



Building Climate Resilient Agriculture in Caribbean Countries: Haiti

Haiti's Agriculture Sector in Context

Haiti is a low-income economy with a per capita Gross Domestic Product (GDP) of USD 2,925, the lowest in Latin America and the Caribbean. Real GDP fluctuated over the period 2016 to 2020 peaking at USD 15.97 billion in 2018 and a low of USD 13.42 billion in 2020. Agriculture is a key economic and growth sector for the Haitian economy, contributing an average USD 2.73 billion annually for the 2016-2020 period. In 2021, Haiti reported severe localised food insecurity, and the deteriorating situation impacted approximately 4.4 million people. The high levels of food insecurity were exacerbated by the negative effects of the COVID-19 pandemic, primarily through income and job losses, the low availability of locally produced staple crops and high prices of food. The pandemic also exacerbated the declining availability, affordability, and access to key inputs to support production. Haiti's vulnerability to climate and non-climate disasters, and the frequent occurrence of these phenomena, are other limiting factors impacting the country's economic performance.

The population of Haiti in 2020 was estimated at 11.4 million with a labour force of just under 5 million, a fifth of which is employed in the agricultural sector. Employment in agriculture remained constant over the 2016-2019 period where just under 1.5 million persons were employed in the sector, declining to 1.01 million in 2020. Main agriculture systems are sugar cane, cassava, mangoes/guavas, plantains, bananas, yams, avocados, maize, rice, and vegetables. Livestock includes cattle, goats, and a small number of pigs and horses.

Haiti's agriculture is further constrained by poor access to markets limiting the potential for farmers to improve production and sales of food and cash crops. With increased urbanisation, Haiti has experienced increased food importation. There are, however, opportunities to strengthen agroforestry value chains such as mangoes, avocado, and food tree crops.



Limited processing capacity for agroforestry by-products

Source: The Evangelical Covenant Church, "Haiti Agriculture: Let it Grow!", Covenant World Relief (blog), October 9th, 2013, <https://blogs.covchurch.org/cwr/2013/10/haiti>

Agriculture in Haiti's NDCs

While agriculture and food security was broadly identified as a priority sector in the initial Nationally Determined Contribution (iNDC) (2016), Haiti has strengthened its commitment to global emission reduction and has outlined both agriculture adaptation and mitigation targets in the country's updated NDC (uNDC) (2021). Adaptation targets in the uNDC include a commitment to develop Haiti's bioeconomy through climate smart and organic agriculture. To achieve Haiti's commitment to emission reduction by 2030, the ambitious agriculture mitigation targets included in its uNDC are to:

- Improve pasture quality with legumes.
- Expand fruit crop agroforestry systems.
- Enhance manure management.
- Increase crop cover.
- Expand reforestation with agroforestry.

Emission Profile of Agriculture in Haiti

Agriculture contributed 81% to the overall agriculture, forestry, and other land use (AFOLU) emissions and 71% towards the total country emissions (excluding FOLU). Enteric fermentation contributed 61.1%, and agricultural soils, 28.6%, to the agriculture emissions (4,771 Gg CO₂e) in 2000. It is noted that these estimates are for the year 2000

and with emissions increasing by 39% between 1994 and 2000, further increases would be expected in the last 20 years. The baseline scenario provided in the uNDC shows that overall emissions increased by 74% between 2000 and 2020.

Barriers to Inclusion of CRA Actions in NDCs

Barriers that limit the application of climate resilient agriculture (CRA) technologies are: inadequate opportunities for youth and women, including access to start-up support and productive capital, access to credit (less than 5% of credit goes to the agricultural sector), limited budgetary support for agriculture (less than 10% of the annual government budget), land insecurity, inadequate tools and decision support for baseline, monitoring and reporting information (MRV) and other tracking support, inadequate policy and regulatory framework, and other capacities.

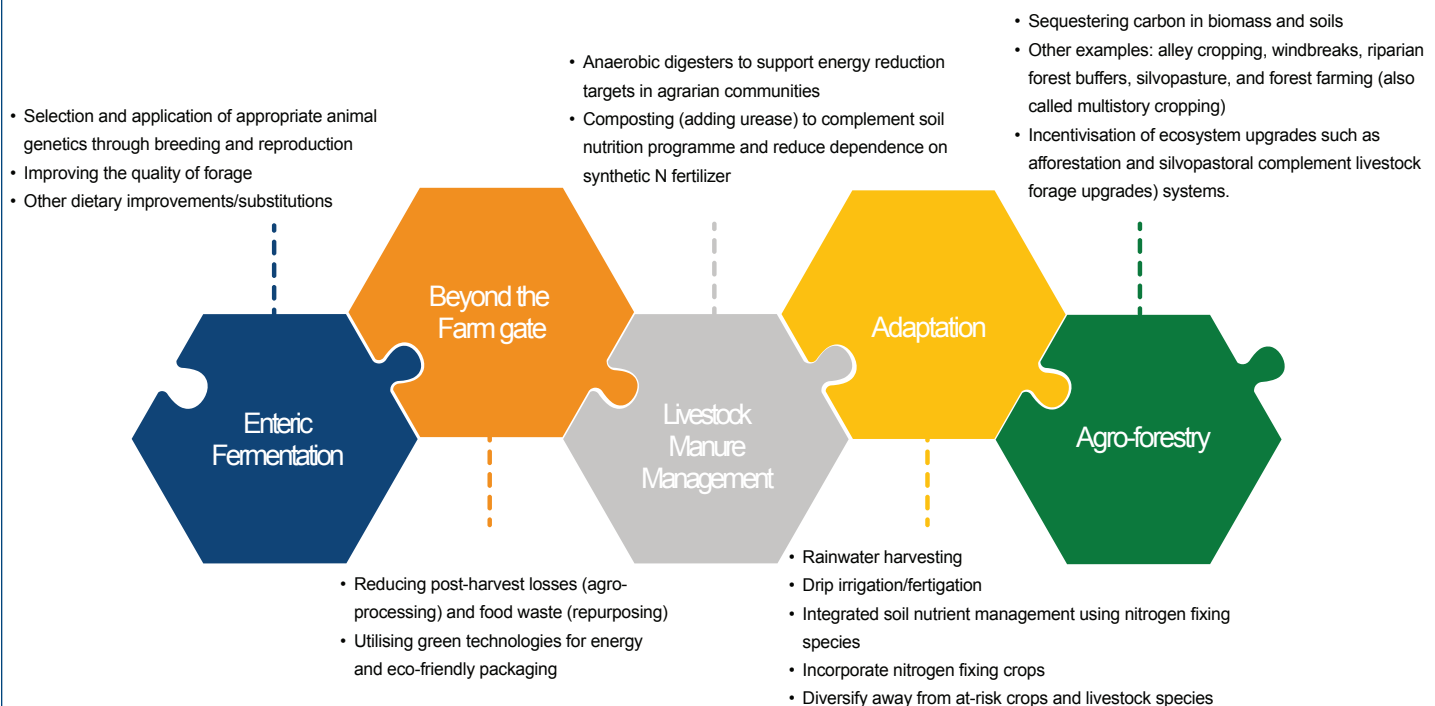
Agroforestry is key to Haiti's emissions reduction targets and critical barriers identified for the dissemination of the "Agroforestry technology in Haiti" are:

- Lack of technicians with specific knowledge of agroforestry technology.
- Inadequate compensation to balance the price of products of agroforestry systems compared to products of short-cycle systems.
- Poorly developed markets for the sale of agroforestry products.

Opportunities for Building CRA and Enhancing Climate Ambition in NDCs

Haiti's agriculture sector is a significant emitter of greenhouse gases, with enteric fermentation contributing 61.1% and agricultural soils, 28.6%. The mix of on-farm and beyond the farmgate measures that will provide both mitigation and adaptation co-benefits, will reduce the carbon footprint of Haiti's agricultural sector.

Opportunities for enhancing CRA in Haiti



Priority Capacity Needs and Key Approaches for Enhancing Agriculture's Contribution to Future NDCs

Capacity Needs for Building CRA in Haiti

- Strengthen value chains (processing, packaging, pricing, marketing, etc.) for agroforestry produce and products.
- Incorporate income streams diversification opportunities such as intercropping with cash crop systems and complementary agro-enterprise such as apiculture.
- Enhance capacity for farmers in CRA technologies.
- Strengthen institutional arrangements for CRA technologies include extension and other advisory services.
- Create pathways to enhance women and youth participation in primary agriculture.
- Provide access to tools to monitor and track carbon inventory of food systems.
- Strengthen climate and other natural disaster decision support.
- Tailor ongoing food security and poverty alleviation programmes by the World Food Program and others to incorporate CRA considerations.
- Mainstream CRA investment opportunities in agriculture investment strategies.

Approaches and Steps to Enhancing Agriculture's Contribution to Future NDCs

- Alignment of agricultural climate targets, policies, and actions with National Adaptation Plans or Sustainable Development Goals.
- Enhancing financing for climate resilient agriculture.
- Strengthening Monitoring, Reporting and Verification systems for better inventories, assessments of mitigation potentials or assessment of access to finance.
- Improvement of agricultural innovation and extension services.
- Identification of policies and measures to equitably clarify land tenure, protect small-scale farmers, and engage private sector in the CRA transition.
- Identification or prioritisation of actions that support both mitigation and adaptation.
- Improved description of co-benefits for mitigation and/or adaptation actions.
- Link to niche markets that could incentivise sustainable, lower emission products.

The *Strengthening the Foundation for a Climate Responsive Agricultural Sector in the Caribbean Readiness Project* (CARICOM AgReady), financed by the Green Climate Fund, targets nine countries in the CARICOM region with The Ministry of Environment and Housing of The Bahamas as the lead National Designated Authority (NDA) and the Inter-American Institute

for Cooperation on Agriculture (IICA) as the delivery partner. Covering Bahamas, Belize, Dominica, Haiti, St. Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago, the project works to provide information and tools to enable greater participation from the agriculture sector in climate action and finance processes.



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