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A bi-monthly electronic bulletin about interdisciplinary research, teaching and outreach at the Centre for Resource Management and Environmental Studies (CERMES) Editors: Maria Pena and Dr. Patrick McConney

Sargassum handbook for fishers

By Shelly Ann Cox



We are pleased to announce the release of a best practice handbook for fishers coping with Sargassum! The 23-page comic-styled handbook contains key messages and colourful illustrations to engage and educate the reader. It gives us great pleasure to introduce the star of the handbook, Gasmo, the Sargassum fish. Gasmo relays all that he has learnned from fishers in the Eastern Caribbean about the challenges associated with Sargassum influxes and what they are doing to cope and adapt. He provides useful tips and gives some food for thought.

The handbook includes effective social and technological innovations and strategies tailored to specific fisheries. The strategies range from simple, low-cost fishing techniques to more advanced technological innovations. It also includes adaptive strategies that can be employed at landing sites and at sea. It is expected that the handbook will enhance the adaptive capacity of fishers to respond to Sargassum influxes, which could ultimately increase resilience of the entire social-ecological system. Initiatives such as

Inside this issue	
Sargassum handbook for fishers	1
CERMES at 1st WASAG Forum, Cape Verde	1
Caribbean Protected Areas Gateway welcomes web developer	2
Students water research experiences	3
3 rd NFWF grant for CERMES for global SocMon coordination	4
CERMES to tackle climate change – poverty nexus	4
Scoping in Dominica for climate resilience	4

the production of this handbook, that serves to encourage, engage and facilitate fishers in active participation in projects, plans and opportunities, are still needed and are imperative to successful adaptation.

The development of this handbook has benefitted from the generous support of the Climate Change Adaptation in The Eastern Caribbean Fisheries Sector (CC4FISH) Project of the Food and Agriculture Organization (FAO).

<u>Citation:</u> Speede, R. F., S. Cox and H. A. Oxenford. 2019. Best Practices for Caribbean Fishers Coping with Sargassum. Centre for Resource Management and Environmental Studies. The University of the West Indies, Cave Hill, Barbados. 23pp.

Artwork can be downloaded at the following link: bit.ly/Sargassumhandbook.

CERMES at 1st WASAG Forum, Cape Verde

By David Yawson

The Global Framework on Water Scarcity in Agriculture (WASAG) brings together multi-sectoral stakeholders to address the global challenge of water scarcity and efficient use of water in agriculture for food security. WASAG organized its 1st International Forum on Water Scarcity in Agriculture in Praia, Cape Verde from 19 to 22 March, 2019, which coincided with the celebration of World Water Day 2019. This Forum was organized by









partnership between the Government of Cape Verde, the Food and Agriculture Organization of the United Nations, and the Swiss Federal Office for Agriculture. The Forum focused on Small Island Developing States and West Africa.

Dr David Yawson (CERMES) and Dr Adrian Cashman (Akwatix, former Director of CERMES) contributed to three themes of the Forum via presentations on (i) the prospects of drought-driven migration in Cariacou, (ii) an evaluation of the Zero Hunger Challenge programme in connection with the School Feeding Programme in Barbados and Grenada, and (iii) lessons from farmer practices on irrigation water use efficiency in Small Island Developing States based on observations in Barbados. The presentations were applauded as important contributions to the Forum. The Global Water Partnership – Caribbean (GWP-C) partially supported the participation of CERMES in the Forum.



David Yawson (centre) during a discussion at WASAG

Caribbean Protected Areas Gateway (BIOPAMA Programme) welcomes Web Developer to the team

By Carmel Haynes

The Caribbean Protected Areas Gateway (Caribbean Gateway) stands poised to significantly advance and improve its <u>web platform</u> with the addition of a locally-based Web Developer, Mr. Anton Shepherd, to the team. Anton, who took up the post in March 2019, is a Barbadian who has over eight years of experience in web development and has worked extensively throughout the region as a developer, consultant and

project manager of web/mobile technologies for regional and international partners. Notable engagements include work conducted with the CARICOM Development Fund, the CARICOM Secretariat, the CARICOM Disaster Emergency Management Agency (CDEMA) and the Natural Resources Department, Energy Division (Barbados). His passion for the opportunities that lie at the intersection between technology and business drives his continued interest in creating data-driven solutions that impact and improve lives.



Anton Shepherd (second right), meets with the Campus Information Technology Services (CITS) team and CERMES Information Technology Technician (Dale Benskin: far left)

This engagement is being funded via an arrangement between the European Commission's Directorate-General for International Cooperation and Development (DG DEVCO) and the Joint Research Centre (JRC), which is an implementing partner of the BIOPAMA programme. The primary objective is to reinforce the decision-making process on conservation and natural resource management and governance by developing state-of-the-art information management tools to provide region-specific information and knowledge on biodiversity, protected areas and development, aligned with the pan-ACP Reference Information System developed by JRC.

Anton will specifically provide spatial (GIS) and IT development support to the Caribbean Gateway, CERMES and other regional project partners, where necessary, towards the development of our Regional Reference Information System (i.e. the Caribbean









Gateway Web Platforms). Anton will work closely with the JRC development team, the Cave Hill Campus CITS team and CERMES IT Technician, to maximize his expertise in the areas of development, design, content, outreach, capacity building and training.

Student water research experiences

By Adrian Cashman

Every year CERMES sends out a cohort of students into the world to undertake their research projects. For many, even the supervisors, this is a daunting prospect. For the previous 10 months they have been challenged, guided and goaded under the watchful gaze of lecturers and course leaders and supported by fellow students. Now, that support melts away, you are effectively on your own – or so it may seem. The research project is the culmination of the CERMES programme, the opportunity to put into practice the knowledge and skills built, to deepen and extend those skills and to demonstrate that they can successfully conduct high-quality research.

But after the research has been submitted, after it has been scrutinized, picked apart and commented on by a supervisor, what is left? What are the take-away messages and insights that stay with them as they further their careers? Out of curiosity, I asked the 2017-18 Water Resources Management students what their memories were of their research projects; the high and the low points. Here, in summary, are some of the things they said.

For all of them the level of support and cooperation they received from the people they met on the ground from whichever country they were working in, that they relied on to be able to do their research was beyond their expectations. Whether in assisting in setting up community meetings, making introductions, learning from the experience of others or just making time available, without this their work would have been so much harder and less rewarding. They also said that the experience brought home to them how much they had each grown as individuals in confidence, in what they had learnt and how to apply their acquired knowledge. At the same time, they realized how much further they had to go, that this was just the start of the journey of their professional development. On a lighter note, one student said that their best moment was,

"submitting the paper to Neetha and leaving the university as a free man."

On the downside there was also agreement that the greatest challenge they encountered was with accessing and acquiring the data that they needed for their research. This ranged from GIS datasets, to missing water quality data, to persons not responding to repeated requests or returning calls, to the wrong data being given. This is a hard introduction to the real world, it is a situation you learn to deal with. As one student put it, "I was reminded that not everything goes to plan or work out in the way you would have expected. I saw this as a highlight in that I learnt to be flexible, made changes and had to work around challenges I had faced when collecting the data for my research."

So what impact might these projects have? For me, looking at them, I see them as being vital in their contribution to our knowledge and understanding of the challenges facing the region and how we can go about crafting responses. They won't, of themselves lead to an overnight revolution but we are in this for the long haul and each of these projects is laying solid foundations on which we are making life better. Kevin's work facilitates the introduction of integrated water resources management in Belize; Kellesia's work will contribute to better floodplain management in Trinidad; Waynelle's study makes the economic case for household level aguaponics in Barbados; Tamara's investigation of willingness to participate in managed aquifer recharge could extend Barbados' water resources in the face of climate change; Fidel's study of water quality threats to freshwater resources in northern Belize highlights the need for better monitoring programmes and; Brendon's work on stormwater management is one of the first to look at the potential of green infrastructure to address future flooding in Barbados. Together, they may not realize it, but their work has changed the future.











Third NFWF grant for CERMES global SocMon coordination

By Maria Pena

CERMES has been awarded its third successive grant valued at USD 54,000 from the National Fish and Wildlife Foundation (NFWF) for Coordination of a Global Socio-economic Monitoring Initiative for Coastal Management III from January 2019 to June 2020. Through this project CERMES will continue to assume the role of global coordination to facilitate the improvement of six regional SocMon programs globally in the Caribbean, Central America, Brazil, South Asia, Southeast Asia and Pacific Islands.

The current project builds on previous SocMon activities and NFWF-funded projects. In this third phase, the grant will (1) support the development of regional capacity in socio-economic monitoring, (2) facilitate monitoring activities at established or new sites; (3) disseminate information on global status, trends and prospects of SocMon; (4) support integrated coral reef monitoring efforts of the Caribbean node of the Global Coral Reef Monitoring Network (GCRMN-Caribbean); and assist in information exchange and promotion of SocMon. The project furthers efforts towards achieving major 2015-2019 SocMon Strategic Plan Goals.

Preparations are underway for four SocMon regions to initiate capacity building training workshops in SocMon methods and approaches and to implement socioeconomic assessment and monitoring programmes at coastal management sites and fishing communities in Antigua and Barbuda (Caribbean); Rio de Janeiro State and Parana State (Brazil); Agatti Island and Minicoy Island, Union Territory of Lakshadweep (South Asia); and Ulithi, Yap (Pacific Islands). SocMon Caribbean and Brazil kick off their capacity building activities in mid-May with the South Asia and Pacific Islands following close behind in June. Come back here for more updates on the project.



CERMES tackles climate change - poverty nexus with FAO

By Patrick McConney

In mid-April FAO held a meeting for Addressing the Climate Change and Poverty Nexus for Enhancing Resilient Fisheries Livelihoods and Food Security in Three Caribbean Countries – Barbados, Dominica and St. Kitts and Nevis, 11-12 April 2019, UN House. Dr Janice Cumberbatch of CERMES was a key resource person in the discussion on how to tackle the climate change – poverty nexus by building upon existing information and studies to 'learn by doing'. This could be an exciting and rewarding intersection of social science and fisheries science. Fisherfolk and civil society organisation representation was prominent at the meeting. CERMES looks forward to partnering with FAO and the countries to make a real difference through future project activities.

Scoping in Dominica for climate resilience

By Patrick McConney



Fisheries infrastructure at Scotts Head village is gone

Through funding obtained from the UK Global Challenges Research Fund (GCRF) by colleague Rachel Turner of the

University of Exeter, a scoping visit that also included Iris Monnereau (FAO) and Patrick McConney (CERMES) was undertaken in Dominica in early April. We were informatively guided for the week by the former Chief Fisheries Officer, Andrew Magloire, and accompanied by several colleagues from the Fisheries Division. Our core aim was to better understand climate adaptation and resilience to the impacts of the extreme weather events on Dominica. Using the first-hand experience of seeing the situation and interacting with diverse groups of people we should be able to collaborate more effectively with colleagues there who are re-building for resilience.







