# vivamos mejor

**Better living conditions for Latin America** 





## Improving livelihoods of farming families in the watershed of the Rio Quiscab

## **Project background**

The majority of the indigenous rural population in the Rio Quiscab watershed area in the Sololá department survive off self-sufficient subsistence agriculture. 70% of these farming families are poor. They overexploit their natural resources, water, forest, and soil. As a result of decreasing harvest yields, many farmers burn down areas of forest, but the cleared areas only bring good yields for a few years. In addition, the erosion causes the streams to wash valuable topsoil into Lake Atitlán, which is the largest freshwater reserve in Central America and whose water quality has been impaired as a result. Furthermore, the farmers are also fighting against increasing droughts caused by climate change.

## Our approach

We help smallholder families use their land in a way that conserves resources while still improving their yields. They learn sustainable yet more efficient cultivation methods, as well as beekeeping and mushroom cultivation, with which they can generate income and protect the forests. On the other hand, we also raise awareness of resource conservation among broad sections of the population and support the authorities in creating the basis for well-regulated land use planning.

## **Project goals**

To enable farmers in the Rio Quiscab watershed area to use their natural resources sustainably.

- To raise awareness of environmental protection and resource conservation among the population and to teach them solution strategies for the Rio Quiscab watershed area.
- For farming families to use their natural resources (agricultural land, forest, water, and pasture) sustainably.
- To enable farmer families to earn additional income through beekeeping and mushroom cultivation.

## **Project activities**

## Raising awareness of resource conservation

In workshops and via radio / television, our partner organisation educates the population about the interaction between the forest and the water balance and raises awareness of the need to conserve natural resources. Teachers are trained in teaching about environmental issues in a way that is appropriate for children.

#### Data collection and land use plan

The plan for the area is out of date. Our partner organisation is collecting up-to-date data on the condition of soils, forests, water, and fuelwood consumption. It will draw up an updated land use plan in collaboration with the authorities on the basis of the data obtained.

## **Project location**

The Rio Quiscab watershed area, which encompasses the political communities of Sololá, Santa Lucía Utatlán, San José Chacayá, Nahualá, and Barreneché de Totonicapán in the Atitlán highlands, Department of Sololá, Guatemala.

### **Topics**

Sustainable water and agriculture, conservation of natural resources, empowerment

## **Vivamos Mejor Programme**

"Food & Water"

#### **Duration**

2021 - 2023

#### **Project Costs**

CHF 689,872

#### **Vivamos Mejor**

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#### **Facts**

The loss of natural resources, soil, forest, and water threatens the livelihood of indigenous smallholders in the highlands of Guatemala. Without water and healthy soil they cannot produce food! Studies by the FAO\* show that smallholders play a key role in feeding the world. However, they cannot reach their full potential due to a lack of expertise, financial vulnerability, and overexploited production bases. Climatic changes such as longer dry seasons and water shortages further threaten the livelihoods of smallholders. The precarious situation has a direct impact on the most vulnerable: indigenous children. 42% of children in the region are malnourished. Protecting the natural resources they need to survive helps secure the livelihood of the indigenous population.

\*Food and Agriculture Organization of the United Nations.

#### Our mission

Through our "Food & Water" programme, we are equipping the rural population with knowledge and empowerment they need for the future. Thanks to modern, sustainable agriculture and water management methods, they can grow crops in harmony with their natural environment and can feed themselves and those around them.

#### Our vision

Our vision is for rural areas to offer future generations a future-proof living environment thanks to sustainable development.

#### Weather station and climate network

To collect weather data, we are setting up an automated weather station that will regularly measure humidity, air pressure, solar radiation, wind direction, and wind speed, in addition to temperature and precipitation. We are also installing six manual rain gauges and training farmers to read them. The data is forwarded to the Centro Humboldt in Nicaragua, which specialises in climate issues, in order to develop reliable models of the local climate.

#### Soil protection and diversity

An agronomist and an indigenous social worker support the smallholders with expert advice on how to manage their corn fields more sustainably through erosion control measures, the production of organic fertilisers, and diversification, to prevent soil fatigue and produce more and more varied crops.

## Reforestation

In collaboration with 360 farming families, 80 hectares of former forest area are to be reforested with local tree species that are appropriate to the location.

#### Reducing firewood consumption

We supply 225 families with material and instructions for building efficient stoves. This should reduce the firewood consumption by 50%. A built-in smoke vent protects the families from harmful smoke particles and reduces respiratory diseases.

### Beekeeping and mushroom cultivation

In workshops, smallholders learn the basics of beekeeping and mushroom cultivation, which there is a growing market for in Guatemala. In addition, our partner organisation helps with marketing and enables small holders to earn a small additional income.

## **Target groups**

Direct: 500 farming families and 50 community representatives

Indirectly: 110,000 other residents of the project area

## Costs

The project costs are CHF 689,872. We rely on companies, cantons, foundations, and municipalities for funding. As part of the programme contribution, the project is co-funded by the Swiss Agency for Development and Cooperation (SDC), part of the Federal Department of Foreign Affairs (FDFA).

#### Own and local contributions

These amount to CHF 101,202 and are not included in the total costs. The beneficiaries are contributing labour to the construction of efficient stoves with local materials. For the reforestation, the beneficiaries are doing voluntary work.

## Regional approach

The project is part of our regional programme, in which we work with partners in Guatemala, Honduras, and Nicaragua to implement projects related to the same issue in a way that is adapted to the context and make the expertise of all organisations mutually accessible. Our regional coordinator advises the partner organisations, pools the experience gained, and shares it with us and our partners at regional meetings.

#### Local project partner

Our project partner is the legally independent, grassroots Guatemalan NGO "Asociación Vivamos Mejor Guatemala". It exclusively employs local staff and is very familiar with the local cultural context. The organisation has 25 years of project experience and works with clear target measurement instruments and a transparent accounting system.

## **Images from the previous project**



Erosion protection on steep slopes is essential.



Beekeeping and mushroom cultivation have potential as forest-friendly sources of income.



Family in front of a newly built fuel-efficient wood-burning stove



Measurements of streams and their water runoff.