"Climate Change: migration in Small Island Developing States (SIDS) in the Caribbean"

"The case of St Vincent and the Grenadines": Leicester, UK. Wednesday 21st June 2017. Andrew Simmons, Kingshill.reserve@gmail.com Human migration would be one of the important consequence of Climate change (IPCC 4th Report)

Current estimates of refugee is estimated above 15 million - indications are the figures will double soon

Estimated that 200 million people will be environmentally displaced by 2050.

The figures were revised upwards by Christian Aid to 1 billion environmentally displaced persons by 2050

<u>SIDS</u>

Recognized as a special case both for their environment and development by UNCED in 1992. (recognition in the context of Agenda 21)

UN Action - The Barbados Programme of Action (1994) The Mauritius Strategy (2005)

SIDS contributed less than 0.1% of Green House Gases but faced the brunt of the Climate change burden. Caribbean SIDS produce less than 0.49%

Challenges Facing Small Island Developing States

Small Island Developing States (SIDS) are presently facing the worst development challenge for centuries.

- Narrow resource base depriving them of the benefits of economies of scale; Small domestic markets and heavy dependence on a few external and remote markets;
- High costs for energy, infrastructure, transportation, communication and servicing;
- Long distances from export markets and import resources;
- Low and irregular international traffic volumes;
- Little resilience to natural disasters;
- Growing populations;
- High instability of economic growth;
- Fragile diverse and natural environments.

Climate Change Drivers

Affecting economic growth, health indicators, water availability, food production and the fragile ecosystems in SIDS (IPCC, 2007, 2014)

Flooding of low-lying coastal areas, increased water scarcity, decline in agricultural yields and fisheries resources, and loss of biological resources (Hulme, M., R. Doherty, T. Ngara and M. New, 2005).

Bleaching of Coral reefs - threatening the tourism industry in the Caribbean (increased sea surface temperatures and acidification of the oceans)

Sea level rise, hurricanes and extreme weather evens - threatening mangroves, thus reducing yields in fishes. Water resources are expected to be stressed by changes in precipitation patterns, (UN-OHRLLS, 2007).

Destruction of economic sector – Fisheries, Agriculture and Tourism

<u>St Vincent and the Grenadines</u>: "The Gem of the Antilles"



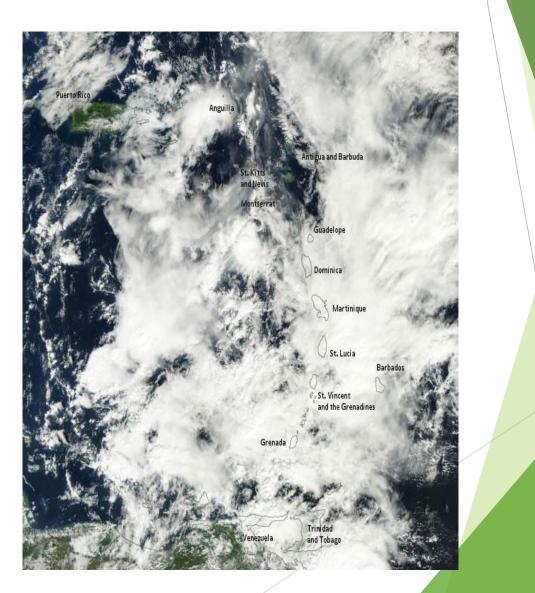


St Vincent: Viewed as the cradle of the modern environmental movement: - Oldest Environmental legislation in the world (Kings Hill Forest Reserve, established in 1791), Order No. 5, *1791* (Grover, 2000) - Oldest Botanical Gardens in the Western Hemisphere established in 1765



Vulnerability Survey

- The main population centres, 85 percent of the population, lie on a narrow coastal strip less than 5m above sea level and less than 5km from the high-water mark.
- The infrastructure to support these population centres -- roads, telephone and electricity lines, transmission centres, water lines, airports, and marine centres etc.
 (80% of the island's total infrastructural base fall within this area).
- 90 percent of the country's economic investment is situated in this narrow coastal area.



Weather System and Topography



Destruction of Infrastructure, Agriculture and Tourism industry: estimated at US\$300 million



Destruction & Carnage of Climate Change



Destruction, Displacement, poverty & Human Misery 13 dead, 1000s injured and 1000s of households - lost of homes and or displaced



<u>Critical Issues & Actions for consideration to</u> <u>combat Climate Changes</u>

- Developed countries should provide finance and technology to ensure that developing countries implement their current climate action plans
- The activation and further capitalisation of the Green Climate Fund and other funds
- The establishment of a Climate Justice Tribunal that:
 - Allows citizens to bring claims against their own and other governments; & hear claims against corporations with great historical responsibility or climatedamaging future projects.

- All countries should adopt a global scheme to fund renewable energy systems
- Parties should decide that no 'climate finance' can be directed to fossil fuel projects;
- The New Climate Agreement should reinforce platforms and institutions that allow for the sharing of technology, capacity building and best practice
- Climate Justice loss and damage: Commitment to support SIDS for unavoidable climate impacts beyond current climate action (Thrown out by COP21 of UNFCCC).

JEMS Capacity Development Programme website: jemssvg.com



Community Risk and Vulnerability Mapping exercises

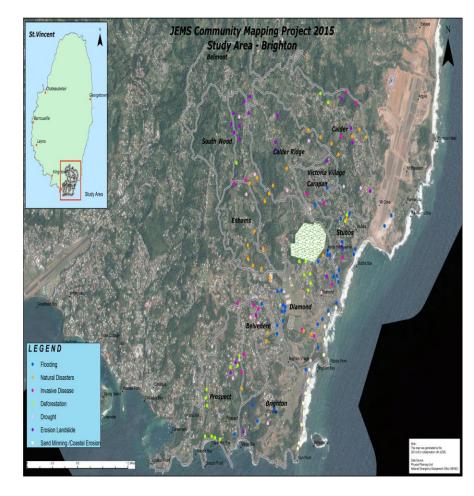
(6 areas: 40 villages, 3 towns and 1 island)

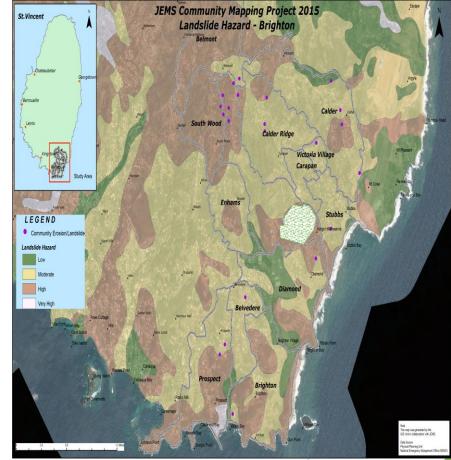
Vermont Community Participatory Risk Mapping Exercise Georgetown Community Risk Mapping Exercise





GIS Maps evolving from the Community Participatory Mapping exercises





Community and Youth Leaders Training Workshop on Climate Change, 19-20th June, 2015

Bentley Browne, Director of Social and Sustainable Development Division, OECS Secretariat, St Lucia

Cross Section of Participants

