



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

UWI Cave Hill Campus launches recycling initiative

Submitted by Maria Pena

The Cave Hill Campus officially launched its recycling initiative on 8 April 2009 in fine style at the Errol Barrow Centre for Creative Imagination (EBCCI). Dr. The Hon. Denis Lowe, Minister of Environment, Water Resources and Drainage, in his feature address, noted how heartened and impressed he was to learn that CERMES, in collaboration with the Maintenance Department and others at UWI plus the private sector, was spearheading this drive to introduce recycling on campus. He further stated that the University's commitment to such a programme demonstrated that it is no longer comfortable with its current waste management practices and is serious in showing the public that, "operating as a throw-away society will soon be a thing of the past."



Left - Recycling station for open use areas around Campus.
Right - Dr. The Hon. Denis Lowe ceremonially launching recycling at the UWI

Special thanks must be given to the Solid Waste Project Unit, B's Bottle Depot, Ace Recycling, Ink Link, Cave Hill Theatre Workshop and Caribbean Broadcasting Corporation for their roles in this initiative.

Conch assessment continues

Submitted by Hazel Oxenford

Phase 3 of the Barbados Conch Assessment project is now underway, with deepwater surveys of queen conch currently being undertaken on the west and southwest coasts. This is a collaborative project between CERMES, the Environment Division and the Fisheries Division of the Barbados Government. The research is headed by Professor Hazel Oxenford and the survey team is lead by CERMES MPhil student, Caroline Gooding.



The conch survey team. Left to right - Julian Walcott and Caroline Gooding (CERMES), Colvin Taylor and Gregory Franklin (Barbados Fisheries Division)

Ocean life symposium

Submitted by Hazel Oxenford

Professor Hazel Oxenford presented an overview of ***Eastern Caribbean fisheries: Key issues for managers*** at the Ocean Life Symposium in Roseau, Commonwealth of Dominica (23-25 March). The meeting was sponsored by the Eastern Caribbean Coalition for Environmental Awareness (ECCEA) and The Pew Environmental Group. It was attended by scientists, technical

experts, Government representatives, international organisations and civil society from the Caribbean, North, Central and South America, West Africa and Europe. The Symposium addressed several issues including a number of priorities identified in the recently agreed Action Plan for the Conservation of Marine Mammals in the Wider Caribbean Region (MMAP) adopted in September 2008 at the 13th Intergovernmental meeting on the Action Plan for the Caribbean Environment Programme (UNEP-CEP), and the 5th meeting of contracting parties to the SPAW protocol of the Cartagena Convention. The symposium was particularly pleased by the statement of Dominica's Prime Minister, the Hon. Roosevelt Skerrit that his government would not support commercial whaling.

Fisherfolk organize fishing technology event in Grenada

Submitted by Patrick McConney

History was created on 1 April 2009 when the Caribbean Network of Fisherfolk Organisations (CNFO) opened its 3-day fisher exchange and gear technology workshop in Gouyave, Grenada. It is the first time that a regional fisherfolk organization has developed a project proposal, obtained funding and arranged its own fisheries event.

Mitchell Lay, and others of the CNFO coordinating unit, arranged the event ***Caribbean fishers collaborating on suitable gear and techniques that will contribute to sustainable fisheries*** attended by fishers from Antigua, Barbados, Belize, Dominica, Grenada, Jamaica, Nevis, Guyana and Trinidad and Tobago.



Johnson St. Louis of the Grenada Fisheries Division making opening remarks to the assembled fishermen

Patrick McConney of CERMES gave presentations on the ecosystem approach to fisheries (EAF), the impacts of fishing on ecosystems and innovations in gear technology used in responsible fishing. Fishers discussed fishing methods and livelihoods in the context of EAF. They did practical gear demonstrations and shared ideas on sustainable fishing with some fishing communities in Grenada.

Haitian style cooking – using fuel (biogas) from a latrine

Submitted by Anika Sutherland

Dr. Adrian Cashman, CERMES Water Resources Management lecturer, thought it would be a good idea to have his students regularly write short articles on interesting and hot topics in the realm of water resources for the *Connections*. These articles are peer reviewed and we do hope you enjoy this new addition to our newsletter.

Toilets and cooking may seem like strange bedfellows but not for the Water Resources Management (WRM) group who voted this the most interesting short article in their end of the week discussion session.

We learnt that the Bio-latrines is a relatively new initiative being practiced by our Caribbean neighbour Haiti. Haiti is among the poorest countries in the world and has many challenging sanitation issues. Some of these are rooted in the limited access to water. This has implications for the collection and disposal of faecal matter, often associated with public health problems, diseases and in some extreme cases death. The bio-latrines converts human waste into biogas in as little as a month. The gas is being used for lighting, cooking and heating. One of the most important features is that apart from the initial cost of the toilet structures, there is no cost. This invention helps solve sanitation problems and also addresses deforestation issues and by extension water scarcity, environmental degradation and poverty issues. So improving the environment can be as easy as cooking from a latrine – Haitian style!

The other stories researched and contributed by the WRM group included: the Global Water Crisis; Farms, Flows and Fraud?; Flying Toilets (a close second); Water refugees; Social justice & water scarcity and; the tragedy of our common environment.

St Lucia's water privatisation aborted

Submitted by Adrian Cashman

Recently St Lucia's project to privatise its water utility WASCO experienced a set back. Tendering for bids to privatise the country's water company was aborted. The delay may be brief however as the government appears to be committed to going ahead with the proposals. The government said it does not have the 250 million dollars required to rescue WASCO from its financial woes.

Privatisation of water utilities is an emotive issue especially in the Caribbean where water is seen by many as a social good that should be provided by governments in the same way that health care and schooling are. The Caribbean has its own fair share of privatisation initiatives that have gone bad over the years. This has in part fuelled opposition to moves by governments to out-source water services as a response to poor service provision and severe financial difficulties in running water utilities. The situation has often been exacerbated, in the eyes of the public, by external pressure from bodies such as the World Bank on governments to reform their water sector.

CERMES is currently undertaking a regional review of the status of water policy across the Caribbean. The recent events in St Lucia illustrate that policy development is a more dynamic process than it might at first sight appear. We will have to wait and see what transpires in St Lucia but one thing these recent events have demonstrated is: don't be surprised by the unexpected!

CERMES welcomes Fellow

Just this week CERMES welcomed UN Nippon Foundation of Japan Fellow, Mé-Chinhô Costa Alegre to the Department.



UN Nippon Japan Fellow, Mé-Chinhô

Mé-Chinhô comes from the Democratic Republic of São Tomé and Príncipe. He is a legal advisor with the Maritime and Port Authority of São Tomé and Príncipe. His

proposed research topic will address challenges in the management of marine affairs in Small Island Developing States (SIDS) with large ocean jurisdictions.

This Fellowship Programme is administered by The Division for Ocean Affairs and the Law of the Sea (DOALOS) of the Office of Legal Affairs, United Nations, NY. Until now the fellowships have been awarded at leading developed country universities. DOALOS is of the view that they should also be tenable at developing country universities with a strong reputation and has decided to begin this process with CERMES at UWI. Needless to say we are proud and honoured to have been singled out in this way.

Belize field trip

Submitted by the Climate Change and Water Resources Management students

Initially the thoughts of visiting Belize during March were full of anticipation and expectations. Knowing very little of the country besides it being tropical and having descendants of the Mayan people, we could have done well to read "Knowing Belize for Dummies". However, the CERMES climate change field trip met all expectations.

One of the most interesting aspects of the tour was the presentation of real-life situations and issues that demanded the application of environmental resource management solutions. This demand required, not one but several. For example, the Climate Change students were abuzz



Examining the waste water treatment facility at the University of Belize research station at Hunting Caye

with ideas and potential solutions when they visited the University of Belize Research Station there on Hunting Caye. This station illustrates

attempts at using renewable resources, which in Belize are plentiful.

The expanse of the country and the sparse distribution of the population make the traditional centralised provision and distribution of services – telephone, water, electricity and other public goods - very expensive and impractical. As a result, duplication of services is required to meet community needs. As a way to meet these needs, the adoption of renewable energy sources was utilised. Examples of this could be seen at the remote San Benito Poite village, where photovoltaic panels were deployed to provide electricity.



San Benito Poite

The Belize Sugar Industry (BSI) sugar factory also utilises bagasse as a fuel source for a cogeneration or CHP (combined heat and power) plant that produces internal power and power to the grid. Small privately owned hydro-dams at San Miguel and Macal likewise utilise underground and surface water respectively, to provide power that contributes to the national grid. The use of methane (CH₄) to provide power at the Belize Brewery Co. Ltd (BBCL) is also another example.

Not only were we able to see renewable resources in use, but we were also able to hear and discuss the impact of climate and weather on rice cultivation at Big Falls and Blue Creek, CHP and hydro-power production at Tower Hill and Hydro-Maya and Chalillo respectively, as well as water distribution upstream of Monkey River. The Monkey River situation proved quite interesting and alarming as observations reveal coastal degradation as a result of both climate and farming practices.

Situations that held implications for climate were also observed. For example, the “Milpa” (slash and burn) cultivation practiced by the indigenous farmers places pressure on the land and causes soil erosion. Other challenges included the release of warm waste water into the rivers and CO₂ into the air by BSI and BBCL, the release of CH₄ by the rice fields, nitrogen by BBCL, and the Belize Natural Energy production of fossil fuels.

Belize abounds with natural resources and examples of attempts at using renewable resources. Likewise, as expected, there are issues that challenge further application of sound and sustainable environmental resource management. Related cross-cutting issues like sustainable livelihoods, climate change, sustainable management of resources, poverty, wealth distribution, governance and others, can all be found in one place – Belize - an Environmental Resource Management Student’s dream visit.

Knowledgebase for lessons learned and best practices in the management of coral reefs

Submitted by David Gill (Director, Meridian Environmental Consulting Agency)

The Global Environment Facility (GEF) has sought to assist groups and governments in preserving and promoting the sustainable use of tropical coastal ecosystems by investing over US\$320 million to improve their management. Many of these projects have had successes and failures, and from them have been reaped “lessons learned” which can assist others who may be confronted with similar challenges or require guidance.

In 2005 the WorldFish Center embarked on a project to review major lessons learned from large GEF projects on tropical coastal ecosystems. This project, ***Knowledgebase for Lessons Learned and Best Practices in the Management of Coral Reefs*** involved the review of 30 GEF and 26 non-GEF projects from around the globe that focused on sustaining and protecting tropical ecosystems.

Within the Caribbean, interactive “mini-workshops” are being conducted in specific countries to inform coral reef managers and scientists on the

availability of major outputs of the project and to facilitate the sharing of experiences of those who have been involved in coral reef management projects in the past. So far these workshops have taken place in Jamaica, Belize, Barbados, St. Vincent, Grenada and the Bahamas. Additionally, a Caribbean e-group open to all interested persons has been formed

(<http://tech.groups.yahoo.com/group/gefil>) for coral reef managers and scientists to discuss their ideas and experiences. CERMES staff participated fully in the Barbados workshop providing information on lessons learned from a number of resource management projects, including the Sustainable Grenadines project, socio-economic monitoring in the Negril Marine Park and the Barbados sea moss project, among others.



Participants interacting at the Barbados mini-workshop



MarGov project update

by Carmel Haynes and Patrick McConney

This section has been specially added to our e-bulletin to inform, update and share lessons learned with partners, stakeholders, policy makers and other interested persons about the IDRC-funded CERMES Marine Resource Governance in the eastern Caribbean (MarGov) project.

MarGov loses researcher



The MarGov Team was shocked and saddened by the sudden passing of one of our MPhil Researchers, Tenile Grant. Tenile passed away on Friday, 20 March, 2009. Tenile was on study leave for 2 years from the Ministry of Agriculture, Fisheries Division in Jamaica, where she was a Senior Fisheries Officer. For her MarGov research she was examining

national level governance in Barbados as it relates to fisheries. Her research will be carried on in a more limited capacity by the rest of the team. We

at CERMES, especially her MPhil colleagues, miss her a lot.

Sea eggs in discussion

As part of her investigations into the sea egg fisheries of Barbados and St. Lucia, MPhil Researcher Shelly-Ann Cox worked with the Barbados Fisheries Advisory Committee (FAC) to organise a public panel discussion on this fishery. Entitled "*All your eggs in a roe - having your sea eggs and eating them too*", the event took place on April 14, 2009, at the Fisheries Division in Bridgetown and featured a panel including Chris Parker, Fisheries Biologist at the Fisheries Division; Sergeant Wendell Thomas, an officer attached to the Marine Police Division; and Maria Pena, CERMES Project Officer. The discussion was moderated by Angela Watson, deputy chair of the



FAC. This initiative was a step towards establishing a sea egg management council which will work towards ensuring that sea eggs return to harvestable levels.

New research collaboration

Keith Gibson, a PhD Researcher in the Faculty of Environmental Design at the University of Calgary, Canada has expressed an interest in carrying out collaborative research with the MarGov Project as it relates to his thesis on how Resilience Thinking can support and enhance ongoing coastal zone and watershed conservation projects in Tobago. Keith described his work, expected to run for two years starting in June 2009, as an exceptional opportunity for innovative conservation initiatives in Tobago to engage an alternative perspective on their work in the context of a sustainable future for Tobago's people and natural heritage. To this end, Keith travelled to CERMES and met with the MarGov Team on 9 March to present his project and get feedback and discuss how his project could complement MarGov's research.

Supporting CRFM in its communications thrust

As part of its mandate to improve transparency, accountability and participation in the management of fisheries resources within the region the MarGov Project is collaborating with the Caribbean Regional Fisheries Mechanism (CRFM) to raise public awareness of the Common Fisheries Policy and other relevant matters related to marine governance. This collaboration has led to MarGov Communications Officer Carmel Haynes being contracted with the CRFM to draft the first Communications Strategy for the CARICOM agency and conduct a number of public awareness exercises. The first was a panel discussion held at the CARICOM Secretariat Annex in Turkeyen, Guyana, that included representatives from the Guyana Fisheries Advisory Council, industry representatives, and the Guyana Fisheries Division; while the second was a panel discussion held on Dominica's popular "The Heng" morning radio programme on Kiri FM. The Dominica discussion included Dominica Fisheries Division and national fisherfolk organisation representatives.

MarGov Media Exposure

As part of the collaboration with the CRFM, MarGov Communications Officer Carmel Haynes accompanied Deputy Executive Director of the CRFM, Milton Haughton, on the "First Look" morning show on HBTV 9 in Guyana and "The Heng" in Dominica. Also, having transformed the October 2008 MarGov panel discussion in Barbados – "Caribbean Fisheries: Sinking or Swimming in a Sea of Uncertainty" – into a 45-minute DVD programme, the video was then used as part of the pre-publicity for the CRFM panel discussions and aired on NCN TV in Guyana and Marpin TV in Dominica.

CRFM Fisheries Forum

Patrick McConney and Carmel Haynes represented UWI at the 4th Special Meeting of the CRFM Fisheries Forum in Roseau, Dominica on April 20. Patrick was instrumental in getting the meeting to adopt an Ecosystems Approach to Fisheries management into the language of the Draft Common Fisheries Policy.



CRFM meeting participants

Kemraj scopes St. Lucia

During April 2009, PhD Researcher Kemraj Parsram continued scoping field work in St. Lucia. This was done primarily to collect secondary data to build on a situational analysis of the fisheries for large pelagic and reef fishes. He also had informal discussions with stakeholders on key issues facing the fishing industry, including livelihoods and management, in order to identify potential networks of interest for detail analysis in his PhD research.