

# CHALLENGES AND OPPORTUNITIES FOR THE AGRIFOOD SYSTEMS OF THE

## EASTERN CARIBBEAN STATES

*\* Reading based on the indicators of the Observatory of Public Policies for Agrifood Systems (OPSAa)*



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## AGRICULTURAL CONTEXT

# THE CHALLENGE OF SUSTAINABLE AGRICULTURAL PRODUCTION IN A CONTEXT OF ENVIRONMENTAL CHANGES

A perspective on agricultural production and agrifood trade

### COUNTRY

OECS: Organisation of Eastern Caribbean States (agregado) ∨



Agricultural value added (AVA)  
(constant USD)

2022

**249,787,160**



Annual variation of the  
agriculture sector (AVA) (%)

2022

**0.11**



Agriculture sector as a (%) of  
GDP

2022

**3.59**



Exports by products and  
aggregates

Agri\_food.  
USD in 2023

**80,050,756**



Imports by products and  
aggregates

Agri\_food.  
USD in 2023

**481,719,447**



Trade Balance

Agri\_food. USD Exp./USD Imp. in  
2023

**0.17**

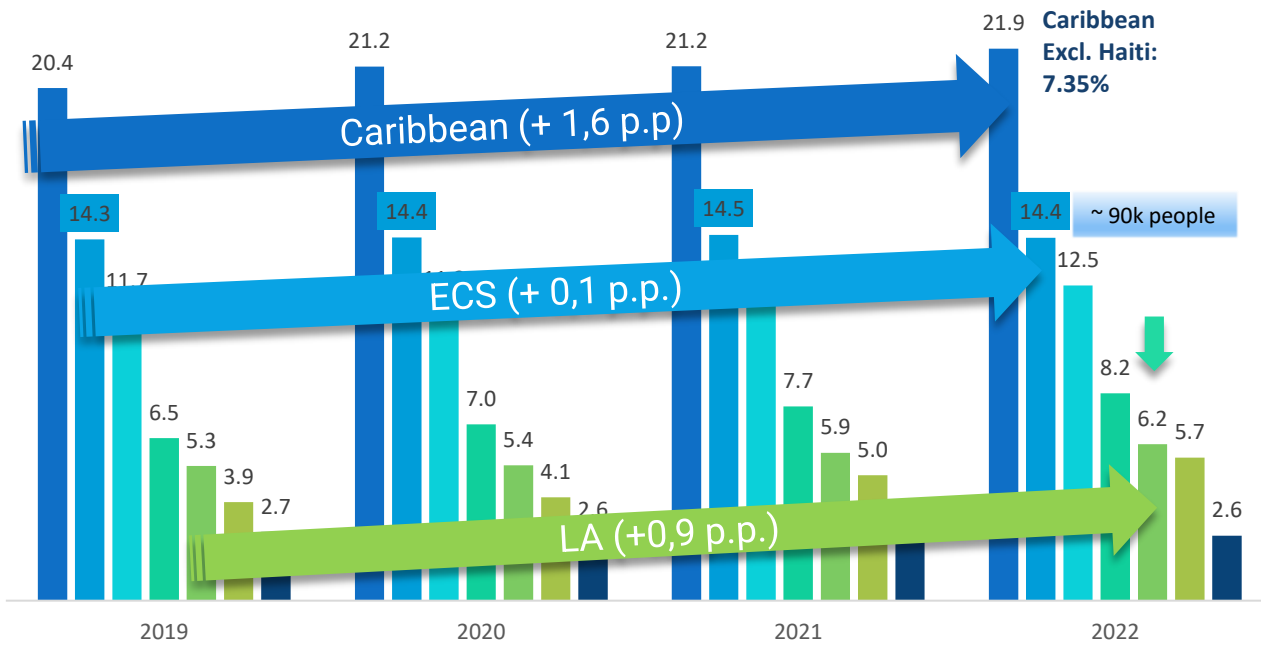
**USD 6.01  
Imp./Exp.**

# THE MULTI-CRISES

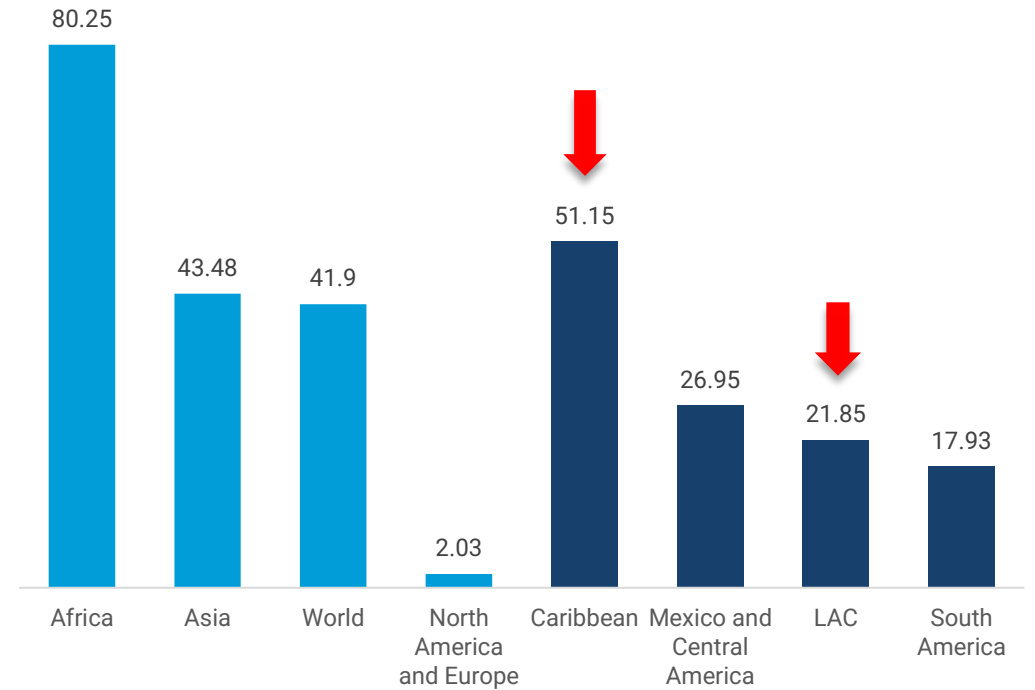
## ARE PUSHING MORE PEOPLE INTO EXTREME POVERTY AND HUNGER

Population experiencing hunger (undernourishment, as a %)

Caribbean ECS Central America Andean America Latin America South America North America



Population without access to healthy foods (%)

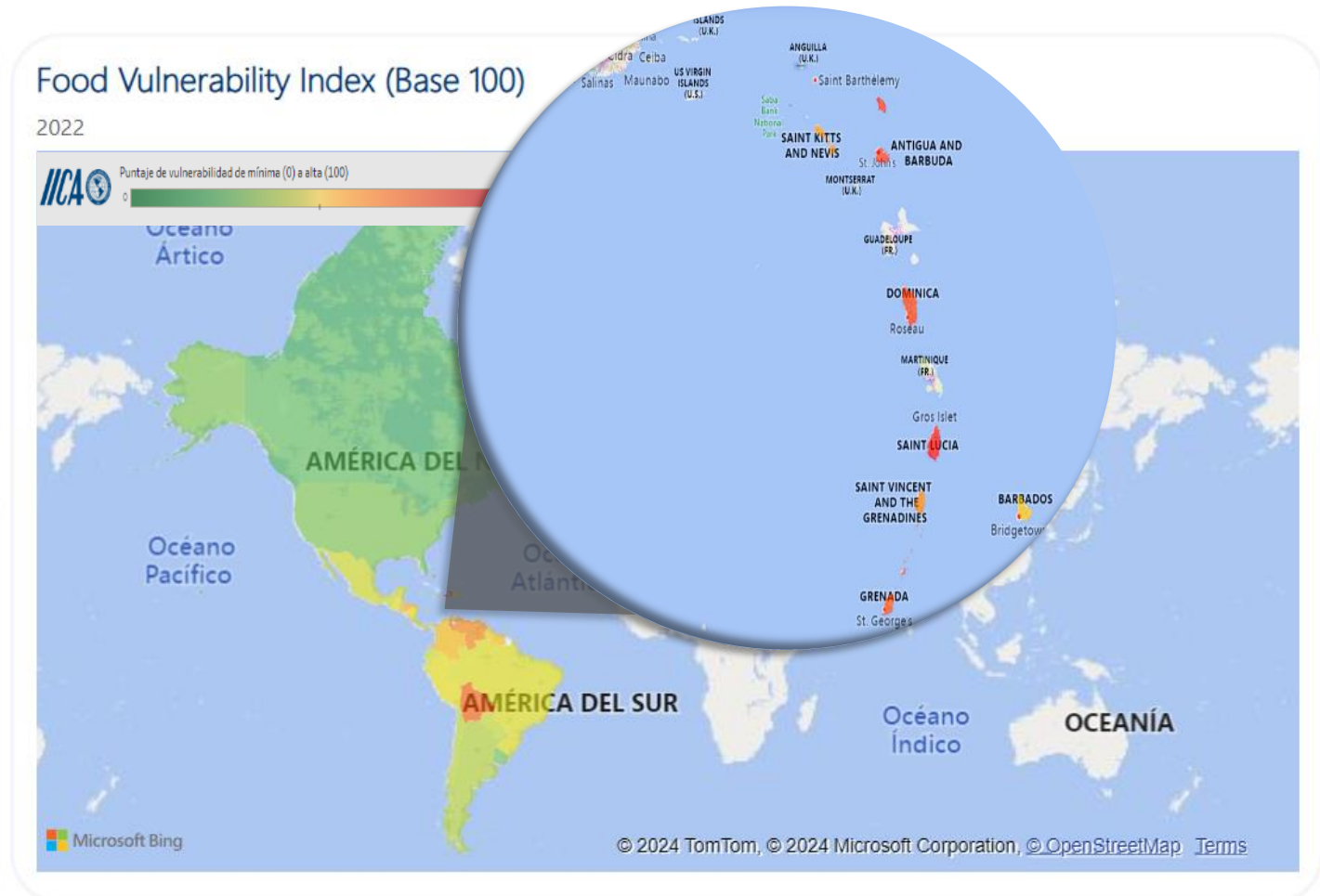
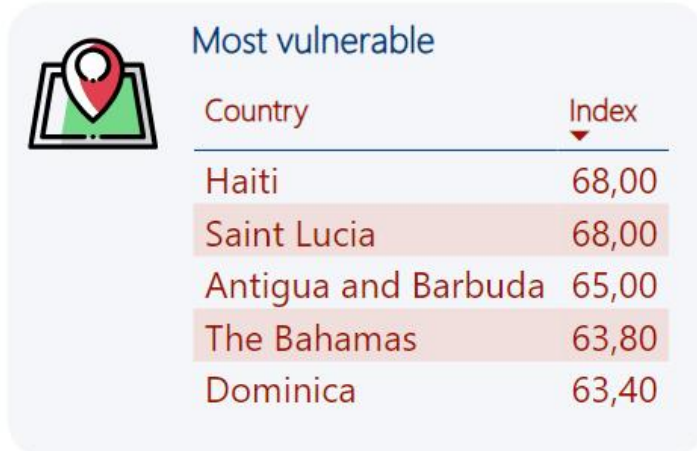
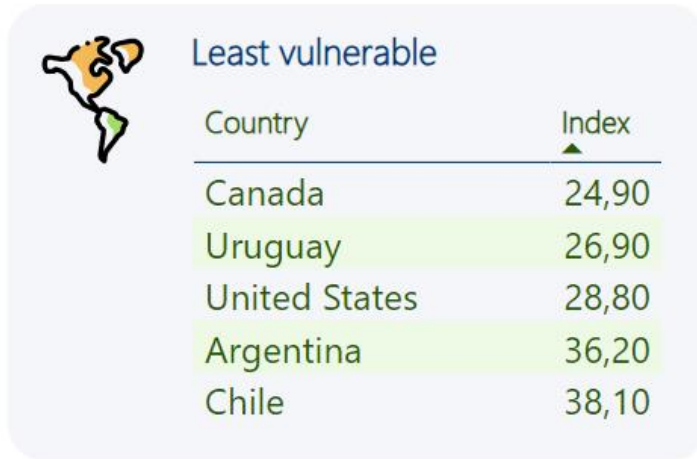


Source: OPSAa (IICA) based on data from FAO (2024); Diaz-Bonilla (2023).

# FOOD INSECURITY

## IICA's INDEX OF VULNERABILITY TO FOOD INSECURITY (scale 0-100)

Based on main sources of vulnerability

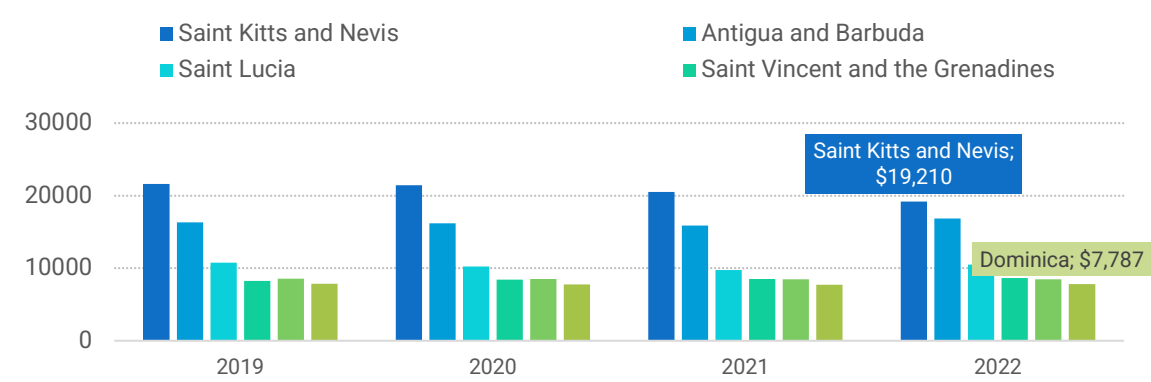


# FOOD INSECURITY

## ON THE NEED TO ADDRESS THE KEY CAUSES OF FOOD INSECURITY

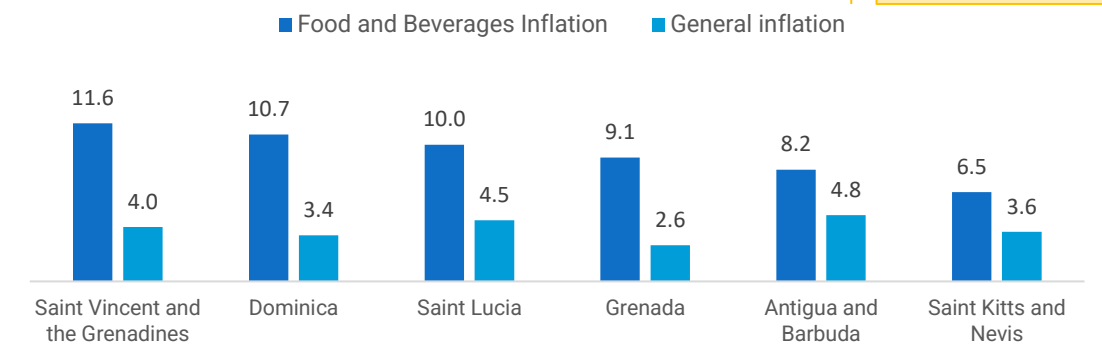
We must recognize that the causes are external and extend beyond agri-food systems.

Income per capita (usd) varies across OECS

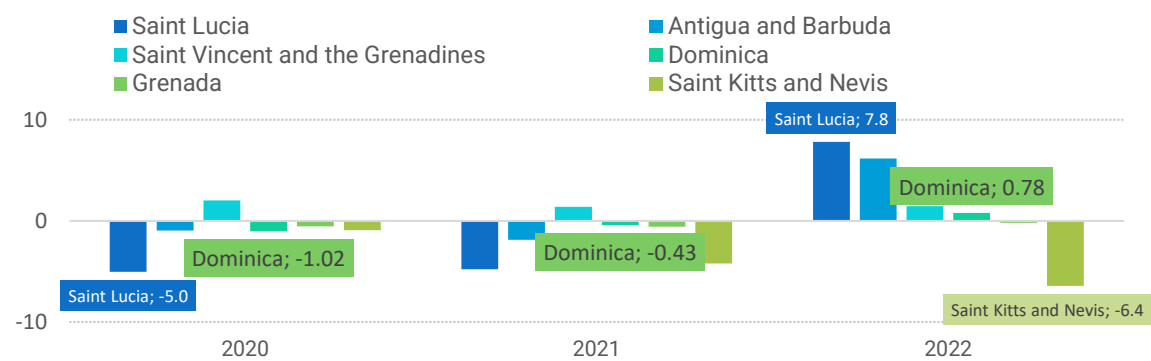


Food inflation is a key factor affecting access to food, especially for the poor (2023)

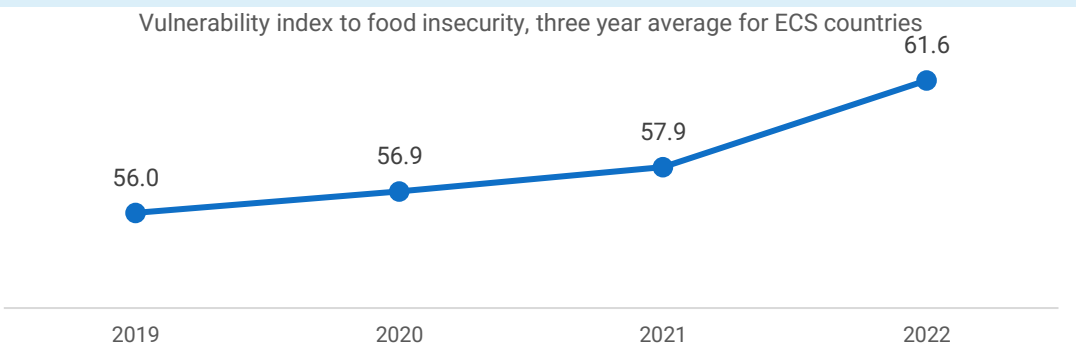
In some countries, food inflation has more than doubled general inflation.



Annual income growth variation highlights economic Instability in OECS



Considering the key causes of food insecurity, vulnerability has increased in the OECS.



Income trends are mixed with varied food security impacts (% annual)

Dominica	Saint Vincent and the Grenadines	Grenada	Saint Lucia	Antigua and Barbuda	Saint Kitts and Nevis
-0.22	1.62	-0.44	-0.66	1.12	-3.85

Source: OPSAa (IICA) based on data from FAO (2024) and World Bank (2023)

# SUSTAINABLE AGRICULTURE

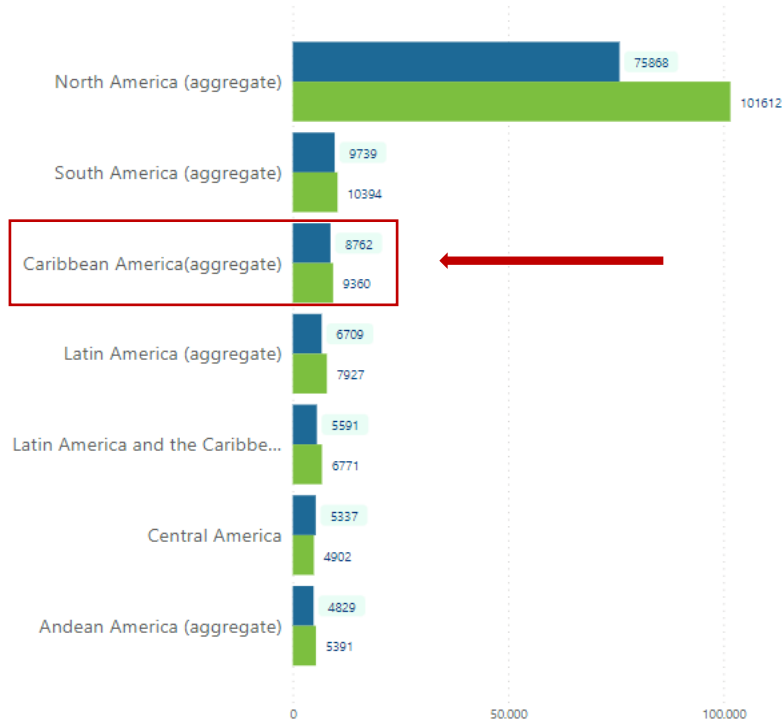
## ON THE CHALLENGE OF SUSTAINABLE AGRICULTURAL PRODUCTION IN A CONTEXT OF ENVIRONMENTAL CHANGE

Increasing production and productivity based on limited resources and inputs

Productivity; agricultural value added per agricultural worker (USD/worker)

Constant 2015 USD

● 2011 ● 2019



Reduced availability and use of resources and inputs	Latin America	Caribbean	OECS
Surface area devoted to agriculture (%)	36.9	43.8	21.7
Agriculture's share of total employment (%)	17.2	7.2	10.2*
Use of fertilizers (kg/ha)	216.3	141.9	99.4**
Irrigation (m3/ha)	400-17k	39-7k	39-3k
Agricultural credit (% ag. GDP)	12%	20%	4.5%



48%

of soils in the Caribbean are highly or very highly degraded (UNEP, 2017)

Source: <https://opsaa.iica.int/indicators>; UNEP (2017)

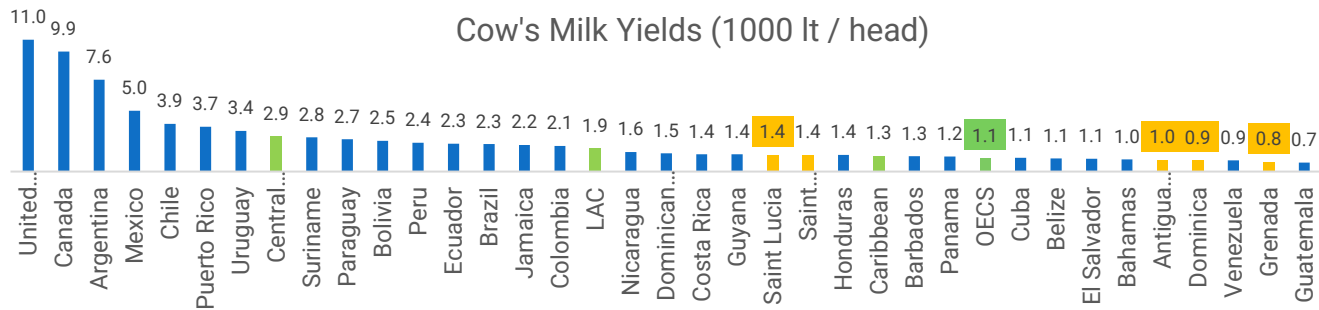
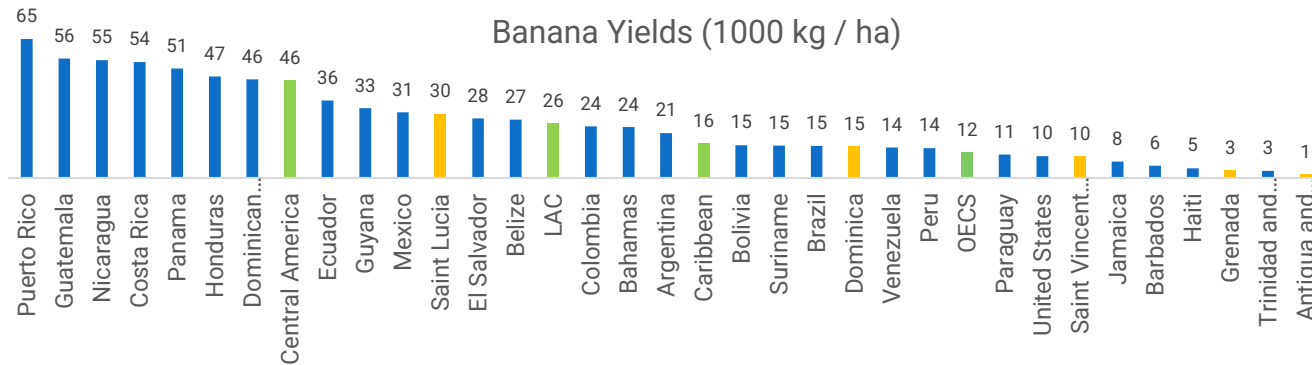
\*Saint Kitts y Nevis and Saint Lucia

\*\*Antigua and Barbuda, Dominica, Grenada and Saint Lucia

# SUSTAINABLE AGRICULTURE

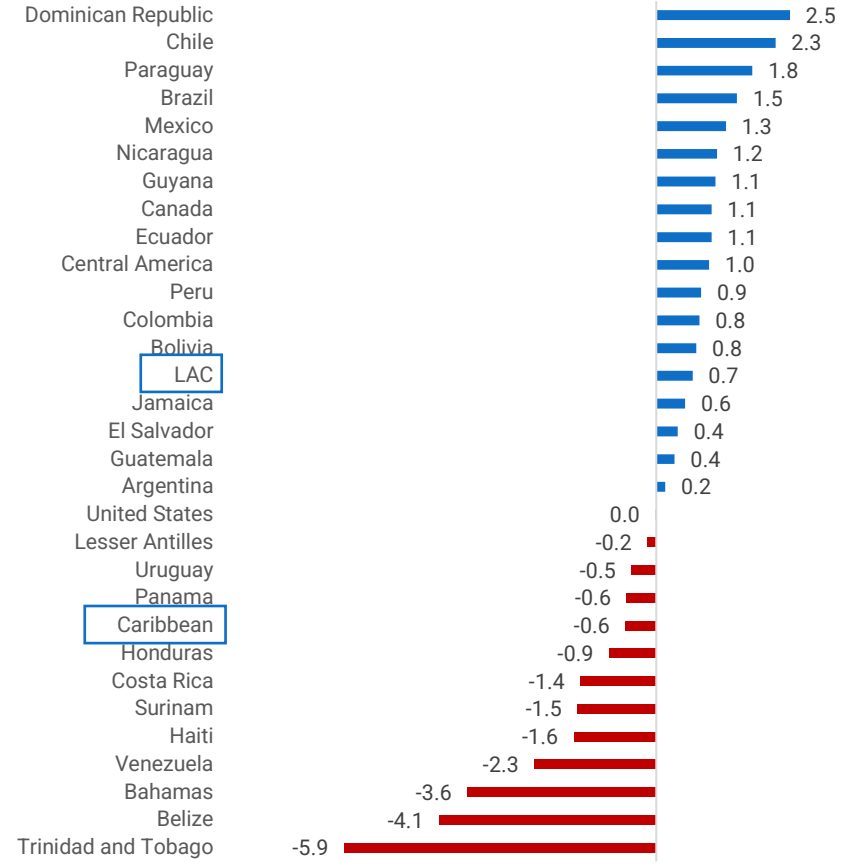
## ON THE CHALLENGE OF SUSTAINABLE AGRICULTURAL PRODUCTION IN A CONTEXT OF ENVIRONMENTAL CHANGE

*Opportunities to close gaps in productivity*



High variability of yields per hectare (Coefficient of Variation; 2011 – 2022)			
Products	Central America	Caribbean	LAC
Banano	4.8	7.9	3.1
Cow milk	4.3	5.6	5.1

Agricultural Total Factor Productivity (PTF)  
(Average annual growth: 2011 – 2021)



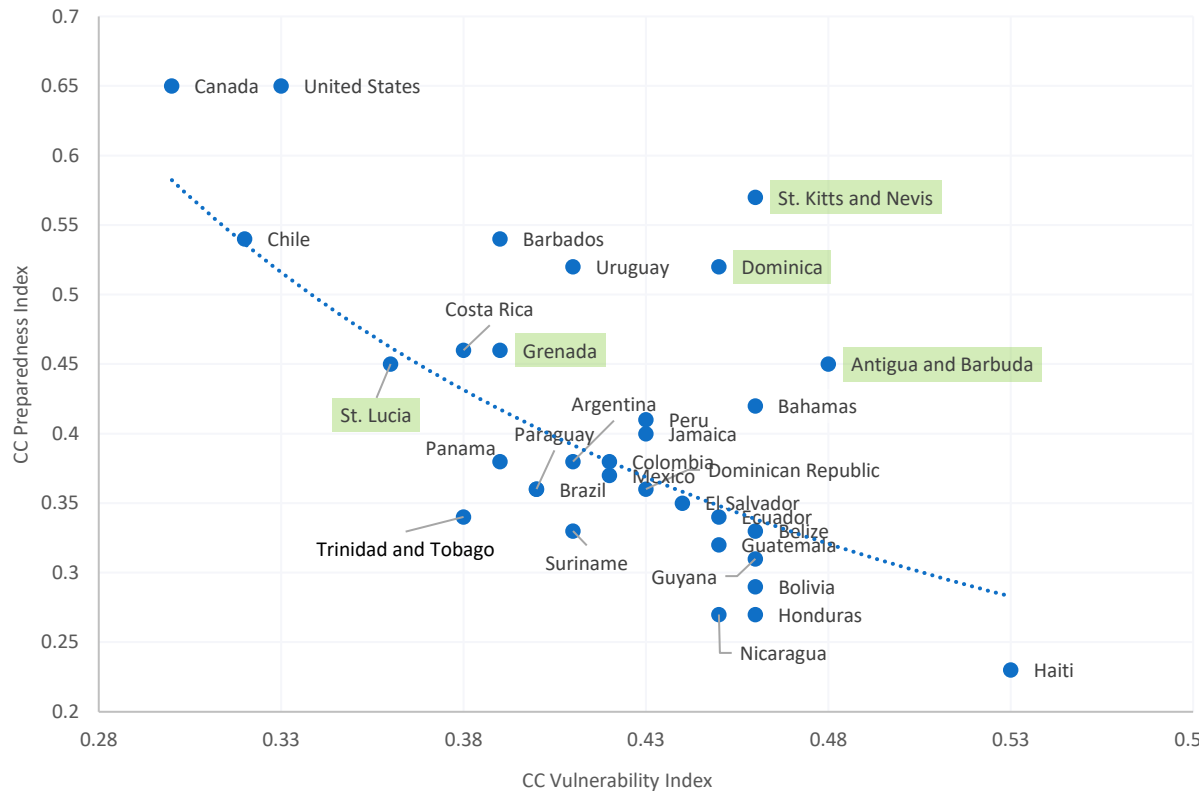
Source: OPSAa (IICA) based on data from FAO (2024); USDA (2024)

# SUSTAINABLE AGRICULTURE

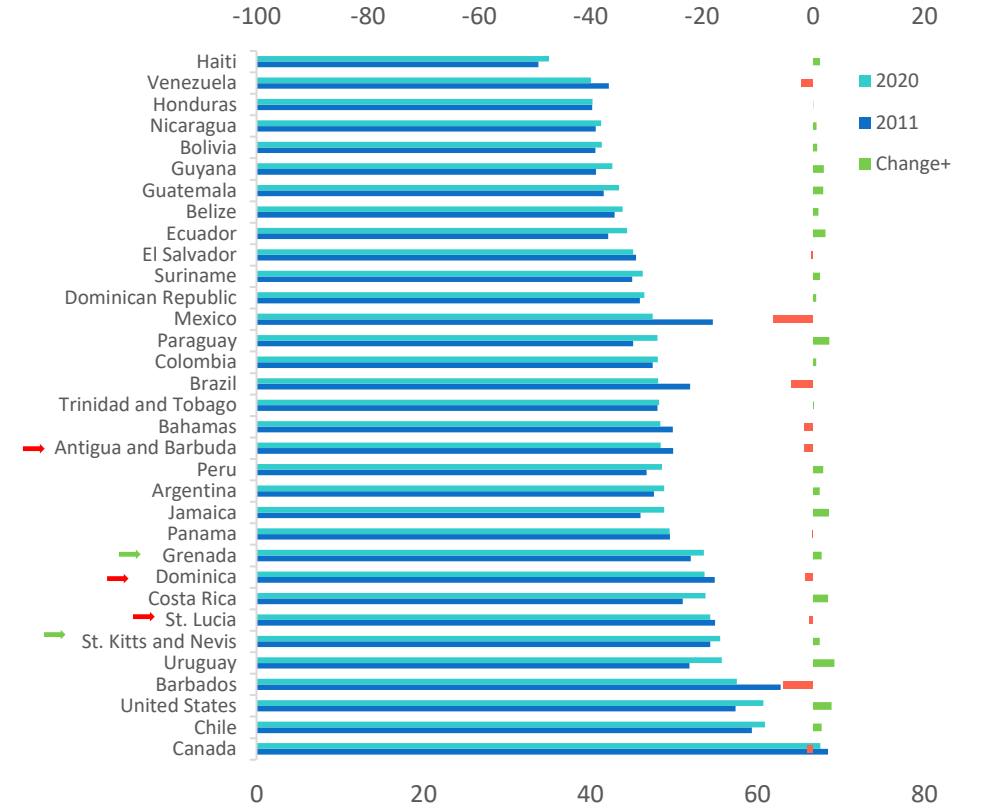
## ON THE CHALLENGE OF SUSTAINABLE AGRICULTURAL PRODUCTION IN A CONTEXT OF ENVIRONMENTAL CHANGE

Improve resilience to climate change

Vulnerability to CC and level of preparedness



Global climate change resilience index



Source: OPSAa based on *Notre Dame Global Adaptation Initiative*



# PESTS AND DISEASES

ON THE CHALLENGE OF SUSTAINABLE AGRICULTURAL PRODUCTION IN A CONTEXT OF ENVIRONMENTAL CHANGE  
 Integrated management of pests and diseases and promote One Health approach

## PLANT HEALTH



- MUSACEAE**
- *Fusarium oxysporum* fsp cubens TR4



- CROPS**
- African Land Snail
  - Asian Tramp Snail
  - Cuban Slug



- FRUITS & PALM**
- Citrus Greening
  - Spotted Wing
  - West Indian Fruit Fly
  - Red Palm Weevil

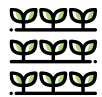
## Priority pest and disease threats



- PALM**
- Lethal Yellowing of Coconut
  - Red Palm Mite



- FRUITS**
- Carambola Fruit Fly
  - Caribbean Fruit Fly
  - Frosty Pod Rot
  - Mediterranean Fruit Fly



- CROPS**
- Giant African Snail

## ANIMAL HEALTH



Ability to cope with new diseases

2014-2024

3

Emerging

2

Re-Emergents

### Emerging Diseases

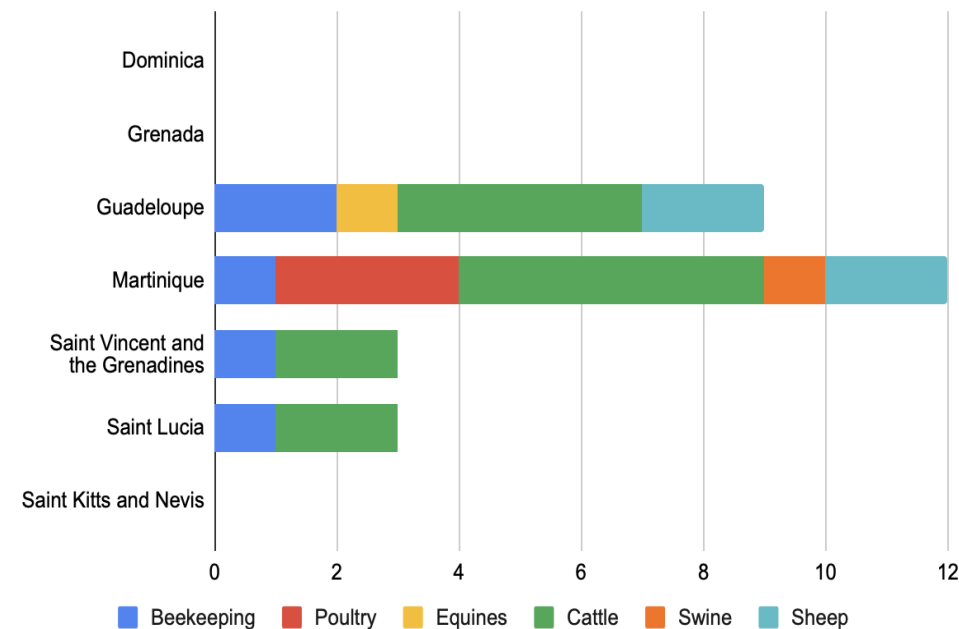
1. Bluetongue virus infection (BTV) or bluetongue (BT) or bluetongue fever
2. Porcine Reproductive and Respiratory Syndrome
3. Varroa spp. (4 of 7)



### Re-Emerging Diseases

1. Bovine Viral Diarrhea
2. Cowdriosis

Diseases by type of domestic animals reported to WOAHP by OECS (2014-2024)



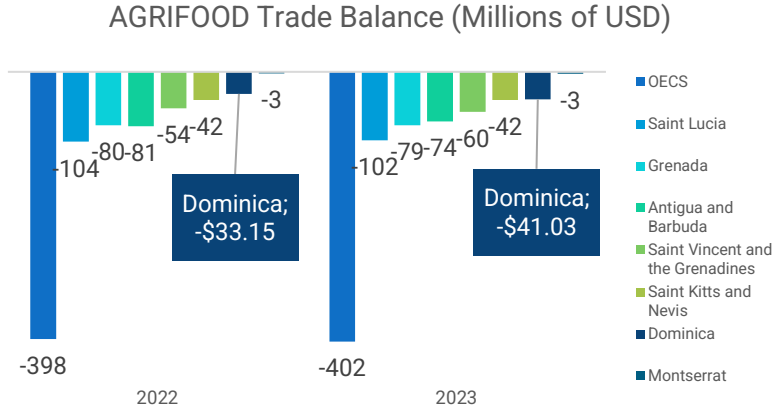
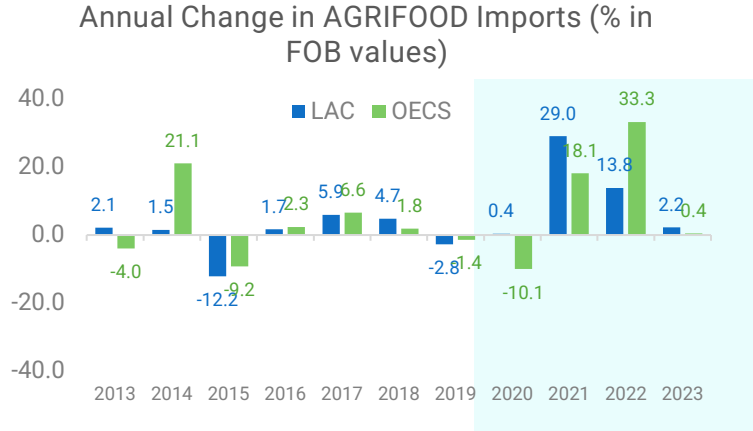
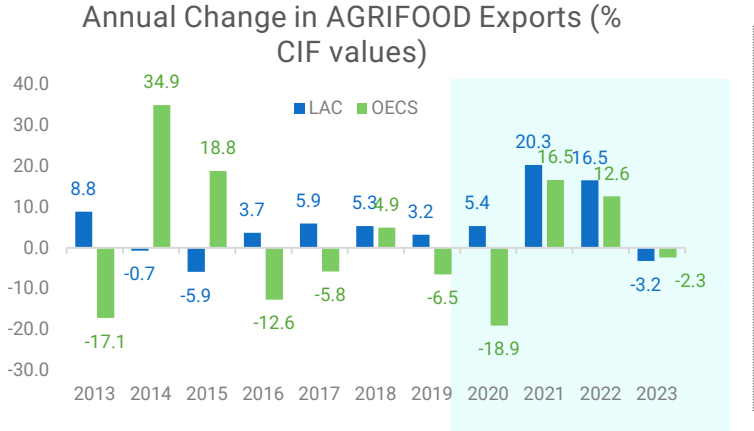
- Significant advances to **restrict infections** to particular areas from diagnosis
- **Diagnostic capability** (Molecular Biology) and official reporting.
- Diseases found in **more than one type of animal** (e.g., cattle and sheep).
- Phytosanitary surveillance of **wild species** that could function as **hosts**.

Source: OPSAa (IICA); data from Caribbean Plant Health Directors; World Organization for Animal Health, WAHIS (2014-2024).

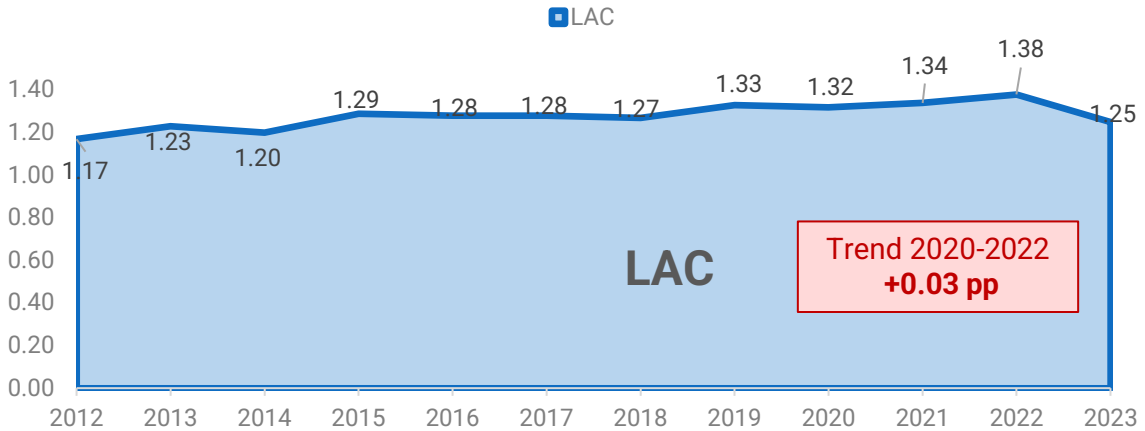
# AGRIFOOD TRADE

## ADVANCING TOWARDS A RULES-BASED TRADE SYSTEM IN AGRIFOOD

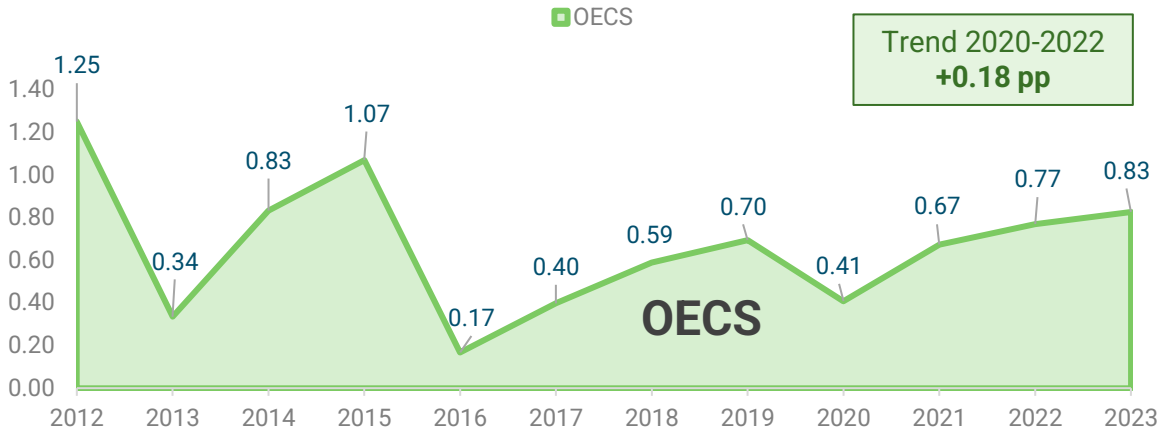
Focusing on empowering Sustainable Development through Agri-Food Trade



LAC: AGRIFOOD Revealed Comparative Advantage over Time (exports - imports)



OECS: AGRIFOOD Revealed Comparative Advantage over Time (exports - imports)

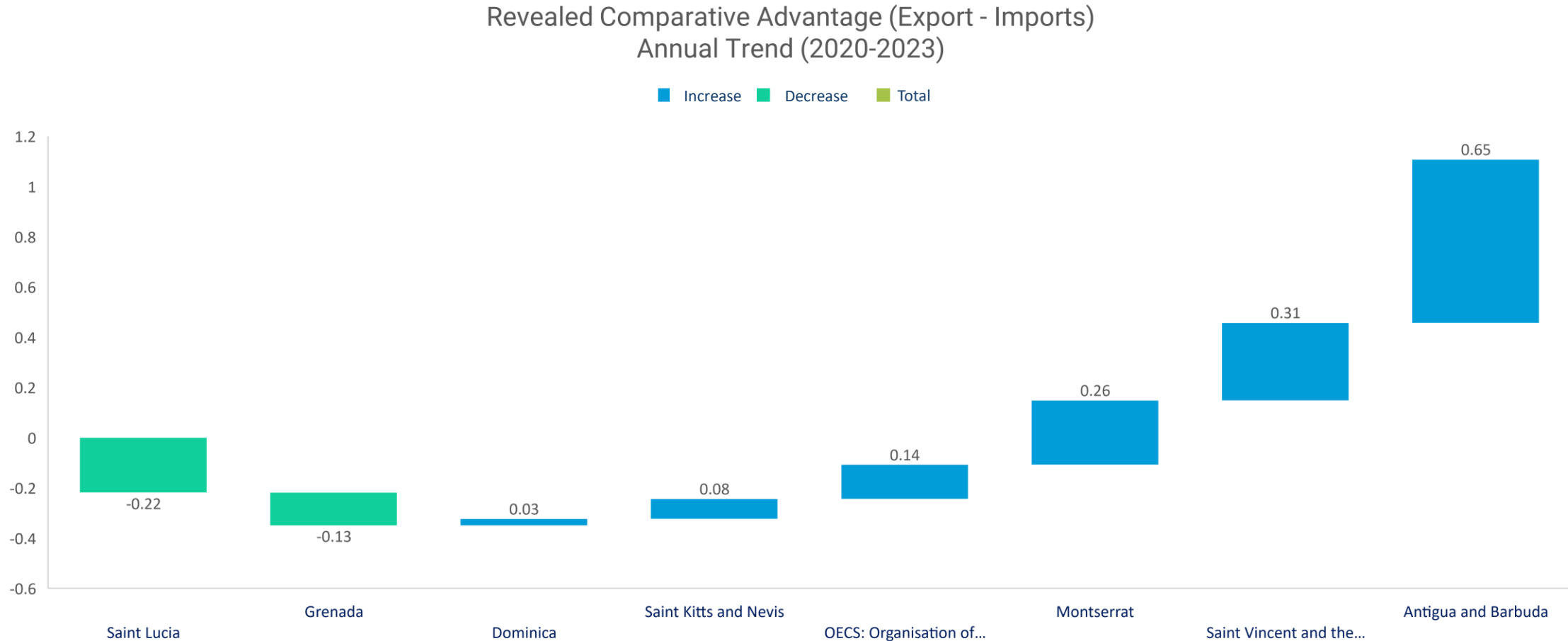


Source: OPSAa (IICA); data from TDM (2024).

# AGRIFOOD TRADE

## THE CRUCIAL ROLE OF ADVANCING A RULES-BASED TRADE SYSTEM

- *Revealed Trade Competitiveness diverse across OECS*

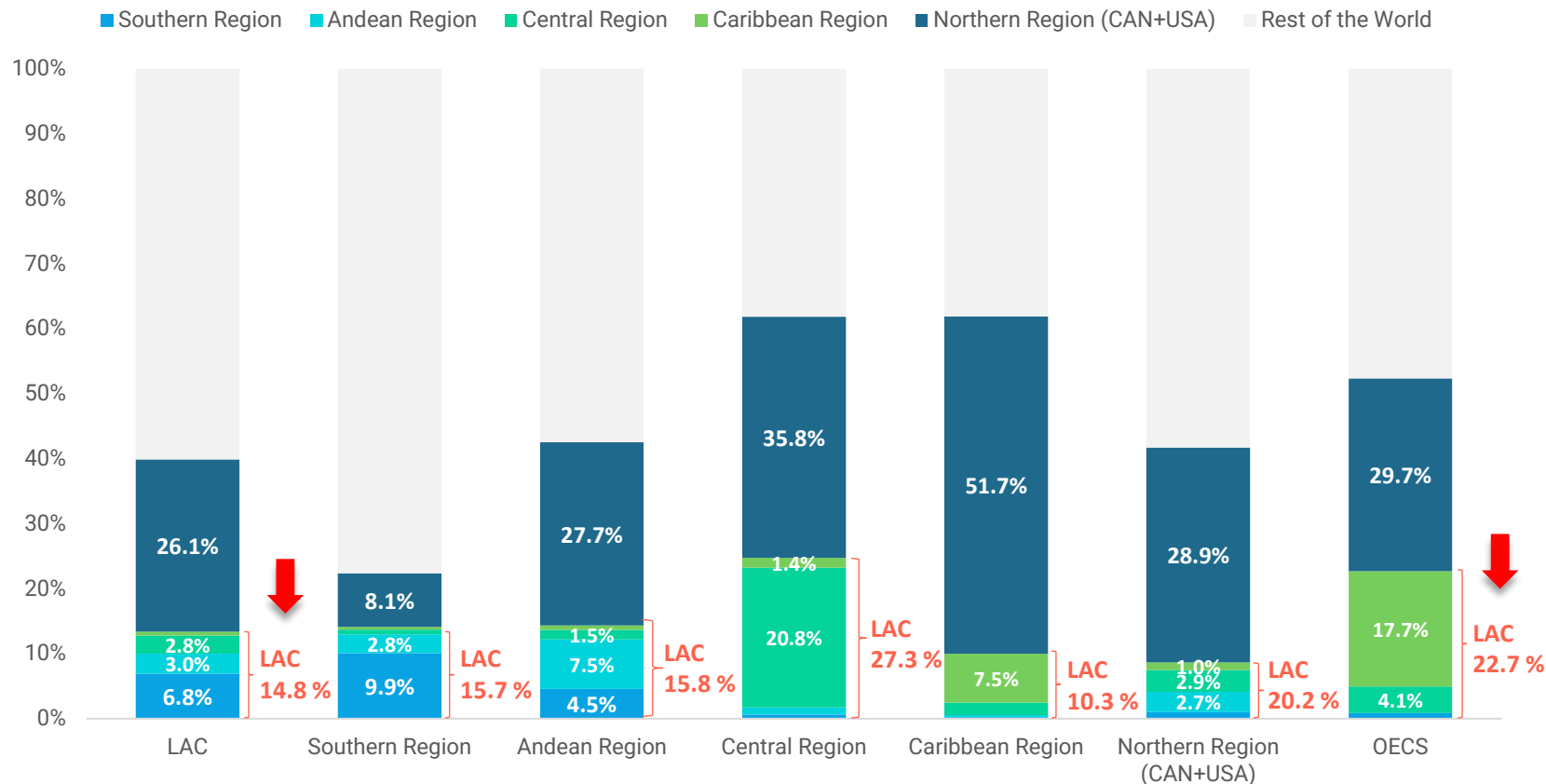


# AGRIFOOD TRADE

## ADVANCING TOWARDS A RULES-BASED TRADE SYSTEM

Promoting intraregional trade is a key mechanism to reduce the risk of shocks in third markets

Destination of exports (CIF) in 2023



Agrifood exports to LAC countries

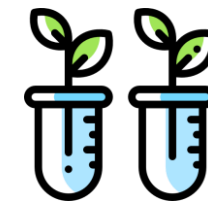
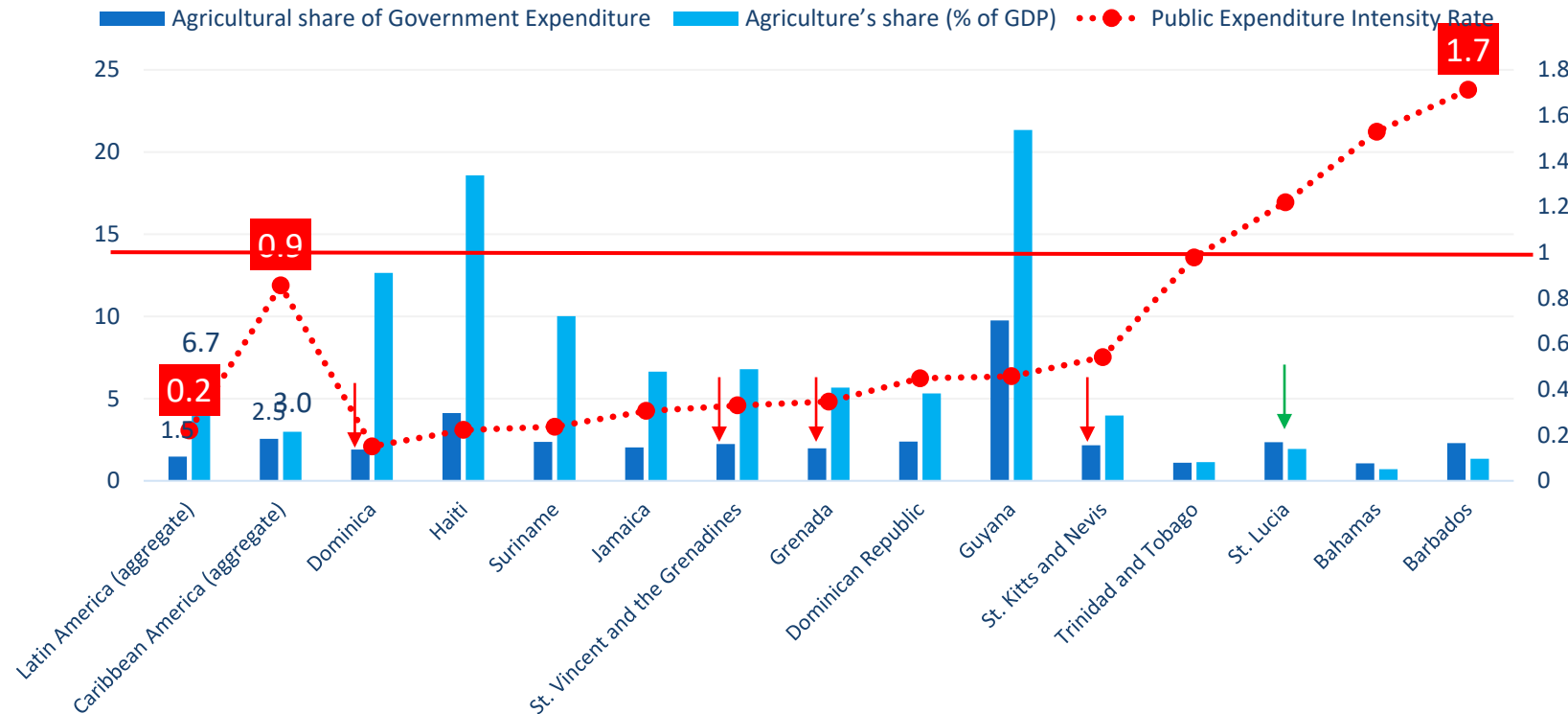
**14.8%** | **22.7%**  
LAC | OECS

# AGRICULTURAL POLICY CHALLENGES

## TOWARDS GREATER EFFICIENCY IN PUBLIC EXPENDITURE ON AGRICULTURE

Considering that public expenditure intensity rate is low across OECS

(1) Public expenditure (% total expenditure); (2) agriculture's share (% of GDP) and public expenditure intensity rate (1)/(2)



Public expenditure on R&D as a percentage of agricultural GDP

0.8%

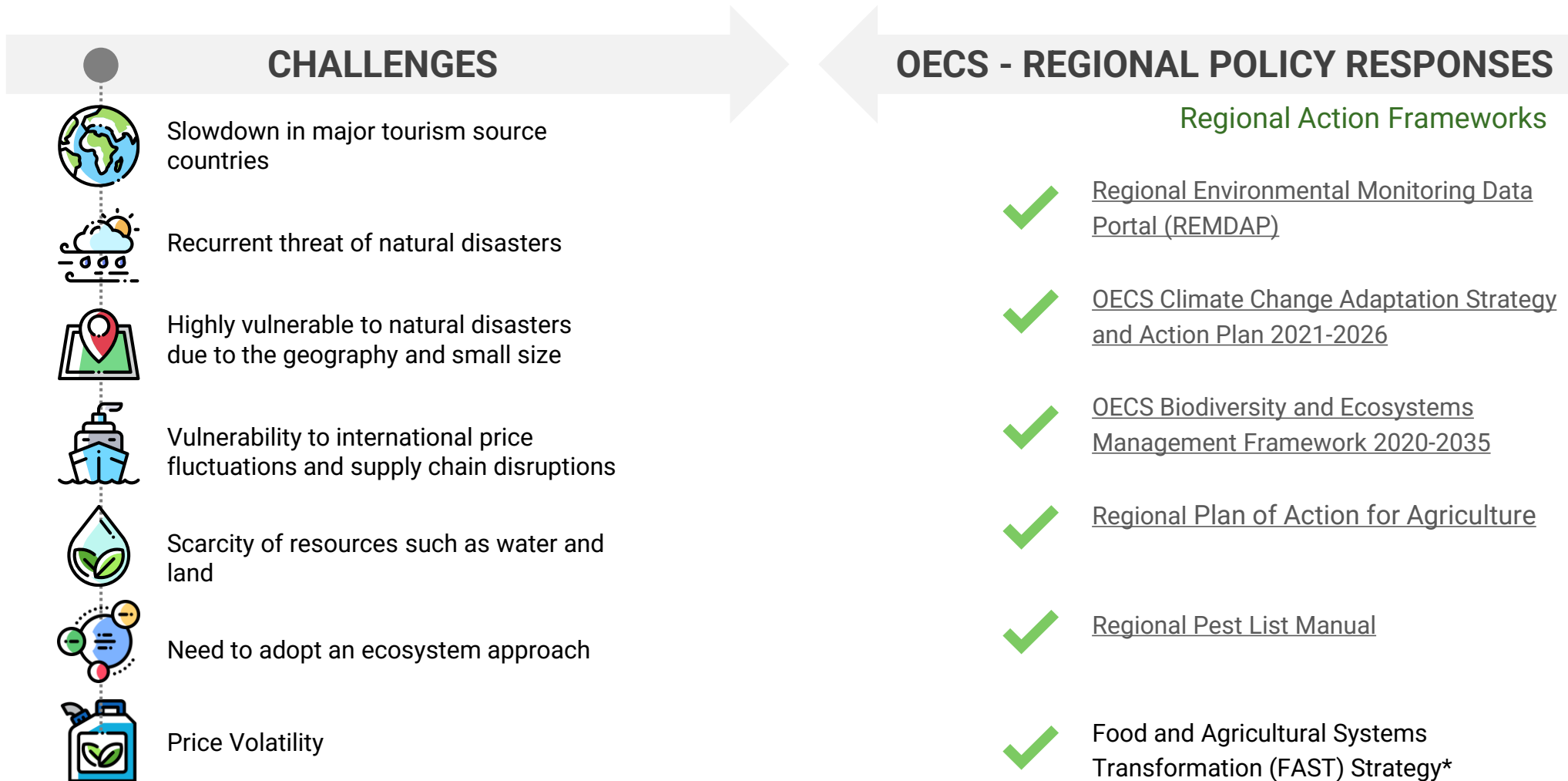
LAC

2.1%

Caribbean

# AGRICULTURAL POLICY CHALLENGES

## AN OPPORTUNITY FOR REGIONAL COOPERATION



Source: <https://www.oecs.int/en/>; <https://opsaa.iica.int/>

\*Not published

# KEY CHALLENGES OF AGRICULTURAL POLICIES

## TRACKING PUBLIC EXPENDITURE AND POLICY INSTRUMENTS IN AGRI-FOOD SYSTEMS

### PLANT PROTECTION

- ✓ Integrated Pest Management (IPM) Plan - Dominica
- ✓ Fusarium Wilt sensitization drive - St. Lucia
- ✓ Policy Brief: Safeguard the region from TR4-OECS

### COFFEE AND COCOA VALUE CHAINS

- ✓ Cocoa and Coffee Project - Dominica
- ✓ Reforestation initiative with cocoa crops- St. Lucia
- ✓ OECS Regional Agriculture Competitiveness Project

### AGROTOURISM

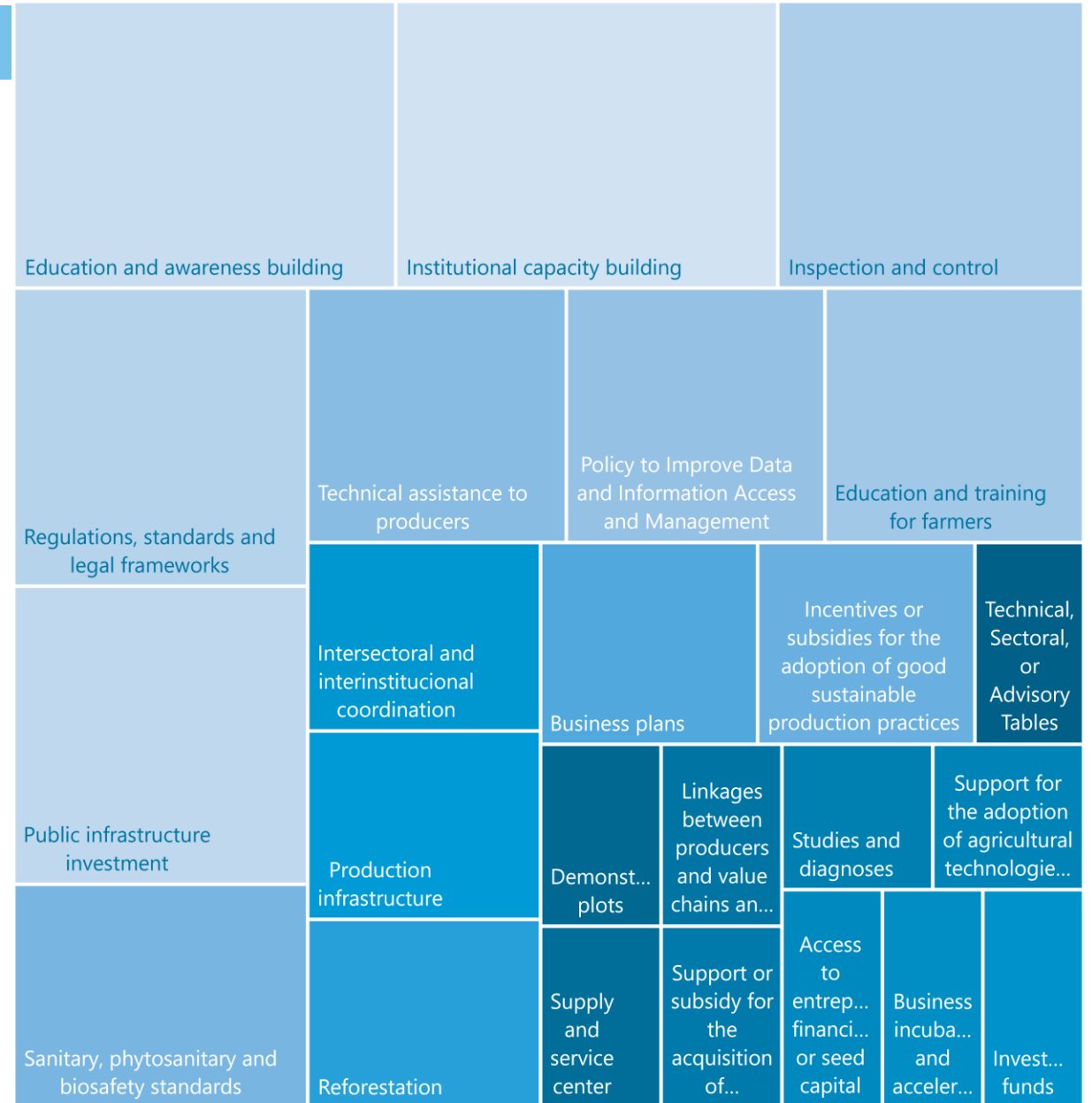
- ✓ National Land Use Policy - Dominica
- ✓ National Agricultural Plan 2015-2030 - Grenade
- ✓ The Eastern Caribbean Green Entrepreneurship Initiative

### LIVESTOCK

- ✓ National livestock enhancement programme- Grenada
- ✓ The St. Kitts and Nevis Climate Smart Agriculture Project

■ Implemented in collaboration with IICA

Source: <https://opsaa.iica.int/resources> and <https://opsaa.iica.int/frames>



# Observatory of Public Policies for Agrifood Systems

Transforming knowledge into evidence  
for a new generation of public policies  
that transform agrifood systems

JOIN THE OPSAA NETWORK

<https://opsaa.iica.int/>





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# Thank you!

 Joaquín Arias (Coordinador)

 Milagros Conislla

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