



CONCEPT NOTE

UNESCO's International Science School 29 May - 1 June 2018, Havana, Cuba

“Building resilient societies through the links between research, disaster risk reduction and climate change adaptation in the Caribbean”

A collaborative capacity building initiative of UNESCO's international science programmes



SUMMARY

The sub-regional UNESCO's International Science School will provide a space for collective learning in relation to environmental adaptation in Caribbean SIDS. This capacity-building event is conceived as a knowledge brokering exercise that will bring together academics, public officials and representatives from civil society, prioritizing young participants and women.

The school will focus in the identification of capacity gaps that might exist at the sub-national, national and sub-regional levels in relation to connecting scientific research with agendas for environmental adaptation, and participants will address possible alternatives for the solution of those gaps.

The school will be organized by the Cuban MOST National Committee with the support of the Ministry of Science, Technology and Environment (CITMA) of the Republic of Cuba.

This activity of the UNESCO Social and Human Sciences Sector (SHS), the Natural Sciences Sector (SC), and the Intergovernmental Oceanographic Commission (IOC) will be conducted as a collaborative endeavor between the Management of Social Transformations (MOST) Programme, the IOC Subcommission for the Caribbean and Adjacent Regions Intergovernmental Oceanographic Commission (IOCARIBE), the International Hydrological Programme (IHP), the Man and the Biosphere Programme (MAB) and the Small Islands and Indigenous Knowledge Section (SC/PCB/SII).

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I. BACKGROUND AND JUSTIFICATION

Changing Minds, not the Climate!

The hurricane season of 2017 in the Atlantic - the highest in terms of the number of major hurricanes since record keeping began in 1851- tragically confirmed the environmental vulnerability of Caribbean SIDS.

Irma and Maria, the two category five storms to batter the Caribbean in just a week, in September 2017, made obsolete traditional notions of preparedness based on the ordinary and the familiar.

The ferocity of those mega-storms brought devastation of catastrophic proportions to the islands. Those events were a timely reminder that the Caribbean needs a paradigm shift in their sub-regional and national approaches to development planning in a highly vulnerable context.

However, more frequent and intense tropical cyclones are only part of the problem. Ocean and hydro-meteorological events including changing precipitation patterns, droughts, soil salinization, land degradation, landslides, coastal erosion, storm surges and flooding as well as sea level rise are all processes for which effective adaptation strategies are urgently required.

The UNESCO Science Report already urged the Caribbean to “take climate change adaptation more seriously.” The Caribbean is the most tourist-intensive region in the world, making their economies particularly vulnerable to the vagaries of Nature. According to the World Travel and Tourism Council, the Caribbean will become the most at-risk tourist destination in the world between 2025 and 2050.

The majority of the island economies are tourism and agriculture based. Tourism represents on average, 14.8% of GDP and 12.9% of employment in the Caribbean thus highlighting the potential for economic losses in this context. Some projections indicate that losses could total US\$22 billion annually by 2050, representing approximately 10% of the regional economy.

Climate change is expected to increase the intensity and frequency of droughts in the Caribbean. According to FAO, the sub-region faces significant challenges in terms of drought. The Caribbean already experiences drought-like events every year, often with low water availability affecting agriculture and water resources, and a significant number of bush fires. The Caribbean accounts for seven of the world's top 36 water-stressed countries, while Barbados is in the top ten. Cuba experienced in 2017 the worst drought in one century.

Critical issues which the UNESCO's International Science School seeks to contribute to resolve

Environmental adaptation involves decisions that require a significant amount of deliberation because the decision problem involves one or several of the following features: important consequences, uncertainty, conflicting objectives, multiple stakeholders, complexity of the decision environment, and need for accountability.

All decisions related to environmental adaptation, whether they are personal, public, or business-related, are based on the decision maker's views and values. Science can and should help decision

makers by shaping their views. Regrettably, results of science are not always accessible to decision makers, and scientists often do not understand decision makers' information needs.

Exchanges among researchers, policymakers and civil society inevitably relates to questions such as:

- How to manage environmental hazards when uncertainties are not fully answered by science? Do decision makers have questions that are not easy to answer scientifically?
- How to deliver “simplicity out of complexity”? In other words, how to render complex problems tractable when dealing in the public policy arena with complex environmental systems?
- How to address controversial opinions during the process of informing policymakers and other “users” of scientific knowledge?
- What could scientists do when decision makers treat with suspicion, or even contempt, recommendations based on research?

Experience with MOST Schools -one of the capacity building mechanisms of UNESCO's MOST Programme- indicates that the format proposed for the UNESCO's International Science School can enable participants to acquire skills that are related to answering those questions. Collective exchanges could assist participants in transforming their perceptions of a problem (“the gap”) into an opportunity (“learning from the gap”).

Determination of the need of the UNESCO's International Science School

The organization of this UNESCO's International Science School was jointly agreed by Dr. Elba Rosa Pérez Montoya, Minister of CITMA, and Nada Al-Nashif, ADG/SHS, at a meeting in Paris, 31 October 2017.

Minister Pérez Montoya indicated that the government of Cuba was interested in the organization of this type of event to conduct capacity building and knowledge brokering initiatives for the benefit of young stakeholders: academics, public officials and representatives from civil society, not only from Cuba but from the Caribbean sub-region as well.

The minister expressed that CITMA, through the MOST Cuban National Committee, could align the UNESCO's International Science School to “Life Task: facing Climate Change in the Republic of Cuba”, a State Plan approved by the Council of Ministers on April 2017. This State Plan corresponds to the process of “localization” of several SDGs and it represents a contribution of Cuba to the 2030 International Development Agenda.

Minister Pérez Montoya considered that the UNESCO's International Science School fits Task # 10 of Project Life: *“Prioritize measures and actions to augment risk perceptions and increase the level of knowledge and the degree of participation of the entire population in dealing with climate change and a general knowledge promoting the saving of water”*.

The ADG/SHS thanked the support of CITMA to organizing an event of sub-regional scope and confirmed the interest already expressed to MOST by academics from other Caribbean countries in organizing such event, after recent meteorological events in the zone. The ADG/SHS stated that the convening capacities of MOST allows to involve diverse UNESCO international science programmes in the preparation of the UNESCO's International Science School, something that will represent a unique contribution from the organization.

Other Member States from the Caribbean (based on discussions during the General Conference of UNESCO and in follow up to the CARICOM members' meeting with the Director General of UNESCO) have since endorsed the initiative.

II. OBJECTIVES

A. Development objectives

The UNESCO's International Science School will contribute to the process of translating scientific knowledge into the practical "localization" of six Sustainable Development Goals (SDGs) of the 2030 International Development Agenda in Caribbean Member States:

SDG 11 "Make cities and human settlements inclusive, safe, resilient and sustainable".

SDG 13 "Take urgent action to combat climate change and its impacts".

SDG 14 "Conserve and sustainably use the oceans, seas and marine resources".

SDG 15 "Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss".

SDG 16 "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, build effective, accountable and inclusive institutions at all levels"

SDG 5 "Achieve gender equality and empower all women and girls", which is a crosscutting SDG in all UNESCO's programmes.

The UNESCO's International Science School will address these six SDGs through the synergies of UNESCO's international scientific programmes. It will be the first time that UNESCO combines the potential for systems thinking represented by those programmes to conduct a critical assessment of existing gaps in transforming knowledge in environmental adaptation in the Caribbean.

B. Immediate objectives

The UNESCO's International Science School aims to attain immediate objectives in four main areas:

Capacity building:

Equip participants with practical knowledge on systems thinking and foresight, focused on the timely use of scientific evidence and analysis in decision-making.

Assist Member States with a cost-effective approach to training that enhances the skills of a diversified group of stakeholders in relation to environmental adaptation.

Policy advice:

Improve the understanding of researchers, policymakers and civil society in relation to the crucial role of culture, political contexts, and institutional processes in the take up of scientific research. The Caribbean Region is a remarkable place to test this approach because there is a major difference between the Latin American and CARICOM countries.

Advocacy:

Contribute to fostering a culture of evidence-informed decision making in relation to environmental adaptation in in Caribbean SIDS.

Youth participation:

Support through enhanced capacities the creativity and energy of young stakeholders, in the area of environmental adaptation.

III. PROJECT IMPLEMENTATION

A. Expected project results

- Enhanced understanding of the factors that influence the linkages between scientific research and implementation processes in relation to environmental adaptation in Caribbean SIDS.
- Collective and critical reflection on existing policy-making and research management processes, their strengths and limitations in the sub-region.
- Acquisition of new tools, by young stakeholders, for evidence-informed policy-making and implementation

B. Expected outcome document

Drawing on the exchanges during the event, UNESCO will produce a succinct text with recommendations for future work on the following main areas:

- Recommendations directly addressed to the four UNESCO international science programmes that participated in the event.
- Recommendations to the main three categories of stakeholders that participated in the event: government officials, academics and representatives of civil society.
- Partnerships

C. The format of the proposed UNESCO's International Science School

The UNESCO's International Science School will provide a space for collective learning among a selected group of diverse development stakeholders in Caribbean SIDS, in relation to environmental adaptation.

The school will focus in the identification of the capacity gaps that might exist at the sub-national, national and sub-regional levels in relation to agendas for environmental adaptation, and it will address possible alternatives for the solution of those gaps.

The school, conceived as a knowledge brokering exercise, will bring together academics, public officials and representatives from civil society.

Discussions will be structured around two main questions:

- What do policymakers want from researchers?
- What do researchers think they should provide to policymakers?

The format of the School encompasses a mixture of formal presentations, group work and open discussions over 4 days of intensive exchanges.

Profile of participants:

- Government officials (Regional & sub-regional public entities, key ministries/ municipalities)
- Universities, research centers, students
- Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs)

- UNESCO's international science programmes / UN agencies
- Young and women are targeted beneficiaries of this school.

The working languages will be Spanish and English.

Simultaneous translation will be provided.