

Caribbean WaterWays

Newsletter of the GEF IWCAM Project

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Final Message from the GEF-IWCAM Regional Project Coordinator



Dear Colleagues, Partners,
& Friends,

I write this message with a sense of pride and a touch of sadness. It is a time which most project managers should look forward to, being the end of a successful project. However, the end of something truly satisfying is hard to celebrate. We have spent the last 5 ½ years working to achieve a common (project) objective. We have shared ideas, put our collective shoulders to the wheel and have moved the project to where it now is. In its wake, we hope that we have left behind a lot of "satisfied customers". We have sought to address stakeholder needs, involve relevant

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Antigua's Demonstration Project:

Finding practical solutions to sewage pollution and reducing negative impacts on a biodiversity hotspot

Due to unforeseen delays in finalization of planned stress reduction activities, the GEF-IWCAM Demonstration Project in Antigua & Barbuda is one of the last to be featured. The project, being implemented by the Environment Division, Government of Antigua & Barbuda, was designed to address the issue of coastal pollution by sewage and wastewater from within the city of St. John's via a series of phased and coordinated initiatives. Its overall aim was to identify a cost effective solution to the problem of sewage within the city of St. John's in the first instance, and

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Private Sector Involvement in the Lower Haina River Basin

- A GEF-IWCAM Dominican Republic Demonstration Project Success Story

The GEF-IWCAM Demonstration Project in the Dominican Republic sought to reduce pollutants in the heavily contaminated Lower Haina River Basin, one of the country's most industrialised watersheds.

This area has over one hundred medium to large size industries (including electricity generation, petroleum refining and a battery factory). These affect the environment, biological diversity and the welfare of the local population through the production of liquid effluent; liquid chemical contaminants; industrial solid waste; and industrial atmospheric emissions. The lower watershed is heavily contaminated by these activities and by domestic liquid and solid waste.

The Lower Haina River Basin is home to large squatter settlements, with many areas lacking adequate solid and liquid waste disposal and management systems. At the same time, the Haina River is the pri-



Lower Haina River industrial area and port

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BOX A:

Cleaner Production (CP): results from one or more of a combination of conserving raw materials, water and energy, eliminating toxic and dangerous raw materials and reducing the quantity and toxicity of all emissions and waste at source during the production process" (UNEP 2010).

Sustainable Consumption and Production (SCP):

"The production and use of goods and services that respond to basic needs and contribute to a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the entire life cycle of goods and services" (Oslo Symposium, 1984).

For more information on SCP, visit the
**Cleaner Production and Sustainable Consumption
Information Centre for the Caribbean at:**

<http://www.cehi.org.lc/cpii/index.htm>

BACKGROUND ON THE GEF-IWCAM PROJECT:

The Global Environment Facility-funded Integrating Watershed and Coastal Areas Management in Caribbean Small Island Developing States (GEF-IWCAM) Project was approved by the Global Environment Facility (GEF) in May 2004. Implementing agencies are the United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP). Executing agencies are the Secretariat of the

Cartagena Convention (UNEP-CAR/RCU) and the Caribbean Environmental Health Institute (CEHI) and the UN Office for Project Services (UNOPS). The thirteen participating SIDS are: Antigua and Barbuda, The Bahamas, Barbados, Cuba, Grenada, Dominica, Dominican Republic, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago. The length of the Project is 5 years and commenced in the second quarter of 2005. The

Project Coordinating Unit is located at the CEHI, as agreed by the Implementing and Executing Agencies and the participating countries.

(Continued from page 1)

major source of potable water for this area and for the capital city of Santo Domingo. All of this activity takes place in an area of just 39 square kilometres, a hot spot as far as pollution is concerned.



Child plays near polluted river

The GEF-IWCAM Demonstration Project in Haina aimed to: improve the quality of the river-basin related ecosystems; protect and conserve biodiversity within the river and coastal zone; reduce diseases, morbidity and mortality rates resulting from the deterioration of the environment; strengthen capacity, infrastructure and understanding within the public and private sectors, and provide an effective model for replication.

The local community consisted of two main groups - the industrialists and residents. The involvement of the various stakeholders was encouraged and facilitated early in project development by a series of consultations organized by the Secretary of Environment and Natural Resources in 2000. Several groups from Haina participated in these early consultations including the Haina Association of Industries and Businesses (HRBMC), other NGOs and CBOs. The discussions involved meetings with neighbourhood groups as well as technical persons from the community.

The primary intervention was directed at the industrial sector with a focus on the collection of data, selection of indicators to guide policy and strategic planning, the introduction of cleaner production practices (See Box A, page 2), and mechanisms to guide policy, strategic planning and integrated management.

Baseline survey

In order to determine existing practices, inform recommendations and allow for monitoring of changes in the environment resulting from cleaner production practices to be adopted by the industrial sector, for the first

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eventually nationwide.

The Demonstration Project was originally intended to show a model system for retroactive fitting of sewage handling systems within the capital city of St. John's. This model was to have demonstrated on-the-ground stress reduction and improve street cleanliness and hygiene. Recommendations on upgrading the sewage handling and treatment mechanisms in both St. John's and nationwide were to have been submitted to the Cabinet of Ministers.

Initially, the project envisioned that the city of St. John's would be the focus of activities. In the original project document, two streets were to be upgraded for connection to a central wastewater treatment system. However, due to several developments during the first year of the project, it became necessary to move the focus of the project from the city of St. John's to the current demonstration site at McKinnon's Pond. Some of the issues which led to this decision included:

- As originally anticipated, the central sewerage system for St. John's had not been developed. It would therefore have been impractical to retrofit the establishments, including homes on two blocks of streets in St. John's, as there would be no system in which to place the pipes.
- The streets of St. John's were renovated for the 2007 Cricket World Cup tournament. Since the demonstration aspect of the project was not yet ready for implementation at that time, the pipes etc. necessary for the retrofitting of the streets were not yet ready and available. Street/sidewalk renovation therefore took place without the pipes from the GEF-IWCAM Project. By the time that the project was to be implemented,



Waterfowl on McKinnon's Pond

it

was seen as counterproductive and impractical to dig up the previously completed sidewalks to lay the pipes.

- McKinnon's Pond had previously been chosen as a biodiversity hotspot that was in need of protection from a wide variety of land based sources of pollution. Due to its proximity, it was chosen as the replacement site for demonstration of an effective sewage treatment system for the country. It provided the ideal location within which the effects of sewage on an ecosystem could be directly observed.

The new demonstration site included the building of a small treatment plant and the upgraded connection of a number of homes and commercial enterprises within the McKinnon's area. To ensure the demonstration of the best available technology for the effective treatment of sewage, the end result of the project was the construction of a Membrane Bio-Reactor (MBR) sewage treatment plant with the capacity to treat 20,000 gallons per day of sewage. MBR systems treat sewage to approximately 5ppm residual pollutants and as such, the new plant is expected to show a great deal of stress reduction on the environment based upon the quantity of pollutants that it will remove. Two streets in the McKinnon's/Yorks community would be renovated to enable connection of residential plots and commercial entities to the system. Currently, it is not uncommon for homes in the project site to have the overflow from their septic tanks going directly into the streets. Connecting these street overflows to the sewerage system will directly reduce the amount of excess grey water and sewage going into the open environment and, by extension, into McKinnon's Pond. Commercial enterprises include a supermarket and a small hotel. The eventual expected impact is a reduction in the amount of polluted water entering this critical habitat for a variety of water fowl, birds and other species.

At the time of writing, the treatment facility was 90% completed. It was awaiting connection to the sewer pipes from Yorks. Heavy rains throughout recent months had hampered the completion of the plant and sewer lines. Extremely muddy conditions rendered the area inaccessible to heavy vehicles and pe-

(Continued on page 6)



McKinnon's Pond

(Continued from page 2)

time ever, a comprehensive baseline study of the Lower



*Monitoring water
quality, Lower
Haina River*



Haina River Watershed was conducted. The baseline study had 5 components:

1. A handling practices and disposal of industrial waste diagnostic
2. A surface water quality and sedimentation diagnostic in the Lower Haina River Watershed, the Itabo River, and along the coast
3. An assessment of indicator species and/or their resistance to pollution in the river, estuary and coast
4. Air quality
5. Characterization of industrial discharge

The first three studies were completed during the project (February 2008 to January 2011). The two final studies are ongoing but the Environmental Quality Directorate has committed to completing them.

The studies showed that effluents from the factories receive very little treatment before they are discharged into the waterways. The majority (66%) are disposed of underground, 17% as surface run-off, 6% into tributaries and 11% directly into the river. Most factories operated in the area largely unchecked and unregulated prior to the introduction of the first major piece of legislation on environmental protection in 2000: the National General Law of Environment and National Resources (64-00).

It was found that while there was knowledge of the environmental legislation, more than 50% of companies had not applied for environmental clearance. Of those that had environmental clearance, 66% had environmental permission, while 2% had environmental li-

cences. This meant that only a third of the companies operating in the Haina River Watershed, at the time of the study, had environmental clearance to operate.

68% of the establishments surveyed did not have a finalised procedure for waste disposal. To compound this, 52% of the companies did not know the monthly volume of waste they generated. All companies surveyed generated liquid waste in their operations. Of these, 86% disposed of their waste without treatment. Similarly, 100% of the industries generated solid waste during their operations. Seventy-two percent of these disposed of their waste in the dump. Solid waste generated in Haina includes flammable waste from 46 companies, toxic waste from 41, and corrosive and reactive waste from 17 companies. It was also noted that while 82% of the industries used a third party to handle their waste disposal, 78% of those third party entities did not have environmental certification. The Haina Municipal Government and HRBMC were also instrumental in waste disposal, as 44% of the industries used their services.

Involving the Private Sector

The participation of businesses in the industrial sector was key to the success of this Demonstration Project. It was essential that interventions instigated by the Demonstration Project not be seen merely as a nuisance or as undue interference from Government. By bringing the HRBMC on as a project partner in the very early stages, the Ministry, in implementing the Project, ensured that these industries were well represented and involved in project design and execution. This helped to alleviate many concerns and promote the involvement of individual businesses represented by the Association. Indeed, in early consultations, issues were discussed and special working groups were formed to further analyze them and formulate remedial proposals.

The Project Implementation Unit (PIU), with good support from the Ministry, worked with determination and persistence to inform HRBMC members of Project objectives and to



*Industrial waste
disposal survey*

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ensure good participation in the survey. The HRBMC demonstrated tangible commitment to environmental clean-up and worked closely with the PIU. The manufacturing sector has in the past been blamed for the poor water quality and persistent contamination of the river by chemical and other pollutants and the Association realized that by embracing the requirements for operating permits and monitoring systems, it could reverse this perception. Its collection of public and private sector interests came together at regular meetings to discuss and strategise with representatives of the PIU.

As a result, during the Demonstration Project, the number of businesses registered in the Ministry of Environment's System of Environmental Authorization increased from 42.7% to 51%. This indicates greater willingness on the part of a significant number of enterprises to be subject to monitoring and compliance.

Cleaner production mechanisms to reduce point source pollutants were identified and are being implemented in ten factories. Twenty-two technicians (10 from the participating factories, 10 independent technicians, 1 from the Ministry of Environment, and 1 from the Haina Municipal Environmental Management Unit) are being trained to encourage replication of the cleaner technologies in other factories in Haina and elsewhere. While pilot activities are in their early stages (See Box B) and it is too early to see their impacts in the community as a whole, so far, in these industries a reduction of 1,338 m³ per year of wastewater has been observed. This amount is expected to increase as more industries incorporate cleaner production mechanisms, such as recycling and reutilization, into their processes.

The GEF-IWCAM Demonstration Project helped develop a framework to measure process, environmental status, and stress reduction indicators. The cleaner production strategy for the lower watershed was completed in June 2011 by the Ministry of Environment and Natural Resources, which will continue to measure these indicators after Demonstration Project completion. It consists of: 1) an analysis of solid waste accumulation in the rivers, streams, and canals; 2) a clean-up plan for the Lower Haina Watershed; and 3) a plan for the sustainability of the clean-up and preservation effort. This is shortly to be submitted to the Municipal Government for their implementation. The Committee for the Management and Development of the Lower Haina Watershed, which is still to be officially established, will have responsibility for monitoring the plan.

In addition to better regulation of industrial waste, other activities have been undertaken by the government to deal with solid waste disposal in particular. These include:

a plan for cleaning rivers, streams and gorges, focusing on the removal of solids that prevent the normal flow through these water channels; closure and elimination of illegal garbage dumps; and relocation of sediment found in waterways to ensure that the storm-water run-off does not encounter obstacles along its natural course.



Involvement of the community through the inclusion of the Neighborhood Councils on the HRBMC, as well as in a range of public awareness activities, is intended to ensure that their concerns continue to be addressed and that they remain actively involved. The Ministry went so far as to reclaim lands bordering the Haina River which were being used as unplanned garbage dumps. These zones have been reforested with the participation of the community.

Effective involvement of the private sector and inclusion of local communities in the process have been significant achievements of the Dominican Republic's Demo Project.

BOX B:

Ten industries are participating in the Demo Project's Cleaner Production Pilot Activity:

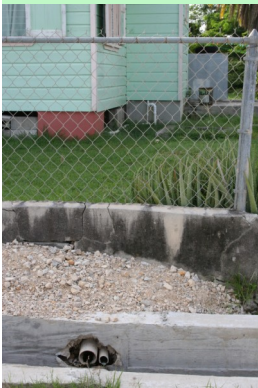
- Chemical Products and Substances Manufacturers, 2
- Food Production, 2
- Non-Metallic Mineral Products Manufacturers, 2
- Rubber and Plastic Manufacturers, 1
- Complementary Transportation Activities, 1
- Collection, Treatment, and Elimination of Waste, Material Recovery, 1
- Printing and Tape Reproduction, 1

Through application of the Cleaner Production Mechanism methodology, 30 options for cleaner production mechanisms were identified. These focused on efficient use of energy, water, fuel, and materials. The breakdown is:

- Energy – 47%
- Water – 43%
- Fuel – 7%
- Materials – 3%

Application of these options will save an estimated USD 203,188 annually and 284,553 Kwh (approximately 2% of total use at the industries). The resulting environmental benefits will be a reduction of 178,215 kg of CO₂, and a reduction in water use of 1,407 m³/year (3% of current use). All of these options require an investment of USD 455,568 (recuperation period of two years) and will result in annual savings of USD 217,302. By June 2011, three of the participating manufacturers had begun their identified Cleaner Production activities and the others all had implementation plans.

(Continued from page 3)



destrians. Though almost all plant installation was completed, the rain delayed installation of the electricity and remaining pipes from the Yorks area and homes. This is currently being completed.

The main contractor/partner for the sewer installation is the Antigua Public Utilities Authority (APUA). They have supported the consultant/contractor, Caribbean Water Treatment Inc. in project implementation. The Central Board of Health and the Department of Public Works have been willing partners with the APUA throughout the construction of the facility and sewerage works. They assisted in clearing the ground of the abandoned plant, and placed material on the road leading to the plant to assist access to the plant for the remaining construction period as well as during operation. It is anticipated that the remaining installation and connections will be completed and the plant commissioned at the end of October 2011.

Among the unique elements of the treatment plant are its treatment capacity, which will allow the final effluent to be used for irrigation of nearby agricultural plots. Farmers in the area are keen to participate in this aspect of the project, especially as Antigua is well known for being water-scarce. Another unique demonstration is the use of small-bore sewers to convey septic tank effluent from Yorks. This type of sewer system has never before been tried in Antigua and is seldom seen in the Caribbean. The system was considered suitable as the area has a high groundwater table and poor soil permeability. As such, septic tank effluent essentially had no place to go except to re-surface. The successful demonstration of small bore sewerage, combined with MBR treatment could provide an option for poorly-drained soils throughout the Caribbean



Farm on banks of McKinnon's Pond

Abandoned sewage treatment plant at McKinnon's, before rehabilitation, October 2010



Sewage treatment plant after rehabilitation, May 2011

region.

In order to completely meet the objectives of the Project, it will be necessary for the Environment Division to measure water quality within the demonstration site for at least six months after construction of the plant is completed. This information will provide a great deal of information on environmental quality and pollution levels within McKinnon's Pond. Monitoring will show the level of impact that the plant has upon the environment. Significant social benefits are also anticipated as water from the plant will be utilized by farmers within the vicinity of the plant, and as surroundings of the homes and streets connected to the system are free of open sewage drains.

Small bore sewers being installed in Yorks by APUA, July 2011



Reviewing progress in SOPAC!

The GEF-IWCAM RPC participated in the **3rd Regional Steering Committee (RSC) Meeting for the Pacific GEF IWRM Programme**, a sister project to the GEF-IWCAM project but designed for Pacific SIDS. It was held in Rarotonga, Cook Islands, from July 25-29, 2011. The RSC was hosted by the Government of the Cook Islands, on behalf of the Pacific IWRM project, and organized by SOPAC. In attendance, as part of the regional partners were UNDP, UNEP, and other agencies involved in implementation of the Pacific IWRM Project, such as the EU, UNESCO, IUCN and the GEF Secretariat.

The five-day meeting was attended by approximately 50 persons and involved a number of plenary and after-hour sessions. The RPC presented on experiences, achievements, lessons learned, and replication and sustainability approaches of the GEF-IWCAM project. The presentation, which included video clips from Andros and a sampler from the IWCAM documentary was well received. The Pacific IWRM Project Manager expressed his appreciation for the numerous exchanges between Pacific and Caribbean projects, acknowledging the multiple benefits.



Participants visited Wigmore's Waterfall/Papua intake and the Muri area, a popular tourist destination. In Muri, poorly maintained septic systems, which had been identified as pollution sources for the Muri lagoon, had been upgraded. The upgrade of one facility, in progress, was observed and explanations provided by the contractors.

The Muri Lagoon was also visited, via glass-bottomed boat, to observe impacts from pollution.



IWCAM Policy Makers Briefing Package available

This series of twenty-one briefing sheets explains the importance of using a more integrated approach to the management of our watersheds and coastal areas.

It introduces policy- and decision-makers to some of the key issues, concepts, challenges and approaches involved in more integrated management of our watersheds and coastal areas.

It is designed to help policy- and decision-makers better understand the impacts of a range of development activities on watersheds and some of the things that can be done to reduce negative effects.

It is also meant to provide up-to-date information on the challenges being faced in specific countries, and current and planned initiatives to address them.

Guidance is provided in stakeholder involvement, approaches to partnership building, capacity building, monitoring & evaluation and, data & information management – all necessary for the kind of change that is needed.

This package has been developed by the GEF-IWCAM Project, in collaboration with the Caribbean Environmental Health Institute (CEHI), and the Secretariat of the Cartagena Convention, the United Nations Environment Programme's Regional Coordinating Unit.

These, and many other information and public education materials (including brochures, videos, manuals, case studies and experience notes) are available at:
www.iwcam.org

For more information contact:
iwcam@cep.unep.org

20th CWWA Conference - 7th High Level Session convened

The GEF-IWCAM Project supported the participation of Ministers from Grenada, Dominica, St. Kitts, Nevis, and St. Lucia at the 7th High-Level Session (HLS) of Caribbean Ministers with responsibility for Water, which took place during the 20th Caribbean Water & Wastewater Association (CWWA) Conference in Guadeloupe, October 3-7, 2011.

This High-Level Session, organised by the Global Water Partnership – Caribbean, in collaboration with CWWA, sought to bring decision makers in the water sector together in order to discuss specifically “Water Management Financing in the Caribbean: Pricing, Efficiency, Equity & Sustainability”. Regional and international agencies such as CEHI, the CARICOM Secretariat, the Caribbean Water & Sewerage Association and GWP were actively involved in the discussions. The meeting heard presentations from water managers, regulators and other sector experts. Eventually a series of recommendations were made for Minister’s consideration. These included:

- Establish a regulatory framework for setting appropriate rates and tariff frameworks at the regional/ sub-regional level on a sustainable basis.
- Maintain and expand dialogue with Ministers with responsibilities for Finance, Energy, Environment, Health, Agriculture and Tourism on water financing opportunities.
- Be urged to lobby for the introduction of sustainable cost recovery measures for water utilities.
- Establish a sub-committee at the regional level for follow-up on compliance with HLS Decisions.
- Ensure that IWRM is utilised as the mechanism for effective water resources management.
- Create an enabling policy environment to mobilise multilateral, regional and bilateral resources for the implementation of IWRM plans.

The GEF-IWCAM Project also supported attendance of Ministers at this meeting in 2010, when it was held in Grenada.

IWC6 celebrates 20 years of the GEF!

The Sixth International Waters Conference was held from 17–21 October in Dubrovnik, Croatia. This year’s conference coincided with the 20th anniversary of the GEF’s establishment.

The conference is meant to facilitate cross-sectoral and portfolio-wide learning and experience sharing. This year the conference focused upon the transboundary results and impacts of the GEF International Waters portfolio after 20 years. More than 70 active GEF IW projects, including the GEF-IWCAM Project participated.

The GEF-IWCAM Project’s exhibit at the Innovative Marketplace featured achievements and lessons learned in projects implemented in the project’s 13 participating countries. A series of posters described the major platforms of the IWCAM approach which are:

- Governance
- Community Mobilisation
- Public Awareness and Education
- Environmental Stress Reduction Demonstrations
- The Economic Imperative
- Capacity Building
- The Legal and Policy Environment





GEF-IWCAM Participation in World Water Week 2011

The theme of the 2011 Stockholm World Water Forum (WWW) held in Stockholm, Sweden, August 21-27, was *Water in an Urbanising World*.

The RPC participated and represented GEF-IWCAM formally in one session. This was a Seminar entitled – *Living on the Edge: Management in Coastal Cities*, which took place on the afternoon of August 24. The seminar was convened by UNEP and SIWI and attended by over 60 persons. It also included presentations from Nikolay Aladin and Takehiro Nakamura, among others. This was followed by a Panel discussion, including Torkil Jonch Clausen from GWP.

The GEF-IWCAM RPC was able to feature a brief video on the IWCAM project, and presented on the IWCAM approach to management of coastal cities in the Caribbean, via Case Studies which highlighted success stories in IWCAM. The presentation focused on a number of the demonstration projects and the outreach and capacity-building work being done through the project.

WWW was attended by over 2,500 persons and involved a number of parallel sessions, an exposition, and high-level Plenaries.

Introducing the IWCAM Approach to...



Everyday living!

Industry!



Agriculture!

Tourism!



We have published four brochures introducing the Integrated Watershed and Coastal Areas Management (IWCAM) approach for different sectors. These are available from UNEP-CAR/RCU and CEHI as well as online at:

www.iwcam.org

Message from the United Nations Environment Programme Caribbean Regional Coordination Unit:

It is with a mixture of sadness and anticipation that UNEP's Caribbean Environment Programme salutes the conclusion of the GEF IWCAM project. The success of any project is judged by the extent to which its benefits are sustained over time. I believe IWCAM has not only demonstrated tangible benefits, it has established mechanisms that will ensure long term sustainability.

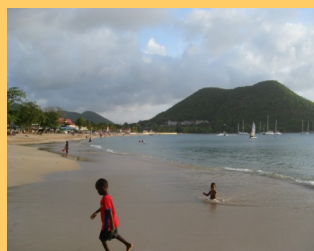
As one of the two executing agencies for the GEF IWCAM project, we wish to thank everyone from the participating countries – Governments, Academia, NGOs, community groups, private sector, partner agencies, media and donors who contributed to the outstanding success of IWCAM.

We are particularly happy to recognize the impetus that the project provided for the ratification and implementation of the Cartagena Convention and, in particular, the Protocol on controlling pollution from land based sources and activities (LBS Protocol), for which we are the Secretariat. Countries made significant advancements in their respective ratification processes and we congratulate Bahamas and Antigua and Barbuda who ratified the LBS Protocol during the project's life time. Others are close and Barbados, Jamaica and Grenada may yet ratify the LBS Protocol before project closure.

While the ratification of agreements such as the LBS Protocol and the strengthening of national policies and laws were major achievements for IWCAM, the most profound impact was at the grass roots and community levels. It is through these "on the ground" impacts that we will ensure sustainability of the "IWCAM" way of doing business.

We must now replicate and upscale the successes of the GEF IWCAM project and use the lessons learnt to improve the management of our limited and fragile natural resources. As we approach RIO + 20 in June 2012 with its focus on the Green Economy and Poverty Reduction, IWCAM stands out as a model for SIDS globally. UNEP's Caribbean Environment Programme remains committed to work with all partners and countries in the Wider Caribbean to ensure that the achievements from the IWCAM project are both sustained and enhanced.

**- Nelson Andrade—Colmenares,
Regional Coordinator
UNEP-CAR/RCU**



Message from the Caribbean Environmental Health Institute:

When I joined the Caribbean Environmental Health Institute (CEHI) in January of 1999 as Programme Director, one of my first assignments was to organise the First Steering Committee Meeting for the Project Development Facility (PDF) for the GEF IWCAM Project, in Jamaica in March of that year. It was with a great deal of excitement that I embarked on developing the IWCAM, working closely with my counterpart, Tim Kasten, then Programme Officer at UNEP Caribbean Regional Coordinating Unit (UNEP CAR RCU) and the lead partner Co-Executing Agency.

Between 1999 and 2006, CEHI and CAR RCU, supported by the Implementing Agencies UNDP and UNEP, worked with thirteen countries in the Caribbean to ensure the approval process by the GEF. It was a long gestation period but when it was finally launched in 2006, it marked the start up of one of the largest environmental projects in the Caribbean. Now that the Project is winding down (and hopefully moving into another phase), it is only fitting that we reflect on the progress that has been made in the region, as a result of it. A terminal evaluation will be undertaken soon to determine its impact.

There have been many positives including the strong network of persons that has been established and direct benefits have been derived especially in the Demonstration Projects which focused on hotspots in eight countries. There have been many challenges as well. The real test would be whether IWCAM has made a difference and whether the results will be sustainable.

From both a personal and institutional standpoint, it has been an exciting project. CEHI is pleased to have been selected to execute two significant components : the Integrated Water Resources Management component and the Laboratory capacity building component. I would like to express appreciation to the GEF, our partner Agencies, the countries and the individuals who have contributed to the work of IWCAM. We now look forward to "IWCAM 2".

- Patricia Aquino,

Executive Director,

CEHI

It's been a great experience! The PCU thanks you for your support!



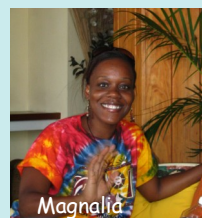
Sasha



Una



Vincent



Magnalia



Donna

(Continued from page 1)

**Message from the
Regional Project Coordinator cont'd:**

partners, and do what needed to be done.

It is our hope that our efforts will prompt further investments by countries in the areas of integrated watershed and coastal area management. It is our hope that the approaches tested through the numerous pilots, sub-projects, and demonstrations will take root at the national and community level.

We have seen much direct impact on the lives of Caribbean communities. Such impact includes improvement of access to water for human well-being, including for agriculture and basic sanitation. We have seen communities cleaned. We have seen children educated. We have seen professionals across the region develop and apply new skills. And we have shared the lessons far and wide.

We have strengthened collaboration among disparate organizations. We have raised policy issues and shaped policy. We have even seen policy put into action, such as the declaration of a National Park in St. Kitts, which will protect a critical water supply for future generations. We have seen new organizations being formed and increased collaboration between the NGO community and governments. All of this has been done within budget, in quick time, and, as mentioned above, to the satisfaction of multiple beneficiaries.

As we look ahead, we believe that we had all of the ingredients to make the IWCAM project successful. We had committed agencies, staff and country Focal Points. We had sufficient funding and imagination to make the funding work. We had relevant skills and plenty of enthusiasm. And

we had the same vision for what we wanted to see at this time. It is therefore a shame to see it all end, and we are seeking to ensure that what has been achieved serves to catalyze further work, in areas that could not be covered by the IWCAM project.

We are confident that our collective successes have not gone unnoticed. We are confident that our formula, which worked so well for the last 5 ½ years will not be discarded but will be used to create further successes. In this regard, the Implementing and Executing Agencies, along with participating countries and other potential partners, have continued to prepare a future project, building on the successes of IWCAM and seeking to fill the gaps. As such, this will not be the last time that you hear of this initiative. We fully expect that reference will be made to IWCAM when the next regional GEF-funded project to address IWRM and Coastal Area management is rolled out.

The future is bright. We need not rest on our laurels. There are partners already preparing to build on the work done. These new partners are willing to work with other like-minded organizations, governments and sectors. To those who will carry the "IWCAM torch" into the future, we wish you well. We urge you to build on the successes, and learn from these successes AND even the few failures.

On a personal note, it has been the most rewarding of times for me. I feel that it was time well spent and wish to thank all of those persons who assisted in any way in making this project a success. I look forward to the opportunity to work with you all again and wish you God's blessings.

Congratulations!!

- Vincent Sweeney



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