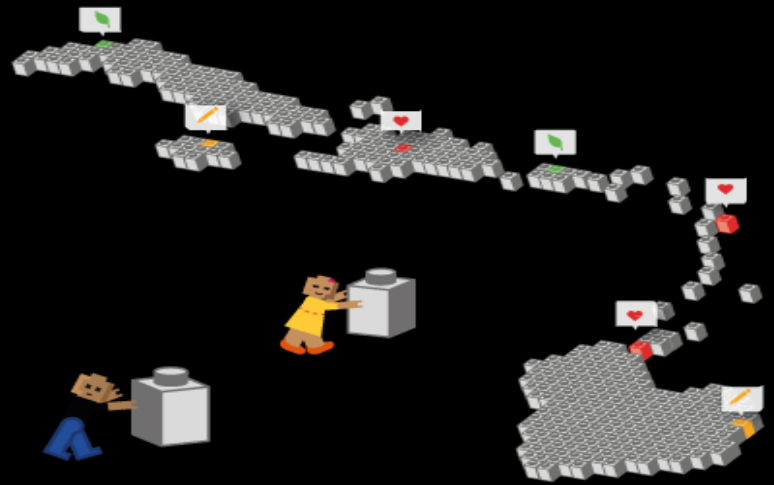


DEVELOPING THE CARIBBEAN



Open Data in the Caribbean

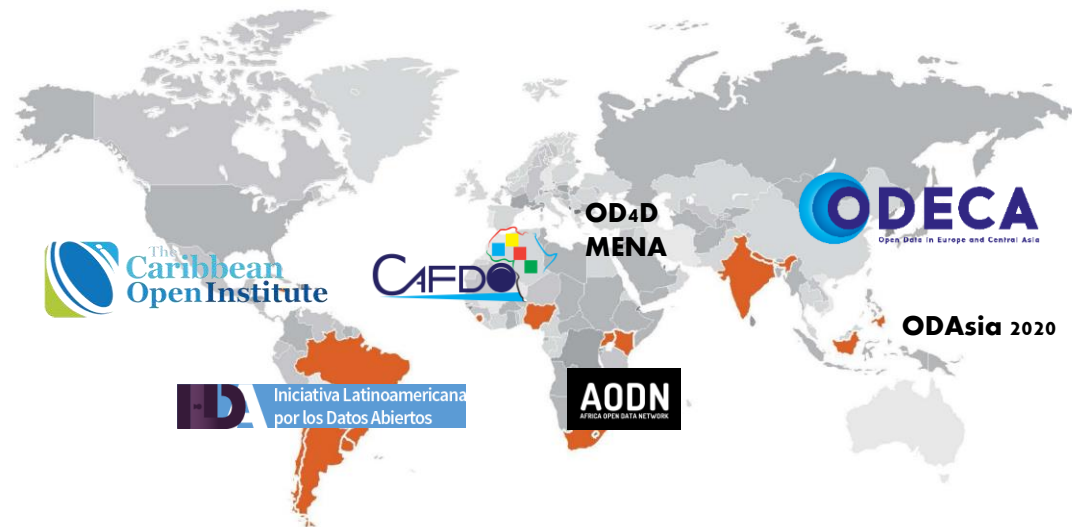
Advocacy | Evidence | Capacity



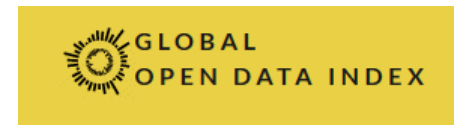
\ Open·Government·Data \ *n. v.*

“The proactive release of Government **Data in a format** that can be **freely** used, **reused** and redistributed by **anyone** for **any purpose**”

Open Data for Development Network (OD4D) Regional Hubs



Collaborative OD4D Global Initiatives



Barriers to Open Data in the Caribbean

- Cultural

In this setting, the open data narrative demands tangible returns on the investment of scarce resources, if it is to compete for political attention

Innovation and Problem-solving has become the dominant means of a resonant discourse

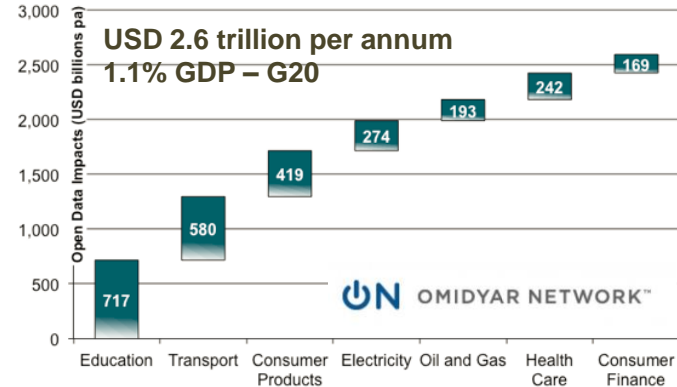
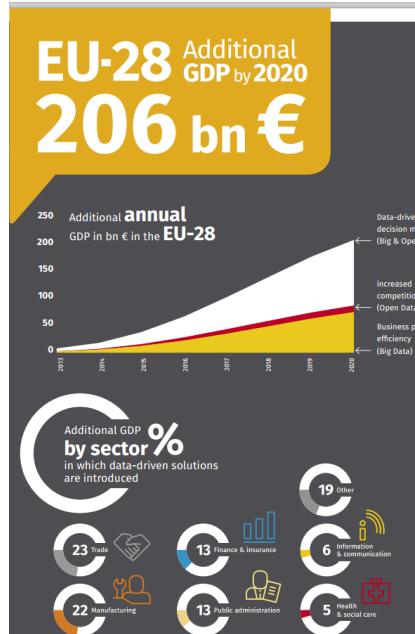
Competing Policy and Political Agenda Priorities for Scarce Resources

The overarching research question is whether openness - *the availability of public information in reusable formats* - can create positive developmental effects in a *given ecosystem* within the Caribbean's cultural and institutional context

The Economic Opportunity of Open Data



Open data
A new goldmine



Economics of Caribbean Open Data

eg. Tourism Levers/Drivers

Efficiency & Effectiveness

- **Improved quality of service delivery in support services such as transportation, entertainment and merchandising.** eg. Open-Data-enabled mobile Apps
- **Enhanced tourism product information** and diversity of choices for discriminating visitors with niche interests
- Enhanced Market analysis and selective targeting through access to tourism origin data to stimulate Apps development, and enhance sector analysis and visualization



Participation & Collaboration

- **Increased linkages between tourism and other sectors** such as Agriculture, Manufacturing, arts & craft, self-employed service providers
- Empower Community Tourism interests and stakeholders with greater participation and collaboration in the development of the community tourism product; Open Data initiatives can impact positively on the visibility, inclusiveness and welfare of small operators



Transparency

- Increased transparency in the allocation and disposal of resources/funds for the development of the sector (i.e. Tourism Enhancement fund; JSIF – community-based tourism development)




New Services & Businesses

- Increased visibility and clientele for smaller hotel properties, attractions
- Enable product development and market access for community-based tourism initiatives
- **Innovation opportunities for software developers and other service entrepreneurs**




Agriculture Levers/Drivers


Efficiency & Effectiveness

- Improved logistics and coordination in the agricultural sector to mitigate spoilage, surplus and shortages 
- **Improved analysis of agricultural information to inform policy and planning**
- Enhanced access and use of geospatial and meteorological data to inform farming practices for optimal yield and environmental preservation
- **Greater efficiency in the delivery of Extension Services using Open Data combined with mobile Apps**

Transparency

- Open access to business information to support farmers, retailers and consumers 
- Livestock registration mechanisms (passport) the use of Open Data to enhance the oversight and traceability of products from the farms to the final consumer

Participation & Collaboration

- Open Data and crowd-sourcing can lead to improved accuracy and currency of agriculture supply & demand data by mobilizing end users to assist in the data collection and/or verification process 
- **crowd-sourced open data on incidences of praedial larceny can provide security forces with an improved detection and investigative capability**

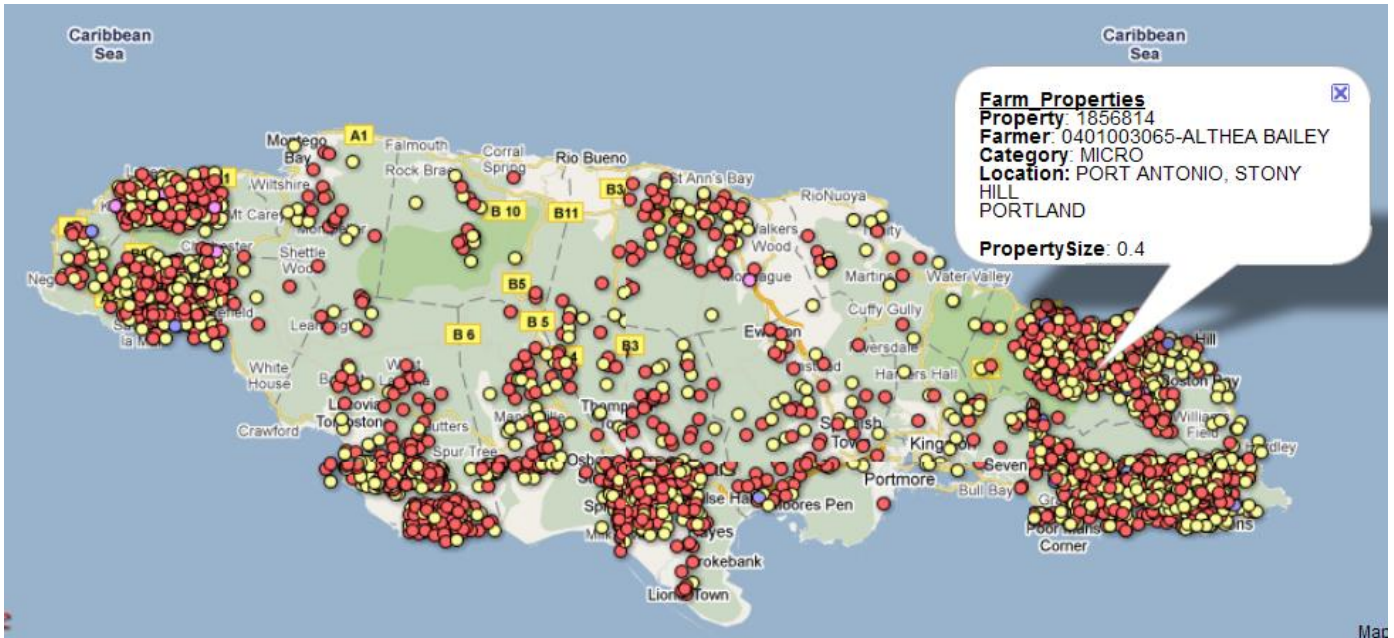
New Services & Businesses

- Open agriculture data creates the opportunity for the emergence of a variety of e-Agriculture Apps that can encourage a broad base of domain experts, technical developers, and innovators to participate in an Agriculture innovation ecosystem 
- **Published Agriculture Open Data becomes a catalyst for innovation opportunities for software developers and entrepreneurs**

Data Visualizing vs Statistics Increases Utility

Farmer Registration Info.

PARISH	#REGISTERED
ST.ANN	17,391
TRELAWNY	7,561
CLARENDON	18,976
ST.MARY	8,388
ST.CATHERINE	12,271
ST.JAMES	7,054
HANOVER	5,803
ST.THOMAS	8,931
MANCHESTER	17,892
WESTMORELAND	9,565
PORTLAND	7,841
ST.ANDREW	5,552
ST.ELIZABETH	21,360
Total Registered 148,585	



Caribbean Open Data Use-Cases

Commodity Price Trends

Commodity Price Trend for Carrot in the Parishes of: Kingston & St Andrew, St Elizabeth, Westmoreland

- Parish
- Kingston & St A..
 - St Elizabeth
 - Westmoreland

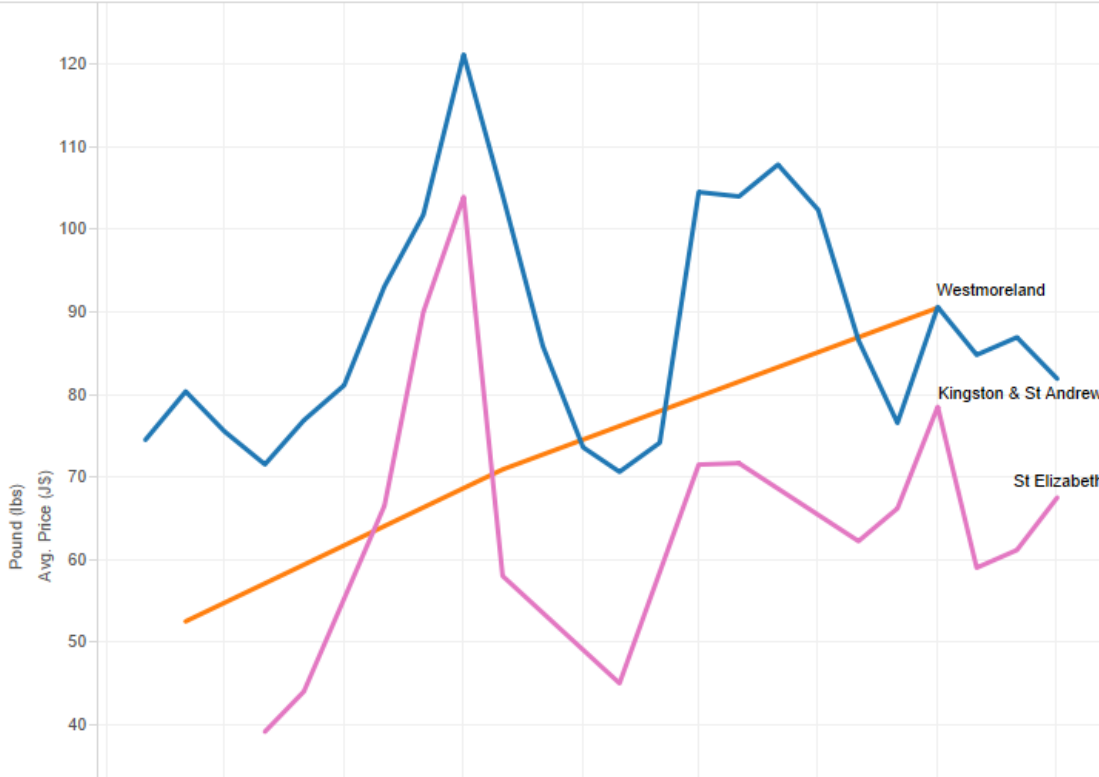
- Parish
- Clarendon
 - Hanover
 - Kingston & St Andrew
 - Manchester
 - Portland
 - St Ann
 - St Catherine
 - St Elizabeth
 - St James
 - St Mary
 - St Thomas
 - Trelawny
 - Westmoreland

- Commodity
- Cabbage (Green)
 - Cabbage (Red)
 - Callaloo
 - Cantaloupe
 - Carrot
 - Cauliflower
 - Coco
 - Cucumber
 - Dasheen
 - Escallion
 - Ginger
 - Green Banana
 - Gungo Peas
 - Irish Potato
 - Lettuce

Commodity / Variety / UnitOfMeasure

Carrot


Local



GOJ/MOF publish GOJ 2012 Budget



Ministry of Finance

Government of Jamaica 

[Home](#) | [About Us](#) | [FAQs](#) | [Contact Us](#) | [Search](#) | [jamaica.gov.jm](#)

Debt Mgmt. Strategy

- [Debt Management Strategies](#)

FSRE

- [FY 2012-2013](#)
- [FY 2010-2011](#)
- [FY 2009-2010](#)
- [FY 2008-2009](#)
- [FY 2007-2008](#)
- [FY 2005-2006](#)
- [FY 2004-2005](#)

Budget Presentations

- [FY 2012-2013](#)
- [FY 2011-2012](#)
- [FY 2010-2011](#)
- [FY 2009-2010](#)
- [FY 2008-2009](#)
- [FY 2007-2008](#)
- [FY 2006-2007](#)
- [FY 2005-2006](#)
- [FY 2004-2005](#)

Estimates of Expenditure

Estimates of Expenditure

Recurrent

- ◊ 0100: His Excellency the Governor General & Staff | [2012-2013-0100-1.pdf](#)
- ◊ 0200: House of Parliament | [2012-2013-0200-1.pdf](#)
- ◊ 0300: Office of the Public Defender | [2012-2013-0300-1.pdf](#)
- ◊ 0400: Office of the Contractor-General | [2012-2013-0400-1.pdf](#)
- ◊ 0500: Auditor General | [2012-2013-0500-1.pdf](#)
- ◊ 0600: Office of the Services Commissions | [2012-2013-0600-1.pdf](#)
- ◊ 0700: Office of the Children's Advocate | [2012-2013-0700-1.pdf](#)
- ◊ 0800: Independent Commission of Investigations | [2012-2013-0800-1.pdf](#)
- ◊ 1500: Office of the Prime Minister | [2012-2013-1500-1.pdf](#)
- ◊ 1600: Office of the Cabinet | [2012-2013-1600-1.pdf](#)
- ◊ 1649: Management Institute for National Development | [2012-2013-1649-1.pdf](#)
- ◊ 1700: Ministry of Tourism | [2012-2013-1700-1.pdf](#)

Revenue Measures

- [FY 2012-2013](#)
- [FY 2011-2012](#)
- [FY 2009-2010](#)
- [FY 2008-2009](#)
- [FY 2005-2006](#)
- [FY 2003-2004](#)
- [FY 1999-2000](#)

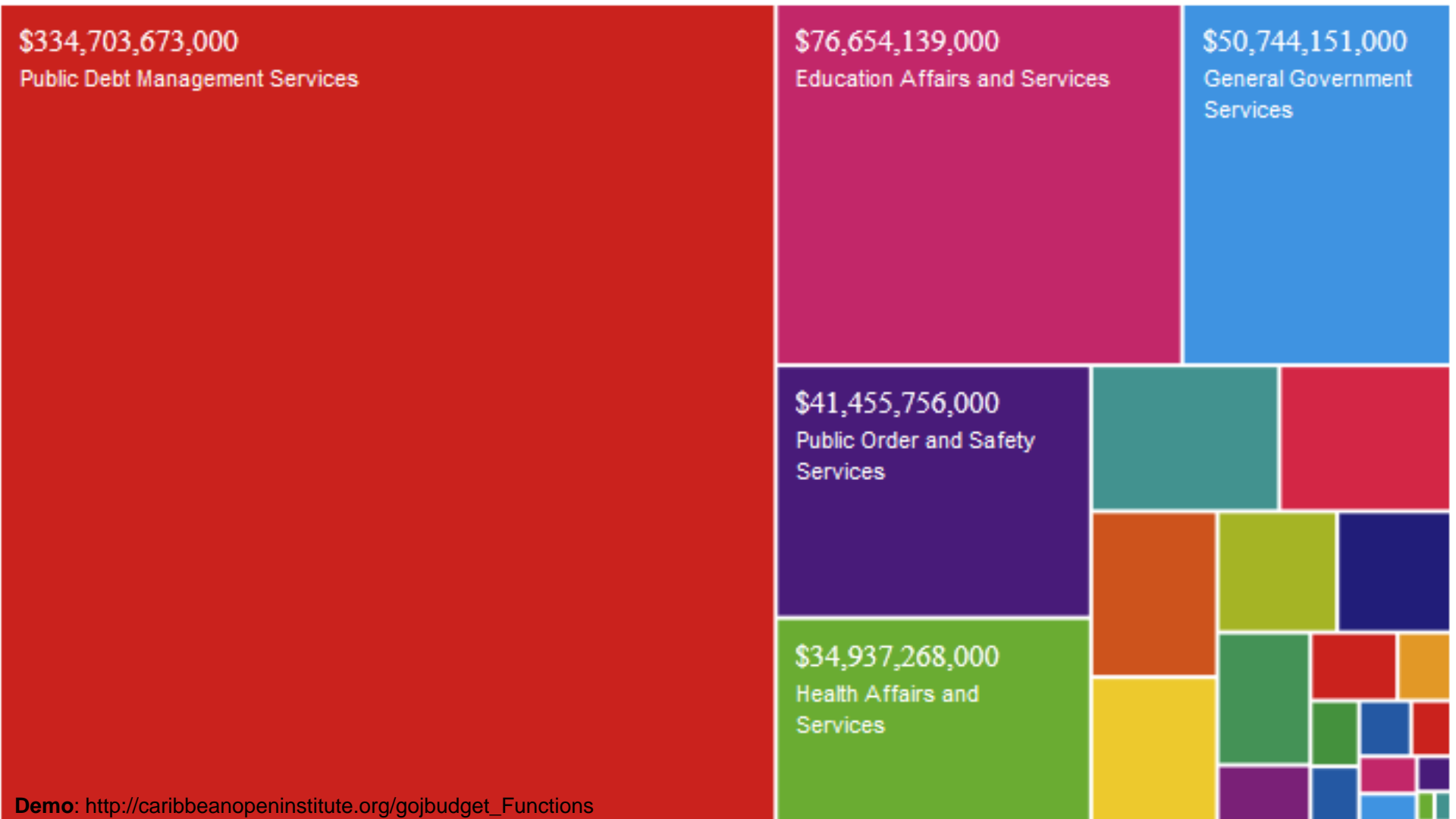
Budget Memorandum

- [FY 2012-2013](#)
- [FY 2011-2012](#)
- [FY 2010-2011](#)
- [FY 2009-2010](#)
- [FY 2008-2009](#)
- [FY 2007-2008](#)
- [FY 2006-2007](#)
- [FY 2005-2006](#)

Tax Reform

- [FY 2011-2012](#)

Fiscal Policy



\$334,703,673,000
Public Debt Management Services

\$76,654,139,000
Education Affairs and Services

\$50,744,151,000
General Government Services

\$41,455,756,000
Public Order and Safety Services

\$34,937,268,000
Health Affairs and Services

Open Data And Interactive Community Mapping



A Strategy for Empowering Local Communities

Three Target Communities



August Town
community, a cultural
& heritage Mecca

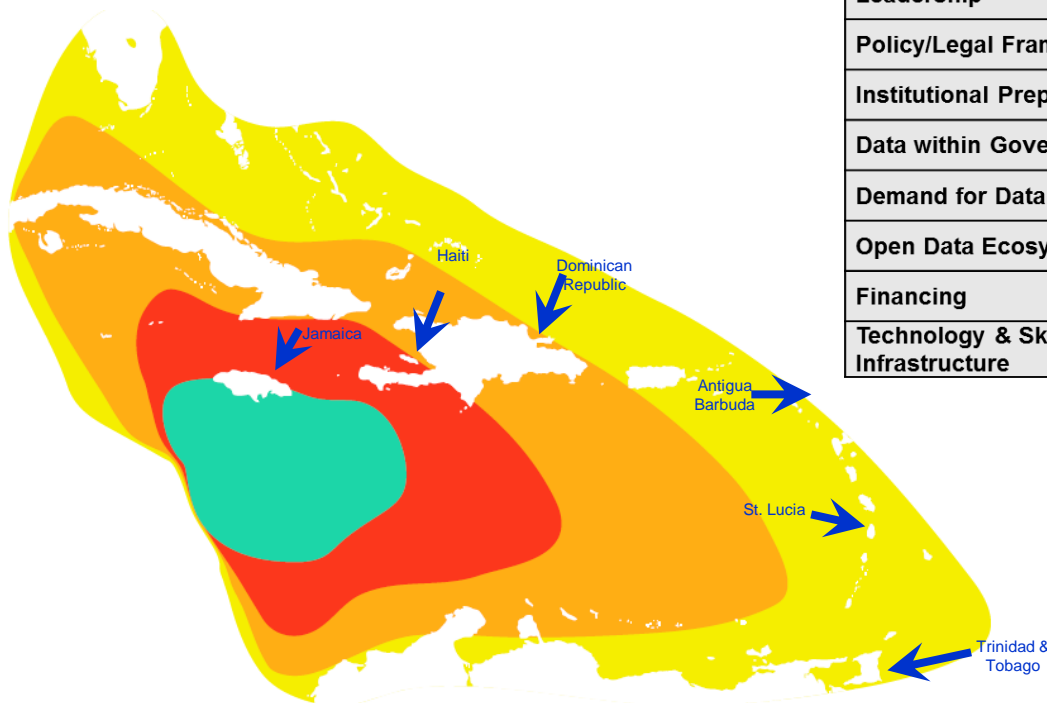


The Rastafarian Indigenous
Village, Montego River
Gardens, St James



Beeston Spring,
Westmoreland, near Sandals
"Villages as Business" -
Community development

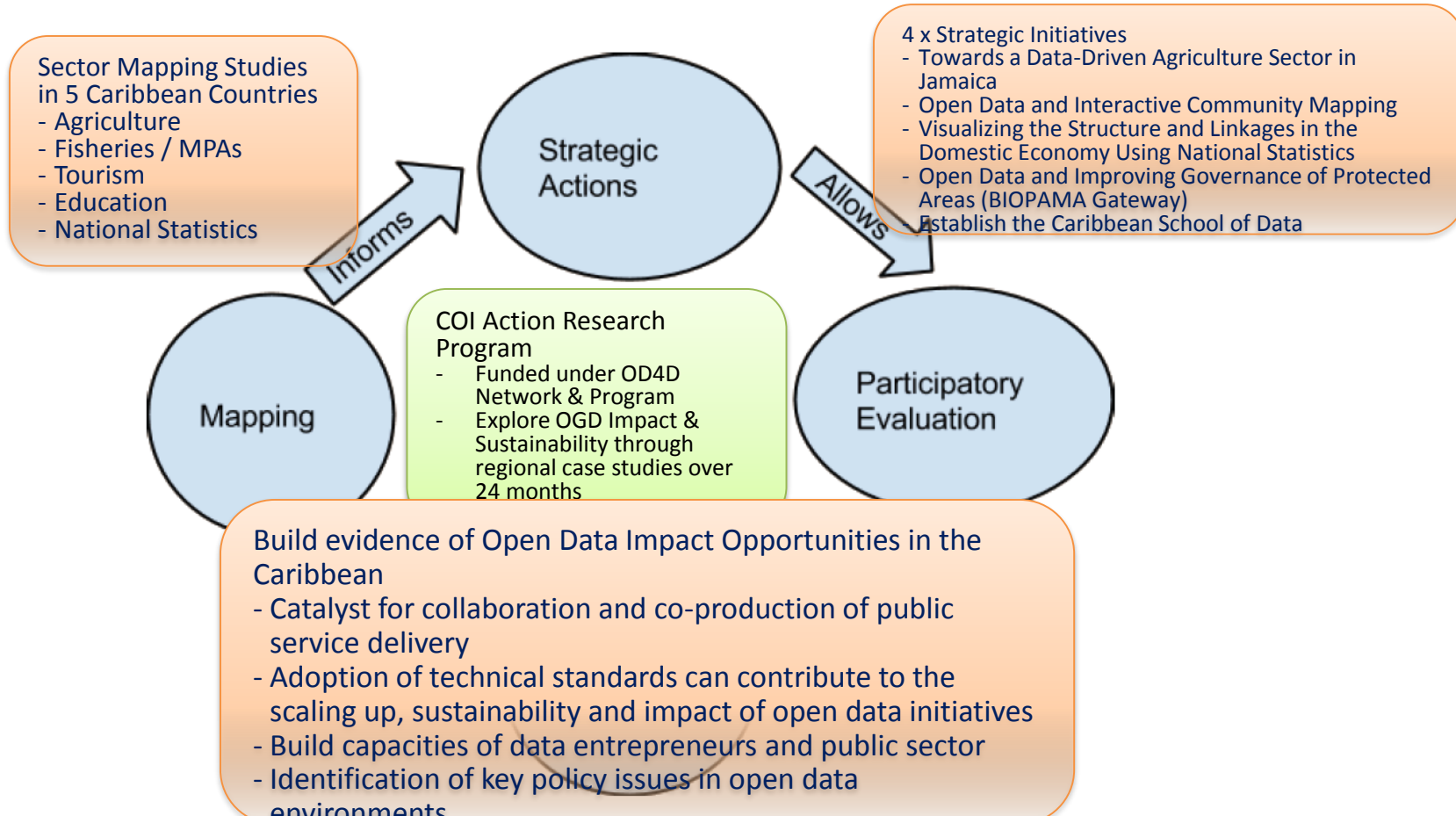
Key Initiatives so far... *Support to Governments*



DIMENSION	RATING
Leadership	Yellow
Policy/Legal Framework	Yellow
Institutional Preparedness	Yellow/Red
Data within Government	Yellow
Demand for Data	Yellow/Red
Open Data Ecosystem	Green ✓
Financing	Yellow
Technology & Skills Infrastructure	Green/Yellow ✓



Open Data Action Research



Open Data Strategic Initiatives

Towards an Agriculture Digital Services Model for Data-Driven Agriculture Sector in Jamaica

Sector: Agriculture

Target Impact: Explore the potential of emergent best practice in government digital services to address challenges in data accessibility, quality and data gaps

Open Data and Interactive Community Mapping: Empowering Local Community Tourism

Sector: Community Tourism

Target Impact: effective engagement, capacity-building & empowerment of local community participants

Visualizing the structure and linkages in the Jamaican economy using Official Statistics (Administrative Data)

Sector: National Statistics

Target Impact: increase the accessibility, understandability & re-usability of national statistics

Open Data and the BIOPAMA Gateway: Towards Improved Governance and Decision-Making of the Caribbean's Protected Areas

Sector: Marine Protected Areas

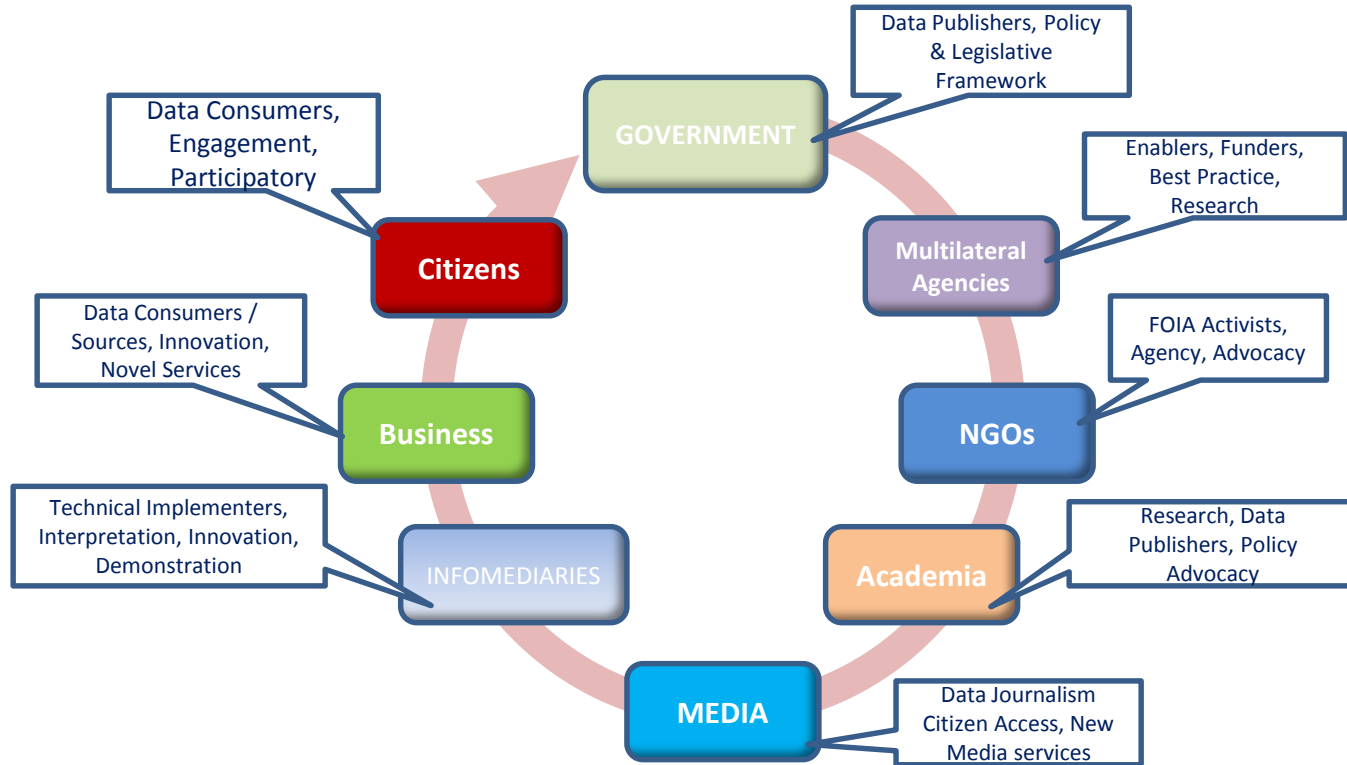
Target Impact: Greater alignment of data (biodiversity, livelihoods, governance) to enhance governance and decision-making affecting PAs

Establish the Caribbean School of Data

Sector: All

Target Impact: In general, building data literacy capacity will increase the impact of the various open data initiatives across sectors. The emphasis of this initiative will be on sustainability through established regional capacity-building institutions

Open Data Ecosystem / Actors





DevCa

Developing
the Caribbean 2016

Towards A Caribbean
Data Revolution
May 5th-6th

DevCA is a Multi-Country Open Data Conference & Codesprint

DevCA has had 4 Editions (2012, 2013, 2015, 2016)

- Conference Sites: Jamaica, Trinidad, Dominican Republic
- Codesprint sites: Barbados, Guyana, Cuba, St.Kitts

Thematic Areas: Agriculture, Tourism, Education, Data Journalism, Census 2010, Consumer Prices, Elections, Zika

Outcomes: Awareness, Advocacy, Engagement, Experimentation, Entrepreneurship



DevCA Engages with Caribbean Leaders...



DevCA Engages with International Experts...



DevCA Engages With Caribbean Academics...



DevCa
Developing
the Caribbean | 2015

Technologists...



Community



Calling all
Coders
Designers
Engineers

Come and
HACK
ZIKA

DevCa

ZIKA | Hackathon

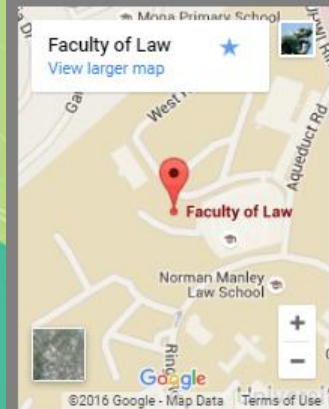
Institutional Partners

- CARPHA, PAHO, MOH-Jamaica
- Specific Problem statements

DevCA Cuba Hackathon

- 83 Developers
- 10 Prototypes developed

When: Thu May 5 to Fri May 6
Venue: Faculty of Law, UWI Mona



Big Opportunities for Collaboration

- Integrating / Harmonizing the Data Ecosystem
 - Official Statistics, Open Data, Big Data for Development & SDG Reporting & Monitoring
- National SDG Reporting Platform for Jamaica



Emerging Insights...

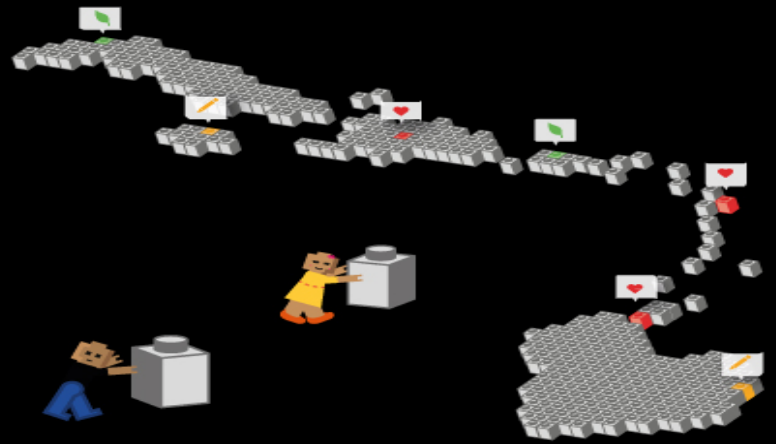
- **Innovation fellowships** provide an important mechanism for collaborative government-civil society co-creation in key developmental areas
- **Governments' role** will require active participation on supply and demand sides of the Caribbean open data ecosystem
- Scale limits and resource deficits will require a common set of technology platforms, tools, standards and code repositories for shared use i.e. **the Caribbean Digital Commons**
- The value sustainability of the open data initiatives in the region will ultimately rely on the emergence of a **vibrant Caribbean open data ecosystem** of actors and investment in individual and community **capacity-building** across the whole open data value-chain

Key challenges

- **Country leadership apathy:** The persistent apathy of political leadership in the Caribbean towards the open data/open government agenda continues to be disappointing
- **Scalability:** The challenge of getting to scale remains a perennial development challenge that limits the transformational impact that the open data innovations explored through this project can have on the peoples of the Caribbean
- **Capacity-Building:** Building sustainable open data infrastructures and enabling the effective use of open data in the Caribbean, requires that actors from all sectors (public, private, media, civil society) invest in individual and community capacity across the whole open data value-chain
- **Regional Collaboration:** Not enough Organic Collaboration / *“Network Effects”*

“ [Open Data] is one of the few resources that is defined by abundance rather than scarcity. Making the best possible use of an existing and increasing resource is not just common sense, it is the closest we can get to generating economic winners without losers. It is not just an economic and social opportunity but a political one.”

- Nigel Shadbolt, Co-Founder of the Open Data Institute



The Caribbean Digital Commons

Imagining the Future Digital Caribbean

- **Regional Open Data Portal:** Open Caribbean Datasets for Entrepreneurs and Innovators, including Geospatial Data
- **Caribbean School of Data:** Building Data literacy and Digital Competency across the Caribbean
- **Evolving DevCA:** *A Platform (Open Space) for convening multiple stakeholders around Digital Services-enabled problem-solving & Innovation*
- **Caribbean Apps Ecosystem:** Technology platforms, tools, standards and code repositories for Shared Indigenous Solutions

