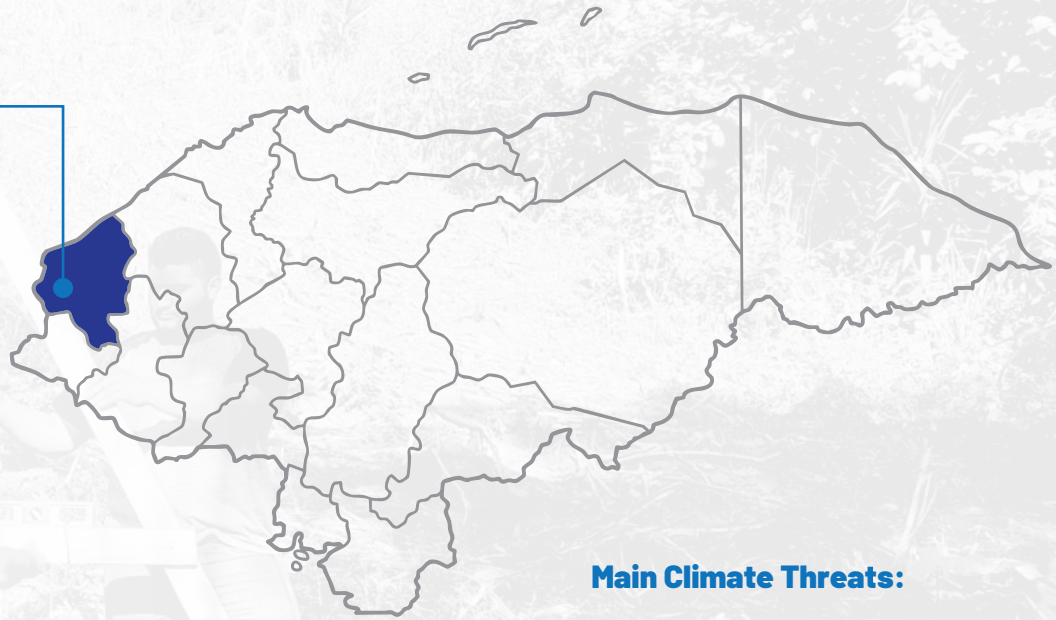
Authors: Martínez, Jesús; Borrayo, Andrea; Arce, Daniela; Gómez, Cindy; Martínez-Barón, Deissy.

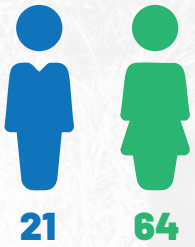
Putting Ecosystems at the Center of Adaptation through the Climate-smart Villages – CSV

Santa Rita, Honduras



Communities:

- Barrancón
- Villa Nueva
- Mirador
- Queseras
- Casita



Implemented Practices:

ON-FARM

Practice	Quantity
Live barriers	6
Organic composting	50
Terraces	4
Grafting	23
Total	**83**

IN HOME GARDEN

Practice	Quantity
Rainwater harvesting	43
Water reservoir for fish production	24
Sustainable Home Garden	72
Total	**139**

Main Climate Threats:

Prolonged droughts

Strong winds

Heavy rainfall

Results

Women's Empowerment

- Women's decision-making over agricultural spending increased from 17% to 67%.

Food Security and Livelihoods

- 80% of participants reported that most of their food comes from on-farm production (vs. 70% in control group).
- Both women and men in Monitoring Phase 1 reported increased saving capacity (women: 25%, men: 35%).

Access to and Use of Climate Information

- Up to 80% of farmers have access to climate information.
- Up to 80% of farmers reported being capable of using agroclimatic information.

Climate Resilience and Sustainability

- Up to 60% of farmers perceived lower climate vulnerability after implementing EbA/CSA practices.
- Up to 80% of respondents reported making agricultural changes to cope with climate change.

Soil Health (Organic Matter - OM)

- Organic matter increased in plots with live barriers, with gains of up to +3.04% in one year.

Greenhouse Gas (GHG) Emission Reduction

- Coffee using EbA/CSA practices reduced emissions by up to 31%.
- Maize with EbA/CSA practices reduced emissions by up to 76%.
- Beans with EbA/CSA practices reduced emissions by up to 50%.

Soil Moisture Retention

- Live barriers showed higher moisture retention (25–30%) during the dry season (March).
- Terraces helped stabilize soil moisture during rainy months (June and August).

Participatory Scientific Trials in Beans

- Planting with technical recommendations yielded up to 40% more than traditional planting.
- Planting during apante season (dry planting with favorable weather) and using technical recommendations, local varieties Matocho and Vaina Morada reached yields of up to 2,971 kg/ha, which is 368% higher than the national average.
- The improved variety SEF 70 had the best performance in the region with an average yield above 2,742 kg/ha, which is 340% higher than the national average.