

COMBATING CLIMATE CHANGE

Presenter

Family farmer - Belize

Description

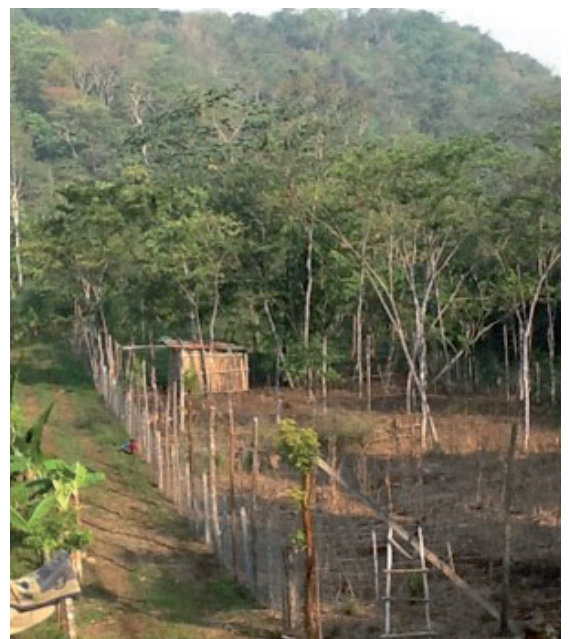
Farmers in Belize are experiencing several effects of climate change, notably higher temperatures, less rainfalls, lack of water in watersheds, contamination of watersheds, less predictability of farm activities (when to grow what), pests and plant diseases.

In order to cope with the challenge of adapting to and mitigating climate change, several practices are being implemented by farmers in Belize, sometimes in cooperation with the National government:

- Study on how the potential of rivers and watersheds is used (government of Belize along with farmers and other user groups) for irrigation purposes;
- Development of agro-silvopastoral systems, consisting in a combination of timber, plants or fruit trees and production of vegetables used by farmers;
- Rearing of exotic animals under hunting threat and integrated farming system;
- Cover structures to combat flies and decrease use of pesticides;
- Transforming agro-waste into animal feed or composting material (i.e chicken manure used for the sugar and banana production);
- Production of biofertilizers;
- Processing produce in order to be less dependent from imports and gain additional value added from production;
- Organic production with self-certification;
- Water catchment/storage of water/water harvesting;
- Back gardening;
- Turn farms in agro-tourism/agro-ecotourism.

Results

- Better water management;
- Resilience to water scarcity;
- Lessen the burden on land dedicated to livestock;
- Less use of pesticides;
- Diversification of farm income.



Climate smartness

On the Belize initiative, developed by the government and the farmers, it is worth highlighting that the implementation of a whole portfolio of adaptation and mitigation practices facilitates achieving an optimal state of resilience because from a systemic perspective, isolated practices won't make enough contributions compared to a tailored group of practices.

Practices such as watershed management, water management, diversification of production and income diversification of producers contribute to increasing adaptation, while the use of trees and protected zone conservation are more mitigation focused. The portfolio of practices promoted by "Combating Climate Change" project contributes considerably to an overall increase in farmers' income. Considering the above, it is possible to acknowledge that such portfolio of practices is contributing to a climate-smart agricultural development in Belize.

It is recommended to assess the implementation of additional practices, which are being implemented in the region and can support climate-smartness goal in Belize by improving yields and climate resilience of the farmers (CIAT and World Bank, 2018). Moreover, capacity building regarding climate and weather information is essential to support long-term impact and guarantee climate smartness despite of climate variability. Empowering farmers on the use of climate information for planning and management purposes may ensure a better-informed decision making processes considering their context specific conditions.

