

SMART SPECIALISATION IN CARIBBEAN AGRICULTURE

Innovation and Value chains Analysis to shape
rural development

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Conclusions

Analysis

Methodology

Background

Objectives

01

OBJECTIVES

02

BACKGROUND

03

METHODOLOGY

04

RESEARCH ANALYSIS

05

**CONCLUSIONS &
FURTHER RESEARCH**



Outline

Conclusions

Analysis

Methodology

Background



**CONTRIBUTE TO
INNOVATION
POLICIES**



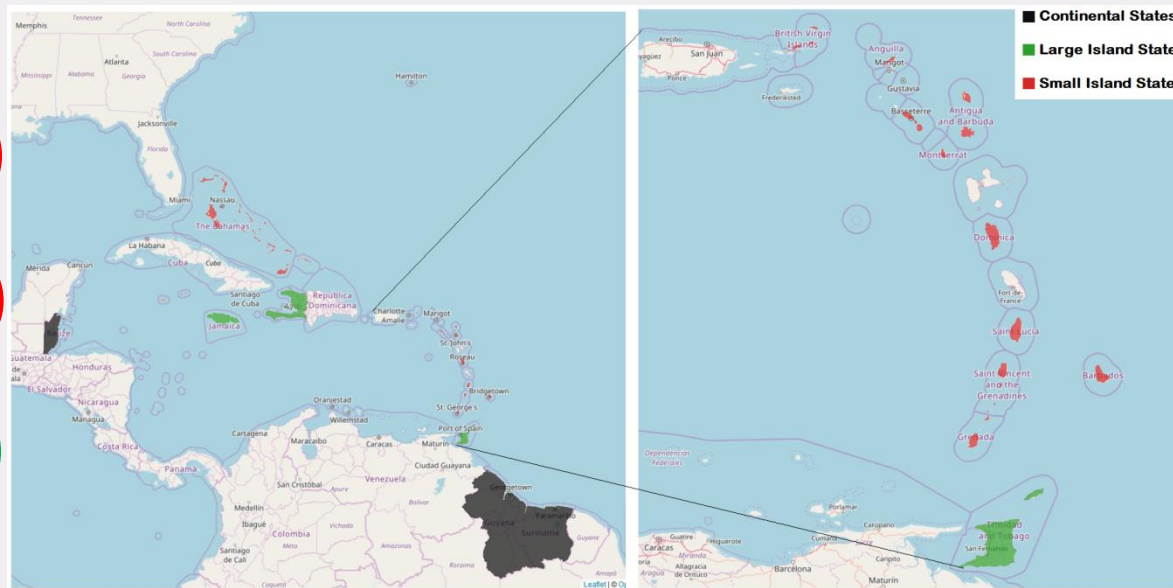
**SUSTAINABLE
DEVELOPMENT**



**POVERTY
REDUCTION**

Agro-food Sector

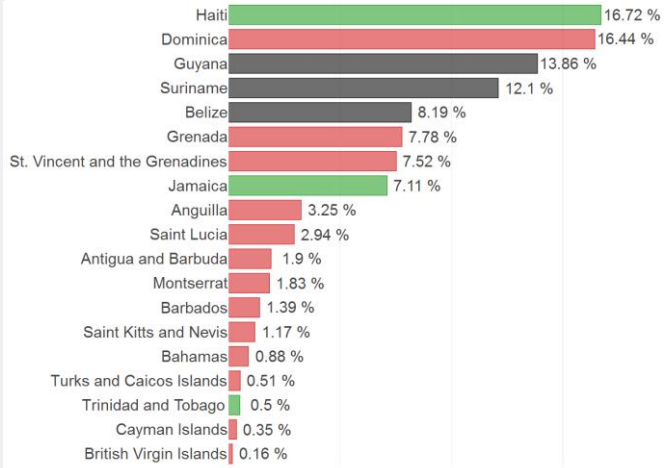
- Anguilla
- Antigua and Barbuda
- Bahamas
- Barbados
- British Virgin Islands
- Cayman Islands
- Dominica
- Grenada
- Montserrat
- St. Kitts and Nevis
- St. Lucia
- St. Vincent and the Grenadines
- Turks and Caicos Islands
- Haiti
- Jamaica
- Trinidad and Tobago
- Belize
- Guyana
- Suriname



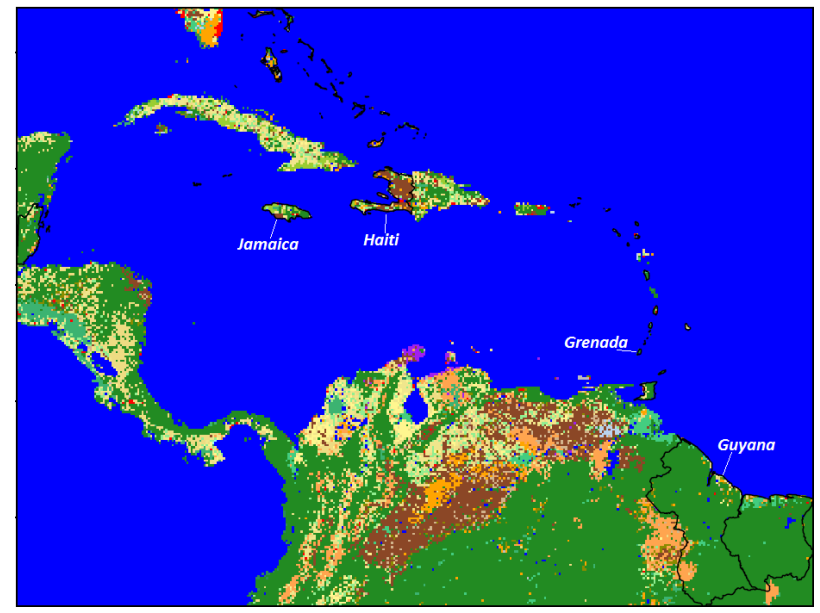
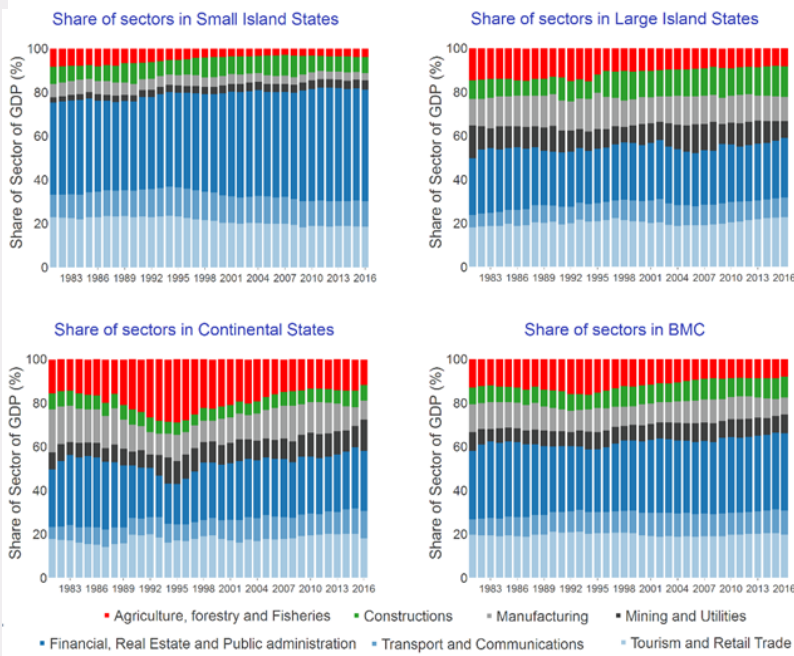
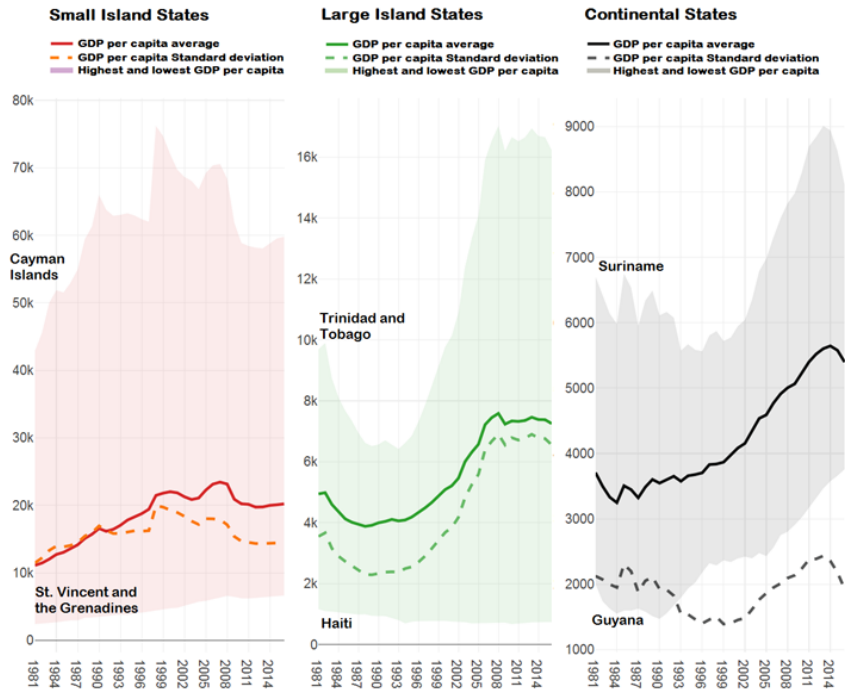
Objectives

Outline

Heterogeneity

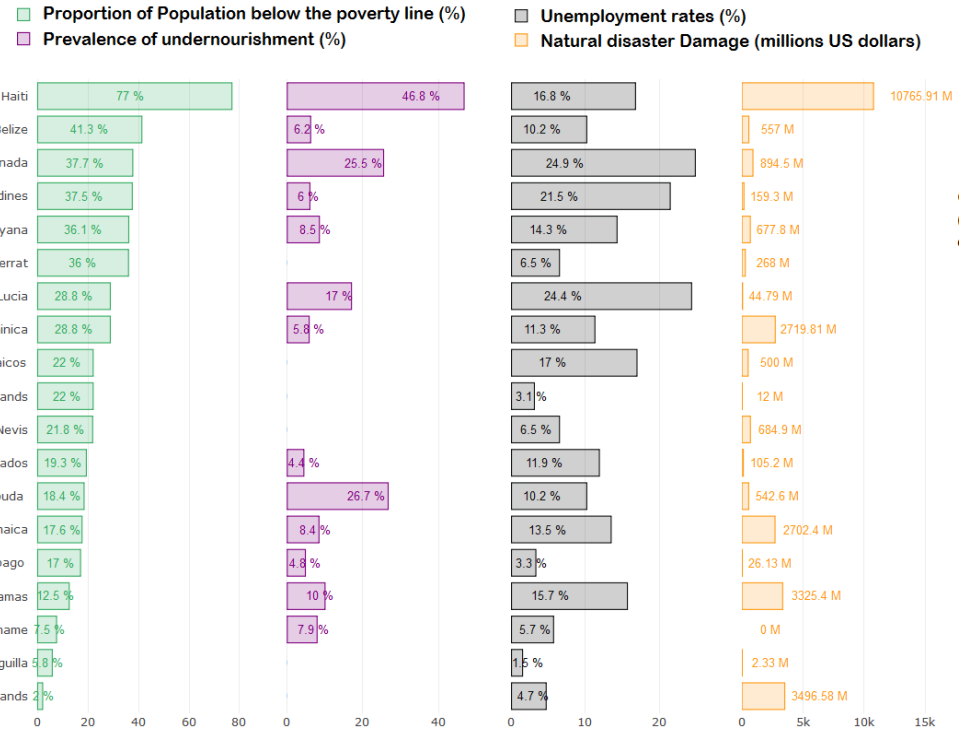
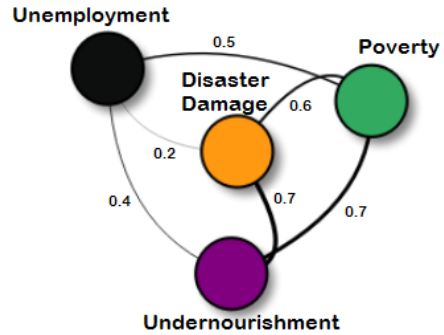


Share of Agriculture, hunting, forestry, fishing on GDP in 2016

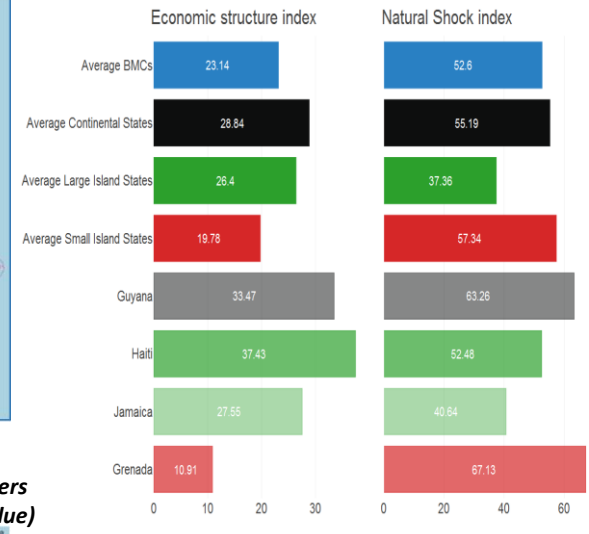


Vulnerability

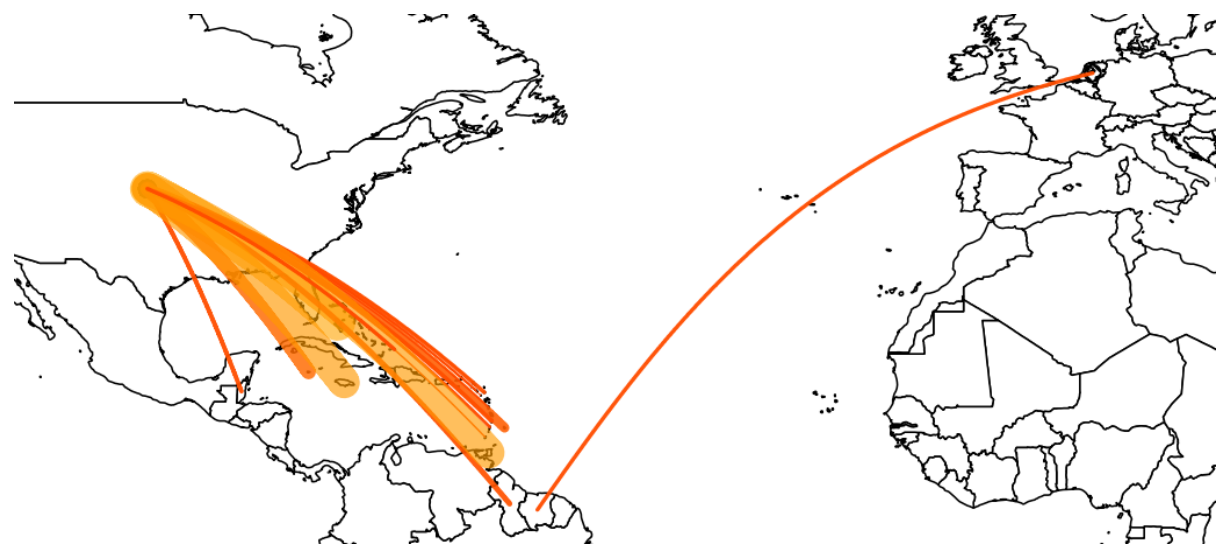
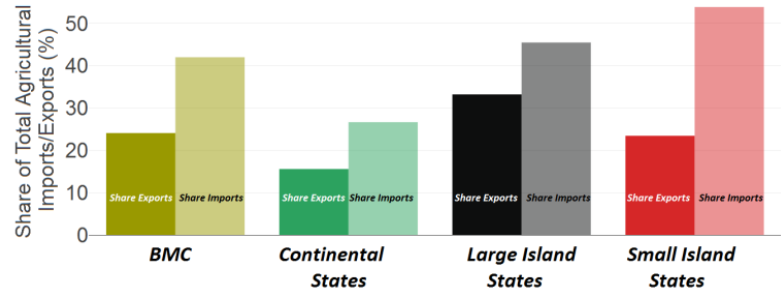
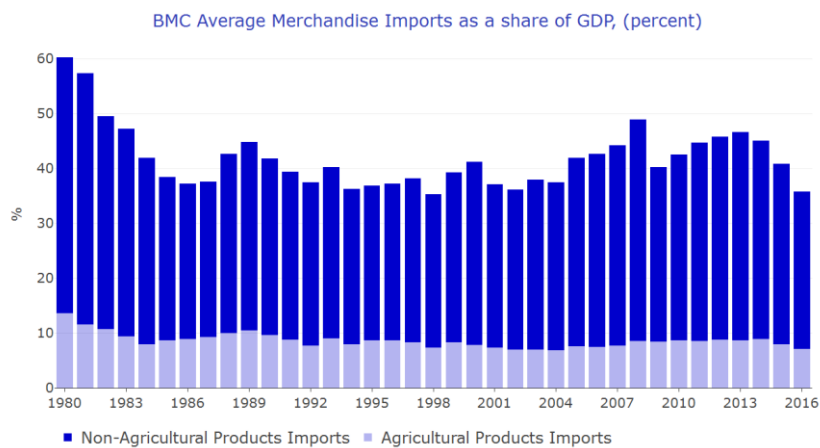
Correlation among the Variables
(The bigger the links, the bigger the correlation)



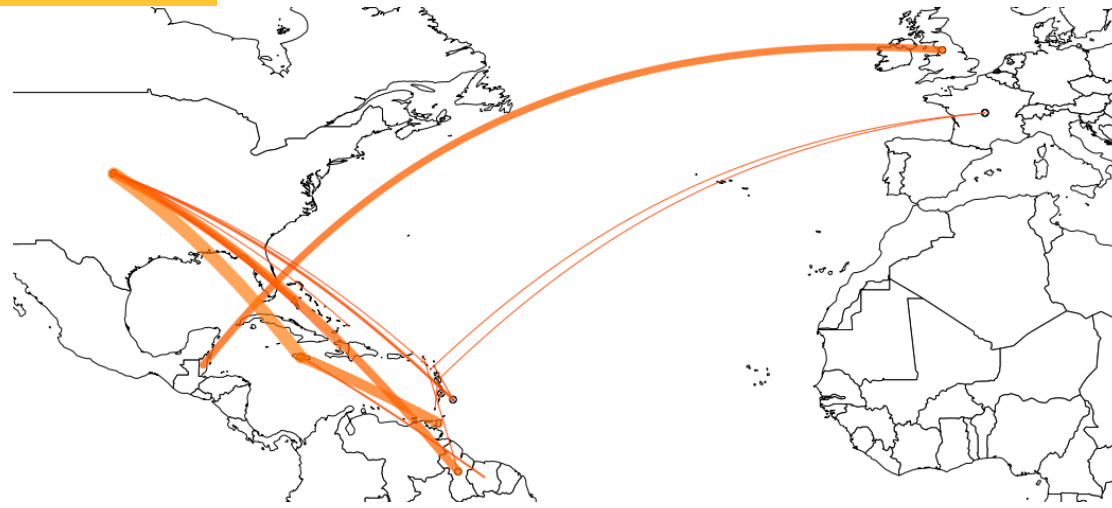
Estimated average annual economic loss of multiple natural hazards and disasters (% of exposed national value)



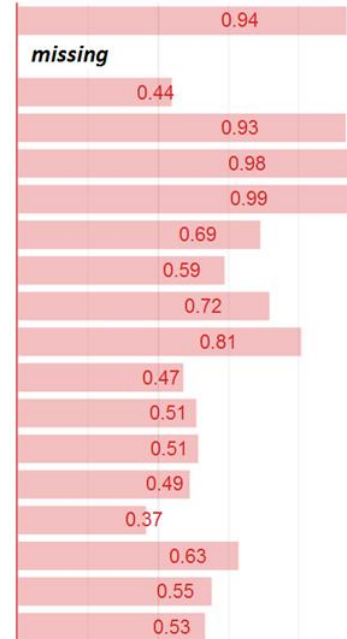
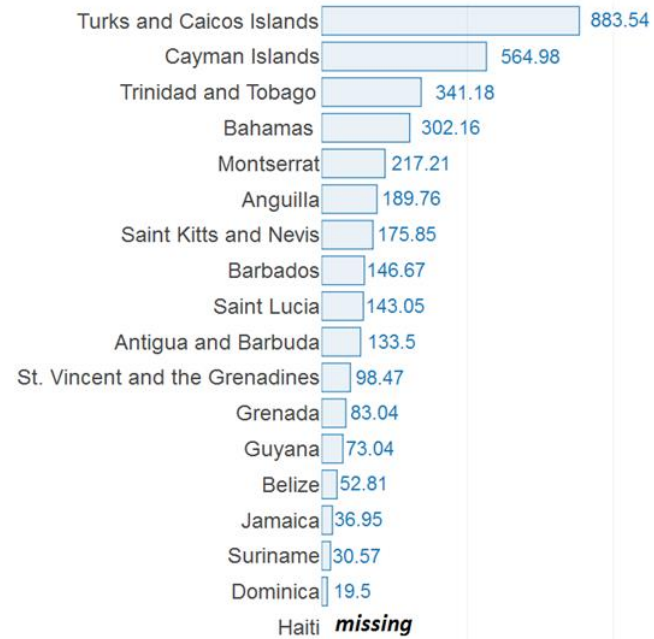
Dependency



Openness



□ Agricultural Trade Openness ■ Agricultural Export Hirschman Index



Conclusions

Analysis

Methodology



Background

Objectives

Outline

Specialisation

EXPORT CLUSTERS



EXPORTS MAIN DESTINATIONS IMPORT MAIN ORIGINS



IMPORT CLUSTERS



Conclusions

Analysis

Methodology



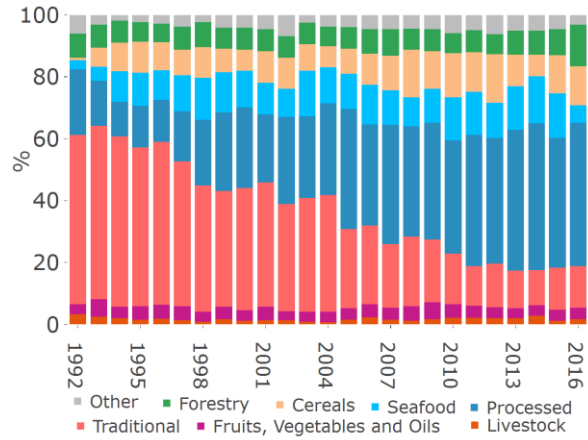
Background

Objectives

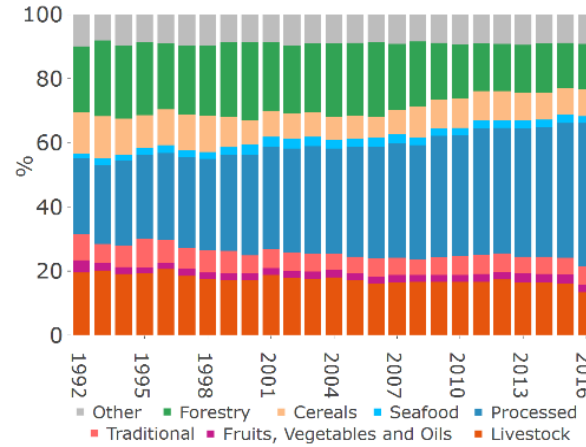
Outline

Diversification

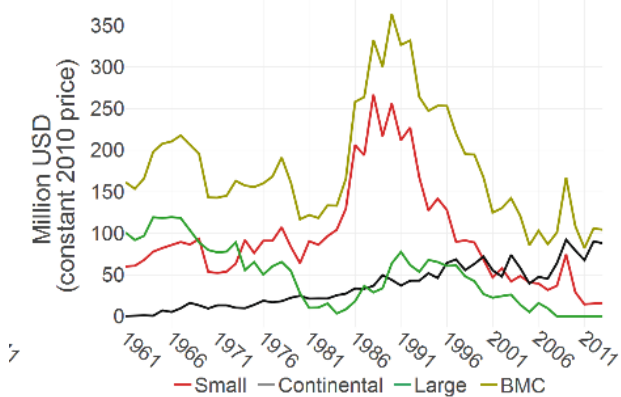
Composition of Agrifood Products Exports in BMC



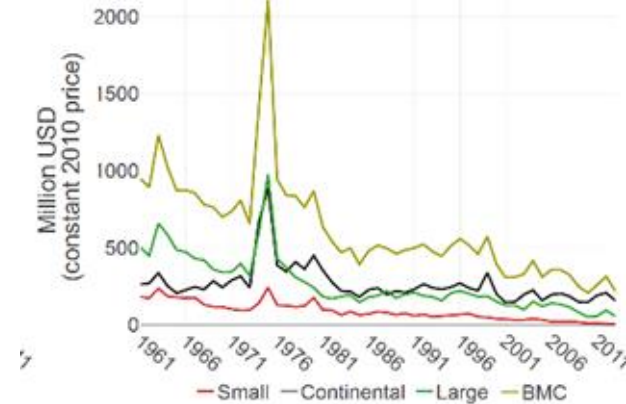
Composition of Agrifood Products Imports in BMC



Banana's Exported Value



Sugars Exported Value



Background

Objectives

Outline

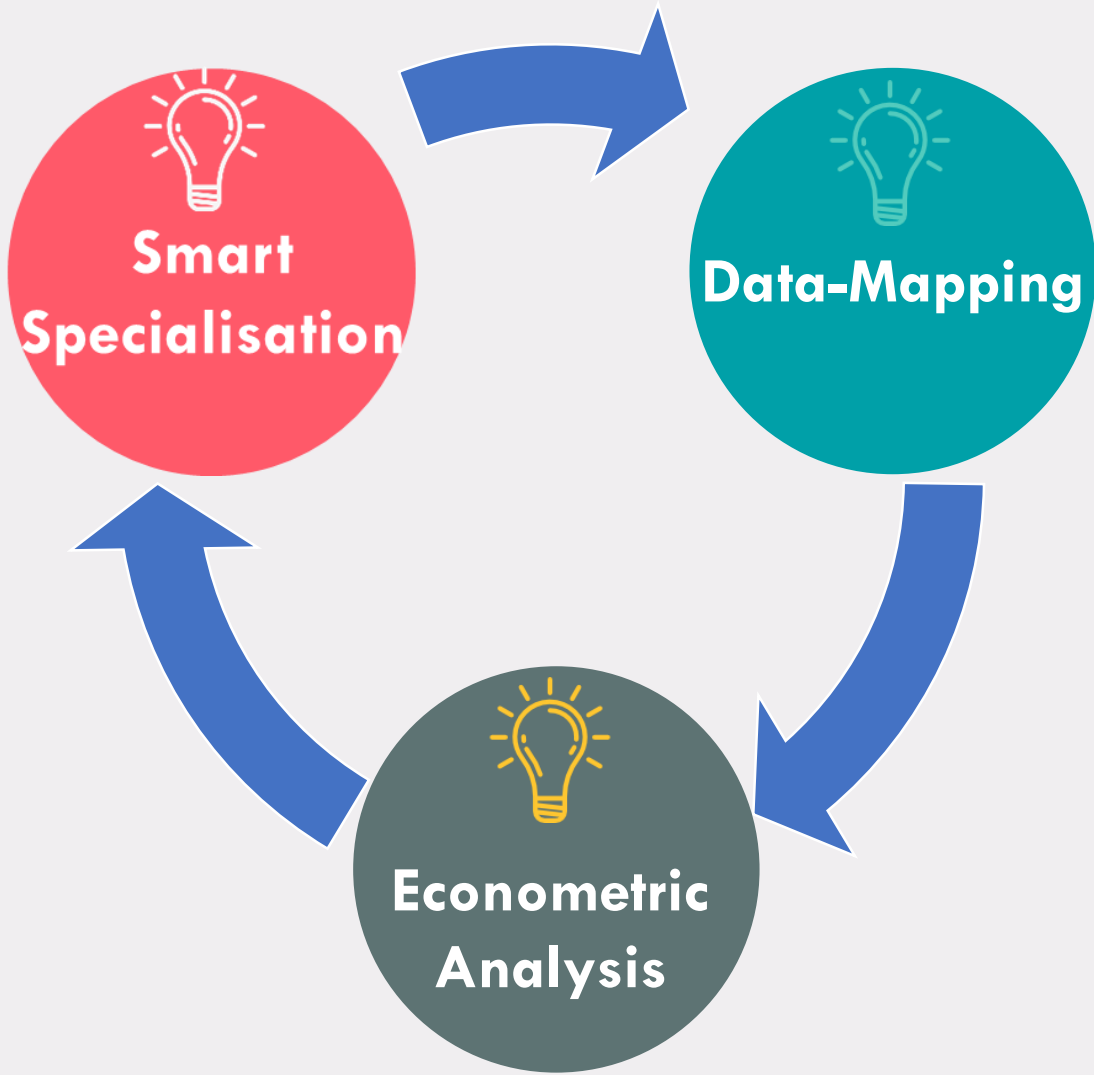
Conclusions


Analysis

Methodology

Conclusions

Analysis




Methodology

Background

Objectives

Outline

Conclusions

Analysis

**Mobilization
of
Knowledge
Resources**

**Comparative
Advantage**

Related Variety



**Analyze
Agro-food
Value Chain**

**Limitation
(certificates)**

**Challenges and
Opportunities**



Methodology

Background

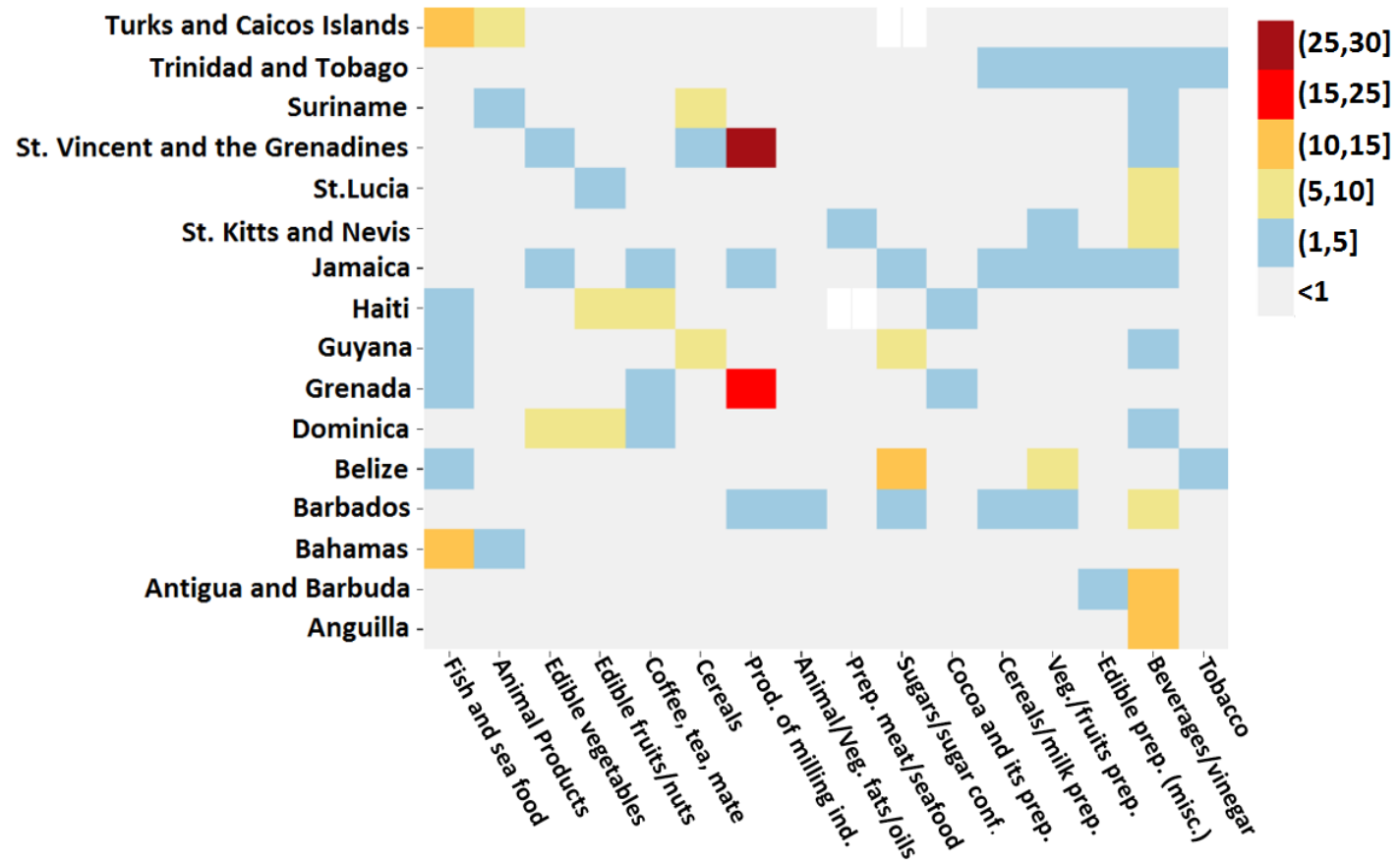
Objectives

Outline



Mobilization of Knowledge Resources

Comparative Advantage



Conclusions



Analysis

Methodology

Background

Objectives

Outline



Mobilization of Knowledge Resources

Related Variety

$$AgValAdd_{it} = \beta_0 + \beta_1 \log PopDens_{it} + \beta_2 Variety_{it} + \beta_3 RelVar_{it} + \beta_4 UnrVar_{it} + \beta_5 RelTradVar_{it} + \beta_6 TradeSim_{it} + \beta_7 GeoD_i + \varepsilon_{it}$$

Variables	Mean	Standard Deviation	Minimum	Maximum	Number of Observations
<i>Import Variety</i>	4.07	0.20	2.94	4.43	278
<i>Export Variety</i>	2.44	0.80	0.40	3.75	278
<i>Related Variety</i>	4.06	1.13	0.72	5.89	278
<i>Unrelated Variety</i>	1.72	0.42	0.26	2.43	278
<i>Trade Similarity</i>	33.54	2.60	28.64	39.53	278
<i>Related Trade Variety</i>	1.49	0.38	0.41	2.14	278
<i>Population density (people per sq. km of land area)</i>	185.89	169.28	2.80	662.78	278
<i>Agricultural Value Added (Million, constant)</i>	170.89	208.11	3.01	909.87	278



Mobilization of Knowledge Resources

Conclusions

Related Variety

	Model I	Model II	Model III	Model IV
Population density (ln)	-0.31 * (0.19)	-0.23 (0.18)	-0.13 (0.19)	0.27 (0.2)
Variety	-0.04 (0.04)			0.29 (0.25)
Related Variety		-0.24 *** (0.07)	-0.17 * (0.08)	-0.45 * (0.25)
Unrelated Variety		0.59 *** (0.17)	0.43 * (0.18)	0.70 * (0.27)
Import Variety				-0.30 ** (0.11)
Related Trade Variety			-0.20 * (0.08)	-0.10 (0.08)
Trade Similarity				-0.08 *** (0.02)
Small Island States	0.51 *** (0.11)	0.44 *** (0.11)	0.41 *** (0.11)	0.33 ** (0.11)
Large Island States	0.35 ** (0.15)	0.26 * (0.15)	0.25 (0.15)	0.13 (0.15)
Adj-R-squared	0.03	0.07	0.08	0.14
F	6.40	7.72	7.40	7.57

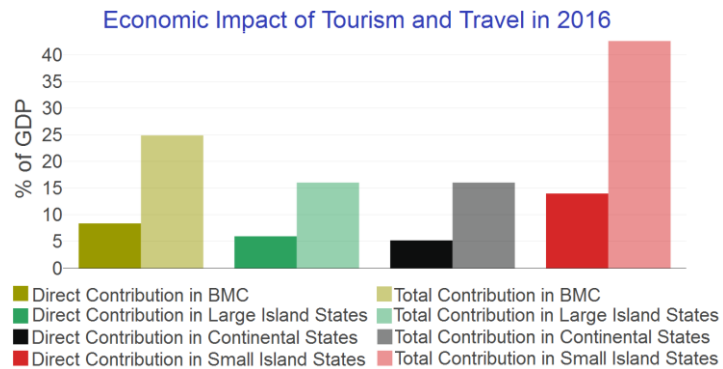
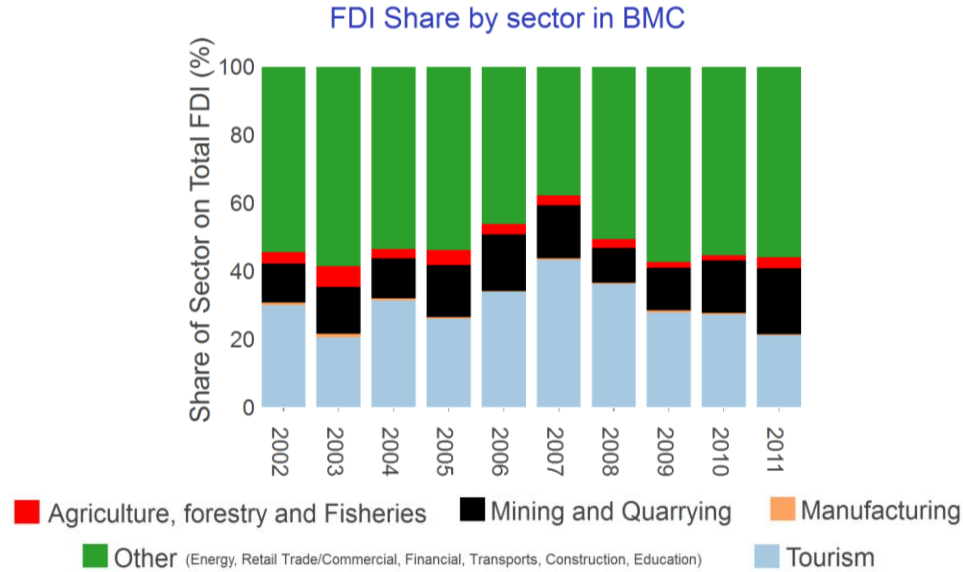




Analyze Agro-food Value Chains

Conclusions

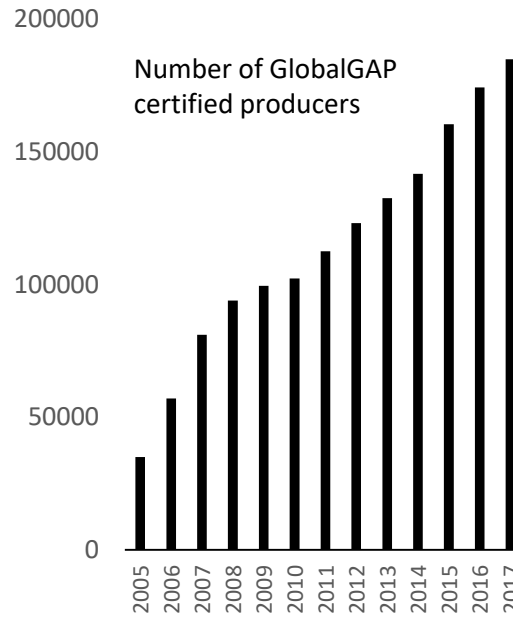
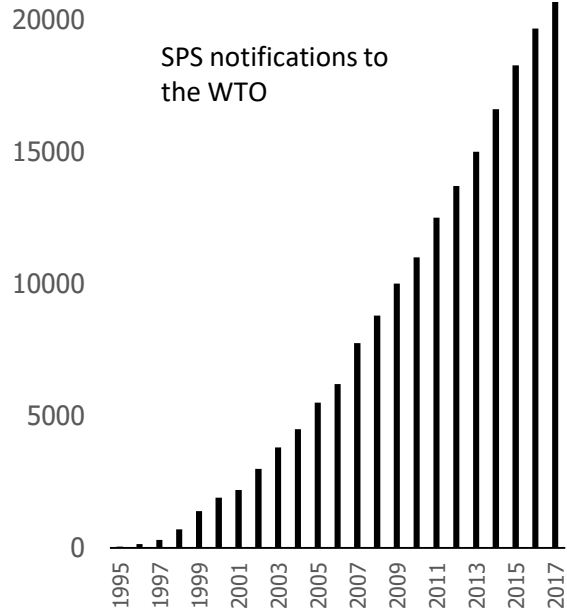
FDI and Tourism





Analyze Agro-food Value Chains

Agro-Food Standards



Conclusions



Analysis

Methodology

Background

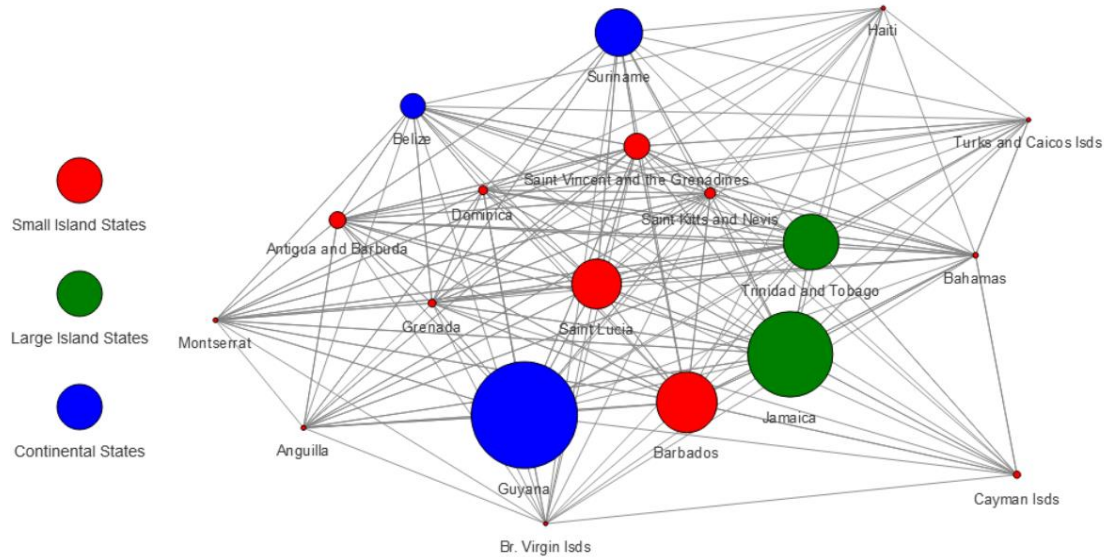
Objectives

Outline



Analyze Agro-food Value Chains

Competitiveness



Conclusions



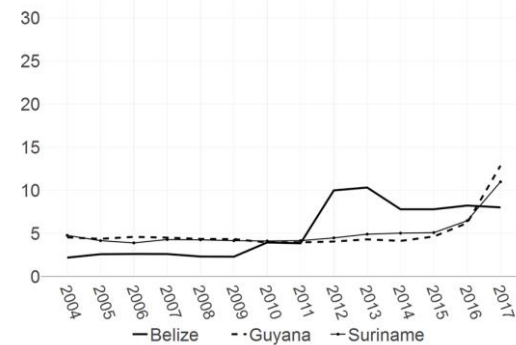
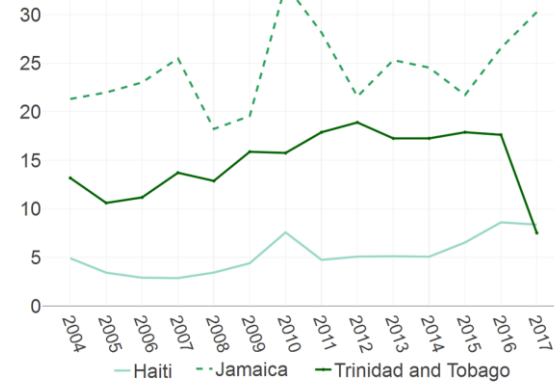
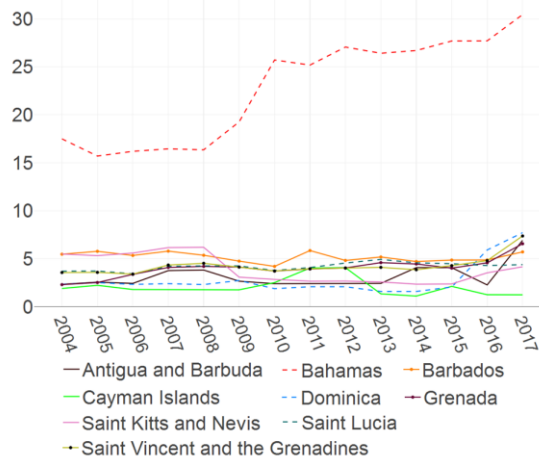
Analysis

Methodology

Background

Objectives

Outline



Visualization Tools

Tool for accessing data to support the Agricultural Investment Plan of the Caribbean Development Bank

Conclusions



https://faocaribbeanagriculture.shinyapps.io/CDB_Agriculture/

MAIN FINDINGS



- 01 **Smart Specialisation to frame diversification**
- 02 **Synergies in states' agro-food specialisations (Competition-Cooperation)**
- 03 **Not Market Driven Diversification strategies**



FURTHER RESEARCH



“The green business of the future will not longer be called green, it will just be business” VIJAY VAITHEESWARAN,
The Economist

**SMART
SPECIALISATION**

**BIO
ECONOMY**

**BIO
ECONOMIC
SPECIALISATION**



THANKS



- Conclusions 
- Analysis
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