



One Health for a Sustainable Food Sovereignty in the Caribbean and Amazon Region

The CambioNet Initiative

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- ❁ **Context and issues**
- ❁ **Toward a new ‘*One Health & Bioeconomic*’ paradigm**
- ❁ **The CambioNet initiative**
- ❁ **Conclusions & perspectives**



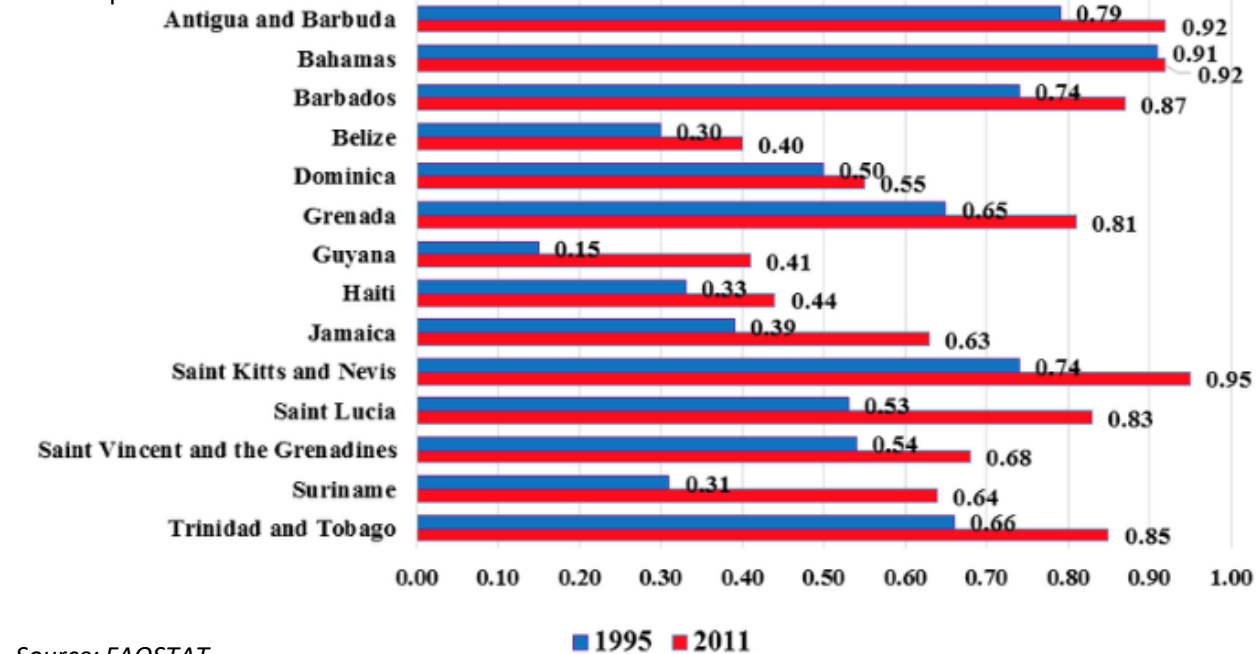
01 Context and issues

Triple crisis: health, climate, biodiversity, against a backdrop of geopolitical instability



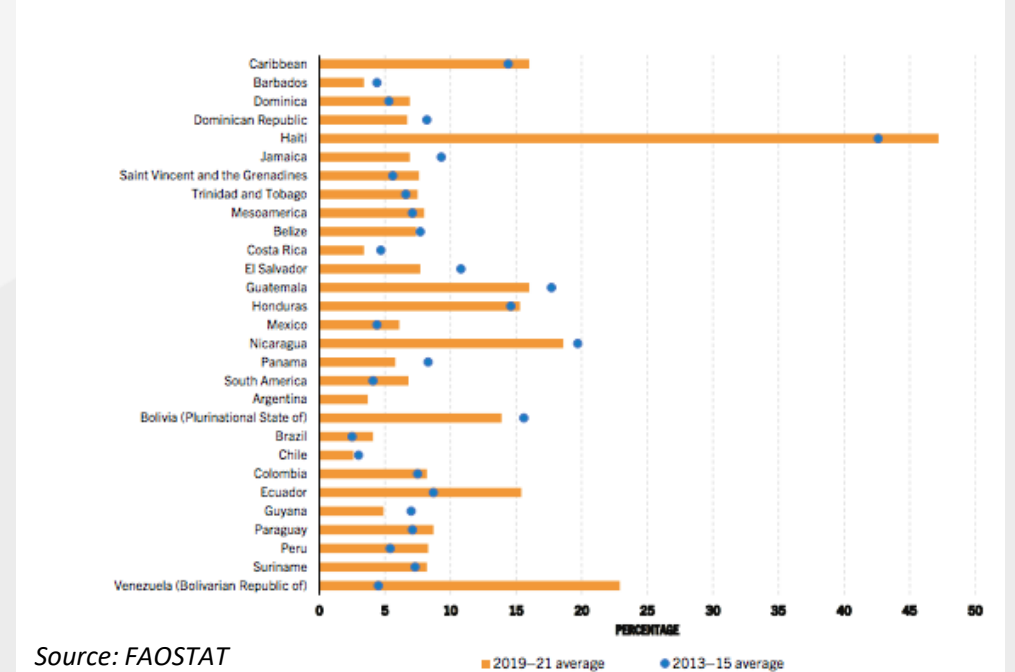
State of Food Insecurity in the Caribbean

Food dependence ratio in the CARICOM



Source: FAOSTAT

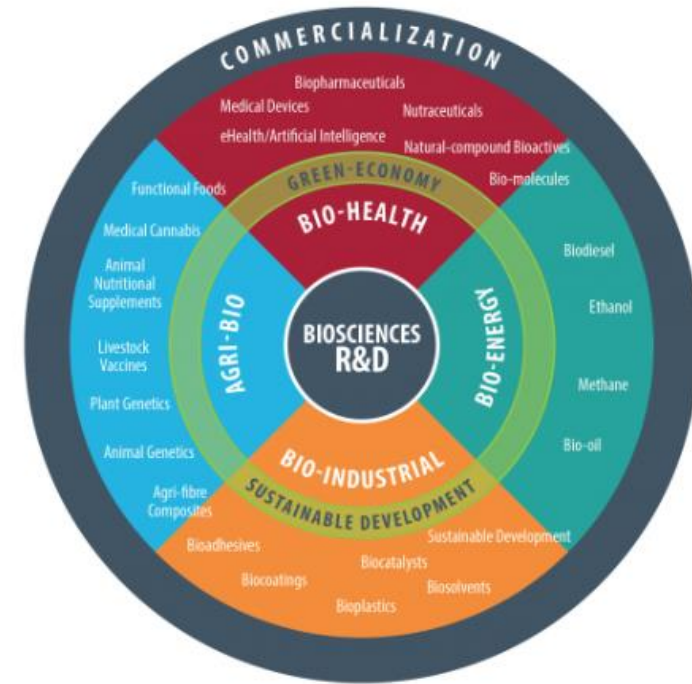
Prevalence of undernourishment in Latin America and the Caribbean by country



Source: FAOSTAT

Every Caribbean SIDS has seen an increasing dependence on imports and for almost half of them more than 80% of the food consumed is imported

The prevalence of food insecurity is higher in Latin America and the Caribbean than the world average. In 2021, 40.6 percent of the region's population faced moderate or severe food insecurity, while 29.3 percent of the world's population was affected by moderate or severe food insecurity.



02 Toward a new '*One Health & Bioeconomic*' paradigm to tackle the challenge of food sovereignty

The need for a change in vision and practices within a large scale approach



From One Health & Bioeconomy to Food Sovereignty

Caribbean

Public Policies

Innovation
Capacity building

Data Driven

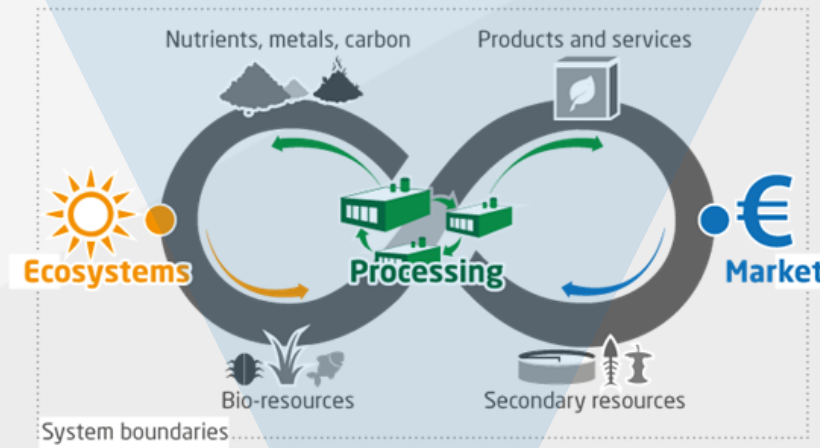
Amazon

The One Health Triad

Climate Change



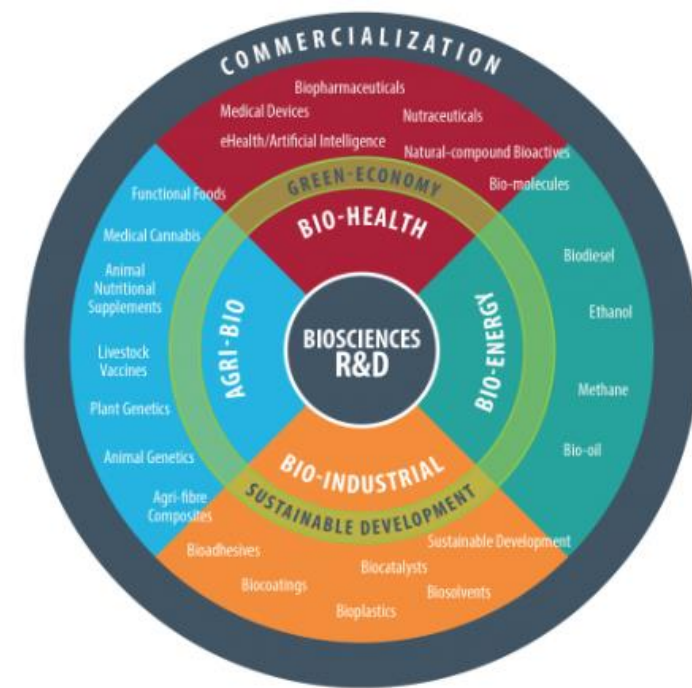
Other chocs:
sanitary
economic
environmental



Bioeconomy : the economy of photosynthesis
Small scale farming systems & Agroecology

FOOD SOVEREIGNTY





03 The CambioNet Initiative

Modernisation of Agricultural and Food Systems



CambioNet in a nutshell

The Caribbean and Amazonian Bioeconomic Network

CambioNet

The Caribbean and Amazonian Bioeconomic Network

Making regional cooperation a vehicle for the agroecological and bioeconomic transformation of Caribbean and Amazonian agricultures

Providing answers to the issues of food security, adaptation to climate change, agroecological and bioeconomic transitions.

Small-scale food-producing and diversified farming systems at the heart of the process

4 WPs serving an innovation value chain by the deployment of strategic instruments for large-scale cooperation

Lead partner: INRAE Antilles-Guyane

Challenge: Modernization of agricultural and food systems in the Greater Caribbean/Amazonia

10 countries: Greater Antilles, Lesser Antilles, Guyana Shield

18 partners: Research & Higher Education, Research & Development, Consulting & Extension

Budget : 6 M€ (FEDER + FED + UNDP)

4 Work Packages :

WP1: Coordination and Steering

WP2: Diagnosis & value creation

WP3: Innovation systems

WP4: Dissemination/Impact and public decision support



Caribbean and Amazon as a structuring entity



Small scale biodiverse farming systems as the starting point of the value chain



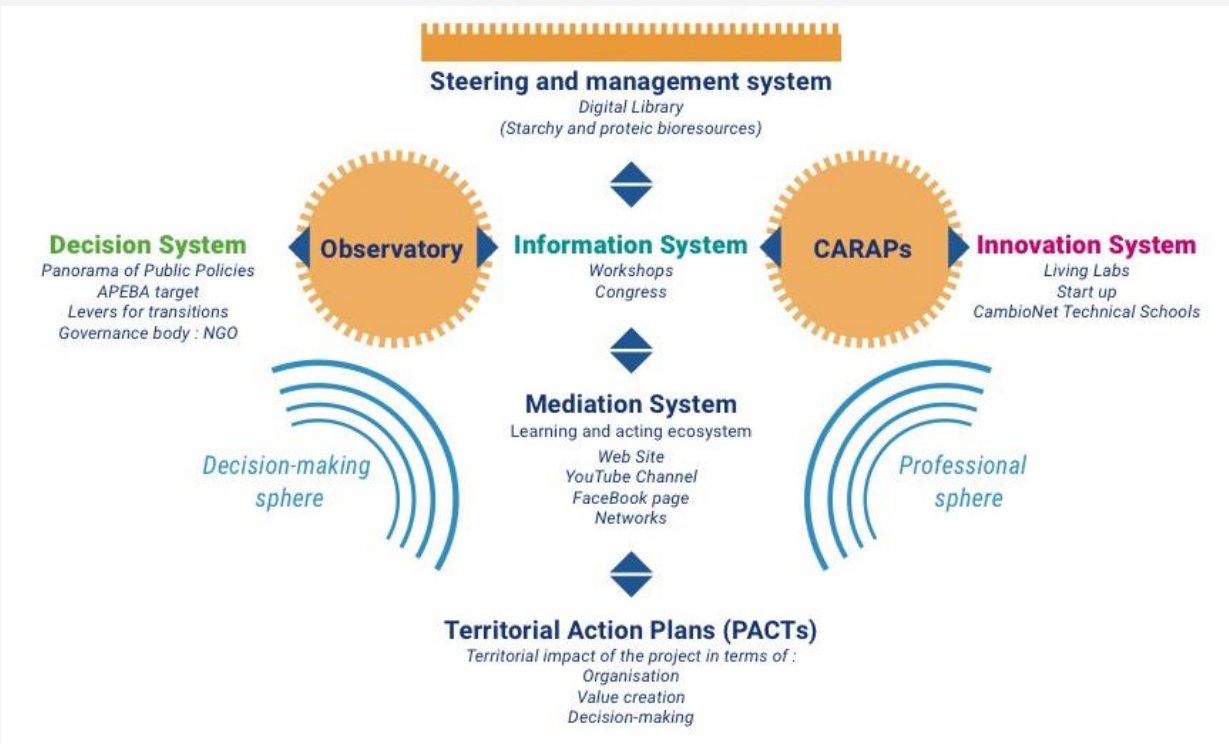
Bioeconomy & One Health as a transition model



Information, capacity building, innovation and public policies as drivers of progress



The CambioNet Innovation Chain



A knowledge pipeline serving innovation and progress



CambioNet highlights : Information System

CambioNet Information system

The Caribbean and Amazonian Bioeconomic Network

CambioNet a service platform

The CambioNet project's information system is a response to the need to capitalise on the large body of existing knowledge on the transitions addressed: food, climate, agroecology, bioeconomy, in order to provide information that can be appropriated and exploited by the project's beneficiaries.



1- Collect information

2- Information storage

- Characterization of the environment**
 - Inventories (starch and protein resources, potential of biodiversity resources, good agricultural practices, expectations, ...)
- Dynamic visualization**
 - Dynamic cartography and graphic presentation of data.
- Dissemination-extension-advice data - Digital library**
 - Research, popularization, technical sheets, e-learning, videos, ...
- Institutional support and research networks portal**
 - Institutional and regulatory framework by country, key indicator of choice.
- Project portal news & indicators**
 - Presentation of the CambioNet project, country issues, information on WP activities, steering committee reports, ...

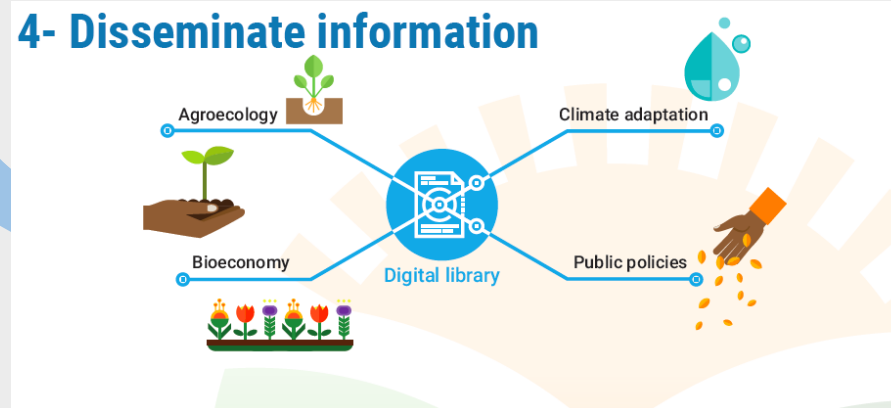
3- Making the information usable

The CARAPs Platform

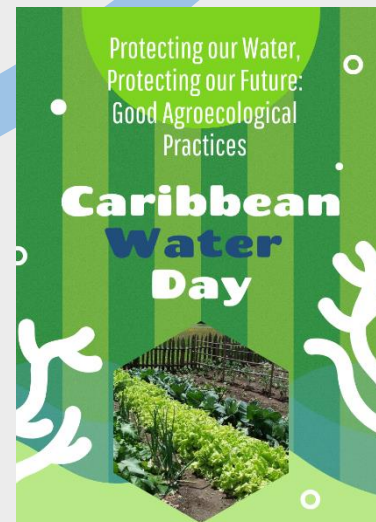
Caribbean and Amazonian Remarkable Agroecological Practices: from pitchfork to fork

Doing my shopping	My inspiration	I consolidate
Agroecology & Bioeconomy tropical techniques (Information System) Fact sheet, references, videos <ul style="list-style-type: none"> - Soil health: organic fertilisation and tillage - IPM and biocontrol - Grass cover management - Optimising water management - Seeds - Selecting and managing service plant - Small breeding - Grazing - Agro-processing on the farm - Biogas production - ... 	Tropical Agroecology & Bioeconomy systems (Information System) Fact sheet, references, videos <ul style="list-style-type: none"> - Agroforestry systems: <ul style="list-style-type: none"> • Syntropic agric. • Undergrowth farming • Creole garden - Permaculture - Aquaponics - Distribution models - Shorts circuits - APEBA organisation methods - Federation 	"It is the way to do it" Video testimonial <ul style="list-style-type: none"> - Adapting to climate change: Karusmart - I produce, save and distribute my seeds: PIAL Cuba - I organise recycling on my farm - I do agroforestry - I produce and sell PPAM: Sarah Gobert 971 - I do Aquaponics: Bioponie - I distribute through short distribution channels: Bouquet du Terroir Sud Basse Terre - I cook with agroecological products: Steve Salim
		CambioNet Technical school (CTS) <ul style="list-style-type: none"> - CTS Technics and Skills for agroecological improvement in Caribbean and Amazonian farming systems (Cuba) - CTS Development of agroecological production systems (Guadeloupe) - CTS Public Policy (Martinique) - CTS Bioinspiration and design thinking (French Guiana)
		I taste and validate Living Labs (LL) <ul style="list-style-type: none"> - I'm experimenting with innovative proposals in CambioNet's LL network - The LL evaluates the results obtained and organises workshops for sharing and feedback with the players in the LL network - The LL decides on the recognition and protection, if necessary, of any innovation proposed - Th LL disseminates results when they are conclusive.

4- Disseminate information



CARAPs Booklets



CambioNet Innovation system

The Caribbean and Amazonian Bioeconomic Network

CambioNet a service platform

Strengthening small-scale agriculture by **innovation** assistance in the Caribbean / Amazonian Region

1. Initiating a Living Lab Networking at the Caribbean / Amazonian scale for a bioeconomical and agroecological development in the Region



Participatory innovation for value creation: network set-up, training, varietal choices, climate-smart technical practices, integrated pest management, biostimulants & organic fertilizers, small-scale mechanization to reduce the use of phytotoxics, connected tools, decision-making tools for sustainability, agro-processing, market channels...



[OneHealthCambioNet
youtu.be](https://www.youtube.com/OneHealthCambioNet)



Caribbean and Amazonian Observatory of Bioeconomy and Agriculture

CambioNet Decision system

The Caribbean and Amazonian Bioeconomic Network

CambioNet

Supporting small-scale farming innovation

What for?:

- ▶ strengthen knowledge, cooperation and coordination between players and regions in order to
- ▶ tackle common challenges in a comprehensive way
- ▶ promote harmonious and sustainable regional development

Targeting Public Policies in favor of One
Health, Bioeconomy, and Food
Sovereignty



<https://drive.google.com/file/d/1jGukDiyPOCDBQFN46-v2-AOHWM3YGCai/view?usp=drivesdk>





04 Conclusion and perspectives

A strategy for impact and progress



From proof of concept to proof of operability

Lessons



- The need to work on consistent spatial and temporal scales
- Breaking out of silo based science

Achievements



- Setting up tools and instruments for regional cooperation
- Creation of the NGO CambioNet International

CambioNet+ (2025-2027)



C. Int. Rep. Dom

C. Int. Dominica

C. Int. Guyane

Consolidating and extending the existing system : scaling up, networking (Climate change, One Health,, Integrated farming, Public policies, ...)

Increase the services and business components for producers and institutions : Observatory, start ups, higher education, training, dissemination, Territorial action plans (RBE), ...

Contribute to the visibility and international attractiveness of the project area:
Greater Caribbean as a hot spot on the international scene
Contribute to the implementation of the "regional integration" process with the OECS and CARICOM





"One Health and Regenerative Bioeconomy: For a Healthy and Sustainable Caribbean-Amaonia"

Thank you for your attention

