

# Connections

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An electronic bulletin about interdisciplinary research, teaching and outreach at the Centre for Resource Management and Environmental Studies (CERMES) Faculty of Pure and Applied Sciences, The University of the West Indies, Cave Hill Campus Editors: Maria Pena, Dr. Patrick McConney



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## A new look for the Connections

It's the April Connections in May. Some would say 'better late than never'. We regret the delay in issuing these CERMES Connections but, now that they are here, just look at the transformation! It's a brand new look just for you.

Since our last issue in February, CERMES has welcomed two new staff members and another PhD candidate to our growing CERMES family. Meet them in this issue. Our climate change students flew off to Belize in March for the annual climate change field trip, while the coastal-marine and applied meteorology groups continued with their courses.

MSc courses are winding down and all of the students are beginning to think of potential research with which to occupy themselves during summer.

We have continued to make improvements to our

website and have added lots of new information in the form of projects and technical reports.

As always, our staff continues to be occupied with teaching and applied research projects with outreach.

#### Water resources management lecturer

CERMES gladly welcomed Dr. Adrian Cashman on 19 February. He joins CERMES as Lecturer in Water Resources Management and will be responsible for launching the new MSc specialisation stream in Water Resources Management.

Dr Cashman's research work focuses on the governance of water resources and policy development in response to drivers such as climate change, stakeholder engagement and empowerment and, the regulation of resources by state and trans-national agencies and economic aspects of water management.

He has 25 years of experience working in the water sector in Namibia, Botswana, South Africa and Europe. This has included senior positions in government responsible for water management, with the private sector as a consultant and as a Research Fellow focusing on the economic and institutional aspects of asset management.

His interests include the

application of applied science and engineering to water resource management; institutional frameworks and the role of civil society organisations in the management and regulation of water resources and the delivery of water services.



Dr. Adrian Cashman Lecturer

#### **2 CERMES CONNECTIONS**



15-16 May 2007 MarGov Inception Workshop, Shell Suite A, UWI Cave Hill Campus, Barbados

The workshop will set the stage for 4 years of participatory research, capacity building, communications, small grants and other aspects of project implementation. The main aim of the inception workshop is to refine the research problem, questions and approaches to project implementation with key partners early in the project to ensure that the project is demand-driven.

## Introduction to the MarGov project

Many people in the Caribbean depend on good governance of marine resources for their livelihoods and for development to be sustainable. However, there is an urgent need to build capacity, and network connections for adaptation and resilience, into present and planned marine resource governance in the eastern Caribbean. To assist in addressing this need, CERMES is undertaking applied research on marine resource governance in the eastern Caribbean through the Marine Resource Governance (MarGov) project.

Using a conceptual framework derived from complex adaptive system (CAS) and social-ecological system (SES) perspectives, the research focuses on understanding governance related to small-scale fisheries and coastal management in the eastern Caribbean mainly through network analysis. It applies the results to the examination of how present and planned marine resource governance initiatives can become more adaptive and resilient at various scales to benefit a diverse array of stakeholders in the eastern Caribbean.

The project, which started on 1 March 2007, with a duration of four years, will generate lessons applicable to the wider Caribbean and beyond. It is part of a major research programme on coastal and marine resource governance aimed at sustainable development.

The investigation will be participatory, involving partners in research design, implementation and

### New faces at CERMES



Donna Roach MarGov Communication Assistant

CERMES also welcomed Miss Donna Roach and Mr. Kemraj Parsram to the MarGov project team in March.

Donna, the project communication assistant, is a recent MSc graduate of the Natural Resource and Environmental Management Programme offered by CERMES. Her research dealt with the assessment of marine protected area (MPA) management effectiveness at three MPAs within the region.



Kemraj Parsram PhD candidate

Kemraj, PhD candidate, is also a MSc graduate of the Natural interpretation in ways that should facilitate skills transfer and later uptake. In addition to strengthening research partners, the project will produce one PhD and two MPhil graduates as research assistants.

Communication and collaboration are key features of the project. It is important for the project to communicate efficiently and effectively to partners, stakeholders and target institutions for uptake. A communication strategy and plan will be developed and implemented to provide a series of project publications ranging from popular to academic literature, as well as electronic products on compact disc and the internet.

For more information, visit the MarGov website at http://cermes.cavehill.uwi. edu/margov\_profile.html

Resource Management Programme, CERMES. He came to the project after working as a natural resources management consultant with the OECS and as Technical Officer with the Caribbean Conservation Association. His professional experience includes environmental impact assessment, coastal and marine resources management, protected areas planning and management; and academic research in forestry, climate change and coastal and marine focused on understanding resources.

Mr. Parsram's PhD research is focused on understanding

governance related to smallscale fisheries and coastal management in the eastern Caribbean. He will use network analysis, with emphasis on transboundary linkages, to determine how present and planned marine

#### CLME project update

The CLME website was officially launched on 23 April 2007. Please visit it for further information at http://cavehill.uwi.edu/ cermes/clme.html



Prof. Robin Mahon, Dr. Patrick McConney and Donna Roach (CERMES MarGov Project) joined Dr. Lucia Fanning and Bertha Simmons (CLME Project Unit) as fisheries, marine conservation and ocean governance experts from around the Caribbean and beyond, met in Jamaica, February 28 to 3 March, 2007 at the CLME Project Concept/Transboundary Diagnostic Analysis (TDA) Synthesis Workshop.

The workshop was held to discuss major areas of

concern affecting the shared living marine resources in the Caribbean and the activities for inclusion in the full-sized Caribbean Large Marine Ecosystem (CLME) project.

The agenda included major issues affecting the management of shared living marine resources within the Caribbean LME, their root causes and potential solutions as well as a review of a regional living marine resource governance framework. A discussion on potential demonstration

Climate change Belize field trip

resource governance initiatives can become more adaptive and resilient at various scales to benefit a diverse array of stakeholders in the eastern Caribbean.

projects (focusing on flyingfish, lobster, shrimp and ground fish and reef fisheries) aimed at introducing ecosystembased marine management in the context of the governance framework was also a key component of the workshop.

Other components included promoting governance, the Caribbean Sea initiative, the management of large pelagic fishes and forming fisherfolk organisations.



Examining coastal erosion in Monkey River



Chalilo Dam

#### Dr. Leonard Nurse and Neetha Selliah accompanied four CERMES climate change students on an eight-day field trip to Belize from 16 - 24 March as part of the MSc course 'Climate Change Impacts: Mitigation and Adaptation. The purpose of the field trip was to investigate the effectiveness of various adaptation and mitigation measures to combat the impacts of climate change. Sites visited included the Monkey River village to examine the impacts of sea level rise on coastal erosion

and the potential loss of a village to the sea; carbon sequestration plots in the Rio Bravo Conservation Area; the Chalillo Dam to examine the potential impact of climate change on the flow rates of the Macal River; the Belize Sugar Inc. to tour the sugar factory and learn about the proposed co-generation plant; Blue Creek Mennonite farms to discuss rice production in relation to methane emissions; the Manatee Lodge at Gales Point to examine land use and endangered species habitats; the Belize Brewery

methane capture facility to observe methane capture in an industrial setting; the Mountain Pine Ridge Forest Reserve to learn of the devastation of the Pine Bark beetle on the reserve and the impacts of climate variability on this outbreak and the National Meteorological Service to observe its role and activities in climate change impact studies .

Special thanks to Dr. and Mrs. Kenrick Leslie and the Community Climate Change Centre (CCCCC) for hosting the group.

#### **4 CERMES CONNECTIONS**

Grenadines MarSIS PhD research receives more than BDS \$ 15,000 from Environmental Systems Research Institute (ESRI), California, US

#### MarSIS research receives grant

In March, Kim Baldwin (CERMES PhD candidate) was notified that the Environmental Systems Research Institute (ESRI) GIS Conservation Program had approved her grant proposal for the Grenadine MarSIS PhD research. This grant includes registration to the ESRI 2007 Users Conference, a number of ESRI GIS classes, several ESRI GIS books and manuals as well as a meeting with the head of ESRI's Marine GIS program to discuss the development of the MarSIS database. The grant is valued at more than BDS \$15,000. Furthermore, Kim will be travelling to San Diego, California this summer to present her research -'Development of a participatory marine space*use information system for the Grenadine Islands* 'at the largest GIS conference - the annual ESRI GIS International Users Conference - with an average attendance of more than 20,000 people.



## Updated CERMES website

Dale Benskin, IT Technician, recently updated the CERMES website on 30 April 2007. There are now nine CERMES technical reports on topics covering socioeconomic characteristics of fisheries, MPAs, liveliohoods analysis and comanagement; as well as numerous MPA management effectiveness project documents and links to the Caribbean Large Marine Ecosystem (CLME) and Marine Governance (MarGov) websites. Please have a browse.



Mustique Primary school students



Calliaqua Anglican Primary school students at the beach clean up at Calliaqua Beachfront

## People and corals project

The final phase of the People and Corals Project, *Evaluation of the use of the workbook*, took place during the period 29 January to 7 February. Katherine Blackman (CERMES Research Assistant) travelled from Grenada through the Grenadines to St. Vincent interviewing the teachers from the previous workshop who had implemented the

workbook and a total of ninety students who were exposed to the workbook. The aim was to get an insight into their perception and experience from using the workbook and to provide any suggestions for its improvement. While using the workbook, two schools -Mustique Primary School and Calliaqua Anglican Primary School - organised a beach clean up at one of their neighbouring beaches with the aim of protecting the reefs through preventing pollution of the ocean. The project has now been completed.