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# CLUSTERS IN THE CARIBBEAN:

Understanding their Characteristics,  
Defining Policies for their Development

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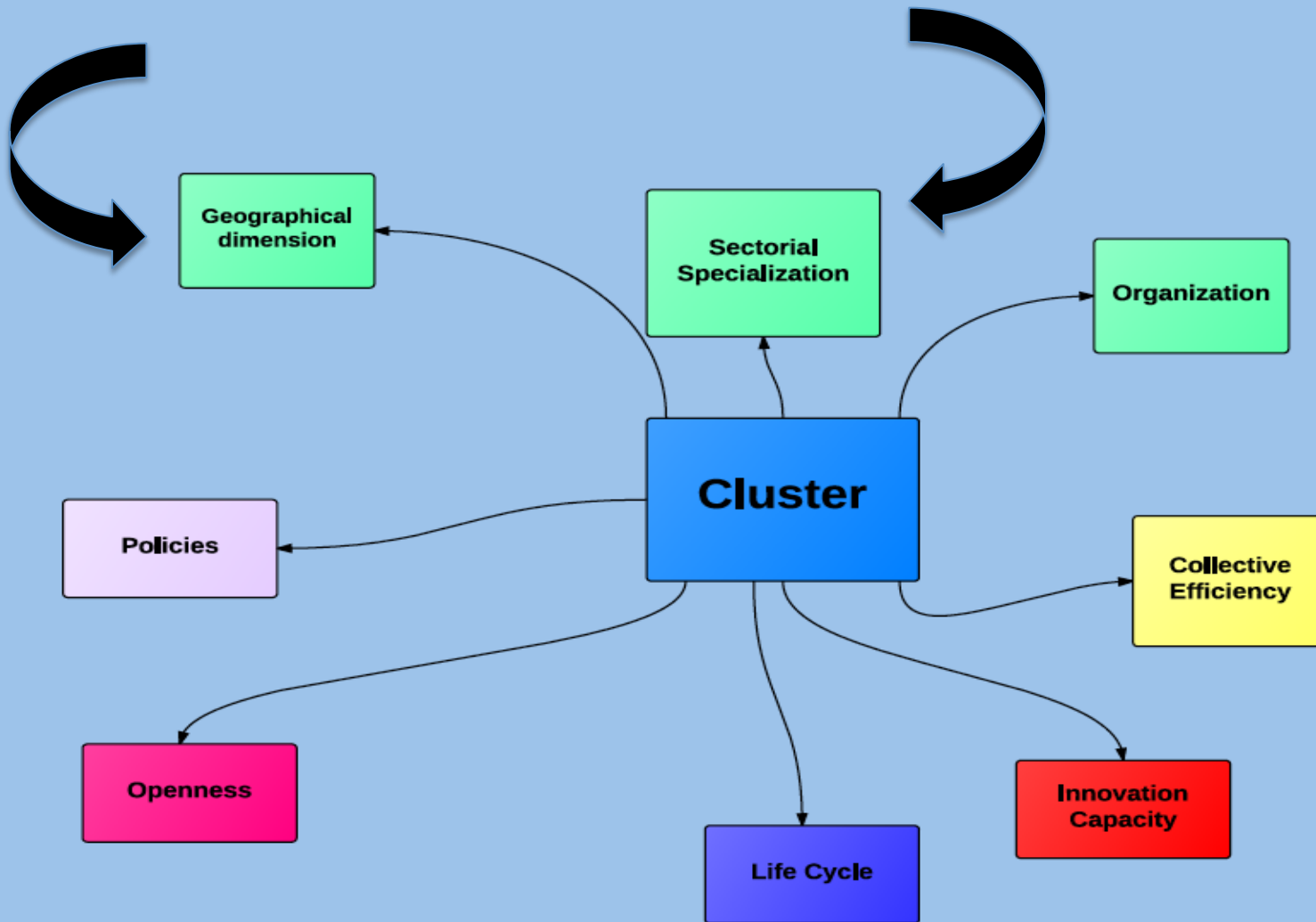
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# Cluster at a glance: 2+6 dimensions



# The 2 baseline dimensions

- ① **Geographical agglomeration**: local, urban, regional, national, inter-country;
- ② **Sectorial specialization**: natural resources, (agro) based, manufacturing, services;

# The 6 characterizing dimensions

- ① **Organization**: a) Marshallian (mainly SMEs), b) Hub & Spoke (large firms + SMEs), c) Survival (mainly informal small and micro firms);
- ② **Collective efficiency**: a) external economies and b) joint action;
- ③ **Innovation capacity**: a) the knowledge base of the firms, b) the (local, national) innovation system and c) the links with external knowledge sources;
- ④ **Openness**: a) export orientation, b) FDIs, c) GVCs;
- ⑤ **Life cycle**: a) emergence, b) growth, c) sustainment, d) decline;
- ⑥ **Policies**: a) spontaneous, b) policies for inception, c) policies for development.

# The universe of the study

- These 2 + 6 dimensions have been investigated in 32 Caribbean clusters;
- Countries: Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St-Lucia, St-Vincent & Grenadines, Suriname, Trinidad and Tobago.

# The main characteristics of the Caribbean clusters (1)

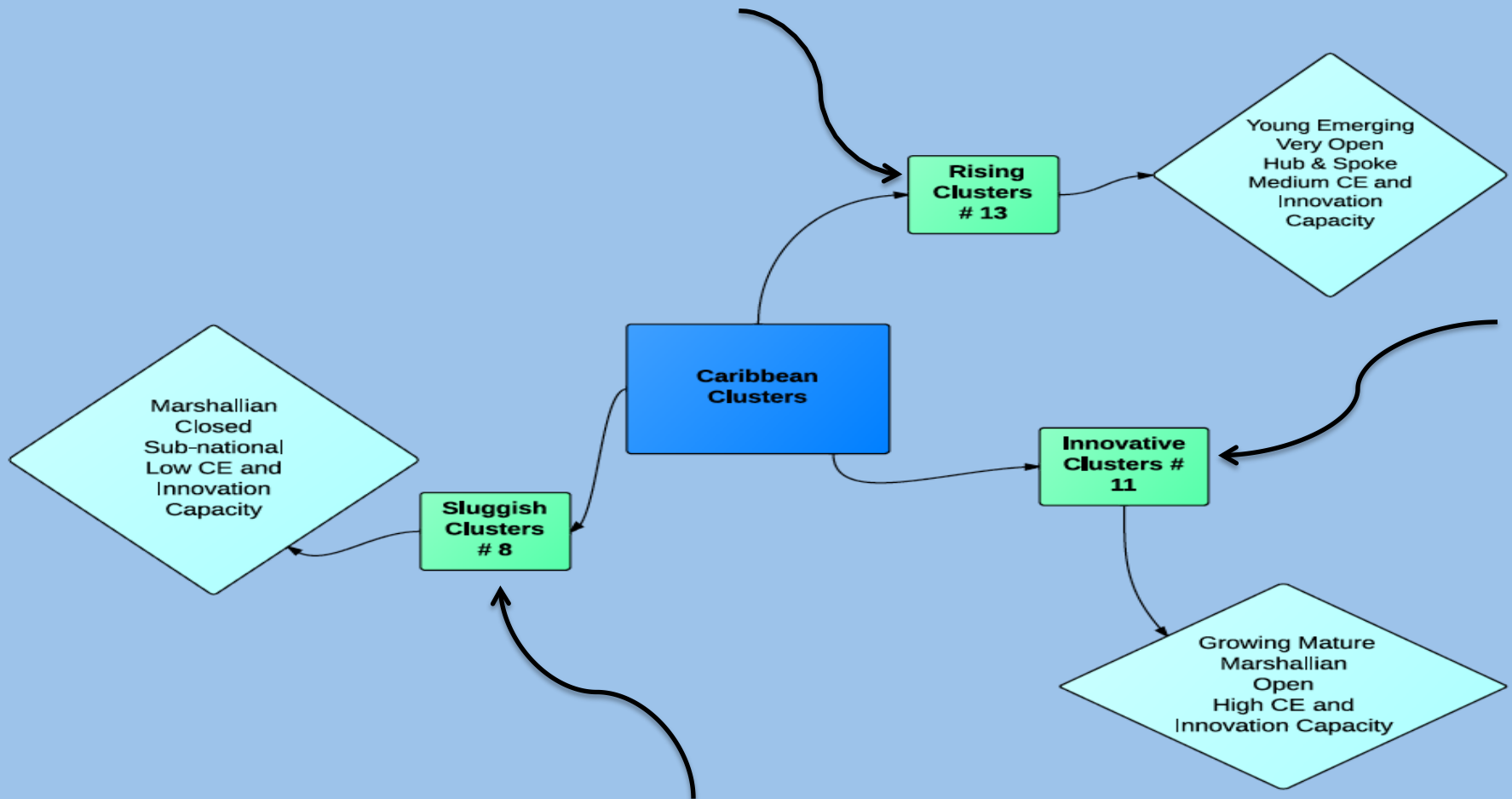
- ***Geographical dimension***: half of the clusters are *national* based. The *local* dimension is predominant in agricultural clusters and in tourism. *Urban* clusters are in the service industry. Only 4 *Inter-Caribbean* clusters;
- ***Sectorial dimension***: predominance of the *tertiary industry* (tourism, creative industries, business and financial services) and *exploitation of natural resources* (agro-processing, forestry, aquaculture). Only two clusters specialized in *manufacturing*;
- ***Organizational structure***: Many *Marshallian* clusters. 5 *H&S* clusters in which a multinational is the hub. Only one *survival* cluster.

# The main characteristics of the Caribbean clusters (1)

- **Collective Efficiency:** there are examples of cooperation in logistics, input and information sharing, market access. Cooperation is pushed by environmental concerns;
- **Innovation capacity:** hub companies, business associations and input suppliers are key knowledge sources external to the clusters;
- **Openness:** local presence of MNCs and/or GVCs is key. The regional market is important;
- **Policies:** some spontaneous clusters; a variety of existing cluster policies in the inception and development phases.

# 3 types of Caribbean clusters

Through cluster analysis, we have identified three groups of clusters.





## Some evidence about the 3 types

- The ***Rising Clusters*** and the ***Innovative Clusters*** share some common key features:
  - They have **external channels** (MNCs or GVCs), through which they tap into knowledge and technologies and connect with foreign markets;
  - Their degree of **collective efficiency is high** (e.g. specialized labor market; collective projects for sharing transportation costs, adopting international standards, introducing environmental best practices or jointly selling products in the international markets);
- ***Innovative Clusters*** display a **much higher innovative capacity** as compared to ***Rising Clusters***, which are **younger** and therefore have accumulated lower technological capabilities;
- ***Sluggish Clusters*** are rather **closed**, often lack connections to external channels and access to international markets. Many of them show a **low degree of collective efficiency** and **poor innovative capacity**.

# Cluster Policies should be different in different clusters

- In ***Rising Clusters*** policies should:
  - Foster **innovation**, which is a weak area in these clusters;
  - Help the **transition from emerging clusters to a growth phase**;
  - Support **the consolidation of leading actors**;
- In ***Innovative Clusters*** policies should:
  - Be **very selective** and sustain **projects with high growth potential**;
  - **Competition for funding should be very tough** and the support to winning projects should be generous;
- In ***Sluggish Clusters*** policies should:
  - **Strengthen trust and local joint action**;
  - **Enhance openness** for accessing resources such as knowledge and technologies;
  - Sustain the **building up innovative capabilities**;
- Every policy should undergo **systematic and unbiased evaluation**.

# Summing up the main findings

- ① Cluster activity is very intense in the region;
- ② The **Caribbean clusters are very diverse** on several key dimensions, as clearly shown with the identification of the three groups – *Rising*, *Innovative* and *Sluggish* Clusters;
- ③ **Supporting policies should therefore be differentiated** to address weaknesses and reinforce strengths;
- ④ In Caribbean clusters, **there are already a variety of supporting interventions**, some of which do represent good practice examples.

# Are clusters relevant for the future development in the Caribbean? YES, for 5 reasons

- ① **New promising industries** to strengthen diversification, entrepreneurship and innovation in the region;
- ② **New skilled jobs** to address brain drain;
- ③ **External economies and joint actions** to address the small size of the countries and the lack of economies of scale;
- ④ **External connections** (via multinationals, GVCs) to access knowledge and acquire capabilities needed for being competitive in the international markets;
- ⑤ **Private and public sector initiatives** to be leveraged in other productive areas.

# Thank you

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# 3 groups of clusters: their features

Type of Cluster (# total)	Names and # of the clusters	Geographical Dimension (# of clusters)	Organizational Structure (# of clusters)	Collective Efficiency (Average Value)		Innovation Capacity (Average Value)	Openness (Average Value)	Stage of Life Cycle (# of clusters)	Policy (# of clusters)
				EE	JA				
<b>Rising Clusters</b> (13)	1.Guyana (Non-Trad Agr) 2.Grenada (Nutmeg) 5.Guyana (Coc Water) 10.Jamaica (Orn. Fish) 14.Inter-Carib (Rum) 15.Guyana (Fishing) 16Guyana (Birding) 19.Jamaica (Treas B.) 20Grenada (Geo-tour) 21.Suriname (Up S R) 22.Inter-Carib (Animat) 23.Barbados (Multimed) 32Inter-Carib (Mar. serv)	Local 3 Urban 1 National 5 Inter-Car 3 Local/Inter-C 1	Marshallian 8 Hub & Spoke 5 Survival 0	2.38	3.77	2.46	3.46	Emergence 6 Growth 6 Sustainment 1 Decline 0	Spontaneous 2 Pol for Incep 3 Pol for Dev 5 Pol for Inc & Dev 0 Spont. + Pol for Dev 3
<b>Sluggish Clusters</b> (8)	3.T&T (Agro products in Felicity) 4.T&T (Agro products in Jerningham ) 7.Guyana (For & Wood) 13.Guyana (Gold Jew) 17.T&T (Tourism in Carapichaima) 18.T&T (Tourism) 25.T&T (Pottery) 26.T&T (Retail)	Local 4 Urban 1 National 3 Inter-Car 0 Local/Inter-C 0	Marshallian 7 Hub & Spoke 0 Survival 1	2.50	2.50	1.75	1.38	Emergence 1 Growth 3 Sustainment 3 Decline 1	Spontaneous 3 Pol for Incep 1 Pol for Dev 3 Pol for Inc & Dev 1 Spont. + Pol for Dev 0
<b>Innovative Clusters</b> (11)	6.T&T (Food sustain.) 8.Guyana (Aquacult.) 9.Belize (Shrimp) 11.T&T (Oil) 12.T&T (Point Lisas I E) 24.T&T (Music, Film, etc) 26.T&T (Mar. Serv.) 27.T&T (Financ. Serv.) 28.T&T (Business Serv) 30.Jamaica (ICT/Bus) 31.Jamaica (Print & Pack)	Local 1 Urban 2 National 8 Inter-Car 0 Local/Inter-C 0	Marshallian 11 Hub & Spoke 0 Survival 0	4.45	3.91	4.27	3.09	Emergence 0 Growth 9 Sustainment 2 Decline 0	Spontaneous 1 Pol for Incep 0 Pol for Dev 5 Pol for Inc & Dev 2 Spont. + Pol for Dev 3