.

The commercial strategy for caiman products has generated valuable experience. The effort has provided communities with access to differentiated markets that favor products supporting the sustainable management of natural resources, are environmentally friendly, and also support the responsible development of local communities.

The export to Europe of salted leather during the 2014 and 2015, generated an average income per member of US\$ 1,803 for one month's work. This represents 58% of the annual national minimum wage. It meant a fivefold increase in the typical family income of participating communities, contributing greatly to their livelihoods.

Mileniusz Spanowicz/WCS



Gustavo Álvarez/WCS



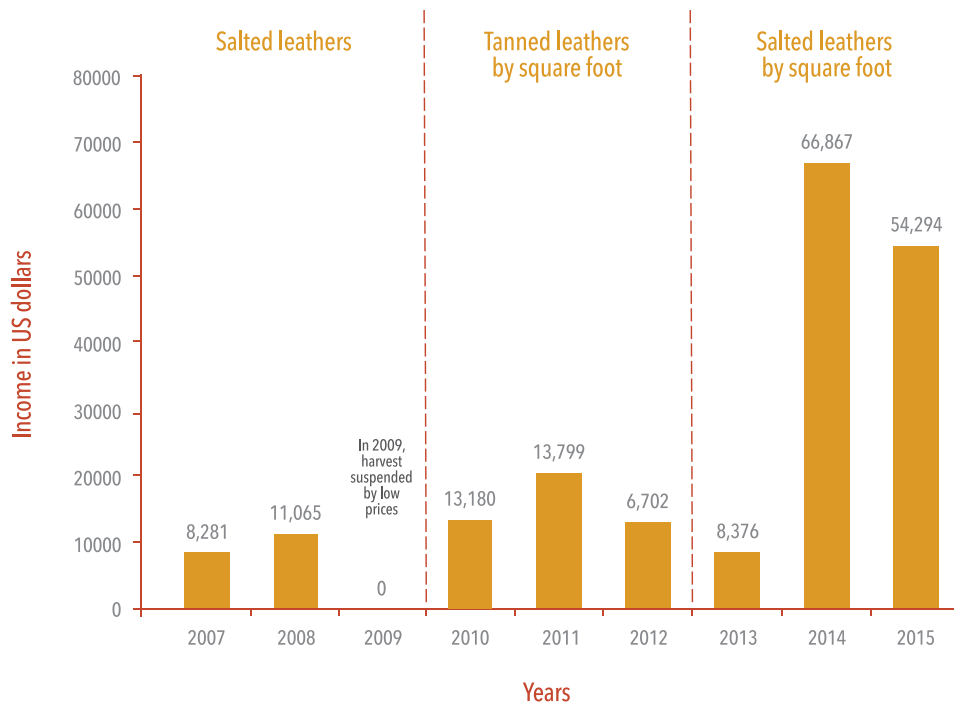
Restaurante Gustu





Mileniusz Spanowicz/WCS

### Harvest increased profits from the sale of tanned and/or salted leathers of the caiman between 2007-2015 in US dollars



Furthermore, the alliance with the nationally and internationally acclaimed "Gustu" restaurant in La Paz, Bolivia, allowed us to involve women in this initiative, through the processing of meat. The sale of fresh spectacled caiman meat fetched a price that tripled that of the local market (from US\$2.58 to US\$7.18 per kilogram). Between 2014 and 2015, the average income for each of the women beneficiaries was US\$220 and was obtained with only one week of work per year.

These alliances open up prospects for the Matusha Aidha association to secure fair markets and provide significant incomes for their families and communities. In turn, the businesses recognize the accomplishments of the Tacana people in the sustainable management of the caiman species, securing the future viability of the species.

The sale of leather and meat helps not just those members directly involved in the harvest of the caiman, but also whole communities and CIPTA through a benefit structure that distributes income to the

communities and thus ensures social support for the sustainable management of the caiman in the Tacana Indigenous Territory.

In May 2015, the Matusha Aidha association received a special recognition by the Ministry of Environment and Water for its contributions to science and improved organization and management techniques, as well as their achievements in the commercialization of leather and meat within the framework of the National Program for the Conservation and Sustainable Harvest of the Caiman.

"We the Tacana people have lived our lives through the responsible use of our natural resources. For this reason, we believe that the sustainable harvest of the caiman guided by serious studies and organizational processes can secure the responsible and long-term management of our territory; and the sustainable management and conservation of the caiman species. Since 2001, this process has been led by CIPTA, the representative body for the Tacana communities in the Department of La Paz" (Jesús Leal, CIPTA President, 2010).



# CAIMAN

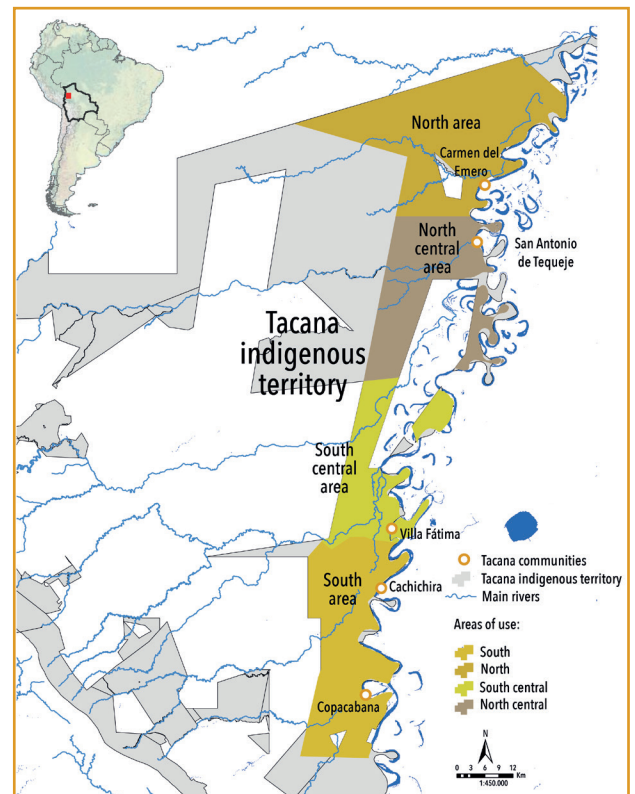
The sustainable harvest of the spectacled caiman (*Caiman yacare*) by the Matusha Aidha Productive Association is a success story founded on the local traditional knowledge of the Tacana people and adaptive management models based on research, planning and monitoring. The active participation of the Tacana indigenous people in management plans and species population censuses is testament to their commitment to the conservation of the spectacled caiman.

## SUSTAINABLE CAIMAN HARVESTS CONTRIBUTE TO IMPROVED CONDITIONS IN COMMUNITY LIFE

### The importance of the sustainable harvest of the caiman for the Tacana people

- Income generation for the families involved in the harvest of the caiman, and economic support to the communities and their grassroots organizations.
- Strengthened abilities of members' technical know-how in management planning, monitoring, and the management of community enterprises.
- Strategic alliances with state institutions, the scientific community, and businesses that value products from managed forests and resources.
- Scientific research that guides management activities and permits the informed determination of harvest quotas.
- Strengthening of territorial management as a result of the sustainable management of the caiman, the conservation of water bodies, and the creation of economic opportunities based on conservation.
- Recognition of the Matusha Aidha Productive Association for their contribution to science and for the sustainable management and commercialization of caiman populations.
- The unique experience provided to and gained by The National Program for the Conservation and Sustainable Harvest of the Caiman.

### Spectacled caiman harvesting areas in the Tacana indigenous territory



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