OUTLINE OF PRESENTATION

1. Topology of C@ribNET
2. Issues and challenges
3. NREN development
Global Topology
C@ribNET Topology

Member States

Anguilla
Antigua & Barbuda
Bahamas
Barbados
Belize
Bermuda
British Virgin Islands
Cayman Islands
Dominica
Dominican Republic
Grenada
Guyana
Haiti
Jamaica
Montserrat
St. Kitts & Nevis
St. Lucia
St. Vincent
Suriname
Trinidad & Tobago
Turks & Caicos
Sun, Sand and Sea...
Regional Context

- The Caribbean Region is one of the most diverse in the world in terms of economic performance and demography
  - Economic Growth
  - Economic size
  - Population distribution
The Caribbean Economic Landscape Today

- Small Island States
- No economies of scale
- High unemployment
- High Debt to GDP
- Climate Change (Natural Disasters)
- Brain Drain
## Population and GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Population Est. 2010</th>
<th>GDP (real) growth rate (%)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>89,000</td>
<td>2.00</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Bahamas</td>
<td>343,000</td>
<td>2.00</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Barbados</td>
<td>273,000</td>
<td>1.80</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Belize</td>
<td>312,000</td>
<td>2.50</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Dominica</td>
<td>68,000</td>
<td>0.90</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Grenada</td>
<td>104,000</td>
<td>-1.40</td>
<td>2010 est.</td>
</tr>
<tr>
<td>Guyana</td>
<td>754,000</td>
<td>4.00</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Haiti</td>
<td>9,993,000</td>
<td>6.10</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Jamaica</td>
<td>2,741,000</td>
<td>1.50</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Montserrat</td>
<td>6,000</td>
<td>-1.00</td>
<td>2002 est.</td>
</tr>
<tr>
<td>Saint Kitts and Nevis</td>
<td>52,000</td>
<td>1.50</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>174,000</td>
<td>2.00</td>
<td>2011 est.</td>
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<tr>
<td>Saint Vincent and the Grenadines</td>
<td>109,000</td>
<td>0.40</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Suriname</td>
<td>525,000</td>
<td>5.00</td>
<td>2011 est.</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>1,341,000</td>
<td>-1.40</td>
<td>2011 est.</td>
</tr>
</tbody>
</table>


Per Capita Income

Figure 1: Per Capita Incomes (PPP) 1975-2002

Source: World Development Indicators (WDI)
Public Debt

In 2003, the average debt for Caribbean countries was 96% of their respective GDP

- Antigua and Barbuda, 142%;
- Bahamas, 48%;
- Barbados, 84%;
- Belize, 100%;
- Dominica, 122%;
- Dominican Republic, 56%;
- Grenada, 113%;
- Guyana, 179%;
- Haiti, 44%;
- Jamaica, 142%;
- St. Kitts and Nevis, 171%;
- St. Lucia, 69%;
- St. Vincent and the Grenadines, 73%;
- Suriname, 44%;
- Trinidad and Tobago, 54%.

Source: www.worldbank.org

- The very high debt has placed seven Caribbean countries among the 10 most indebted countries in the world, and 14 among the top 30, which exacts a toll on sustainable growth and worsens expectations about macro stability.

- Improvement of the debt profile will have significant payoffs, especially for Jamaica, St. Kitts and Nevis, Grenada, Antigua and Barbuda, and Belize.
Despite some decline over the last decade, unemployment rates in most countries tend to be high.

- Barbados: 10.3%
- Belize: 10%
- Jamaica: 15.1%
- St. Kitts and Nevis: 18.9%
- St. Lucia: 18.9%
- St. Vincent and the Grenadines: 21.1%
- Trinidad and Tobago: 10.8%

High levels of open urban unemployment prevail in the larger countries while rural unemployment and underemployment exist in the Organization of Eastern Caribbean States (OECS).

Source: [www.worldbank.org](http://www.worldbank.org)
Migration and Remittances

*Migration* in the Caribbean plays a major role in economic and social development. Most of the migrants are generally in the most productive *age group 20-45* and generally have a high level of education.

– Haitians 63%,
– Dominicans 53% and
– Jamaicans 48%

**Remittances:**


Representing an average of 6% of regional GDP over 1998-2003, remittance flows now exceed both FDI inflows as well as official development assistance.

**Country Variation:** Haiti receiving 14% of GDP in remittances and Trinidad and Tobago receiving around 1% of GDP.

**Brain Drain:** An extreme case in point is Guyana where the country has been losing teachers and nurses at high, unsustainable rates. In Jamaica, roughly 80% of the potential number of tertiary graduates has left the country.

Source: [www.worldbank.org](http://www.worldbank.org)
Caribbean Development Imperatives

• Spurring growth of the economies of the various countries by expeditiously grasping new opportunities in the transitions taking place in societies and economies.
• Increasing the competitiveness of Caribbean economies within the emerging global economy.
• Enhancing regional integration and cooperation through the CSME
• Generating knowledge to guide Caribbean development
• Reducing violence and crime, especially murder.
• Reducing youth employment and increasing youth employability in economies in transition
Issues facing Caribbean Tertiary Institutions

• Caribbean tertiary institutions will never be able to develop the critical mass needed to offer all the programmes that are needed to satisfy the skills and knowledge required by Caribbean economies and societies.

• Apart from UWI almost all Caribbean colleges and universities are relatively small institutions offering a fairly narrow range of programmes mostly at the Certificate, Diploma, Associate Degree and Bachelor degree levels.

• There are only a few institutions offering programmes in the areas of critical need, especially in the sciences and technology,
C@ribNET: Issues and Challenges

• Top Down Approach
• Absence of NRENS
• Absence of National Networks
• Poor Institutional infrastructure
• Lack of Content
Challenges

- Aggressive NREN Programme
- Building Communities (Assembly of NRENS)
- Collaborative development and sharing of content
- Resource mobilisation
- Sustainability!!!
Priority Applications for C@ribNET

1. Environment for collaborative research
2. A Regional Digital Library for Caribbean Tertiary institutions
3. Shared Student Information system for Tertiary Sector
4. Support for Virtual Classrooms for E-learning
5. Open Educational Resources (OERs)
6. Single Virtual University space
7. Regional Tertiary Education Portal
8. Commodity Internet Access
9. Functional Cooperation
   - Climate Change
   - Disaster management
   - Crime and Security,
10. Telemedicine and remote diagnosis from anywhere
THANK YOU !!!!