

PROMOTING AND STRENGTHENING THE AGROECOLOGICAL TRANSITION FOR THE PROTECTION OF THE MAYA MOUNTAIN MASSIF, BELIZE

TL3 BZ

» Context and challenges

The Chiquibul/Maya Mountain Massif is a conglomerate of protected area of over 50,000 hectares including a variety of habitats that contribute to its valuable environmental services and high aesthetic value. Despite its protected area status, the area is under increasing pressure from extraction of natural and cultural resources and increased land-use changes from industrial activities that include mechanized agriculture and logging. To reduce the impact of farmers adjacent to the protected areas, constructive dialogue and the promotion of sustainable and ecological income generating activities was

initiated; among others by the Forest and Agriculture Department, Yaaxche Conservation Trust (YCT) and Friends for Conservation and Development (FCD) and since 2013 supported by the Protection and Sustainable Use of the Selva Maya Project. Through technical assistance regarding agroecological practices, including pest control and production of bio-fertilizer, experience exchanges and market investigation, farmers in Cayo and Toledo District improved their skills, output and sales, thereby reducing their environmental impact.

Beneficiaries

Over 70 farmers in the Cayo District, specifically members of Friends of Vaca Forest Reserve and San Antonio Green Growers association as well as residents of the Maya Golden Landscape in Toledo benefitted directly from the activities as well as indirectly, the population around the Maya Mountain Massif.



Impacts

- ◆ Farmers acquired agroecological skills such as pest identification and management, multicropping techniques, production and application of bio-fertilizers and farm planning. This has, for example, contributed to a reduction of the use of synthetic fertilizers by 75%, diversification of production and increase of income up to 30%.
- ◆ The Green Growers Association developed a Business Plan that outlines the way forward for the Cooperative and established market for their agroecological produce in the Cayo District.
- ◆ The groups have improved their internal organization and improved their working relationships with governmental institutions such as the Forest and Agriculture Department.
- ◆ An agroecological manual based on the experience developed in the Vaca Forest Reserve and San Antonio is available and used for the replication of the approach.



● Status Quo and needs assessment

Having identified small scale agriculture as one of the drivers for forest degradation in and around protected areas, a needs assessment was carried out. This assessment was initiated by scoping existing extension services and approaches to identify areas of opportunity. As such, the organized farmer group Friends of Vaca Forest Reserve as well as three other groups of farmers residing around protected areas in Cayo District, including San Antonio Green Growers Association were identified and expressed interest in agroecology along with farmers in the Maya Golden Landscape in Toledo. In a series of workshops and farm visits, as well a thread and needs assessment was conducted, during which, areas for capacity building were identified.

Enabling factors: The alignment of expectations with stakeholders through the needs assessment allowed the identification of concrete intervention actions.

● ● ● Organizational strengthening

All farmers involved in the capacity building are organized in groups, some of them registered as cooperatives. Although this can be beneficial regarding economies of scale and marketing as well as peer learning, the groups identified organizational weaknesses. To address these, individually workshops for each group were facilitated during which visions, internal relations and guiding principles including rules were defined and revised.

Enabling factors: The focus of the Project intervention in these workshops was on technical advisory for preparation and facilitation. Simultaneously, the improvement and building of relations with governmental entities and other stakeholders was advised and accompanied.

● ● Capacity building

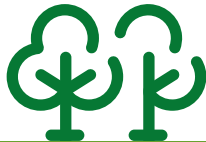
Based on the needs assessment, capacity building activities were implemented with the different groups including pest control and production of bio-fertilizer, experience exchanges and market investigation. For technical skills the Farmer-Field-School approach was applied, which allows participants to learn as they implement and share experiences within the group, favouring the development of collaborative networks. Experience exchanges between the different groups and with farmers in Guatemala were carried out to promote learning and networking. Based on the experiences, a manual for agroecological production was developed and is being used as a reference by farmers as well as for dissemination of the approach.

Enabling factors: The content of trainings and workshops were adapted to the skills and needs of each group and implemented in collaboration with specific stakeholders such as the Agriculture Department and FCD. The activities in Toledo were led by YCT.

● ● ● ● Market investigation

Agroecological products were generally not being marketed as such in Belize in 2014. Hence, there was no price premium to encourage ecological production. To identify possible markets for organic vegetables and derivatives, a market analysis was conducted. The study reviewed the current situation as well as areas of opportunity and a way forward to seize them. These recommendations formed the basis for the development of a business plan by the San Antonio Green Growers Association which is currently being implemented.

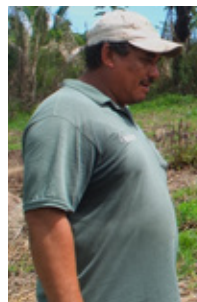
Enabling factors: The results in terms of improved yields and savings by reducing inputs such as chemical fertilizers, obtained from organic production, were an incentive to replicate the models with other groups of producers.



Based on the needs assessment (1) which identified farmer groups interested in agroecology as well as their areas of opportunity, capacity development for technical and organizational skills was conducted (2) and (3), accompanied by a market investigation to identify points and/or channels for produce sales (4).

» Story

“In my small-scale plots I used to use a significant amount of agrochemicals to fertilize the soil; but with the technical assistance of the Project advisors I can now produce my own organic fertilizer and no longer need the chemicals, which pollute the soil and contaminate my production or cause damage to my health or



that of my family. The use of organic fertilizers has also helped me to improve my production because I have a better yield on my cabbage, chili and tomato crops and have reduced production costs by 30%.”

Mr. Carlos Serrano, Vegetable producer in Vaca Forest Reserve.

