Promoting Education for Public Engagement in Climate Change Mitigation and Adaptation Initiatives in Guyana

Paulette Bynoe Lecturer II

School of Earth and Environmental Sciences
University of Guyana

February 2, 2012 Mayaguez, Puerto Rico

Outline of Presentation

- Setting the Context
- Introducing Guyana
- Highlights of a KAP Study (2009)
- Public Education Programme
- Recent Initiatives
- Challenges
- Opportunities



- The climate has changed.
- The climate is changing.
- The climate will continue to change

(Dr. Michael Taylor, 2011)

EDUCATION CAN CHANGE THE CLIMATE

Setting the Context

"National strategies for addressing climate change can only succeed with the full engagement of the general public and important interest groups, or "stakeholders..." Article 6

Article 4.1 "in the implementation of this Article, Parties shall promote and facilitate:

- (i) development and implementation of educational and public awareness programmes;
- (ii) public access to information;
- (iii) public participation in addressing climate change, its effects and responses to development; and
- (iv) training of scientific, technical and managerial personnel.

Setting the Context

Public engagement is about translating shared interests into deliberate collective efforts.

(Orr and Rogers, 2011).

Setting the Context

Chapter 36, Agenda 21 (United Nations, 1992)

"Both formal and non-formal education are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making."

Introducing Guyana



- Low-lying state with area of 215,000 km²
- Population: 762,498 people (35% below poverty, 19% below extreme poverty, GOG 2002);
- Over 90% on coast, which is approximately 1.5 metres below mean high tide level.
- 77.2% percent of the country (152,050 km²) covered by forests. Guyana is a new sink country.

How will Climate Change impact on Guyana?

Changing Weather Patterns

- >> extreme events floods , drought.
- Sea Level rise expected for Guyana is 40 cm by the end of the 21st century.
- Agriculture impacts (Guyana loses about 10% of its GDP annually due to coastal inundation. Implication: approx. 1 billion dollars for adaptation.
- Salt water intrusion, limited freshwater availability during the dry season; increased pest infestation and emerging diseases.
- Increased forest and wild fires due to warmer temperatures





Highlights of the 2009 KAP Study

(Quota = 500) Weighting of Target Groups:

- Parliamentarians: 61
- Business entity: 239
- Media Reps: 33
- Students: 100
- Farmers: 66

Highlights of the 2009 KAP Study

- Most respondents who had heard of the term 'climate change' could correctly explain its meaning.
- 20 percent of all respondents could not name one greenhouse gas.
- All parliamentarians surveyed acknowledged that global climate change would directly influence their lives, while 20 percent of the media personnel disagreed.
- Over 30 percent of respondents were unaware of the causes of climate change.
- About 85 percent of the respondents surveyed within each targeted group indicated that global climate changes will have a direct influence on their lives.
- Over 70 percent of the respondents within each category were not knowledgeable of any international agreement that deals with climate change.

Highlights of the 2009 KAP Study

- Approximately 1/3 of all respondents thought that one of the most effective measures is education, training and information.
- More students (65.6 percent) were very concerned about climate change than any other group.
- Over 80 percent of all respondents thought that it is important for Guyana to address the climate change issue.
- 89.6 percent of all respondents surveyed believed that Guyana should use its forests in fighting climate change by avoiding deforestation.
- All respondents expressed willingness to learn more about climate change and how they and their organisations could help to mitigate and/or adapt to climate change.

<u>Issues from the 2009 KAP Study</u>

- Mitigation and adaptation options to address climate change;
- Avoided deforestation and a low carbon economy;
- Lifestyles and their contribution to climate change;
- Importance of individual actions required to combat climate change; and
- Importance of corporate actions required to combat climate change.

Issues from the 2009 KAP Study

- The science of climate change (made simple), including enhance greenhouse effect, greenhouse gases and the process of global warming;
- The evidence of climate change;
- Impacts of climate change;
- International Agreements on climate change and Guyana's obligations;

Strategic Goals

- Enhanced awareness and understanding of all social groups (in Guyana) of climate change causes, impacts and solutions;
- Empowerment of every citizen of Guyana to make lifestyle decisions and take individual actions that will seek to strengthen and / or support national and international efforts to avert the grave consequences of climate change;
- Practice of Corporate Social Responsibility in the private sector in the context of Guyana's Low Carbon Development Strategy (LCDS) and general sustainability.
- Increased public access to information on climate change.
- Increased opportunities for training of scientific, technical and managerial personnel to address climate change issues at the strategic level.

Key Institutions as Facilitators and Partners

- Government ministries and agencies
- Academia
- NGO (for example CI, WWF)
- Regional and International Institutions
 (UNICEF, UNDP, CARICOM, CCCCC, IDB, FAO, EU)

Target Groups:

- Households;
- Children and youth;
- Teachers and teacher trainers;
- Policy and decision makers (including parliamentarians);
- Consumers;
- Religious organisations

Target Groups:

- Indigenous peoples;
- Tradesmen and technicians;
- Private sector;
- Media personnel;
- Resource users
- Professionals from various sectors
- Scientific and academic community

Target Group: Children and Youth

Objectives:

- To increase knowledge of climate change issues through integration.
- To provide opportunities for local actions (in a local environmental setting) that address climate change.
- To develop in youths skills to discern the causal relationships between lifestyle choices and climate change impacts, and to promote opportunities for critical thinking and problems

Target Group: Children and Youth

- Audit of present school's curricula at nursery, primary, secondary and technical level
- Infusing/integration of climate change issues in existing curricula, using pilot subject initially
- -Magazines and comic books
- Formation of Environmental Clubs in schools and communities
- Hosting of youth camps during Summer breaks, hikes, tours
- -Science Fair focusing on Climate Change
- -Essay, poster and painting competition
- Preparation of booklet, pamphlets and workbooks
- -Production of bi-annual newsletter which can be produced by Environmental Clubs
- Integration of climate change in the Adults Education Curricula
- -Quizzes and debates

Recent Activities



Recent Activities









Recent Activities

- Let's Learn About Climate Change-a highly informative 37 page book was published for primary schools with support from CCCCC and USAID
- Recently reviewed to include aspects of Guyana's Low Carbon Development Strategy (support provided by UNICEF)
- Development of lesson plans and students activity sheets on CC for Science and Social Studies (Levels 1 to 6)

<u>Challenges</u>

- Fragmented approach/Limited networking
- Adequate financial resources
- Teacher training
- An overcrowded curriculum
- Inadequate teaching and learning resources
- Limited monitoring and evaluation
- Lack of demonstration projects

Opportunities

- The National Low Carbon Development Strategy
- Development of a Sustainability Education Policy
- Resuscitation of the National Environmental Education Advisory Committee
- Pre-service and In-service teacher training
- Development of general and specialised courses for university students

Education can change the climate!!!

THANK YOU

MUCHAS GRACIAS