

March 2011

ISSN 2070-4593

EARTH CONSCIOUS





UNEP

WORLD ENVIRONMENT DAY



5 JUNE

Forests: Nature at Your Service

In support of the UN International Year of Forests



2010
equals
record for
world's
warmest
year!
Page 20

Editor:

Linda Hutchinson-Jafar

Technical Editor:

Faies Jafar

Contributors:

**Barbara King
Bogusia Sipiora
Christopher Camacho
Garfield King
Jordan Jafar
Stephen Doobay
Wesley Gibbings**

Design and layout:

Karibgraphics Ltd.

**EARTH
CONSCIOUS**

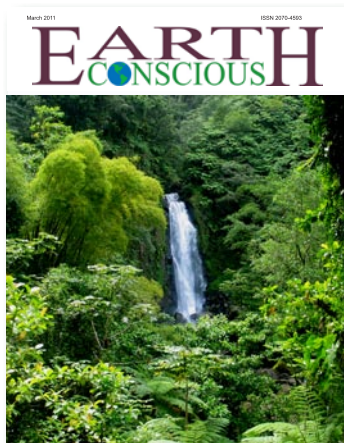
is published by:

Caribbean PR Agency
#268 Harold Fraser Circular, Valsayn, Trinidad and Tobago, W.I.
T/F: (868) 645-0368
hutchlin@gmail.com
www.earthconsciousmagazine.com

© 2011. No part of this publication may be reproduced without the written permission of the publisher.

CONTENTS

- 2** From the Editor
- 6** Consequences of our actions
- 12** YOUNG VOICES
- 14** The role of the media in biodiversity conservation and protection
- 18** Pride in Pawi
- 22** Reefs at risk
- 24** CARIBBEAN UPDATES
- 28** Implementing Cancun: Latin America's role in taking climate change to the next level
- 32** UN launches year-long celebrations on vital role of forests
- 34** Assessing agriculture's potential to mitigate global warming
- 36** GLOBAL WATCH
- 42** Crown Palace - an ancient tribute to the beloved
- 44** FAMILY VALUES
- 46** BOOKS
- 49** LETTERS



On our Cover

Earth Conscious joins the world in celebrating 2011 as International Year of Forests. Our cover shows the Trafalgar Waterfalls (Mama) in the midst of the dense, lush forests in the Caribbean island of Dominica. Photo courtesy "Discover Dominica Authority".



Residents of Abu Hasheem village in Sudan are using solar power to improve their incomes and lives **Page 41**



Preparing for Durban

It's now more than three months since the UN Climate Change Conference in Cancun, Mexico which was heartily applauded as a major success.

Delegates representing countries around the world were gung-ho about making progress on the issues that were agreed upon to ensure a more successful outcome at their next major meeting in Durban, South Africa taking place at the end of this year.

The road to progress however hasn't started off particularly well. Countries have already missed a crucial mid-March deadline to start work on the important Green Climate Fund which is expected to reach US\$100 billion a year by 2020 to aid developing countries fight climate change – a promise made in December 2009 by rich countries.

Reason given for this is that groups of countries in Asia and the Caribbean and Latin America have not yet finalised their nominees to sit on the Transitional Committee for the design of the Green Climate Fund. The meeting has now been postponed until the latter part of April.

Despite this temporary setback, the UNFCCC's work continues. In April, climate change negotiations, the first in preparation for Durban, will resume in Bangkok, Thailand by the working groups on Long-term Cooperative Action (AWG-LCA 14) and on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP 16).

The UNFCCC has also made it possible to follow progress on the Cancun agreements via the UNFCCC.int website under the "Cancun Agreements" link which includes an assessment by UNFCCC Executive Secretary, Christiana Figueres which we have also reproduced in this edition of Earth Conscious.

The UNFCCC website also contains submissions that have been sent in the context of the Cancun agreement. You can check the website to see whether your government or group has made any submission.

It's going to be an interesting year as there continues to be high hopes for progress and development of the climate change issues leading up to Durban.

Earth Conscious will continue to update and bring relevant information to our readers as we continue to follow the debate.

Linda Hutchinson-Jafar
Editor

Responding to Climate Change IN THE CARIBBEAN

A conference 'Responding to Climate Change in the Caribbean' will be held in London in mid-June at the University of London to provide an opportunity for policy-makers, scientists, investors and educators to better understand the requirements for effective, forward-looking responses to climate change challenges in the years ahead.

The conference slated for June 13-14 is organised jointly by London University's Institute for the Study of the Americas (ISA), London Metropolitan University's Centre for Caribbean and Latin American Research and Consultancy (CLARC) and the International Institute for Environment and Development (IIED).

The policy-focused conference will assess progress to date, highlighting lessons learned: the problems and obstacles as well as successes.

The Caribbean is highly vulnerable to the effects of global warming, and is one of the regions likely to be most profoundly affected by the impacts of climate change both in the short and long-term, according to the organisers.

Increased frequency and intensity of extreme weather events, rising sea-levels, and damage to marine eco-systems already threaten Caribbean environments, human settlements and livelihoods.

A host of initiatives has been launched by governments, NGOs, and the private sector over the past decade in the search for effective economic, social and technological responses, with varying effectiveness. And the nations of the Caribbean are increasingly active in international climate change negotiations.

But the region's diversity socially, politically, economically, and geographically, represents a unique challenge both for regional policy responses to climate change, but also for international cooperation and governance.

Equally, the Caribbean's trading partners and investors face a range of challenges, and perhaps opportunities, in their future engagement with the region.

The conference will be staged half-way between the UNFCCC COP 16 in Cancún (December 2010) and COP17 in South Africa (December 2011), which will do much to shape the international political and financial framework within which the Caribbean will seek to adapt to the impacts of climate change and pursue low-carbon development strategies.

Climate change may be increasing toxins in Caribbean fish

Global climate change may contribute to an increase in toxins that poison Caribbean fish and the people who eat the seafood, according to experts who met recently in the Virgin Islands.

Preliminary findings from other parts of the world suggest that increases in water temperatures trigger an increase in growth of a specific marine alga, known as *Gambierdiscus toxicus*.

This in turn produces a group of closely related toxins known as "ciguatoxins." Ciguatera fish poisoning, known as CFP, occurs when people eat fish that have accumulated these toxins.

"While ciguatera fish poisoning has been recognized as an important public health problem in the Virgin Islands for many years, we still have very little understanding of the factors that increase the risk of toxicity," said Dr. Glenn Morris, principal investigator of the project and director of the University of Florida Emerging Pathogens Institute.

"The increases in temperatures that are witnessed in the Caribbean Sea may have an effect," said Dr. Morris about reported CFP cases. "It is important that we understand the potential impact of climate change, and rising sea surface temperatures, on the occurrence of this disease."

The Ciguatera "Fish Poisoning" Monitoring project, or CaribCATCH, is a three-year cooperative agreement supported by the National Center for Environmental Health at the Centers for Disease Control and Prevention to determine the relationship between the incidence of ciguatera fish poisoning and changing environmental conditions.

When herbivorous reef fish eat seaweed or algae, they consume the *Gambierdiscus* organisms, and the ciguatoxins build up in the fish's flesh.

Higher levels of toxins are seen in predatory reef fish that feed higher up the food chain. The toxin cannot be removed from fish through either cooking or freezing.



Caribbean - Regional electricity supply options : toward greater security, renewables and resilience

The Caribbean region continues to be plagued by high and volatile fuel prices, with limited economies of scale or diversity in electricity supply. Although several studies have examined alternative resource options for the region, they often only consider solutions for individual countries in isolation.

When one looks at the Caribbean, however, it is apparent that the short distances between islands and market sizes present opportunities to benefit from regional solutions.

Indeed, increasing interconnection in the Caribbean could pave the way for greater energy security, a larger use of renewables, and enhanced climate resilience.

Given the dearth of research comparing regional solutions with individual country ones, the potential benefits of pursuing an integrated approach for the Caribbean were not clear.

Thus, the report, 'Caribbean regional electricity supply options: toward greater security, renewables and resilience' for the region, serves to explore at a concept level the alternative of multi-country-based energy development paths that could be implemented by countries to diversify their electricity mix, improve reliability and access cleaner resources.

The idea of regional interconnections is not new: gas pipelines are widely used to interconnect gas supply with gas demand, and electricity market interconnections have become the norm around the world. However, this option does not appear to have received the attention it merits in the specific context of the Caribbean.

While this study analyzes a small subset of the imaginable regional energy options for the Caribbean, it shows that regional solutions warrant further study.

CONSEQUENCES OF OUR ACTIONS

By Garfield King

Photographs by Stephen Doobay

The mini bus stopped at the traffic lights on the main road. An arm appeared from an open window and dumped two empty plastic bottles, an empty cardboard juice pack and an empty snack wrapper onto the road. The lights changed to green.

A police officer appeared. He ordered the vehicle to remain stationary, approached the open window and ordered the young man to exit the mini bus, pick up the garbage he had thrown into the street and dispose of it when he finds a bin.

I witnessed that scene recently on a major road in Trinidad. A man standing next to me wondered aloud whether the police have nothing better to do? "So much killing and stealing all over the place and police can only hassle people about stupidity like litter", he said loudly enough for the officer to hear.

We seem to be unaware of the consequence of our actions, big and small. The young man on the mini bus is likely to think twice before throwing his garbage into the street. Sure, the minor littering he did may seem insignificant when viewed in isolation, but it is not an isolated act. If one vehicle out of every thirty is carrying someone who throws something into the street we have a problem. Unsightly yes, but that's just the atheistic.

In many developing countries there are few, if any, mechanical street-cleaning vehicles to cruise the roadways every night or pre-dawn to clean up our thoughtless/careless spills. For the most part that job is left to the rain, wind or simply gravity. The thoughtlessly tossed trash travels to its rendezvous with other rubbish to the assigned muster point... the drains. Every day fresh garbage is recklessly flung after fast food feasts, discreetly dropped on

pavements and perilously pelted from moving vehicles. When the heavy rains come the blocked drains are not able to do their job of drawing off excess liquid.

"But my little empty plastic water bottle can't block a huge drain." Perhaps not yours alone, but several thousand people are expressing the same view and several thousand little empty plastic water bottles can become a dam.

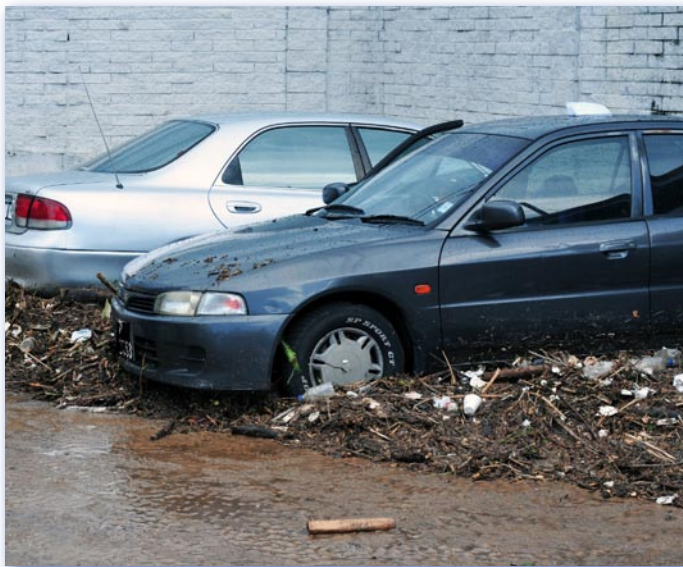
We are all responsible as "every little bit counts." Sure, we can call on the authorities to do more, provide better infrastructure, increase the frequency of drain dredging and related measures. That will help, but the efficacy of such efforts is hampered by the waste we discard indiscriminately.

When you add the often illegal construction work being done on hillsides, and the slash and burn tactics used by those planting on the steep slopes surrounding some cities, the problem grows exponentially.

Without planning permission the man goes ahead and builds. Clearing away the bush and trees he leaves the debris further down the hillside as it's too expensive to have it brought down for proper disposal. "The workmen can dump it anywhere; just make sure it's not in the line of sight of my development."

And so the rains come and finish the job. The bush, bits of trees and general debris makes its way to the roads below and in a flash there is flooding.

Picture number 1 was taken after the waters receded following flooding in Port of Spain, Trinidad in October 2010. The water was up to the windows of the parked car in the foreground. Take a look at what the water brought with it.



Picture 1 (parked cars after water run off)

Picture 2 shows the debris left on a bridge as the water begins to run off. The water level was half way up the structure. Take a look at what the water brought with it.



Picture 2 (bridge with debris)

In picture 3 traffic flows as normal after the run off of flood water. Once again, look to the right of the picture to see what the water left behind.



Press photographer Stephen Doobay has been photographing flooding in Trinidad and Tobago for more than 15 years. He believes the situation in Port of Spain has worsened in the last 7 years or so. Earlier, the water would run off relatively quickly. He attributes the worsening situation to the construction taking place on the hills and people not disposing of their garbage properly.

The authorities in Port of Spain purchased suction trucks to help keep the drains in the capital clean. According to reports after the trucks do their work cleaning the drains it takes less than 36 hours for them to get clogged again. Also, the drains are not deep enough to accommodate the volume of water that now comes from the hills.

Along with the litter there's the dumping. To get the old fridge, stove or furniture out of the way to accommodate the new appliances, people dump them at the side of the road. Nowhere close to where they live of course. But drains run at the side of the road so it's not long before the disused appliances, old tyres and broken furniture block the drains. When the rains come, flood waters flow into people's homes destroying their furniture, fridges, stoves and other appliances.

We do not exist in a vacuum. Our actions impact on each other, negatively and positively. That is the wider picture. Being mindful of the consequences of our litter habits may not stop the flooding, but will certainly go a long way in lessening a perennial problem.



Garfield King is an independent radio producer, presenter and writer with almost 30 years broadcast experience. As a trainer, he conducts workshops on public speaking, presentation skills and communication dynamics. inkings@tsftt.net.tt

UN Climate Change Secretariat publishes assessment of Cancun Agreements

The UN Climate Change Secretariat has published an assessment of the Cancun Agreements, agreed at COP16 in Mexico in December 2010. The assessment by UNFCCC Executive Secretary Christiana Figueres, looks at what governments have agreed to do in the field of international action on climate change in 2011, and will contain regular updates charting progress made in the course of the year. Areas looked at in detail are mitigation (reducing greenhouse gases), adaptation to climate change, along with providing financial, technology and capacity building support to allow developing countries to mitigate and to adapt. The assessment, including a Progress Tracker for 2011, can be accessed via a new entry point on the unfccc.int website titled "Cancun Agreements."

What will Governments do in 2011?

Implementing the Cancun agreements means that Governments will want to turn their decisions into action that brings real benefits for people on the ground as soon as possible.

It is also clear that while Cancun delivered the shape of a comprehensive international system for collective action to deal with climate change, further details of how to make this system operate to effect will continue to be fleshed out among Governments during 2011, according to Ms. Figueres.

This is important to ensure that newly created institutions become fully functional and the framework delivers quickly, especially to help the poor and vulnerable to adapt most effectively to climate change.

It is also important to keep in mind that, as UN analysis shows, the emission reduction targets and actions announced in Cancun, although they are the most ambitious global effort to date, are inadequate in the longer term to keep the world under the agreed maximum global temperature rise of two degrees.

It is therefore essential to keep raising the global level of ambition to reduce global greenhouse gas emissions, if the agreed goal of limiting the temperature rise is to be achieved successfully over time, according to the UNFCCC Chief.

To this end, in Cancun, Governments agreed to continue work on identifying a goal for substantially reducing global emissions by 2050. They also agreed to work towards identifying a time frame for the peaking of global emissions.

Both are important to keep the world on a viable timetable to address climate change. The first review of progress to identify whether the world is meeting the necessary timetable, or whether it will require stronger action, will start in 2013 and be completed by 2015. The review will be based on the latest scientific information and on progress made in combatting climate change.

New institutions that will be developed include:

- a Green Climate Fund to house the international management, deployment and accountability of long-term funds for developing country support
- a Technology Mechanism to get clean technologies to the right place, at the right time and to best effect
- an Adaptation Framework to boost international cooperation to help developing countries protect themselves from the impacts of climate change
- a Registry where developing countries will detail their voluntary plans to limit greenhouse gas emissions and the support they need to achieve them.

IDB PAPER EXAMINES IMPACT OF DEFORESTATION BAN IN LATIN AMERICA

The Inter-American Development Bank (IDB) presented a discussion paper on the implications of a hypothetical complete ban on land clearing for agriculture in tropical areas of Latin America and the Caribbean, which underscores that the carbon market will not be sufficient to compensate the rural poor for lost income.

According to the paper "Agriculture Greenhouse Emissions in Latin America and the Caribbean - Current Situation, Future Trends and One Policy Experiment," the value of greenhouse gas (GHG) emissions in the marketplace, compensating farmers for refraining from land clearing may only offset over half of the total agricultural losses associated with the ban, when taking into consideration the average 2009 price of roughly \$4.30/t CO₂ eq.

At present, deforestation and forest degradation are the main source of GHG emissions in the region and scientific studies suggest policies to halt destruction of forest cover will be key to stabilize worldwide emissions.

The study is part of ongoing efforts by the IDB to improve information on and understanding of the potential costs and benefits of policies seeking to mitigate and adapt to climate change.

Eirivelthon Lima, a Natural Resources Economist at the IDB, one of the coordinators of the study explains that "Our study supports other empirical studies indicating that the potential income that the rural poor could receive from protecting the forest is much smaller than the income they would typically get by clearing land to grow crops."

She adds that "a complete ban on land clearing in the tropics of Latin America and the Caribbean would therefore require compensatory policies to make the ban feasible and to prevent local poverty from increasing."



Commonwealth High Level Meeting on Climate Finance

Representatives from Commonwealth countries most vulnerable to climate change ended a high level meeting on climate finance with a call for practical support to enable them access, manage and use funds to tackle the potentially devastating effects of changing global weather patterns.

The 'Commonwealth High Level Meeting on Climate Finance' held in Sussex, UK, in late January was designed to build on the outcomes of the Commonwealth leaders meeting in Port of Spain, Trinidad and Tobago, in 2009 and the commitments made at the UN Climate Change meetings in Copenhagen and Cancun.

This meeting aims to ensure that the poorest and most vulnerable Commonwealth member countries, especially the small island developing states, low-lying coastal states, least developed countries and those in Africa are able to access, manage and absorb funds for mitigation and adaptation.

At each of these meetings the urgent need for adequate money to deal with, and prevent, the effects of climate change in vulnerable countries was recognised. The meeting brought together a regionally-representative group from Commonwealth ministries of Planning, Finance, Environment and Foreign Affairs, as well as development partners, experts on climate finance, and regional organisations.

An outcomes document at the end of the meeting noted that the Commonwealth was well placed to share experiences and provide practical help to get projects underway.

"Although there is some US\$2 billion of climate finance available to developing countries, only around US\$400 million has



been disbursed according to a study by the Overseas Development Institute.

"We see this low level of disbursement and absorption as indicative of a potential capacity challenge to the recipient countries – and hope that this meeting will find ways of making it easy and convenient for our member countries to access, absorb and use this money," said Ransford Smith, Deputy Secretary-General of the Commonwealth.

He said mechanisms are needed to attract climate financing to the neediest countries in an effective manner.

"This means paying great attention to the many lessons learned from the decades of experience with development. Specifically, developing countries must be in the driving seat, using these funds for national priorities and complex and fragmented sources of financing must be avoided so that countries with limited institutional resources can still access them easily," Mr Smith added.

According to the outcome document, discussions uncovered a broad range of concerns regarding the current effectiveness of climate financing. Participants noted the inadequate level of accessible climate finance for their adaptation and mitigation needs; difficulties in accessing existing sources of funding; the imbalance between the financing of mitigation and adaptation actions; the challenge of fragmented funding sources; and the need for climate financing to be driven more strongly by national programmes and needs.

Who wants the last slice?



Our planet is the only one we have, and its resources cannot be mindlessly consumed. Let's conserve our earth and make sure there is plenty for future generations to enjoy.



Life, Health and Pensions • Asset Management • Property and Casualty
www.guardianholdings.com • www.facebook.com/GuardianFinancial • [Twitter.com/ghltweets](https://twitter.com/ghltweets)

GROWING OUR FOODS

As far as I can remember, my parents always had different kinds of vegetables and herbs growing in our yard at home.

My mom would remark ever so often that she got a special joy eating the foods that we grew. I never knew what she meant until I ate tomatoes from a vine that I planted with the help of my parents and took care of until it reached maturity.

I sunk my teeth into the fleshy tomato, almost as huge as my hand and enjoyed eating the juicy pulp and seed which dribbled down from my mouth to hand and elbow. It did taste special! But I think the specialness really had to do with actually eating something that you grew as you waited everyday for the new leaves to be formed or for the fruit or vegetable to start blossoming.

This year started off with my parents preparing the ground for planting vegetables. My mom said food prices were again "sky-rocketing" meaning people have to spend more to buy foods and she did not want to get caught in that.

We're also growing our foods as organically or as natural as we can without using chemicals to chase off bugs or to make the vegetables grow faster. Chemicals are not good for the soil or the air. Foods that have been sprayed need to be washed thoroughly so you don't get the harmful chemical into your body.



So, we're keeping it simple as we can by giving the plants daily watering and ensuring that it gets enough sunlight to help it grow. My brothers and I have also been given our own plants and I think it's a neat way of encouraging young children like us to be excited about contributing to the kitchen.

It also encourages us to become productive at an early age and not always be dependent on the supermarket or the green grocer for our fruits and vegetables.

Earth Art



The Role of the Media in Biodiversity Conservation and Protection

By Wesley Gibbings



A discussion on media and biodiversity conservation can end quickly by saying that the media have no real role in anything outside of their functions as business enterprises delivering a public good by way of news, information, opinion and entertainment, and are fuelled by journalistic, commercial, political, cultural and other public interest inputs. We can then possibly conclude that the presumed “role of the media” would constitute the implicit cumulative impact of all these various parts.

Alternatively, we can believe that societies grant to businesses enterprises - describing themselves as mass media - license to investigate, comment, analyse, entertain, advertise, publicise and to generally survive financially. In return, the media are expected to pursue the interests of the populations they service, or in which they reside, in a manner supportive of interventions deemed through public policy or other interventions to contribute to the greater good of society.

As a consequence, biodiversity conservation and protection become imperatives of such an explicit role – if we accept this to be essential to our survival at all.

One of the more interesting things arising out of last year’s observance of International Year of Biodiversity was the manner in which scientists, environmental communicators and educators, lay persons, and those who don’t care that much, wrestled with the concept of biological diversity.

The easy way out, some might say “the cop out”, would be to resort to the classical definition which describes biodiversity as “the diversity of plant and animal life in a particular habitat”.

The reality, though, is that this diversity of plants and organisms and species represents far more than a stable, static condition. In fact, there are definitions that describe a far more dynamic, interactive process representing a high degree of interdependence, interaction, growth, decline and change. Somewhere between there is the vexing question of deliberate modification by humans. But that’s for another discussion.

One of the more fashionable and widely-accepted definitions puts humans at the centre by suggesting that biodiversity describes “the variety of life that is essential to sustain the systems that provide us with water, food, clean air and fuel.”

Human interaction with our natural environment has brought great changes, especially in recent decades. To cite one example, the greater mobility of people and plant and animal species is possible because of modern transportation, climate change factors and other variables mean that invasive, non-indigenous species now increasingly occupy new biodiverse spaces with both negative and positive impacts.



Our natural landscapes in the Caribbean are also considered to be among the most diverse in the world. The presence of endemic flora and fauna has given impetus to pursue greater protection of species of plant and animal life, while greater care and higher levels of environmental management are required to ensure there is conservation of the natural processes that maintain the diversity required to maintain life as we know it in these small countries.

Countries such as ours pay attention to species diversity; the impact of such diversity on sustainable livelihoods, especially in the areas of marine, horticulture and agricultural diversity. There is also concern related to the protection of rivers and beaches, threatened species, invasive alien species and the maintenance of coastal and marine habitats.

I believe we can make the mistake of assigning this issue the unfortunate label of science journalism, complete with an obligation to perform “objectively” and to strive for a high degree of empiricism.

It is a mistake if only because the value of biodiverse ecosystems to humankind exceeds mere scientific assertion and engages a far more complex interface between the quality of human existence and the interdependent, interwoven and evolutionary nature of plant and animal life. The essential messages of the biodiversity story are therefore perhaps more a matter of social rather than natural science.

The biodiversity story is as much a story of political arrangements and how power is managed in our society as it is a question of biological complexities. The relationship between the plantation and the port – as the late Trinidadian thinker, Lloyd Best, famously described the colonial legacy of our countries – determines in large measure relationships between urban and rural natural environments.

There might as well be implications for the manner in which we have engaged our own diversity as people – a process we have been relatively unsuccessful at engaging.

The biodiversity story is also very much a story of economics and finance. To what extent have we considered our ecological assets, inclusive of their inherent diversity, as economic product? For example, it has been found that the economic value of products extracted from our forests – timber and wildlife to name two such products – is being vastly under-estimated, when we consider the impact of environmental degradation occasioned by deforestation and the impact on dwindling wildlife populations.

To what extent have we considered our ecological assets, inclusive of their inherent diversity, as economic product?

It is also a story that has a direct bearing on important questions related to supplies of food and water – important not only their obvious human benefits, but for their contribution to social peace. The estimate is that the world has lost up to three quarters of its agricultural biodiversity in the last 100 years.

It is not entirely far-fetched to conclude that most of the recent conflicts in the Middle East and North Africa emerged out of concern over inflation, jobs and livelihoods in part because of unstable, unpredictable food markets increasingly affected by extreme climate conditions.

Journalistic obligations therefore extend beyond the science of biological diversity. For example, the debate over genetic modification to promote greater production and economic viability within the food sector is characterised by discussions involving matters of scientific ethics, intellectual property issues and even a discourse on the question of food sovereignty.

It might well be that biodiversity as a newsworthy phenomenon is at least as elusive as it is all-embracing and wide-ranging. In which event, biodiversity as an explicit subject of journalistic investigation would not, by itself, provide the fodder required for the headlines except that it also constitutes an important element of front page issues such as food prices, disasters and conflict traceable to disappearing economic activity especially by rural populations.

Environmental communicators would do well to consider the diverse entry-points for this subject on the news agendas – a process in which the term biological diversity might attract only minimal attention, but whose presence is as pervasive as it is influential.

Mr. Gibbings delivered this paper at a recent Media Awareness Seminar in St. Vincent and the Grenadines.



IDB and Barbados sign loan deals for sustainable energy and climate change projects



Prime Minister Freundel Stuart (left) and Minister Chris Sinckler (right) listening to IDB president Luis Alberto Moreno. (Lennox Devonish)

Photo: Nation News, Barbados

Inter-American Development Bank President, Luis Alberto Moreno and Prime Minister of Barbados, Freundel Stuart have signed two loan agreements totalling US\$40 million to support initiatives that will bring significant economic benefits to the Caribbean island through sustainable energy and more effective coastal zone management.

Conscious of the drain on foreign exchange, Barbados is aiming to reduce the island's heavy dependence on imported fossil fuels over the next 10 to 15 years by at least 30%. The broad-based strategy involves encouraging consumers to be more efficient in their energy use and, simultaneously, promoting greater use of alternative sources of energy.

A US\$10 million loan will go towards establishing an Energy Smart Fund to help consumers, both households and businesses, to acquire and install renewable

energy technologies such as solar panels for power generation that will be connected to the grid, more efficient air conditioning units and efficient lighting systems.

Last year, a US\$45 million loan was made available to support the comprehensive process of establishing a Sustainable Energy Framework, including the preparation of policy and legislation that will promote renewable energies and energy efficiency in all sectors of the economy. Supporting technical assistance grants of US\$3 million were also approved, including a US\$ 1 million for pilot projects.

According to IDB calculations, savings to be generated by the Smart Fund and other initiatives under Barbados' Sustainable Energy Framework are expected to total at least US\$283 million over the next 10 to 15 years, reducing CO2 emissions by more than 4.5 million tons.

Over the same period it will be one of the largest reductions in fossil fuel consumption ever achieved in Latin America and the Caribbean. Barbados spent US\$252 million on oil imports in 2009, the equivalent of 7% of gross domestic product or the amount spent annually on education.

The second loan of US\$30 million goes to support a Coastal Risk Assessment and Management Programme which will help improve the generation and management of coastal risk data, build additional infrastructure to control shoreline erosion, improve Barbados' resilience to climate change and other hazards, and also improve public access to beaches.



Pride in Pawi

By Christopher Camacho

Far from the crowds of Port of Spain in the communities of the North East, elaborate stories are told that start, "Back in my day..." "Once upon a time..." and "Long before...". Here they tell tales of the biggest fish, the fiercest storm and the craziest local adventurer, almost always related to the teller himself.

Sharing this beautiful and remote part of Trinidad where the hustle and of town is traded for the rustle of the forest, lives one of the country's national treasures: The Pawi. And here, under siege from hunting and habitat destruction, the few remaining Pawi, an endemic species known only to Trinidad, are threatened of joining the fish-that's-bigger-than-my-boat, Hurricane Flora, and the village hero as being placed entirely and totally in the fading past of local legend...

The Guardian Life Wildlife Fund (GLWF) refuses to accept the demise of this treasured bird, and along with its partners including the United Nation's Development Programme, UWI's Pawi Study Group, and, most importantly, the communities themselves, has embarked on a project to save the Pawi by raising awareness of its critically endangered status and creating the infrastructure to preserve and protect it for future generations.

For the last 8 months, the GLWF's 'Pride in Pawi Project' has gone into 5 communities surrounding the precious last known habitat of the Pawi and assisted in the creation and training of Core Groups of conscientious and caring citizens in a coordinated effort to conduct research on this enigmatic animal.

This research is studied and interpreted by UWI's Pawi Study Group where it will be used as publishable scientific records of a practically unknown species. What does it eat? Where does it roost? And of course, the most important, How many are left? (Last tally estimated at 230)

Matelot, Matura and Grande Riviere have taken up the challenge with great enthusiasm, and equipped with their GPS, First Aid, and data collection training have conducted several month's worth of information gathering in the North East Forests. "We've seen the most remarkable things!" says Kevin Muhammed, a patroller from Grande Riviere, where the Pawi is sighted regularly, "We've been observing behaviour that is totally unprecedented in the former research."

As the GLWF's project enters its final few months, Brasso Seco and Blanchisseuse are joining in, sending their own teams into the deep Madamas Forests, where just a month ago a Pawi injured by illegal hunting was rescued by hikers, and made famous across the country with her amazing recovery, earning her the illustrious name, Phoenix.

"Additionally, the progress of the project has led to the growth of the knowledge base within the communities and

exciting new opportunities begin to arise. Following in the example laid by earlier conservation movements in Trinidad, namely the Leatherback Turtle initiatives in villages like Matura and Grande Riviere, locals talk excitedly of the possibility of leading eco-friendly excursions into and along the forest trails housing this rare and elusive creature.

Already the Asa Wright Nature Centre conducts similar tours amidst the forests of Madamas for bird lovers who fly down from all over the world for a chance to spot one of the last remaining Pawi. Equipped with forest, first aid and birding training, the newly created "Pawi Guardians" will be poised to become expert guides for these ornithological enthusiasts, bringing culturally and environmentally sustainable economic benefit to these remote communities.

Like the Leatherback's experience over the last 25 years, the Guardian Life Wildlife Fund hopes that the Pawi too can become the rallying point for a nationally led campaign to protect the ecology of the virgin forests of the North East. Its waning cry is a call to both young and old to stand up and protect the raw natural beauty of it and, of our country.

With this triad of goals as its main axis: the advancement in scientific research on an unknown species; the increased capacity of the communities; and the heightening of national awareness, the GLWF's Pride in Pawi Project continues onwards to uplift both the future of Trinidad & Tobago's national treasure and by extension, the country itself.



Pride In Pawi



2010 equals record for WORLD'S WARMEST YEAR

The year 2010 ranked as the warmest year on record, together with 2005 and 1998, according to the World Meteorological Organization (WMO). Data received by the WMO show no statistically significant difference between global temperatures in 2010, 2005 and 1998.

In 2010, global average temperature was 0.53°C (0.95°F) above the 1961-90 mean. This value is 0.01°C (0.02°F) above the nominal temperature in 2005, and 0.02°C (0.05°F) above 1998. The difference between the three years is less than the margin of uncertainty ($\pm 0.09^\circ\text{C}$ or $\pm 0.16^\circ\text{F}$) in comparing the data.

These statistics are based on data sets maintained by the UK Meteorological Office Hadley Centre/Climatic Research Unit (HadCRU), the U.S. National Climatic Data Center (NCDC), and the U.S. National Aeronautics and Space Administration (NASA).

Arctic sea-ice cover in December 2010 was the lowest on record, with an average monthly extent of 12 million square kilometres, 1.35 million square kilometres below the 1979-2000 average for December. This follows the third-lowest minimum ice extent recorded in September.

"The 2010 data confirm the Earth's significant long-term warming trend," said WMO Secretary-General Michel Jarraud. "The ten warmest years on record have all occurred since 1998."

Over the ten years from 2001 to 2010, global temperatures have averaged 0.46°C (0.83°F) above the 1961-1990 average, and are the highest ever recorded for a 10-year period since the beginning of instrumental climate records.

Recent warming has been especially strong in Africa, parts of Asia, and parts of the Arctic, with many sub-regions registering temperatures 1.2 to 1.4°C (2.2 to 2.5°F) above the long-term average.

2010 was an exceptionally warm year over much of Africa and southern and western Asia, and in Greenland and Arctic Canada, with many parts of these regions having their hottest years on record.

Over land few parts of the world were significantly cooler than average in 2010, the most

The year 2010 was characterized by a high number of extreme weather events, including the heat-wave in Russia and the devastating monsoonal floods in Pakistan.

There have been many major weather and climate events in late 2010 and early 2011. These include:

- In early January floods affected more than 800 000 people in Sri Lanka according to the UN Office for the Coordination of Humanitarian Affairs. The Philippines were also severely affected by floods and mudslides during January.
- Flash floods in the mountain areas near the city of Rio de Janeiro in Brazil in the second week of January resulted in more than 700 deaths, many of them in mudslides. This is one of the highest death tolls due to a single natural disaster in Brazilian history.
- Severe flooding occurred in eastern Australia in December and the first half of January, associated with the continuing strong La Niña event. The most extensive damage was in the city of Brisbane, which had its second-highest flood of the last 100 years after that of January 1974. In financial terms it is expected to be the most costly natural disaster in Australia's history.

notable being parts of northern Europe and central and eastern Australia.

December 2010 was exceptionally warm in eastern Canada and Greenland. It was abnormally cold through large parts of northern and western Europe, with monthly mean temperatures as much as 10°C below normal at some locations in Norway and Sweden.

Many places in Scandinavia had their coldest December on record. December in Central England was the coldest since 1890. Heavy snowfalls severely disrupted transport in many parts of Europe. It was also colder than average in large parts of the Russian Federation and in the eastern United States, where snow also severely disrupted transport.

ST. MAARTEN GETS ITS FIRST NATIONAL MARINE PARK



St. Maarten recently established its first national marine park - the Man of War Shoal Marine Park and is the first step towards preserving the area known as the Proselyte Reef, the island's most important underwater habitat.

"The development of the marine park has been long in the making and we are pleased to have begun the first and most crucial phase of the process. By creating the marine park, St. Maarten is taking steps to preserve the local environment as well as enhancing sustainable tourism," said Franklin Meyers, Minister of Economic Affairs, Tourism, Transportation and Telecommunications.

The Proselyte Reef includes the island's most important marine habitat consisting of coral reefs and sea grass beds as well as a large population of aquatic mammals, including whales, dolphins, sharks, sea turtles and fish. The reef also acts as a migratory stopover and breeding site for three IUCN Red List Species, 10



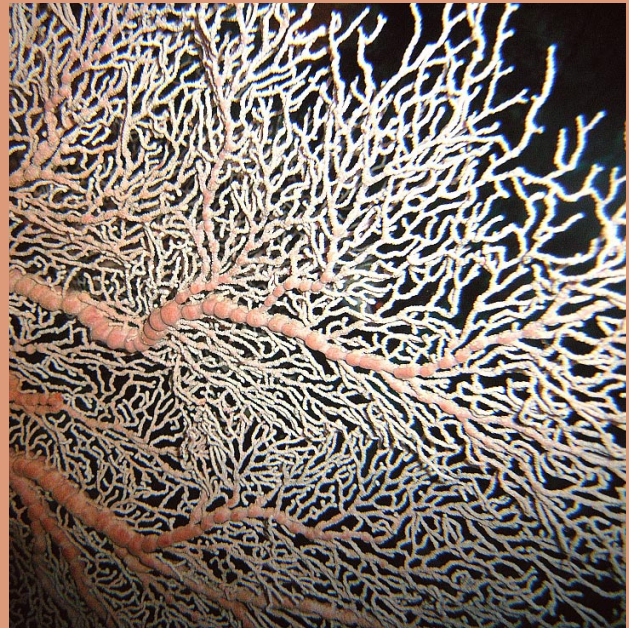
CITES Appendix I species and 89 Appendix II species.

The area was selected because of the ecological, economical and cultural value which provides more than US\$50 million per year in economic goods and services. In addition, this designated region will help boost tourism to the island as diving in marine parks is on the rise globally and is a tourist "must do" while on vacation.

The new Man of War Shoal marine park allows St. Maarten to have an official protected area that is enforced in accordance with the Specially Protected Areas of Wildlife (SPAW) Protocol and the federal decree on Maritime Management. Named after the HMS Proselyte - a 32-gun frigate that struck Man of War Shoal on Sept. 4, 1801, artifacts such as large anchors, cannons, barrel hoops, cannon balls and pottery are still present at the site, which is considered an archaeological treasure.

Reefs at Risk

75% of world's coral reefs currently under threat - Grenada, Haiti among most vulnerable.



A new comprehensive analysis finds that 75 percent of the world's coral reefs are currently threatened by local and global pressures. For the first time, the analysis includes threats from climate change, including warming seas and rising ocean acidification.

The report shows that local pressures—such as overfishing, coastal development, and pollution—pose the most immediate and direct risks, threatening more than 60 percent of coral reefs today.

For the first time, the report identifies the 27 nations most socially and economically vulnerable to coral reef degradation and loss. Among these, the nine most vulnerable countries are: Haiti, Grenada, Philippines, Comoros, Vanuatu, Tanzania, Kiribati, Fiji, and Indonesia.

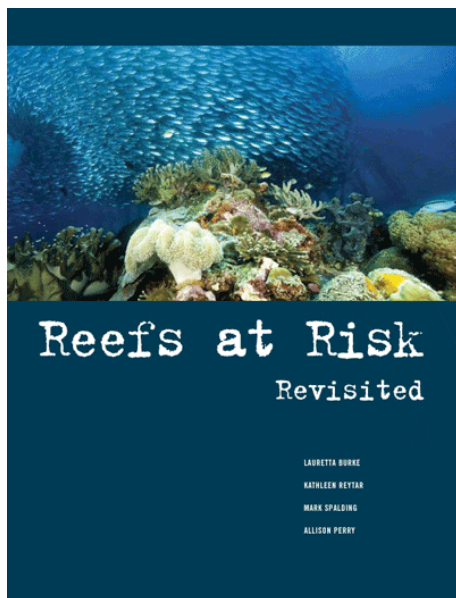
"Reefs at Risk Revisited," the most detailed assessment of threats to coral reefs ever undertaken, is being released by the World Resources Institute, along with the Nature Conservancy, the WorldFish Center, the International Coral Reef Action Network, Global Coral Reef Monitoring Network, and the UNEP-World Conservation Monitoring Center, along with a network of more than 25 organizations. Launch activities are taking place in Washington, D.C., London,

Malaysia, Indonesia, the Caribbean, Australia, and other locations around the world.

"This report serves as a wake-up call for policy-makers, business leaders, ocean managers, and others about the urgent need for greater protection for coral reefs," said Dr. Jane Lubchenco, under secretary of commerce for oceans and atmosphere and NOAA administrator. "As the report makes clear, local and global threats, including climate change, are already having significant impacts on coral reefs, putting the future of these beautiful and valuable ecosystems at risk."

Local pressures – especially overfishing and destructive fishing – are causing many reefs to be degraded. Global pressures are leading to coral bleaching from rising sea temperatures and increasing ocean acidification from carbon dioxide pollution. According to the new analysis, if left unchecked, more than 90 percent of reefs will be threatened by 2030 and nearly all reefs will be at risk by 2050.

"Coral reefs are valuable resources for millions of people worldwide. Despite the dire situation for many reefs, there is reason for hope," said Lauretta Burke, senior associate at WRI and a lead author of the report. "Reefs are resilient, and by reducing



the local pressures we can buy time as we find global solutions to preserve reefs for future generations.”

The report includes multiple recommendations to better protect and manage reefs, including through marine protected areas. The analysis shows that more than one-quarter of reefs are already encompassed in a range of parks and reserves, more than any other marine habitat. However, only six percent of reefs are in protected areas that are effectively managed.

“Well managed marine protected areas are one of the best tools to safeguard reefs,” said Mark Spalding, senior marine scientist at the Nature Conservancy and a lead author of the report. “At their core, reefs are about people as well as nature: ensuring stable food supplies, promoting recovery from coral bleaching, and acting as a magnet for tourist dollars. We need apply the knowledge we have to shore up existing protected areas, as well as to designate new sites where threats are highest, such as the populous hearts of the Caribbean, Southeast Asia, East Africa and the Middle East.”

Reefs offer multiple benefits to people and the economy – providing food, sustaining livelihoods, supporting tourism, protecting coasts, and even helping to prevent disease. According the report, more than 275 million people live in the direct vicinity (30 km/18

miles) of coral reefs. In more than 100 countries and territories, coral reefs protect 150,000 km (over 93,000 miles) of shorelines, helping defend coastal communities and infrastructure against storms and erosion.

“The people at greatest risk are those who depend heavily on threatened reefs, and who have limited capacity to adapt to the loss of the valuable resources and services reefs provide,” said Allison Perry, project scientist at the World Fish Center and a lead author. “For highly vulnerable nations – including many island nations – there is a pressing need for development efforts to reduce dependence on reefs and build adaptive capacity, in addition to protecting reefs from threats.”

The report is an update of “Reefs at Risk,” released by WRI in 1998, which served as an important resource for policymakers to understand and address the threats of reefs. The new report uses the latest data and satellite information to map coral reefs—including a reef map with a resolution 64 times higher than the original report.

“Through new technology and improved data, this study provides valuable tools and information for decision makers from national leaders to local marine managers,” said Katie Reyta, research associate at WRI and a lead author.



Dr. Jane Lubchenco speaks at WEC's Washington Sustainability Forum



...supporting a sustainable Caribbean environment

EU FUNDS CLIMATE CHANGE PROJECT IN JAMAICA



In the last five years alone Jamaica has experienced more than twelve natural disasters costing the country billions of dollars in economic losses and repairs.

The increase in natural disasters has been partly attributed to climate change and has had a significant impact on the national economy, the quality of the country's natural environment and the livelihoods of thousands of people.

The European Union said with this in mind it committed grant resources of € 4.13 million for the implementation of a Climate Change Adaptation and Disaster Risk Reduction Project in Jamaica.

The project, which is managed by the United Nations Environment Programme (UNEP) and the Planning Institute of Jamaica (PIOJ), is geared towards increasing resilience and

reducing risks associated with natural hazards in vulnerable areas. The project will be undertaken over a thirty month period.

The project will focus on four principal areas in addressing climate change. These include the rehabilitation of watershed areas through reforestation; improvement in the management of coastal ecosystems; forest resource management and improving climate change awareness.

Speaking at the official launch of the project recently, Head of the Delegation of the European Union to Jamaica, Ambassador Marco Mazzocchi Alemanni said the project is timely and shows the EU's commitment to its actions on climate change particularly following the recently concluded Cancun Summit. He suggested that future funding for climate change could be identified from existing co-operation programmes.

"This project should be used as a pilot to better understanding the effects of climate change on Jamaica, and prepare suitable responses to be launched

for the adaptation to this problem. We believe in the near future we will try consider programming future European Development Funds to include climate change adaptation as one of the focal sectors."

Jamaica also stands to benefit from a regional project which is also being funded by the European Union. The project which is being implemented at the CARICOM level is to support the implementation of a Caribbean regional climate change strategy. This project is under the responsibility the Caribbean Community Climate Change Centre (CCCCC) based in Belize and the activities will benefit all countries of the CARIFORUM. That project has received overall funding of €8 million.



SUSTAINABLE TOURISM GETS BOOST WITH LAUNCH OF GLOBAL PARTNERSHIP

The push for sustainable tourism was given a boost with the establishment of the Global Partnership for Sustainable Tourism that unites all stakeholders in the industry in influencing policies, developing projects and providing a global communication platform.

The new Partnership was established at the first annual General Meeting in Costa Rica, hosted by the Costa Rican Ministry of Tourism and supported by the French and Norwegian Governments, together with the UN Environment Programme (UNEP) and the World Tourism Organization (UNWTO).

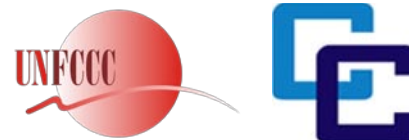
During the meeting, France was elected President of the Partnership Steering Committee and Costa Rica as Vice-Chair. The Secretariat to this innovative Global Partnership will be housed with UNEP's Division of Technology, Industry and Economics (DTIE) in Paris, France and the emphasis will be to shift tourism onto a sustainable pathway worldwide.

"The Partnership will be an up-to-date, dynamic forum where countries that are interested in tourism which is truly sustainable will be able to learn from the successful efforts of the other members and obtain technical assistance, and which will promote constant dialogue, the exchange of experiences, and seek solutions to the problems that are common to the tourism sector," said Gina Guillen Grillo, Senior Advisor to the Minister of Tourism of Costa Rica.

Tourism is one of the world's largest industries and for developing countries it can be a source of much needed income. However, if not managed well, tourism can also threaten a country's natural resources as a result of higher demands on water and energy consumption and waste generation and lead to environmental degradation and negatively impact local populations.

"The tourism sector has been increasingly recognized as a key engine for economic growth, especially in developing and least developed countries. It is not only responsible for a significant share of world GDP (5%) and employment (6-7%), but is also an important source of foreign investment reaching as much as 30% of the world service's exports. The number of international tourist arrivals is expected to reach 1.6 billion by 2020," said Luigi Cabrini, Director for Sustainable Development of Tourism in the World Tourism Organization (UNWTO).

CLIMATE CHANGE PRIORITIES FOR THE REGION



Heads of Government welcomed a report from the Prime Minister of Saint Lucia (Stephenson King) on the outcome of the Sixteenth Meeting of the Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) (COP 16) held last December in Cancun, Mexico. They agreed that CARICOM Member States would:

- make efforts to ensure that there is adequate and balanced representation by competent CARICOM experts, through GRULAC and AOSIS, on the newly formed governance bodies of the Convention.
- collectively sponsor and lobby for the Caribbean Community Climate Change Centre (CCCCC) to be designated an International Centre on Adaptation.

Heads of Government called on the Centre to visit Member States to assist in identifying and preparing appropriate projects, using established guidelines of the World Bank and the UNDP, in order to make use of available and emerging resources for climate change adaptation.



HOW ENGAGING IN GREEN BUSINESS PRACTICES CAN IMPROVE YOUR BOTTOM LINE

Caribbean and international business leaders, including those involved in tourism, looking to cash in on green tourism will get practical answers at the upcoming Sustainable Tourism Conference from 3-6 April in Bermuda.

At the conference, the internationally recognized expert in sustainable tourism development and destination stewardship, Brian Mullis will reveal the most powerful means by which tourism businesses and destinations can improve their bottom line through sustainable tourism.

Mr. Mullis will illustrate how Sustainable tourism has evolved from a grassroots movement - or niche market - into part of mainstream corporate and consumer culture and how businesses can make the practice profitable.

"The business case for engaging in 'green' business practices is stronger than ever," said Mr. Mullis, who he has assisted hundreds of travel-related companies, including Fortune 500 companies, in the areas of sustainable tourism, business development, market access, carbon management, and standards development.

"By embracing sustainable tourism and engaging in the green economy, the Caribbean can benefit in a number of ways including enhanced competitive advantage, improved market differentiation and consumer loyalty, and increased local employment opportunities and opportunities for local enterprise," he added.

STC-12, which has as its theme "Keeping the Right Balance: Rising Above the Numbers" is being organised by the Caribbean Tourism Organization (CTO), in collaboration with the Bermuda Department of Tourism and will be held at the Fairmont Southampton.

ESCAP, ECLAC RELEASE PREVIEW OF GUIDELINES ON SUSTAINABLE URBAN INFRASTRUCTURE

The UN Economic and Social Commission for Asia and the Pacific (UN ESCAP) and the UN Economic Commission for Latin America and the Caribbean (ECLAC) have released a preview of guidelines titled "Are We Building Competitive and Liveable Cities?"

The guidelines address the development of eco-efficient and sustainable urban infrastructure in Asia and Latin America. The guidelines aim to inspire and guide political leaders, urban planners and policy makers in Asia and Latin America in planning and developing sustainable urban infrastructure. They take an eco-efficiency approach in order to assist in identifying win-win solutions leading to improved competitiveness and quality of life, including for the poor.

The guidelines are based around the following five strategic principles: lead the change, by putting sustainable infrastructure at the top of the agenda; link sectors and actors, ensuring integration across sectors and between institutions; recognizing the multiple values of natural resources, through a life-cycle approach; turning 'green' into a business opportunity, by building the business case for eco-efficient solutions; and building the city for the people together with its people, through board-based participation.

The Guidelines were developed by ESCAP and ECLAC, in partnership with the Urban Design Lab (UDL) and the Earth Institute at Columbia University. A final version of the guidelines will be produced in April 2011.



THE NATIONAL GAS COMPANY
OF TRINIDAD AND TOBAGO LIMITED

29,000
seedlings.

That's 29,000 commitments to the

environment.

29,000 more trees for our children's

children to enjoy.

29,000 more subjects for a

painter's canvas. 29,000 more homes for
our wildlife to seek refuge. 29,000

reasons to keep planting.



For Beauty and Beasts

Through our No Net Forest Loss Policy, NGC
replaces hectare for hectare

of forested areas cleared for pipeline
construction. We partner with communities,
governmental and non-governmental
agencies to carry out our

Reforestation Programme

with the aim to restore our
natural forest resources.

29,000 and counting...



Following is an abridged version of a speech given by Executive Secretary of the United Nations Framework Convention on Climate Change, Christiana Figueres in mid-February to the Conference of the Secretariat General Ibero-americana (SEGIB) which was held in Madrid, Spain. Her address is titled: Implementing Cancun: Latin America's role in taking climate change to the next level.



Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change

Latest research rates Central and South America's vulnerability to climate change as currently "high" and certainly as "severe and acute" by 2030. But Latin America also has a number of key opportunities for taking climate change action to the next level - both in adaptation and in mitigation.

It is important that these opportunities are fully capitalised, notably through the Cancun Agreements.

The Cancun Agreements, reached under the steady guidance and outstanding leadership of Minister Patricia Espinosa, signified what was a big step forward for the community of nations, but a small step for the planet.

They are a big step because of three major achievements:

1. The agreements form the foundation for the most far reaching collective effort the world has ever seen to reduce carbon emissions and to build a system which makes all countries accountable to each other for those emission reductions.

Building on emission reduction targets that had been put forward informally in 2010, under the CA all industrialized nations have officialized their reduction pledges, and

have committed themselves to develop low-carbon development plans or strategies.

In addition, 37 developing countries have officialized their nationally appropriate mitigation actions referred to as NAMAs, which seek a deviation from business-as-usual emissions by 2020, and are encouraged to develop low carbon growth strategies.

2. The Cancun Agreements include the most comprehensive package ever agreed by governments to help developing nations deal with climate change, including new institutions to boost technology cooperation, financing and adaptation. These include:

- A technology mechanism, which will be fully operational in 2012 and which will support the innovation, development and spread of new technologies.
- A Green Climate Fund, to provide long term financing to projects, programmes, policies and other activities in developing countries via thematic funding windows.
- An Adaptation Committee to promote the implementation of stronger action on adaptation.

3. The Cancun Agreements provide the strongest signal countries have ever

given to the private sector that we are moving toward low-carbon economies, by committing to a maximum temperature rise of 2 degrees, and a consideration of a maximum of 1.5 degrees in the near future.

At the next UN climate change conference in Durban, much of the focus will be on finalizing and adopting the institution-building arrangements launched in Cancun, as well as the methodologies to provide the rigour and transparency.

These achievements are undoubtedly a major step forward for governments, but at the same time they are only a small step for the planet. This is first and foremost because the level of ambition currently on the table amounts to only 60% of what is needed to limit the temperature increase to the agreed 2 degrees. Furthermore, a 2 degree increase is in fact no guarantee for the survival of small island states. Similarly, no agreement was reached on the year in which global emissions need to peak.

This is contrary to what science tells us is needed: a global peaking in 2015 and a 50% reduction compared to 2000 levels by 2050.

In Cancun, nations evidently chose to approach the challenge in a bottom-up manner through a compilation of best national efforts.

It is hard to say whether this will suffice to keep the world on a 2C trajectory, or whether this would need to be complemented with a top-down international agreement, either through the Kyoto Protocol or in another way that would increase the certainty of the international framework.

They say that a beginning is the half of every action - this is a good starting point for taking climate change action to the next level.

The Cancun Agreements are a small step for the planet, but they are nonetheless a beginning that can spark more action.

While it remains to be seen whether the bottom-up notion will close the current



Flashback Patricia Espinosa Cantellano, Mexico's Foreign Affairs Secretary, in her opening address of the CMP6 review.

emission reduction gap, this very notion allows countries to play to their strengths, to pave their best sustainable paths.

Cancun provides important incentives to develop policies at the national level that respond to the individual needs of countries - both in terms of adaptation and mitigation - while working in tandem with international policy.

In terms of adaptation, national policy efforts are still in their infancy, although they are urgently needed.

To date and in response to international efforts, many national initiatives have focused on identifying adaptation needs, but little real implementation has taken place.

For the development of adaptation policies and their implementation, local initiatives can indeed provide valuable input.

This includes partial reforestation with fruit trees like in El Salvador, the replanting of mangroves to protect cost-lines like in Mexico, or the construction of elevated bamboo houses like in Ecuador.

By assessing local adaptation initiatives and regarding them as input for policy-making, experience and knowledge from communities that have already had to adapt to specific climatic conditions can be shared and utilized to a country's advantage.

In terms of mitigation, Latin America needs to capitalize on the incentives provided by the Cancun Agreements to take climate change action to the next level.

The process of crafting low-carbon national policies that can work in tandem with international policy has already begun. In 2010, all G20 economies and also others have initiated or completed the development of economic growth plans that are strongly based on low-carbon growth.

This is encouraging because the 2C temperature limit and envisioned low-carbon growth in the Cancun Agreements will be impossible to achieve without significantly scaling up the use of renewable energies. But at present, formidable challenges to this still remain.

In the case of Latin American countries-- Brazil, Peru, Columbia-- most electricity comes from hydropower, but the share of hydro has been falling in recent years as gas-powered and thermal generation have collectively provided a significant share of new generation.

The danger in this is that if opportunities for hydropower development and other renewables are not explored, some countries in Latin America are likely

to increase the carbon intensity of their fossil-fuel based power generation capacity as they rapidly build up infrastructure.

This would lock-in long-lived, high-carbon infrastructure and waste their natural renewable energy endowments. Timing is everything.

The use of renewable energy needs to be expanded and go much further through the appropriate policies, incentives and government support at the national level. The Cancun Agreements provide many incentives that need to be utilised towards this.

By dint of natural endowment, Latin American countries have huge potential for renewable energy generation - wind conditions are ideal in Mexico, Central America, Northern Columbia and Patagonia; large parts of Latin America, receive high solar radiation levels; and geothermal resources are also significant, being located in a volcanic area. Biofuels already account for about 6 per cent of energy consumed in the transport sector.

Nationally appropriate mitigation actions in developing countries can capitalise on these endowments and in this way hold both important sustainable development and major investment opportunities.



COP 16 - plenary session

Saint Lucia after "Tomas": 20,000 to benefit from rehabilitation of public infrastructure

The World Bank Board has approved a US\$15 million zero-interest credit to help Saint Lucia rehabilitate key infrastructure damaged by the passage of Hurricane Tomas and improve the island's capacity to manage disaster risk.

An estimated 20,000 people will directly benefit from the rehabilitation of damaged public infrastructure, while the entire population will be better prepared to confront future natural disasters.

"Natural disasters such as Hurricane Tomas impose large costs on Saint Lucia's economy by seriously impacting tourism and agriculture, with particularly severe effects on the most vulnerable communities and households," said Françoise Clottes, World Bank Director for the Caribbean. "This financing will provide much needed resources to support the

Government's program of rehabilitation and reconstruction of public infrastructure, but will also help the country deal with future natural hazards."

Hurricane Tomas swept over the Eastern Caribbean region on October 30, 2010, affecting almost the entire island of Saint Lucia and causing damage estimated at 43 percent of the country's GDP. The bulk of the damages resulted from flash flooding and subsequent landslides that made roads impassable, destroyed bridges and homes, and washed away river banks in the central and south-western parts of the island.

The US\$15 million zero-interest credit from the World Bank's International Development Association (IDA) is repayable in 35 years, including a 10-year grace period.



About the EMA

The Environmental Management Authority (EMA) is a statutory body established under the Environmental Management Act, Chap. 35:05 ('the Act').

The Act is the primary legislative instrument which governs environmental management in Trinidad and Tobago and provides for the making and enforcement of subsidiary legislative instruments, to address specific environmental issues.

There are five pieces of subsidiary legislation made pursuant to the Act which are presently in force:

1. *The Certificate of Environmental Clearance (CEC) Rules, 2001.*
2. *The Noise Pollution Control Rules, 2001*
3. *The Environmentally Sensitive Area (ESA) Rules, 2001*
4. *The Environmentally Sensitive Species (ESS) Rules, 2001*
5. *The Water Pollution (Amendment) Rules 2006 and Water Pollution (Fees) (Amendment) Regulations, 2006*

The EMA has also drafted the following pieces of legislation which are currently in the process of finalization:

1. *The Beverage Containers Bill (Draft)*
2. *The Waste Management Rules (2008) (Draft)*
3. *The Air Pollution Rules (2009) (Draft)*



ema.co.tt



Energy presents

The Caribbean's only major renewable and alternative energy event
designed specifically for the Caribbean community

Sustainable Energy in the Caribbean



Assessing the Caribbean landscape for opportunities
in renewable and alternative energy projects

Tuesday 3rd May and Wednesday 4th May 2011
Jamaica Pegasus Hotel, Kingston, Jamaica

Earth Conscious readers
can claim a **15% discount**
by quoting VIP Code
KA0114ECAD.
Plus register by **1st April**
to gain **additional savings**
of up to **£500!**

Delegates will learn about:

- >> Changing Caribbean **energy policy** and new legislation
- >> Essential information on **project finance requirements**
- >> **New renewable technologies** available on the global market
- >> **Regional and international sustainable energy projects** currently underway

To register please visit www.ibcenergy.com/KA0114ECAD
Booking Hotline: +44 (0)20 7017 5518

UN launches year-long celebration of vital role of world's forests

Recognizing the role that forests play in everything from mitigating climate change to providing wood, medicines and livelihoods for people worldwide, the United Nations has kicked off a year-long celebration to raise awareness of the value of this important resource. "Forests for People" is the main theme of the International Year of Forests, which was launched at a ceremony at UN Headquarters in New York attended by world leaders, Nobel Laureate Wangari Maathai and forest experts.

The General Assembly declared 2011 as the International Year of Forests to raise awareness on the management, conservation and sustainable development of all types of forests, on which at least 1.6 billion people depend for their daily livelihoods and subsistence needs. Forests are also home to over 60 million people, mainly members of indigenous and local communities, who reside in forests.

"By declaring 2011 as the International Year of Forests, the United Nations General Assembly has created an important platform to educate the global community about the great value of forests – and the extreme social, economic and environmental costs of losing them," noted Secretary-General Ban Ki-moon.

The launch ceremony, presided over by General Assembly President Joseph Deiss, is part of the high-level segment of the UN Forum on Forests, an intergovernmental policy forum dealing with forest-related issues.

Mr. Deiss noted that it is very meaningful that the International Year of Forests follows on the heels of the International Year of Biodiversity (2010),



which concluded with the adoption of a new strategic plan containing targets on significantly reducing, by 2020, the rate of loss of all natural habitats, including forests, and sustainably managing forestry to ensure biodiversity conservation.

In his speech at the launch ceremony, Sha Zukang, the UN Under-Secretary-General for Economic and Social Affairs, noted that political interest in forests has been rising, and stressed that that interest should be translated into action.

"We have to make sure that the billions of dollars pledged towards forests and climate change financing is actually released and applied to sustainable forest management," Mr. Zukang said.

Jan McAlpine, the Director of the Forum's Secretariat said: "Every one of us, all seven billion people on earth, has our physical, economic and spiritual health tied to the health of our forest ecosystems. Throughout 2011, we will celebrate this intricate, interdependent relationship between forests and people," she said.



Wangari Maathai

Achim Steiner, Executive Director of the UN Environment Programme (UNEP), also noted that forests represent many things to many people including spiritual, aesthetic and cultural dimensions that are, in many ways, priceless. "But they are also cornerstones of our economies, whose real value has all too often been invisible in national accounts of profit and loss," he added.

Forests cover about 31 per cent of total land area, amounting to just under 4 billion hectares, according to data from the Food and Agriculture Organization (FAO), which released its "State of the World's Forests" report.

The report, which is published every two years, stresses that the forest industry forms an important part of a "greener" economy and wood products have environmental attributes that would appeal to people.

The industry is responding to numerous environmental and social concerns by improving sustainability of resource use, using more waste materials to make products, increasing energy efficiency and reducing emissions. For example, 37 per cent of total forest production in 2010 came from recovered paper, wood waste and non-wood fibres, a figure that is likely to grow to up to 45 per cent in 2030, with much of that growth from China and India.

"What we need during the International Year of Forests is to emphasize the connection between people and forests, and the benefits that can accrue when forests are managed by local people in sustainable and innovative ways," said Eduardo Rojas, FAO's Forestry Director.

Ms. Maathai noted in her address at the launch, as well as in a briefing to reporters, that the value of the International Year is the opportunity to "explore the value of the trees, the forests and the environment, as well as the value of the environmental services that these resources give us."

She added that too often forests and the services they provide are taken for granted and seen as resources that are unlimited. "But we all know now that we are facing situations where these forests are disappearing," she told reporters.

As part of the launch, international filmmaker Yann Arthus-Bertrand will premiere his short film "FOREST." The ceremony also featured clips from winning films from the International Forest Film Festival which was organised by the UN Forum on Forest Secretariat in collaboration with the Jackson Hole Wildlife Film Festival.

FOREST FACTS

- **Primary forests account for 36% of forest area;**
- **The livelihoods of over 1.6 billion people depend on forests;**
- **Forests are home to 80% of our terrestrial biodiversity;**
- **Trade in forest products was estimated at \$327 billion in 2004;**
- **Forests are home to 300 million people around the world.**

Source: un.org

Assessing agriculture's potential to mitigate global warming

Norway and Germany support FAO's work to fill data gaps on greenhouse gas emissions, create planning tools

The governments of Norway and Germany have committed a combined total of US\$5 million in support of an FAO programme to improve global information on greenhouse gas emissions from agriculture and more accurately assess farming's potential to mitigate global warming.

The improved data acquired by FAO's Mitigation of Climate change in Agriculture (MICCA) programme will be made available via an online global knowledge base that will not only profile greenhouse gas (GHG) emissions from agriculture but will also identify best opportunities for mitigating global warming through improved farming practices.

"Data variations in existing assessments, as well as information gaps, pose a real challenge in terms of making the most of the agriculture sector's significant potential to sequester atmospheric carbon," said Marja-Liisa Tapio-Bistrom, coordinator of the FAO MICCA Programme.

Having access to improved data will give governments, development planners, farmers and agribusinesses a tool they can use to access international funding for mitigation projects and design and implement policies, programs and practices intended to reduce agriculture's GHG emissions, increase the amount of carbon sequestered on farms.

"Climate-smart" farming practices can increase productivity and improve resilience to changing weather and climate patterns while reducing greenhouse gas emissions.

Good information for good policies

"We are extremely grateful to the governments of Norway and Germany for supporting this work," said Alexander Mueller, FAO Assistant-Director General for



A rice paddy in Bangladesh's southern delta. Greenhouse gas emissions from agriculture differ from farming system to farming system.

Natural Resources.

"The data we are working together to assemble is fundamental for the effort to shift food production to the climate smart model. The more information we have on emissions from specific farming systems, the more effective the policies countries will be able to put into place to encourage that transition," he added.

Exploiting opportunities

Agriculture accounts for just around 14 percent of all global greenhouse gas emissions, equal to 6.8 gigatonnes of carbon equivalent.

At the same time, the sector has great potential to reduce its GHG emissions and sequester large amounts of carbon from the atmosphere.

The Intergovernmental Panel on Climate Change (IPCC) has estimated that soil carbon sequestration - through improved cropland and grazing land management as well as the restoration of degraded lands - offers the greatest potential in agriculture for climate change mitigation.

Implementing policies, practices and projects to reduce greenhouse gas emissions in agriculture could be done at little or no cost to third world farmers, according to FAO. In some cases it would even increase their productivity, while also making them less vulnerable to climate-related impacts -- thereby buttressing world food security.

Green Government policies would boost economic recovery

Policy-makers in the UK and other countries could speed up economic recovery through policies to increase private investment in renewable energy, energy efficiency and low-carbon vehicles.

This information is according to a report published by the Grantham Research Institute on Climate Change and the Environment and the Centre for Climate Change Economics and Policy at London School of Economics and Political Science.

The policy paper by Dimitri Zenghelis, a senior visiting fellow at the Grantham Research Institute, points out that huge funds currently exist in the private sector that could be used to invest in low-

carbon technologies and infrastructure if governments provide the right signals through policies and regulations. This would help to create jobs and generate tax revenues without the need for a big increase in public spending.

The paper concludes: "There is no lack of private money in the current market. However, there is a perceived lack of opportunity."

"As a result of reduced spending and investment, private sector financial balances (net borrowing or saving minus investment) have reached record, or near-record, post-war surpluses in the United Kingdom (£137 billion in 2009) and United States (\$4.8 trillion in 2009)."





FAO Releases Publication on Managing Forests for Climate Change

The UN Food and Agriculture Organization (FAO) has released a report entitled "Managing Forests for Climate Change," which examines the role of forests and sustainable forest management in climate change mitigation and adaptation.

The report describes the FAO's integrated approach to sustainable forest management and outlines the ways forest management can help tackle climate change, including through carbon sequestration, strengthening adaptive capacity of trees, forests and forest-dependent communities, and conserving forest carbon stocks.

The report lists various sources for financing forests' contribution to climate change mitigation and adaptation, and outlines FAO's support to activities such as afforestation, reforestation, forest restoration, conservation and sustainable practices of forest management and use.

FAO, working with countries to tackle climate change through sustainable forest management

Managing forests for climate change



UNESCO Launches Book Project on Migration, Environment and Climate Change

The UN Educational, Scientific and Cultural Organization (UNESCO) has announced a book project for 2011 on migration, environment and climate change.

The project is based on the recognition that research on the links between climate change and migration is limited, and that uncertainties exist surrounding the actual mechanisms at stake, the number of persons affected and the geographical zones concerned.

The book project aims to: provide a comprehensive overview of the climate change – migration nexus; review the available evidence; and provide detailed analysis of the issues at stake.

The book will consist of two parts. The first, titled "Evidence on the migration – climate change relationship," will provide empirical evidence on the links between climate and migration.

The second, titled "Policy responses, normative issues and critical perspectives," will investigate the key issues raised by the climate change – migration nexus, including the social and political context in which the topic has emerged.

Sweden contributes SEK 100 million to the Adaptation Fund

The Government of Sweden made a contribution of SEK 100 million (Euros 11 million approx) to the Adaptation Fund Trust Fund.

In thanking the Swedish Minister of the Environment, H.E. Andreas Carlgren, the Adaptation Fund Board Chair, Farrukh Iqbal Khan considered the "contribution to be a clear manifestation of the Swedish Government and the country's strong commitment to adaptation efforts in developing countries, especially when the Fund had become fully operational."

Mr. Khan expressed his hope that the Swedish contribution would serve as an important reminder to other developed countries of the huge gap that exists between the adaptation resources and the needs.

The Chair also appreciated the role that Sweden played in the operationalization of the Adaptation Fund Board.

The Adaptation Fund Board has considered a total of 29 projects as both fully developed proposals and concepts. Of those, 4 project proposals have been approved for funding and 9 concepts have been endorsed.

During the Cancun meetings, the Fund also received pledges from Australia (AU\$ 10 million) and the Brussels Capital region in Belgium (Euros 1 million).

The Adaptation Fund is a self-standing fund established under the Kyoto Protocol of the UN Framework Convention of Climate Change and gets its funding from a two percent share of the proceeds of the Certified Emission Reductions issued under the Protocol's Clean Development Mechanism projects.

ASEAN Tourism ministers call for climate change work plan

The 14th meeting of the Association of Southeast Asian Nations (ASEAN) Tourism Ministers have agreed to further strengthen cooperation to effectively respond to climate change.

This is especially on mitigation, adaptation and capacity building in areas of mutual interests such as sustainable development, environmental protection and water resource management.

They agreed on the need for ASEAN tourism to develop its strategic actions to enhance the ability of this sector to address climate change.

Ministers also welcomed the outcomes of the Workshop on Developing the Framework of ASEAN Tourism Standards in Responding to Climate Change, held on 5-7 October 2010, in Bali, Indonesia, and requested the preparation of a work plan on ASEAN tourism activities to contribute to climate change reduction initiatives.

The ASEAN Tourism Forum 2012 will convene in Manado, Indonesia, from 9-15 January 2012, under the theme "ASEAN Tourism for a Global Community of Nations."

Smarter use of scarce resources: Commission launches flagship initiative for sustainable growth

Natural resources, from raw materials to food, water, air and ecosystems, are fundamental to the functioning of an economy and quality of life. But global strains on them are increasing.

Building a more resource-efficient Europe is therefore crucial to the EU's economic and ecological security. The European Commission has set out its views on a strategic framework that should deliver a more sustainable use of natural resources and the shift towards resource-efficient, low-carbon growth in Europe.

European Commission President José Manuel Barroso, who steered the launch of this initiative, said: "Continuing our current patterns of resource use is not an option. They put too much pressure on our planet and make our economy more dependent on external supplies.

"A smarter use of scarce resources is therefore a strategic necessity, but also an economic opportunity. Through more resource-efficiency, clearer long-term policies and joint investments in green innovation, we are strengthening the basis for growth and jobs for our citizens and delivering on our climate and energy objectives."

Background:

This strategy is the seventh and last of the Europe 2020 flagship initiatives which aim at building smart, sustainable and inclusive growth for Europe.

It establishes resource efficiency as the guiding principle for EU policies on energy, transport, climate change, industry, commodities, agriculture, fisheries, biodiversity and regional development.

By using synergies across these policy-areas, the strategy will be instrumental in reaching a variety of EU objectives,

from reducing European greenhouse gas emissions by 80 to 95% by 2050 to reforming the agricultural and fisheries sectors, from reducing food insecurity in developing countries to making the Union more resilient to future rises in global energy and commodity prices.

The strategy already lists a number of specific initiatives to be tabled in 2011, e.g.:

- A low-carbon economy roadmap 2050;
- A 2020 energy efficiency plan;
- A white paper on the future of transport;
- An energy roadmap 2050
- A roadmap for a resource-efficient Europe;
- Reforms of the Common Agricultural Policy, the Common Fisheries Policy, Cohesion Policy, energy infrastructure and trans-European transport networks;
- A new EU biodiversity strategy for 2020;
- Measures regarding commodity markets and on raw materials.

The Commission will now make concrete proposals in these policy areas. Their implementation will be monitored in the framework of the Europe 2020 strategy.



How two per cent of global GDP can trigger greener, smarter growth while fighting poverty

Investing two per cent of global GDP into ten key sectors can kick-start a transition towards a low carbon, resource efficient Green Economy, according to a new UNEP report 'Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication'.

The sum, currently amounting to an average of around US\$1.3 trillion a year and backed by forward-looking national and international policies, would grow the global economy at around the same rate if not higher than those forecast, under current economic models.

But without rising risks, shocks, scarcities and crises increasingly inherent in the existing, resource-depleting, high carbon 'brown' economy, says the study.

As such, it comprehensively challenges the myth of a trade off between environmental investments and economic growth and instead points to a current "gross misallocation of capital".

The report sees a Green Economy as not only relevant to more developed economies but as a key catalyst for growth and poverty eradication in developing ones too, where in some cases close to 90 per cent of the GDP of the poor is linked to nature or natural capital such as forests and freshwaters.

It cites India, where over 80 per cent of the US\$8 billion National Rural Employment Guarantee Act, which underwrites at least 100 days of paid work for rural households, invests in water conservation, irrigation and land development.

This has generated three billion working days-worth of employment benefiting close to 60 million households.

Two per cent of the combined GDP of Cambodia, Indonesia, the Philippines and Vietnam is currently lost as a result of water-borne diseases due to inadequate sanitation.

Policies that re-direct over a tenth of a per cent of global GDP per year can assist in not only addressing the sanitation challenge but conserve freshwater by reducing water demand by a fifth by 2050 compared to projected trends.

The report has modeled the outcomes of policies that redirect around US\$1.3 trillion a year into green investments and across ten key sectors—roughly equivalent to two per cent of global GDP. To place this amount in perspective, it is less than one-tenth of the total annual investment in physical capital.

Currently, the world spends between one and two per cent of global GDP on a range of subsidies that often perpetuate unsustainable resources use in areas such as fossil fuels, agriculture, including pesticide subsidies, water and fisheries.

Many of these are contributing to environmental damage and inefficiencies in the global economy, and phasing them down or phasing them out would generate multiple benefits while freeing up resources to finance a Green Economy transition.

Incomes and Employment

In addition to higher growth, an overall transition to a Green Economy would realize per capita incomes higher than under current economic models, while reducing the ecological footprint by nearly 50 per cent in 2050, as compared to business as usual.

The Green Economy report acknowledges that in the short-term, job losses in some sectors—fisheries for example—are inevitable if they are to transition towards sustainability.

Investment, in some cases funded from cuts in harmful subsidies, will be required to re-skill and re-train some sections of the global workforce to ensure a fair and socially acceptable transition.



In Sudan, WHERE THERE IS POWER, THERE IS DEVELOPMENT

In Sudan's south-eastern state of Blue Nile, the streets of Abu Hasheem village are silent, as if abandoned. However, a burst of life comes from scattered street lights, the village health center, and the local secondary school.

With help from the Sudan Multi Donor Trust Fund-National (MDTF-N), this tiny village of 5,500 now uses solar energy to power its lights. Before being targeted by MDTF-N's Community Development Fund (CDF) Project in 2007, the village was living in virtual darkness, with no source of electricity apart from a few small generators that benefit only their owners. As a result, the population relied on wood as a source of energy, putting stress on the environment of surrounding areas.

In 2007, barely half of the students in the village's primary school attained passing grades on their exams. Just two years later, the student pass rate reached a full 100 percent and was maintained last year.

A recent three-day mission, headed by World Bank Acting Director for Sudan and Manager of the Africa Fragile States Unit Ian Bannon, along with World Bank Sudan Country Manager Alassane Sow, visited Abu Hasheem to observe first hand the impact that solar energy is having on education, health and broader development.

Energy and education

The introduction of solar energy has had a profound effect on the quality of education and learning for the children of Abu Hasheem.

"Night classes were introduced for the first time in the village; students are now able to do their homework and move easily to and from school [at night]," said Abdulhameed M. Saeid, principal of the Salman Alfaresy School for Boys. "Teachers have also benefited, as they have a better residential environment and can better prepare for the next day's lessons."

He playfully added, "We boast of our academic achievements in front of our colleagues of various schools during our meetings at the state level."

And boast he should. This table shows the increase in pass rates and grade percentage averages at Salman Alfaresy School for Boys since the start of the Solar Lighting project in the village.

Year	Pass Rate	Grade Percentage Average
2007	57.1%	52.4%
2008	97.3%	67.9%
2009	100%	68.9%
2010	100%	71.9%

These achievements have encouraged dropouts to return to school, and parents have become more attentive to their children's academic performance. As a result of this track record, the principal of the school was honoured at the national level. The school was also awarded the Damazin Locality Ideal School Prize, won the State Prize for First Grade Basic School, and was presented in the National Program for Distinction and Educational Creativity.

"We visited the school on a weekend evening," explained Ian Bannon. "The classroom was packed with students. They were not in class but studying and doing homework, made possible by solar lighting. The academic results speak for themselves, but equally touching were the faces of the kids and the evident pride of the principal. It was a good reminder of why we do what we do."

Energy and health

In the health sector, the CDF's solar program helped midwives like Nimat Abas who now have a safer and brighter environment to deliver babies at night.

Nimat feels lucky to have had the opportunity to train at the school of midwifery administrated by the Ministry of Health in Damazin with support from CDF. She graduated as a certified midwife after a year and a half and is able to practice in a safe and professional manner.

Nimat told a touching story of the recent past: "One fall night, I was called to deliver a baby. It was a dark cloudy night; you could hardly see anything except a flash of lightning from time to time. The only light was a faint one coming from a small kerosene lamp," she recalled. "Suddenly, a very strong wind blew and put out the lamp's light, right as the baby's head was protruding. I was forced to continue with the delivery in darkness; it was the most critical moment in my life."

Such precarious situations are now a thing of the past; since then, CDF has provided all 10 midwives of the village with solar powered lamps.

Hasan Abu Digin, a medical assistant in the village, has been working with the community health centre since it was established in 2006 by CDF. "We in the health sector are the happiest with the solar energy system. In the past, we relied on the doctor's diagnostic skills to treat patients, but with the new system we now have a lab that enables us to give more accurate diagnoses," Hasan said.

Solar lighting has resulted in a better lit and ventilated health centre, and working hours have increased to include both day and evening shifts.

The project is also mobilizing the community to ensure benefits are sustained. To help make this happen, 24 members of the community have been trained on maintenance of the solar energy system. In addition, each family pays one Sudanese Pound every month to meet maintenance costs.

"Where there is power, there is development"

Benefits of solar power don't just stop at education and health; in Abu Hasheem, villagers are also using solar power to improve their incomes and lives.

"I can now sit under a street lamp and finish my work at night, or even get new customers," said Harun Adam, a blacksmith.

Hamza Ali Harun, head of the Community Development Committee of Abu Hasheem, explains that the Solar Lighting Project is also strengthening social ties among villagers, who use it to hold meetings, social and cultural events, and reconciliation assemblies. He concludes with a simple phrase: "Where there is power, there is development."

Feature courtesy the World Bank

Crown Palace - an ancient tribute to the beloved

By Bogusia Sipiora



This is the most famous love story I have heard about. Also I don't think a man could more splendidly pay tribute to his beloved than what happened once in Agra, a small town on the bank of India's Yamuna river.

Taj Mahal (means 'Crown Palace') is the most well known mausoleum and a reminder of love which a man once gifted to a woman. All tour guides to India recommend visiting this site and warmly indulging in the ultra-romantic story of Mughal King Shah Jahan and his beloved Queen Mumtaz Mahal.

Today every celebrity, politician, common traveler or tourist must visit this place where an ancient love story has its eternal shelter.

Indeed an experience of seeing Taj Mahal with one's own eyes is indescribable, especially during sunset or sunshine when the sun's rays reflect and bounce off the white marble construction transforming it into a fabulous theatre of lights. Well this mausoleum has become a truly romantic place!

There is an interesting story behind the Taj Mahal, one of the architectural wonders of the world.

It says that when Queen Mumtaz Mahal died during delivery of the 14th child, her husband broke down completely and was inconsolable. It is believed that the death so crushed the emperor that all his hair

and beard grew snow-white in a few months.

Shah Jahan, deeply in grief yet passionate in his love decided to build the most awesome and unique graveyard for the Queen. Local guides tell that Shah Jahan employed the best sculptors and craftsmen to build the Taj Mahal.

Construction of the Crown Palace took more than 20 years and when it was completed, the king was so astounded with its sheer beauty that he ordered the hands of the craftsmen to be chopped off and got their eyes gouged out!

It was for assurance that nothing like his Taj would be ever built again and the builders would never be able to view anything more beautiful and splendid. This quite horrifying legend is to add to the mystery of the great love story, I suppose.

Though soon after completing the Taj, Jahan's own son captured him and imprisoned in the nearby Agra Red Fort. As luck would have it, from the bared windows he could see the beautiful snow-white marble mausoleum – a celebration of his wife.

Thanks to its location near the river which reflects colors on the marble, Taj changes its view through the day. It's pinkish in the morning, milky white in the evening and golden when the moon shines. These changes are believed to show the different moods of a woman.

Unfortunately the corrosive effects of industrial pollution affected the monument significantly, causing the marble to lose some of its whiteness.

However scientists came with a beauty solution and the marble is being saved by multani miti which is an ancient face mask made of soil, cereal, milk and lime used by Indian women to beautify their skin!

The sticky mud is put on the surface of the Taj and cleaned after 24 hours drawing out the black and yellow impurities and leaving the marble gleaming and sparkling.

The 16th century beauty formula appeared to be so efficient that it is now being exported to Italy to clean grimy monuments there.

Today the arrangement of the Taj makes it a paradise for 'clickers'. One can have a picture where one looks as if he/she is lifting the Taj Mahal with a finger or holding it in the palm.

The reflection of the building in the adjacent pool also makes it a gorgeous background of a lovely picture from a well-spent holiday.



Bogusia is a Polish native who now lives in New Delhi, India.



Waking up

By Barbara King



A few months ago I wrote in this column about my numbing out to the onslaught of crime stories and events that come so close to home. I was saddened by the sense of powerlessness in the face of the relentlessness and boldness of perpetrators of illegal and violent acts.

Well, in the last few months the crime wave rolled its way to my doorstep and knocked me into attentiveness when a friend's house was broken into while she was at work. A week later a teenage relative was sexually assaulted in broad daylight in the hidden corner of a busy town centre, thieves broke into a neighbour's house, attempted to enter another home and two cutlass-wielding young men had a young couple with their toddler screaming at my gate one evening. Needless to say the numbness wore off rapidly.

In the midst of unloading my distress with friends and contacts I was amazed that just about everyone I spoke to had stories of their own close encounters or those of friends and relatives. A common theme was the feeling of powerlessness, anger at the disrespect and the heartlessness of perpetrators; frustration at the inability to see justice served, and deep sorrow for innocent children who are so often violated by monsters our society has created.

In relation to my assaulted relative, I was shocked and then devastated that such a horrible act could happen to her. She is a sweet, well-mannered, quiet child



who was on her way home from Saturday lessons. The young man approached her in a friendly manner, which caught her off guard. She did not equate a friendly adult with evil intentions. He then quickly put his arm around her, told her not to make any noise and pushed her behind a nearby building. There he tried to make her perform oral sex on him. Fortunately, her screams, struggles and doubtless some divine intervention, resulted in him losing courage and letting her get away.

What hurt me deeply about this situation was that I know her mother had done just about everything in her power to protect her children, girls and boys, from sexual abuse. From the time they were small she spoke to them about good touch and bad touch, to trust their intuition about people and not to hug or kiss anyone they didn't want to. She was very selective about whom they could have sleepovers with, and together they devised strategies and codes for communicating that they wanted to leave a home they felt uncomfortable or unsafe.

They were taught about the dangers of taking sweets or gifts from strangers, being smart in selecting public transportation, and in walking on quiet roads. Like any parent, she could not be with them at every minute of every day. We have to trust that there are more good people in the world than bad; that our daily prayers for their safety would offer some protection.

As a parent educator I have tried to focus on the proactive side when it comes to crime. I advocate for educating children to make informed, wise choices rather than keeping them enclosed in bubble wrap for fear of them having an unpleasant experience. From my interactions with groups of young people, this seems to be what they want for themselves too. I began to have serious doubts about this approach.

One day while I was trying to surface from the deluge brought on by this wave, I came across an inspirational quote which said there is a gift in every challenge. So I tried to see what gifts there could possibly be in these circumstances. I saw that in the midst of the burglaries the men in our community have come together in a solid way to lend support and to protect our families.

The young lady who was assaulted, though traumatized by the experience, was able to say that the experience taught her some important lessons about life. When her parents planned to pick her up every week after lessons she declared: "I will have to walk on the road by myself some day!" She has a new understanding of life in Trinidad and of the reasons for her parents' cautions about being aware of her surroundings.

She also has a greater appreciation for her intuition and her ability to take care of herself in difficult situations. She is willing to move on with her life and not be afraid of the world and its evils. She wants her parents to let her live her life and find her way through the world.

Our children are resilient. However, we have to prepare them for handling the world as it is now. That means balancing protection with prevention, warnings with the wisdom of experience. Not just talking, but rehearsing reactions and options. And of course, doing something to make our world safer for our children.

I advocate for educating children to make informed, wise choices rather than keeping them enclosed in bubble wrap for fear of them having an unpleasant experience.

*Barbara King is a founder of T&T Innovative Parenting Support. She is a facilitator of Parent Education programmes and provides counselling and support group services through The Parent Support Centre, Arima, Trinidad.
Tel: (868) 664-1520*

BOOKS

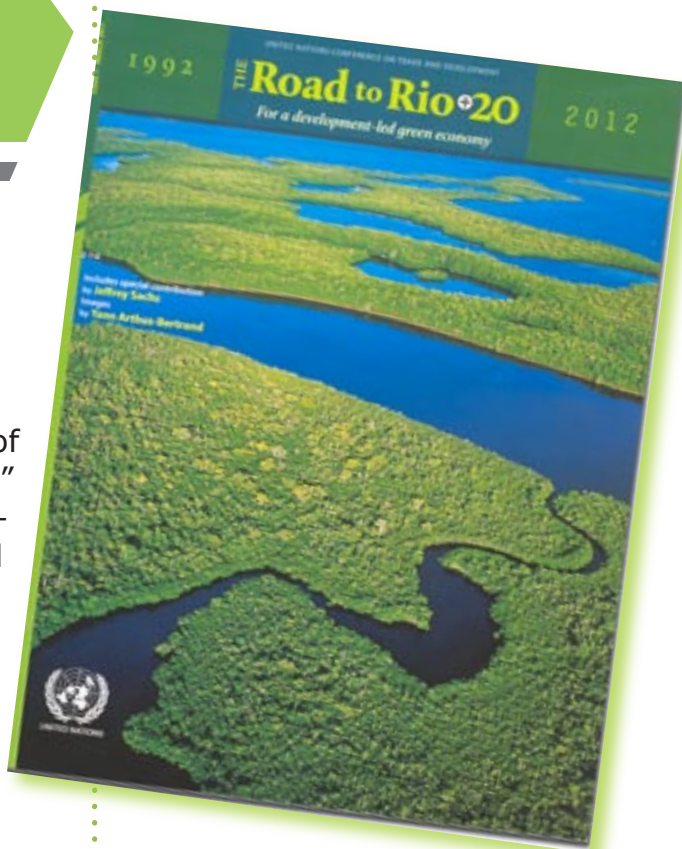
UNCTAD RELEASES BOOK “ROAD TO RIO +20”

UNCTAD has published the first in a series of volumes focusing on issues pertinent to “green” economic growth – a low-carbon, resource-efficient approach to development intended to raise living standards in sustainable fashion while combating climate change and conserving biodiversity. The intent is to give practical expression to the concept of sustainable development adopted at the 1992 Earth Summit in Rio de Janeiro.

“The Road to Rio +20” features 14 articles and is intended to highlight critical topics and focus global discussion in advance of the 2012 United Nations Conference on Sustainable Development. The Rio +20 summit has as its main theme “the green economy in the context of sustainable development and poverty eradication. “It also will focus on the institutional framework for sustainable development at the international and national levels.

The Road to Rio +20 includes lead articles by Jeffrey Sachs, Director of the Earth Institute, Special Advisor to the United Nations Secretary-General, and Professor of Health Policy and Management at Columbia University in New York; Herman Daly, ecological economist and Professor Emeritus of the University of Maryland; and Melinda Kimble, Senior Vice President and Head of the United Nations Foundation’s International Bioenergy and Sustainability Initiatives.

The book’s final chapter features three articles on efforts to carry out green economic growth in Morocco. Each future volume will have a chapter focusing on the programmes and policies of a specific economy.

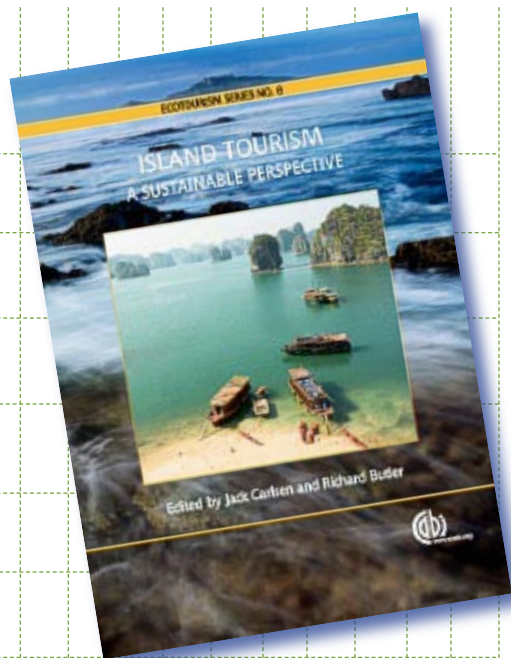
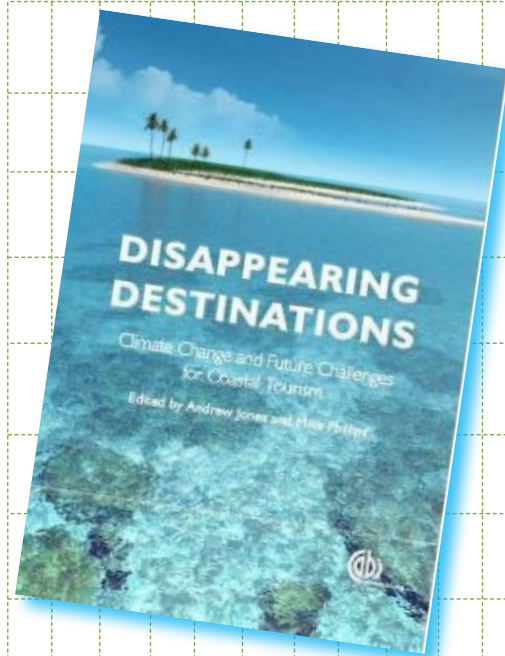


Disappearing Destinations: Climate Change and Future Challenges for Coastal Tourism

Ecotourism Series, No. 8

Edited by A. L. Jones and M. Phillips,
Swansea Metropolitan University, Wales,
978 1 84593 548 1

Providing a thorough examination of the threats posed to destinations by tourism, this comprehensive text discusses how popular and fragile destinations such as the Great Barrier Reef could become severely damaged and forced to close to tourists if current tourism trends continue. The consequences of tourism growth, predicted changes, and management and policy responses are reviewed. The book will explore tourism in the context of climate change and vulnerable environments, exploring the situation at local level and in a wider perspective using international case studies throughout and providing future recommendations.



Island Tourism A Sustainable Perspective

Edited by J. Carlsen, Curtin University of Technology,
Australia and R. W. Butler, Strathclyde University, UK

Islands are the most vulnerable and fragile of tourism destinations and will experience even more pressure as the combined impacts of economic, social and environmental change accelerate in the future. In order to understand the process of island tourism development, response to change and challenges and their journey to sustainability, this book provides insights and instruction on topics including social, cultural, environmental and economic aspects of island tourism.

India named Global Host of World Environment Day 2011

The United Nations Environment Programme announced that India, with one of the fastest growing economies in the world that is embracing the process of a transition to a Green Economy, will be for the first time ever the global host of World Environment Day 2011 on 5 June.

This year's theme 'Forests: Nature at Your Service' underscores the intrinsic link between quality of life and the health of forests and forest ecosystems. The WED theme also supports this year's UN International Year of Forests.

India is a country of 1.2 billion people who continue to put pressure on forests especially in densely populated areas where people are cultivating on marginal lands and where overgrazing is contributing to desertification.

But the Indian Government has also found solutions. While the socio-economic pressures on the country's forests are tremendous, India has instituted a tree-planting system to combat land-degradation and desertification, including windbreaks and shelterbelts to protect agricultural land.

In conserving its critical ecosystem, India has successfully introduced projects that track the health of the nation's plants, animals, water and other natural resources, including the Sunderbans - the largest deltaic mangrove forest in the world, and home to one of India's most iconic wildlife species: the tiger.

India has also launched a compensation afforestation programme under which any diversion of public forests for non-forestry purposes is compensated through afforestation in degraded or non-forested land. The funds received as compensation are used to improve forest management, protection of forests and of watershed areas. Moreover, a government authority has been created specifically to administer this programme.

Photo: UNEP



Achim Steiner, UN Under-Secretary General and UNEP Executive Director (left) and Dr. T. Chatterjee, Secretary for Environment and Forests of the Government of India (right).

Your Letters



Dear Editor,

Dropping you a few lines to say how much I enjoyed reading the December edition of Earth Conscious.

Previously, I took no serious note of the high level conferences on climate change but I must confess learning quite a lot from the number of articles that were written on the Cancun, Mexico summit.

It's good to know that the Caribbean also has a big voice in these high level conferences and that the Caribbean region can stand tall in these international meetings.

Congratulations again and I look forward to my next issue.

David Julien,
a Caribbean national in New York.

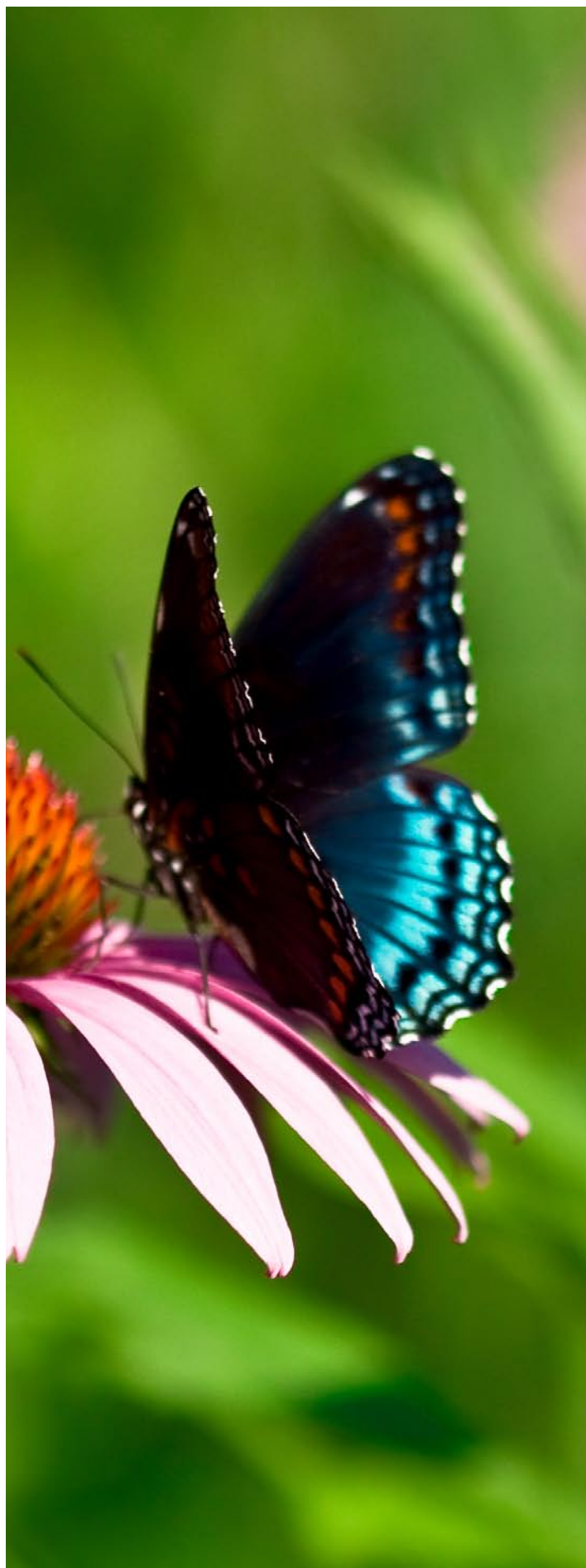
Hello Ms. Hutchinson-Jafar,

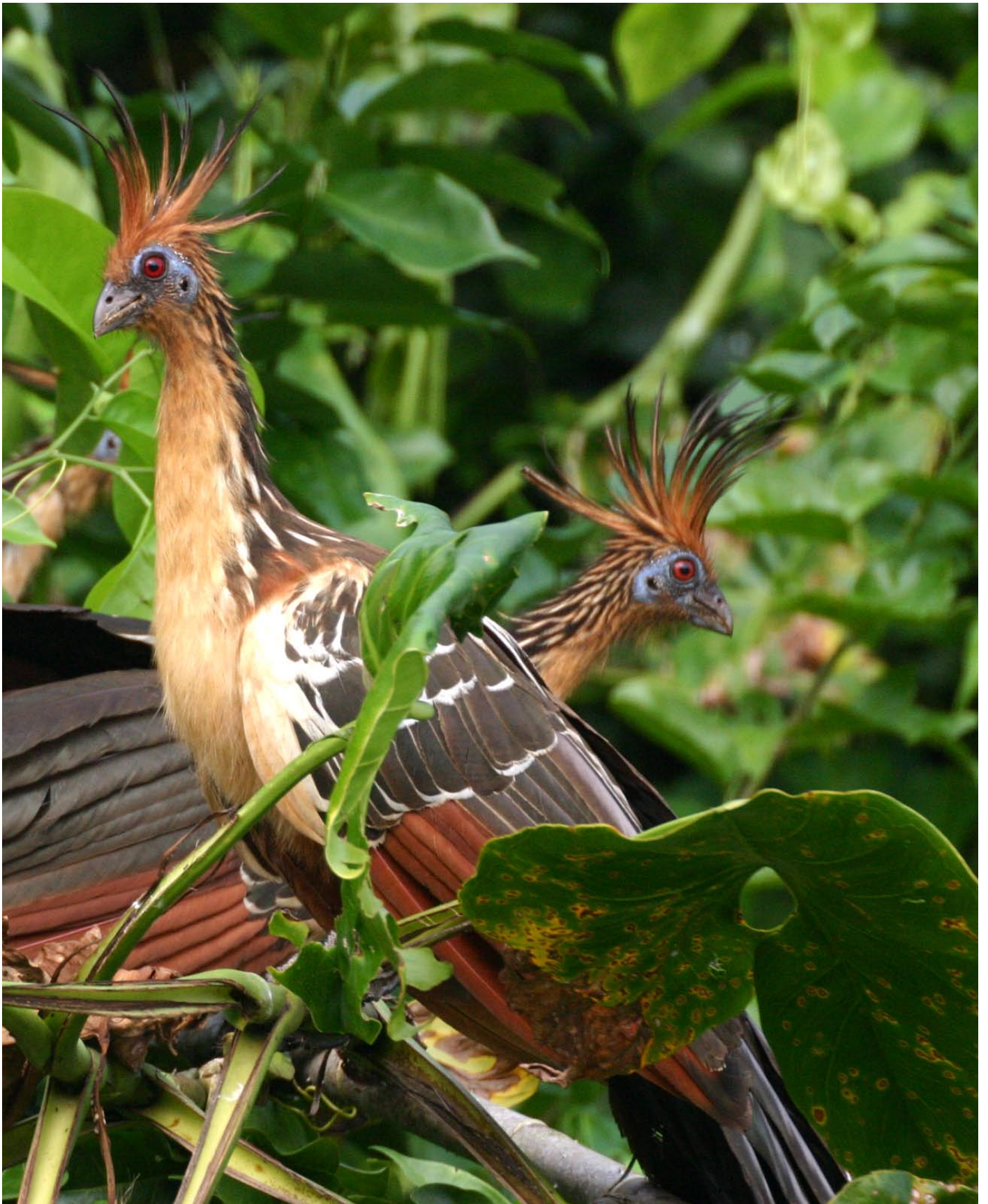
I'm a regular reader of Earth Conscious magazine and want to tell you that the December edition was simply among the very best you've produced.

I enjoyed the articles, the columns and the photo choices. I even printed out 'Thoughts from Jordan' -I guess this is your son? – for my own children to read and I'm sure they picked up some good points from him.

Thank you so much again for an excellent edition.

Lorena Garcia,
Caracas.





The Hoatzin (*Opisthocomus hoazin*) is the national bird of Guyana, where it is commonly called the Canje Pheasant.

Photo courtesy the Guyana Tourism Authority



"To get through the hardest journey we need take only one step at a time, but we must keep on stepping."

Chinese proverb

With over 20 years
experience in the field of
communications,
Caribbean PR Agency
offers a wealth of knowledge,
expertise and experience
to its clients regionally and
internationally.



EVENTS

Seminars | press conferences | conference support

SCRIPT

Press releases | Speeches

PRESS

Newsletters | Advertorials

MULTIMEDIA

Pre-recorded radio programmes | Photography Videography |
Webdesign

GRAPHIC DESIGN

CARIBBEAN PR AGENCY
#268 Harold Fraser Circular, Valsayn,
Trinidad and Tobago, W.I.

Tel: (868) 645-0368
Cell: (868) 686-9797
Fax: (868) 645-0368
Email: hutchlin@gmail.com