

# EARTH CONSCIOUS



Suriname men win global environmental prize

Caribbean at Commission on Sustainable Development

Caribbean coral reefs flattened

Betting on the rains





TOGETHER LET US  
MAKE



HAPPY!

Happy Earth Day  
from Earth Conscious

April 22, 2009

EARTH  
CONSCIOUS



Ordinary people throughout the world are taking action to protect our environment and ensure sustainability. Trinidadian Suzan Lakhani-Baptiste and Surinamese Hugo Jabini and Wanze Eduards are just three examples of ordinary folks making a difference.



Suzan



Hugo



Wanze

Editor:

**Linda Hutchinson-Jafar**

Contributors:

**Jo-Anne Nina Sewlal**

**Garfield King**

**Barbara King**

**Mark Pegus**

**Chandani Jayatilleke**

**Sharif D Rangnekar**

Design and layout:

**Karibgraphics Ltd.**



is published by:

Caribbean PR Agency

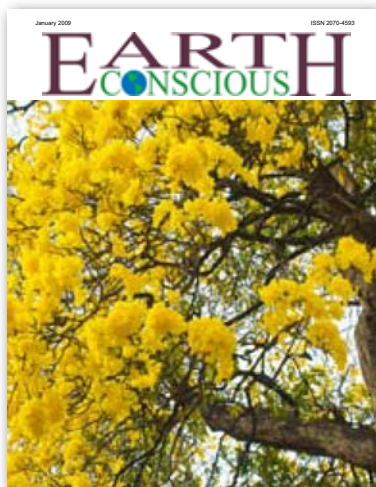
#268 Harold Fraser Circular, Valsayn, Trinidad and Tobago, W.I.

T/F: (868) 645-0368

caribbeanpragency@gmail.com

www.beingearthconscious.com

© 2009. No part of this publication may be reproduced without the written permission of the publisher.



**ON OUR COVER**

A Yellow Poui tree in full bloom.

Photography by Mark Pegus.

## CONTENTS

- 3 From the Editor
- 4 Suriname men win global environmental prize
- 6 Trinidad woman nominated as CNN Hero
- 8 Young Voices
- 10 Caribbean at high level Commission on Sustainable Development
- 11 Anti-smelter victory in Trinidad and Tobago  
Coral reefs flattened
- 12 Betting on the rains
- 14 The Green Wave 2009
- 16 Profiles  
Guardian Holdings Limited promotes no harm to the environment
- 18 Caribbean Updates
- 22 Environment and faith
- 24 Global Watch
- 30 Green Living  
A little gravel in the yard makes a big difference  
Parents being disempowered
- 32 Letters to the Editor  
Upcoming events



## A SPLASH OF GREEN

### Taking action for a sustainable future

At every level in the GHL organization, people are taking the initiative to improve lives. This is who we are as a corporate entity – purposeful and caring.

This spirit is at the heart of our environmental stewardship where employees engage in a number of initiatives to reduce, reuse and recycle, aimed at minimising our carbon footprint. Internationally, we are also exploring eco-friendly auto insurance schemes.

It's all part of taking positive action on environmental matters, not because we have to but because we want to.



**Strength. Endurance. Leadership.**



**A**ll roads lead to Copenhagen!

Negotiations are currently underway in Bonn, under the United Nations Framework Convention on Climate Change, to discuss and shape the international agreements that will be finalised in Copenhagen this December.

In a bid to galvanize political will and public support towards signing a new agreement which will replace the Kyoto Protocol, the United Nations launched a worldwide climate change campaign under the slogan 'Seal the Deal'.

Addressing western hemispheric leaders at April's Fifth Summit of the Americas held in Trinidad, UN Secretary General Ban Ki-moon said a bold, visionary leadership is needed to seal the deal in Copenhagen.

It must be ambitious, effective and fair. It must offer rich nations a way to cut emissions. But no less important, it must support poorer countries as they adapt to the adverse impact of climate change.

Also addressing the issue of climate change at the Americas Summit, United States President Barack Obama invited countries of the region to participate in an Energy and Climate Partnership of the Americas - a voluntary and flexible framework for advancing energy security and combating climate change.

President Obama also expressed his commitment to working with his regional counterparts toward a strong international climate agreement at Copenhagen. He will also work closely with Brazil, Canada, and Mexico through the Major Economies Forum on Energy and Climate.

At the recent High Level Segment of the 17th Session of the Commission on Sustainable Development (CSD) in New York, Guyanese President Bharrat Jagdeo said it is vitally important that, as the world community meets in Copenhagen, it acts with the same urgency it displayed when wrestling with the worst of last year's financial collapse.

In this June issue, we are celebrating the global recognition of persons and organizations around the world for their work in sustainable development.

Special congratulations to Suriname nationals Hugo Jabini and Wanze Eduards who were awarded a Goldman Environmental Prize, given annually by the San Francisco-based Goldman Environmental Foundation, to six winners, one on each inhabited continent.

Read in this issue about how they successfully organized their communities against logging on their traditional lands which ultimately led to a landmark ruling for indigenous and tribal peoples throughout the Americas to control resource exploitation in their territories.

Congratulations, as well to Suzan Lakhan-Baptiste, Chairman of Nature Seekers in Trinidad who has been nominated a CNN Hero for her tireless work in sea turtle protection and conservation.

Also, see the global pages about six innovators of positive environmental change and an inspirational anti-poverty organization from Africa who were named as the UN Environment Programme's (UNEP) 2009 Champions of the Earth.

Read as well the initiatives by ordinary citizens, communities and non-governmental organisations across the world involved in local, environmentally-responsible and sustainable entrepreneurship.

They are the winners of the 2009 SEED Awards for Entrepreneurship in Sustainable Development. Together, they cover a diverse range of promising business models that will tackle poverty and environmental stewardship in areas such as water and waste management, sustainable energy, recycling, and fish farming.

*Linda Hutchinson-Jafar*





Wanze Eduards

Two Surinamese men, Hugo Jabini and Wanze Eduards have been awarded a Goldman Environmental Prize, given annually by the San Francisco-based Goldman Environmental Foundation, to six winners, one on each inhabited continent.

Jabini and Eduards, members of a Maroon community, originally established by freed African slaves in the 1700s, successfully organized their communities against logging on their traditional lands, ultimately leading to a landmark ruling for indigenous and tribal peoples throughout the Americas to control resource exploitation in their territories.

# Suriname men win GLOBAL ENVIRONMENTAL PRIZE



Hugo Jabani

Suriname, located within the larger Amazon Basin, has opened up its immense tropical forests to extractive industries, all of which operate without local consent or oversight. It is the only country in the Americas that does not recognize indigenous or tribal peoples' rights to own and control their traditional territories. Indigenous and tribal peoples who live in Suriname's tropical forests comprise approximately 20 percent of Suriname's population of 450,000.

The tribal peoples are Maroons, the descendants of African slaves who won their freedom and established autonomous communities in the rainforest between the late 17th and mid-19th centuries.

The Saramaka are a specific group of Maroons that live in 9,000 square-kilometers of rainforest. In 1963, they lost almost 50 percent of their traditional territory to a hydroelectric dam built to power an Alcoa bauxite factory. Many Saramaka were displaced and remain in resettlement camps to this day. Others established new villages on the Upper Suriname River.

In the late 1990s, the Surinamese government allowed logging companies to set up speculation projects and camps in the region, against Saramaka wishes. Further, extensive flooding caused by faulty creek bridging rendered a large area useless for traditional agricultural and other activities, thus depriving the Saramaka of an additional 10 percent of their territory.



Aerial view of logging concession in Suriname



Suriname River

## Opposition

Wanze Eduards, 52, father of seven, is a traditional Saramaka leader who holds three offices: Captain, the head of his village of Pikin Slee; Head Captain, the highest official for 36 communities on a section of the Upper Suriname River; and fiscal, one of four members of the Gaama's Council, the paramount official body in Saramaka society.

Hugo Jabini, 44, the son of a female village leader and grandson of the former leader of Tutubuka village, is a Saramakan from Laduani village on the Upper Suriname River. Raised in Saramaka territory, he is presently studying law at the University of Suriname.

Mr. Eduards and Mr. Jabini first responded to complaints about the logging companies in late 1996 when villagers discovered that loggers had destroyed their subsistence farms in the forest. The Saramaka were told by the government of Suriname that they would be imprisoned if they tried to stop the loggers from working.

Mr. Eduards and Mr. Jabini organized meetings with the communities most directly affected. Once they determined that the threat affected all Saramaka, including almost 70 villages on the Upper Suriname River comprising about 25,000 people, these meetings expanded to include all Saramaka communities. With the leadership of Mr. Eduards and Mr. Jabini, the communities established the Association of Saramaka Authorities (ASA) in order to better defend their lands and promote their rights. They led efforts to have Saramaka persons trained to make accurate maps to document their traditional territory and to demonstrate the impact of the logging concessions.

After some 60 meetings in the various communities, the consensus was that the Saramaka could not obtain justice in Suriname and that they should seek the protection of the Inter-American human rights system.

ASA filed a petition with the Inter-American Commission on Human Rights (IACHR) in October 2000. During and following the filing of the petition, Mr. Jabini and Mr. Eduards collected information that showed the impact on the Saramaka from logging and the threat of "irreparable harm" if the IACHR failed to act. They also continued to organize meetings in Saramaka territory to ensure that

as many people as possible were aware of the developments with their case and were part of the decision-making process.

In 2002 and again in 2004, the IACHR requested that Suriname suspend all logging concessions, mine exploration and other natural resource development activity on lands used and occupied by the Saramaka until the substantive claims raised in the case were investigated.

It also requested that the Surinamese government take appropriate measures to protect the physical integrity of the Saramaka people. These interim measures, which were based on the evidence that Mr. Jabini and Mr. Eduards collected, were instrumental in halting these development projects. When the Suriname government failed to completely suspend the projects and comply with the other recommendations of the IACHR, the IACHR took the claim to the Inter-American Court, a legally binding body of which Suriname is a member.

The judgment of the Court in *Saramaka People v. Suriname* not only provides the basis for the legal recognition and protection of Saramaka territory, with respect to land rights and prior informed consent, but also creates a legal framework for the rights of all indigenous and tribal peoples in Suriname. Pursuant to the Court's orders, this includes "their rights to manage, distribute, and effectively control such territory, in accordance with their customary laws and traditional collective land tenure system." In January 2008, the Suriname government publicly declared that it would fully implement the judgment of the Court.

## A New Precedent for Indigenous and Tribal Peoples

The Saramaka ruling is also significant at an international level. In the ruling, which applies across the hemisphere, the Court held that resource exploitation concessions may only be granted in indigenous or tribal territories subject to four conditions: indigenous and tribal peoples' effective participation must be secure; there must be reasonable benefit-sharing; there must be a prior environmental and social impact assessment; and states have a duty to implement adequate safeguards and mechanisms in order to ensure that these activities do not significantly affect the traditional lands and natural resources of indigenous and tribal peoples.



# Trinidad and Tobago woman nominated as CNN Hero



www.natureseekers.org



*Suzan Lakhon-Baptiste, Chairman of Nature Seekers in Trinidad has been nominated a CNN Hero for her tireless work in sea turtle protection and conservation. This is the story of her journey that has led her to global recognition:*

At the height of leatherback slaughter on Matura Beach, the Forestry Division and local community saw value in sea turtle protection. They set about the monumental task of developing a sustainable community enterprise while reducing poaching from thirty percent to zero. To accomplish this goal, Suzan Lakhon-Baptiste and others turned down salaried jobs to pursue a daunting opportunity. With unwavering passion, enthusiasm, and sincerity, Suzan leads the team that vowed to make a difference.

Confident in leadership, Suzan battled beach patrol gender stereotypes. Poachers, late nights, and foul weather did not stop her from protecting nesting female leatherbacks. Suzan's dedication and focus motivated community members, including family and friends, to act. Residents engaged in "meaningful volunteerism" contributing significantly to the Matura Turtle Conservation Programme (MTCP). The empowered community conveyed the importance of protecting leatherback sea turtles, a globally important and shared resource, to the world.

As poaching on Matura Beach decreased, focus shifted to education. Nature Seekers and Forestry Division partnered with the Wider Caribbean Sea Turtle Conservation Network (WIDECAST) to facilitate program technical development. Organizations throughout Trinidad, the Caribbean, and International communities utilized the resulting MTCP model. It is the sense of being part of something bigger that keeps Suzan going during the exhausting nesting season.

Her "love what you do" attitude has paid off. In 1993, Suzan was inducted into the United Nations Environment Programme Global 500 Roll of Honour for Environmental Achievement. Sitting among scientists, engineers, and Ph.D.'s at the ceremony in China, she promised to redouble her efforts. "The only limitation we have is what we set for ourselves. There is nothing we cannot achieve," she insisted. Today Suzan sees bright, new faces mixed in with Nature Seekers veterans. As the next generation of volunteers pitches in to carry the organization forward; Suzan pauses to reflect on the challenges and sacrifices. When asked if she would do the same all over again, her reply with absolute certainty, "Of course, I would. This has been a personally fulfilling journey."



## US President keeps environment issues alive at Americas Summit

**United States President Barack Obama kept the issue of the environment alive at the Summit of the Americas held in Trinidad and Tobago last April. Here are some points on Energy and Climate Change, that he made to the conference:**

Approximately 50 percent of U.S. oil imports come from the Western Hemisphere. By increasing green energy cooperation, we will set our economies on a clean energy growth path and curb global greenhouse gas emissions.

Energy and Climate Partnership of the Americas: President Obama invited countries of the region to participate in an Energy and Climate Partnership of the Americas; a voluntary and flexible framework for advancing energy security and combating climate change. Countries will be encouraged to suggest tangible ideas for cooperation, including on energy efficiency, renewable energy, cleaner fossil fuels, and energy infrastructure.

President Obama also asked Secretary of Energy Chu to advance further cooperation with his counterparts this June in Peru at the Americas Energy Symposium.

Global Climate Change: President Obama expressed his commitment to working with his regional counterparts toward a strong international climate agreement at Copenhagen. He will also work closely with Brazil, Canada, and Mexico through the Major Economies Forum on Energy and Climate.





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...



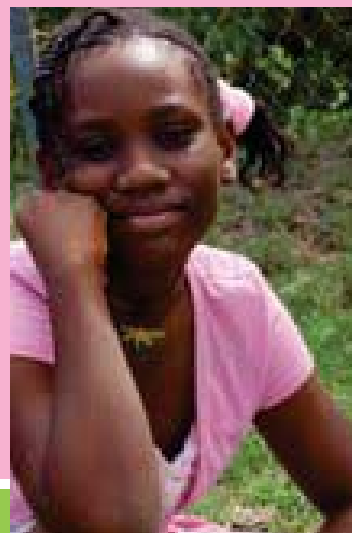
## How Should Adults Protect the Environment?

Sade Piper, 12 yrs  
Grade 6, Look Out Primary School  
Montserrat

I think that adults should commit themselves to protecting the environment, for after all, without the environment, we would not exist. They need to stop destroying the different types of eco-systems.e.g. cutting down trees might destroy the animals that live in trees' eco-system, and humans will not have sufficient air.

Most adults are fond of littering. That is one habit that they need to STOP. Polluting the environment leads to polluted air and the polluted air leads to unhealthy lives.

Remember to be wise - we must, I-intervene and, S-save our, E-environment.



## Some thoughts from Jordan



### Get involved in a greener earth:

Have you ever passed near a beach or a river and see it clogged with paper plates, cups and plastic bags?

Why are people not taking better care of our environment by properly discarding their waste in a garbage bag instead of throwing it out of the car or dumping it at

the side of the road?

We all need to get involved in creating a healthier and greener environment all around us. Children like us too can do our part.

Maybe the next time you see adults littering, you can politely tell them to save their trash for the bin. Don't be scared. Imagine, if we all did this, we will have less junk clogging the drains and the waterways and less flood on the streets and in rivers when the rains come.

So we can make a difference!

And don't forget, we can reduce electricity by turning off lights that are not in use, the lights on the computer and DVDs when we turn them off and not opening the refrigerator too often.

Whenever we use electricity, we put something call greenhouse gases into the air. Greenhouse gases trap energy in the atmosphere, making Planet Earth warmer. Well, that's what the scientists and other experts say.

Another great way – and fun activity to reduce greenhouse gases is planting trees. Trees absorb carbon dioxide, another greenhouse gas, from the air.

Why not grow your own plant and think of it as your own contribution to reducing the poisonous gases in the atmosphere?

I would love to hear about your own ideas – and what you are doing to help our Earth become a healthy place to live.

Please write me at [jordanjafar@gmail.com](mailto:jordanjafar@gmail.com)

**And don't forget your three R's – Reduce, Reuse and Recycle!**





Liu Chin, 10 years,  
Trinidad & Tobago

- P** - put your garbage in the bin  
**O** - observe a clean environment  
**L** - let the plants breathe  
**L** - live in a healthy environment  
**T** - unite with people to not pollute  
**I** - take care of the world  
**O** - ill plants mean no oxygen  
**N** - obtain a good environment  
**N** - nature is meant to be clean

## How Long Does Trash Last?

How long does a piece of garbage last after you throw it away? Do you know it can remain in the ground for a long, long time?

Here's how long scientists think it may take certain items in our garbage to decompose in a landfill:

- banana – 3 to 4 weeks
- paper bag – 1 month
- cotton rag – 5 months
- wool sock – 1 year
- cigarette butt – 2 to 5 years
- leather boot – 40 to 50 years
- rubber sole (of a boot) – 50 to 80 years
- tin can (soup or vegetable can) – 80 to 100 years
- aluminum can (soda pop can) – 200 to 500 years
- plastic 6-pack rings – 450 years
- plastic jug – 1 million years
- Styrofoam cup – unknown? forever?
- glass bottle – unknown? forever?



Mark Pegus



"If we want children to flourish, to become truly empowered, then let us allow them to love the Earth before we ask them to save it."

David Sobel



Find a bin and put it **IN!**



# Caribbean at high level segment of Commission on Sustainable Development

**“Success would not come through rhetorical declarations or aspirational action plans.”**



Dr. The Honourable Christopher Tufton

**J**amaica's Minister of Agriculture and Fisheries, Dr. Christopher Tufton, has called on the international community to put aside its business as usual mindset in favour of urgent, concrete action for the benefit of Small Island Developing States struggling to meet their development goals.

Speaking on behalf of the Alliance of Small Island States (AOSIS) at the High Level Segment of the 17th Session of the Commission on Sustainable Development (CSD), Dr. Tufton said climate change was the single most urgent threat confronting such States.

That “quiet tsunami” affected every sector of the economies of Small Island developing States and, for most of them, food security was intricately linked to the health of subsistence fishing and marine areas, he said.

The continued decline of such coastal areas posed a grave threat, and the alarming frequency and intensity of severe weather patterns and extreme events like hurricanes was one of climate change's most debilitating effects, particularly in the Caribbean.

Many Small Island Developing States were also contending with continued coastal erosion and sea-level rise and, unless urgent measures were made to arrest that trend, many countries would be submerged in the next few decades. Soil salinization, resulting from coastal erosion, had further serious implications for food security.

Emphasizing that climate change

was not just a passing fad for Small Island Developing States, but an existential threat, he highlighted the barriers it posed not only to sustainable development goals, but to their economic and physical survival.

Against that backdrop, he called on the international community to put aside a “business as usual” mindset and give priority to Small Island Developing States during the current session by recognizing their special and important needs.

The international community's role in providing financing, technology and capacity-building to address the special needs of Small Island developing States was not only necessary, but vital.

To that end, AOSIS looked forward to the General Assembly's two-day high-level review of the progress made in implementing the Mauritius Strategy, scheduled for September 2010, and repeated its call for the Commission's next session to devote more than the one day normally allotted to Small Island Developing States, as part of the preparation for the high-level review.

Guyanese President Bharrat Jagdeo, also speaking at the CSD said that, while vital, raising awareness was not enough to achieve sustainable development.

The international community must turn awareness into solutions that could make the urgently required difference. Success would not come through rhetorical declarations or aspirational action plans. Nor would it come through unreformed multilateral institutions that were designed for a radically different era.



President Bharrat Jagdeo

Instead, a sense of global responsibility to forge a new international policy environment, the effectiveness of which was commensurate with current challenges, was needed, he said.

This year presented two significant opportunities to do so. First, as a result of the economic crisis, the world community was moving to create a new global institutional and regulatory framework. As it was formed, the world should work to ensure that a platform to meaningfully integrate sustainable development into global decision-making was created.

Second, it was vitally important that, as the world community meet in Copenhagen to forge a new climate change deal, it acts with the same urgency it had displayed when wrestling with the worst of last year's financial collapse.

Future generations would not be forgiving if the world community failed to grasp those two opportunities and use them to realize the important policies emanating from the Johannesburg, Barbados, Mauritius and other major United Nations sustainable development conferences, the Guyanese leader said.

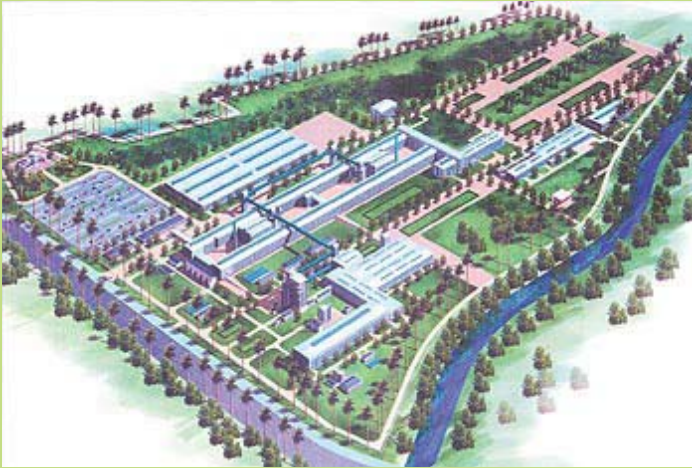
He stressed that true multilateralism and international partnership were essential to solve the problems facing the world that would, if left unaddressed, affect rich and poor alike.

Indeed, carbon emitted in one part of the world caused as much harm as carbon emitted elsewhere, and short-sighted agricultural shifts on one continent led to economic imbalances, hunger and deprivation on others.



## Anti-smelter victory in Trinidad

A Trinidad and Tobago high court judge quashed an environmental permit issued by a state agency for the construction of a 125,000-tonne aluminium smelter by government-owned Alutrint.



Model of Alutrint

The ruling by Judge Mira Dean-Armorer, in response to a request by environmental activists and opponents of the smelter project in the southeast La Brea area, temporarily halts work on what would be the first aluminium smelter on the twin-island Caribbean state.

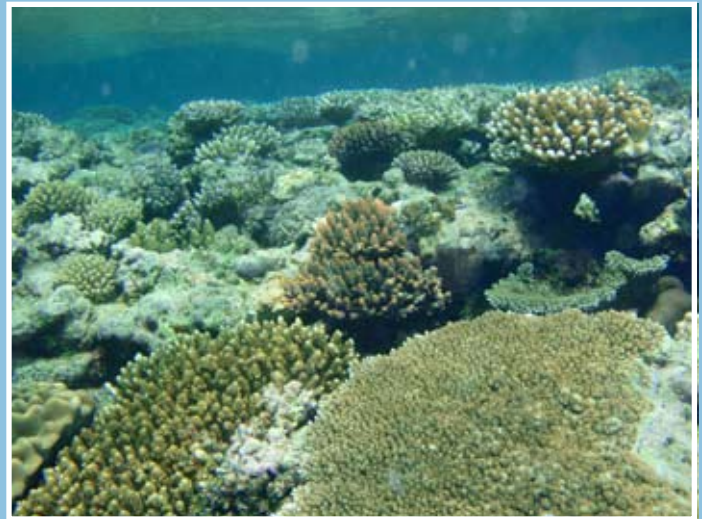
Ms. Dean-Armorer said the Environmental Management Authority (EMA), which had issued a Certificate of Environmental Clearance (CEC) to Alutrint in 2007, had failed to take into consideration the cumulative impact of three major industrial projects, including the smelter in the La Brea area.

Besides the planned smelter, a power plant is being built there and a port facility is also planned, and the judge said all of this could affect human health and safety.

“It is my view and I hold that the decision of the defendant EMA is procedurally irregular, irrational and made without regard to a relevant consideration, that is to say, the consideration of the cumulative impact of the three related projects: the power plant, the aluminium complex, the port facility,” the judge ruled.

Trinidad and Tobago’s government said it would appeal the judge’s ruling over the permit for the smelter, whose building is estimated to cost up to US\$600 million.

## Caribbean coral reefs flattened



Coral reefs throughout the Caribbean have been comprehensively ‘flattened’ over the last 40 years, according to a disturbing new study by the University of East Anglia. The collapse of reef structure has serious implications for biodiversity and coastal defences – a double whammy for fragile coastal communities in the region.

It was already known that coral cover in the Caribbean was in decline, but this is the first large scale study showing exactly what this means for the architecture of the region’s reefs.

Published online by the peer-reviewed journal ‘Proceedings of the Royal Society B’, the researchers found that the vast majority of reefs have lost their complex structure and become significantly flatter and more uniform. The most complex reefs have been virtually wiped out.

The researchers, working with colleagues at Simon Fraser University in Canada, analysed changes in the structure of reefs using 500 surveys across 200 reefs conducted between 1969 and 2008. They found that 75 per cent of the reefs are now largely flat, compared with 20 per cent in the 1970s.

There have been two major periods of reef flattening. The first occurred when a widespread disease killed about 90 per cent of the Elkhorn and Staghorn corals in the late 1970s. The second period has been underway more recently and is thought to have been caused by an increase in the intensity and frequency of coral bleaching events, as a consequence of human-induced climate change increasing sea surface temperatures.

Lead researcher Lorenzo Alvarez-Filip, of UEA’s School of Biological Sciences, said: “For many organisms, the complex structure of reefs provides refuge from predators. This drastic loss of architectural complexity is clearly driving substantial declines in biodiversity, which will in turn affect coastal fishing communities.

“The loss of structure also vastly reduces the Caribbean’s natural coastal defences, significantly increasing the risk of coastal erosion and flooding.”

Reversing declines in reef architecture now poses a major challenge for scientists and policy-makers concerned with maintaining reef ecosystems and the security and well-being of Caribbean coastal communities.



# Betting on the Rains

Rising global food prices and favorable rainfall patterns in recent decades have allowed farmers in South America's Southern Cone region to grow crops on formerly marginal lands. But if climate patterns shift and the rains start to fail, the region could face devastating losses in its economy, livelihoods and infrastructure.

The IRI (International Research Institute for Climate and Society) is working with local partners to characterize the climatic variability of the region and to take actions that will allow people in these marginal lands to be more resilient to climate-related risks.

The countries of Brazil, Bolivia, Argentina, Chile, Uruguay and Paraguay, also known as South America's Southern Cone, have seen a major agricultural shift over the past 20 years. The region has become one of the most important producers of staple crops feeding a growing population: corn, wheat and soybeans.

Rising global food prices have provided economic incentive for farmers to focus production on these crops to much success. Demand has also led farmers to cultivate large areas of "frontier" land--traditionally used only for raising livestock due to climate and land conditions rendering it unsuitable for agriculture.

According to the Food and Agriculture Organization, more than 25 million hectares of frontier lands were converted to agriculture between 1965 and 2005. Despite having been beneficial to farmers thus far, such changes bring to question the conditions that have allowed this shift to happen.

"In the western region of the Argentinian Pampas, for example, there are areas that didn't get enough rainfall to support crops in the 1950s and 1960s. But throughout the later quarter of the 20th century, rainfall during the spring and summer increased, and these places are now able to sustain annual crops," says Walter Baethgen, the head of IRI's Latin America regional programme.

The ability for farmers to plant crops and expand this frontier clearly has been facilitated by increases in precipitation. What is less clear is the duration of such changes.

"Are these precipitation patterns part of a multidecadal cycle or a permanent, long-term trend? This is of grave importance to the future of farmers in the Southern Cone," Baethgen says. Such uncertainties aren't limited to changing precipitation, however. The frontier soils are often already marginal, characterized by low fertility and high erosion risks- adding another element of fragility to an already tenuous future.

Baethgen and colleagues from the National Agricultural Research Institutes of the Southern Cone, the Inter-American Institute for Cooperation in Agriculture (IICA-PROCISUR) and the International Maize and Wheat Improvement Center (CIMMYT), have been awarded funding from Sustainable Energy and Climate Change Initiative (SECCI) of the Inter-American Development Bank (IDB), to assess the vulnerability of these changes in the agricultural frontier.

"This project could be considered a platform to identify new ways to help the farmers and society of a crucial world region in reducing the vulnerability of food production in the years to come," says Roberto Diaz a senior researcher from Uruguay's Instituto Nacional de Investigacion Agropecuaria (INIA), who is collaborating with Baethgen on the project.

The joint research will compile and examine the climate history of the Southern Cone over the past 80 years to understand how it has varied across decades and how it can possibly vary in the future. By studying how climate change can alter rainfall, researchers have a better understanding of the nature and magnitude of the current and future risks that threaten farming and other livelihoods in the region. "We can then see what technologies, production systems and water resource management practices are available to people there that can help reduce those risks," Baethgen says.

In a separate Fontagro (also IDB) funded project, IRI will be working with the same national agricultural research institutes of the region, IICA-PROCISUR and the International Center for Agricultural Research in Dry Areas (ICARDA) to improve the seasonal climate forecasts available for the Southern Cone. In identifying ways in which forecasts and other climate-relevant information can assist water management decision making, the project seeks to provide information and tools to improve water use efficiency (including irrigation) throughout the region under the threats of a changing climate.

By Caitlin Kopcik

*Caitlin Kopcik is a student in the [Climate and Society master's program at Columbia](#). In partial completion of her degree, she will be interning with Americas regional office of the [Red Cross/Red Crescent Climate Centre](#) located in Panama, with a focus on increasing their ability to access, interpret and utilize available information on climate-related risks.*



## ‘Seal the Deal!’



United Nations Secretary-General Ban Ki-moon announced that the UN is launching a worldwide climate change campaign under the slogan ‘Seal the Deal!’

The campaign aims to galvanize political will and public support towards signing a new UN agreement on climate change, and urges world leaders to act in the best interest of their peoples and the planet by sealing the climate deal.

Mr Ban urged the EU to continue its leading efforts to push towards the signing of an effective climate change agreement during the UN Climate Change Conference in Copenhagen this December.

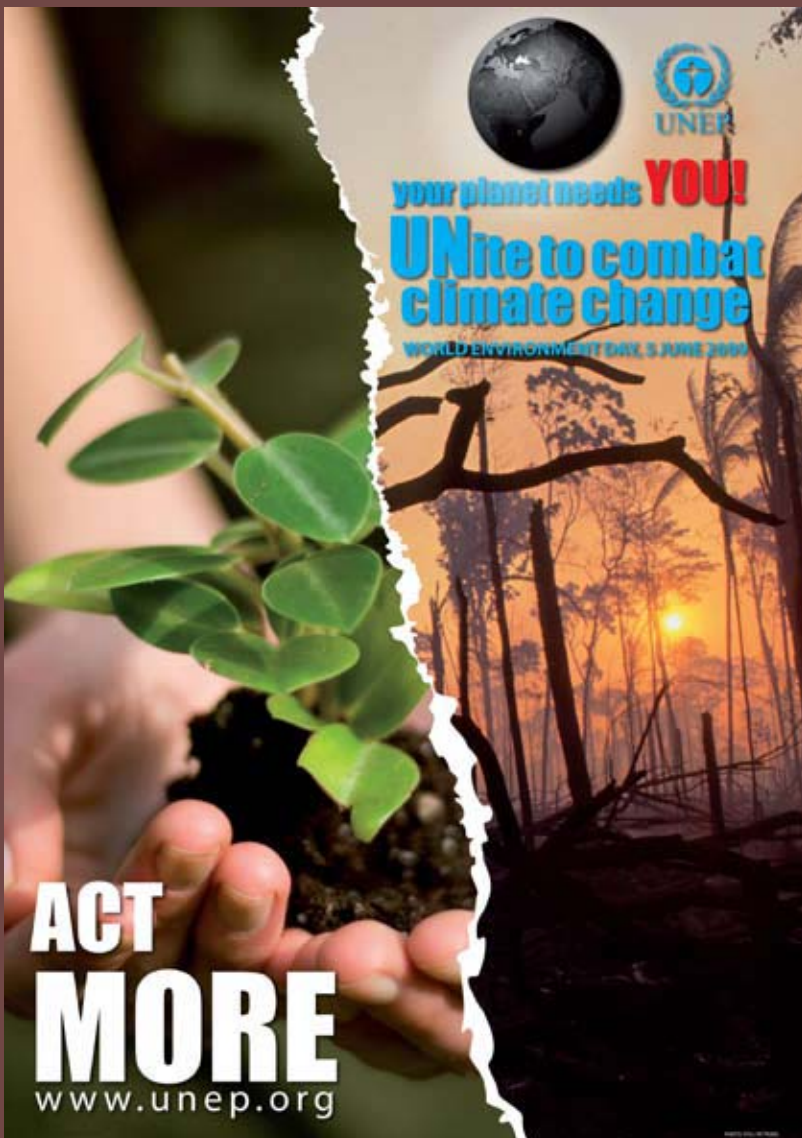
“We count on the European Union’s continued and committed support on this matter. In this regard I would like to inform you that the UN has launched the ‘Seal the Deal’ campaign towards Copenhagen in December.”

In response, European Commission (EC) President, José Manuel Barroso pledged support.

“We have to seal the deal...this is indeed our priority now to Seal the Deal in Copenhagen and I want to tell that we are going to work hand in hand with the United Nations to make that a great success for the future of our planet,” said Barroso.

The campaign slogan is **“Seal the Deal! Power green growth. Protect the planet”**.

## World Environment Day 2009 - UNEP



World Environment Day (WED) was established by the UN General Assembly in 1972 to mark the opening of the Stockholm Conference on the Human Environment.

Commemorated yearly on 5 June, WED is one of the principal vehicles through which the United Nations stimulates worldwide awareness of the environment and enhances political attention and action.

The theme for WED 2009 is ‘Your Planet Needs You-UNite to Combat Climate Change’. It reflects the urgency for nations to agree on a new deal at the crucial climate convention meeting in Copenhagen some 180 days later in the year, and the links with overcoming poverty and improved management of forests.

*For more information on World Environment Day visit: [www.unep.org/wed](http://www.unep.org/wed)*

# The Green Wave 2009

## Trinidad and Tobago

Friday May 22nd 2009 was a very significant day for thousands of youth in Trinidad and Tobago as they joined forces with other young people from around the globe to plant trees for The Green Wave Day.

The Global Environment Facility's Small Grants Programme (GEF-SGP) which is implemented by the United Nations Development Programme (UNDP) supported 3 local community-based and non-governmental organizations with grants of between TT\$ 15,000 – TT\$25,000 to contribute to The Green Wave, a global biodiversity campaign celebrating the International Day of Biological Diversity.

In participating schools and groups, young people planted and watered indigenous trees at exactly 10:00am local time, joining the "green wave" that went around the world.

The Fondes Amandes Community Reforestation Project (FACRP), Ile Eko Sango/ Osun Mil'Osa (IESOM) and the St. George East Branch Association of Community and Village Councils rallied young people to plant thousands of seedlings all over Trinidad and Environment Tobago (ET) held a very successful Green Wave celebration in Tobago, making the Green Wave in T&T a truly national effort.

The trees planted this year will be cared for by the young people and organizations who are undoubtedly environmental stewards, acting to promote biodiversity conservation locally and contributing to engendering a stronger and wider-reaching environmental conscience across our Earth.

UNDP and the GEF-SGP look forward to Green Wave 2010 and an even larger event!

[www.greenwave.cbd.int](http://www.greenwave.cbd.int)



Ms. Anna Cadiz, National Coordinator, GEF-SGP (4th from left) and Mr. Edo Stork, Deputy Resident Representative, UNDP Trinidad and Tobago (far right) plant trees with students at the Fondes Amandes Community Reforestation Project (FACRP)



Drummers at the Fondes Amandes Community Reforestation Project (FACRP) start the Green Wave Day with a celebratory drum roll.





THE GOVERNMENT OF  
THE REPUBLIC OF  
TRINIDAD AND TOBAGO



# Our planet is important

The Ministry of Energy and Energy Industries has initiated research activities with the aim of identifying feasible methods of incorporating Renewable Energy as an energy supplement.

- PV Solar Power
- Solar Thermal Power
- Wind Energy
- Wave Energy
- Biofuels

Level 26, Energy Tower, Trinidad and Tobago  
International Waterfront Centre,  
#1 Wrightson Road, Port of Spain,  
Trinidad and Tobago

Tel: (868) 62-MOEEI, 623-6708  
Website: [www.energy.gov.tt](http://www.energy.gov.tt)



MINISTRY OF  
**ENERGY**  
AND ENERGY INDUSTRIES  
*POWER. PROSPERITY. PROGRESS.*



**GHL beach cleanup**

## Guardian Holdings Limited promotes no harm to the environment

**T**he environmental revolution has changed forever how businesses conduct themselves.

The Caribbean, birthplace of the GHL Group, is made up of small vulnerable island states, all with fragile natural resource bases. It is only fitting that GHL management and staff accept their responsibility to do no harm to our environment.

At every level in the GHL organisation, people are increasingly conscious of their personal responsibility which is aligned to the company's corporate responsibility.

'A healthy environment is necessary for a healthy society, for people and for business and is the foundation for a strong, sustainable economy' says GHL's Group Vice President, Corporate Communications, Maria Rivas-McMillan.

'As a corporation, we recognise our direct impact on the environment through daily consumption of energy and paper resources and a potentially indirect impact through provision of financial services to projects in environmentally sensitive areas'.

Let's admit it, words are easy. However, the real proof of the pudding is in the eating— that is, practical action to manage competing human demands without undermining crucial eco-systems for the benefit of future generations.

The cause of conservation and preservation has long been promoted and supported within the Group. In the early Nineties, Guardian Life of the Caribbean produced a television series, 'Children of the Earth' that ran for several years in Trinidad & Tobago and, because of its success, was translated into Dutch and aired in the Netherlands Antilles.

A natural next step for the company was the setting up of an independent trust, the Guardian Life Wildlife Fund (GLWF), in 1992 with seed funding of \$25,000. This novel undertaking for any corporation at that time was chaired by Alwyn Poon Tip who was later succeeded by Professor Julian Kenny. The current chair is Dr. Carol James who is also Chairman of the Asa Wright Nature Centre. All the trustees are volunteers.

GLWF's mandate is to support projects that seek to preserve and conserve the rich wildlife heritage of Trinidad and Tobago. By raising public awareness of ecological issues and by working closely with environmentalists in the field, GLWF helps secure the nation's ecological future for generations to come.

The Trust has successfully supported efforts towards the protection of nesting marine turtles on the north and east coast beaches of Trinidad. Community groups such as the Grand Riviere Environmental Awareness Trust, Nature Seekers Inc and the Fishing Pond Environmental Group were provided with t-shirts, flashlights, raincoats, first aid kits and notebooks to assist them in their beach patrols and visitor management activities.

South East Eco-tours of Mayaro also received valuable support of binoculars to assist in bird viewing and identification during tours of Nariva and Guayaguayare. A rustic community Shelter was erected by the Trust at Fondes Amandes to facilitate community interaction within a covered shared space which was previously lacking.

These efforts serve to strengthen community human resource capacity in nature conservation. The Trust has expanded its efforts to broaden its support nationally through the production of educational posters and booklets which were distributed throughout the school system of Trinidad and Tobago. Its website



**Guardian Life Wildlife Fund logo**



www.glwildlife.org, is a source of information sharing on key issues and concerns on conservation through the use of Professor Kenny's outstanding nature photography and think pieces.

Dr. Carol James is passionate about the GLWF's latest project - the protection of Trinidad's most endangered species, the Pawi or Trinidad Piping Guan, which occurs nowhere else in the WORLD! 'The Pawi is in danger of extinction if this generation does nothing to protect its dwindling habitat. The Trust has identified community and other national activists who have been designated 'Pawi Guardians' and were suitably trained to facilitate the transformation of negative actions and behaviours towards this species at every

level, from official policy makers, to business organizations, to school students, to the ordinary citizen, whose corporate or personal decisions often result in widespread habitat destruction throughout the country.'

This spirit is also at the heart of GHL's environmental stewardship where employees engage in a number of initiatives to minimise their carbon footprint. 'Reduce, re-use and recycle must become the GHL mantra', Rivas-McMillan says. 'It's a work in progress and education, information and awareness are the keys to changed behaviour'. Employees get tips through an electronic newsletter, 'GreeNews', and are encouraged to make double sided prints, to re-print on the

unused side of documents and to recycle used computer printouts by cutting them into smaller pieces to use as scrap paper/ message pads. Every Friday newspapers are taken to the Trinidad and Tobago Society for the Prevention for Cruelty to Animals, a win win arrangement.

At GHL's head office in Trinidad & Tobago, employees are charged for using styrofoam boxes as opposed to reusable containers and plates when collecting lunches in the cafeteria. This drives home the 'reduce, reuse, recycle' message.

The ECO arm of employee activities continues to partner with the Heroes Foundation, a local NGO, for an annual global Beach Cleanup. For the last three years employee volunteers have collected refuse from several beaches across Trinidad & Tobago. The data is used in a global initiative to determine the type and amount of waste found on beaches.

Guardian also began a pilot project in Trinidad & Tobago where lights are turned off after 10 p.m. to reduce energy consumption. The company gained a 35% savings in its electricity bill! Internationally, GHL Europe is exploring eco friendly auto insurance schemes. In the UK, opportunities are being explored with a number of key broker partners surrounding eco friendly car insurance schemes. A new initiative offers customers the opportunity to offset their vehicles' carbon emissions. For every 1kg of annual emissions produced, lbuyeco arranges for 1kg to be saved by a climate friendly project somewhere else in the world - one balancing the other to make driving carbon neutral. As an example, one of the projects includes promoting the use of energy efficient light bulbs to lower demand on power stations and reduce emissions.

Plans are underway to introduce and promote the use of the reusable "green bags" initially to staff and later to the wider community as a part of the GHL branding strategy. 'It's all part of taking positive action on the environmental matters, not because we have to but because we want to', reiterated Rivas-McMillan.

Article submitted by  
Guardian Holdings Limited.



**Recycle bins around the Queen's Park Savannah, Port of Spain, Trinidad**



Mark Pegus

*The lotus flower represents long life, health, honour and good luck. It also symbolizes purity of heart and mind.*

*The flower grows in muddy water and has the ability to rise above the impurities and display its beauty.*

## TRINIDAD CLAIMS LEADS ON ENVIRONMENTAL SUSTAINABILITY



Managing Director and Chief Executive Officer of the Environmental Management Authority (EMA) in Trinidad and Tobago, Dr Joth Singh says the country

has been engaging some key aspects of the environmental sustainability components of the Declaration of Commitment arising out of the Fifth Summit of the Americas hosted in Port of Spain on April 17-19, 2009.

Addressing a panel discussion organized by the American Chamber of Commerce of Trinidad and Tobago (AMCHAM), Dr Singh said the country was “already running forward with many of the recommendations made by the Summit.”

He cited the issue of environmental governance and noted that the country was leading the region with respect to environmental legislation. In this regard, he referred to the Environmental Management Act and associated rules and regulations.

Dr Singh also noted concerns related to biodiversity, climate change adaptation, domestic planning and zoning measures and other issues that were being addressed by the country through the work of the EMA and others.

He said it was clear the issue of climate change featured “very heavily” in the deliberations of the hemispheric heads and the EMA was encouraged by the support expressed by all countries, including the United States, for the United Nations Framework Convention on Climate Change (UNFCCC).

He reminded the audience that Trinidad and Tobago was fifth worldwide per capita and 66th in terms of global generation of greenhouse gases. While he said developing countries were under no obligation via the Kyoto Protocol to reduce greenhouse gas emissions, it is a matter “currently being considered.”



This, he said, has implications for industry and will be “a significant undertaking if we decide to go that route.”

The EMA's Managing Director alerted the AMCHAM audience to the fact that dealing with the country's carbon emissions may involve some “retrofitting” of their operations.

Dr. Singh referred to the Nariva Reforestation Project being led by the EMA which, he said, had the potential to bring financial resources into the country since there is an avenue for purchase of the carbon captured.

In August 2008, the Ministry of Planning, Housing, and the Environment, the Forestry Division of the Ministry of Agriculture, and the EMA, initiated a project to begin replanting approximately 1300 hectares of land deforested by illegal farmers.

The main objective of the Nariva Project is to contribute to efforts to restore and conserve the Nariva wetlands through recognition of its role as a carbon sink and as a bio-diverse ecosystem.

## DONOR PARTNERS REAFFIRM CLIMATE CHANGE SUPPORT FOR CARIBBEAN



Several international development partners have re-affirmed their commitment to strengthening ties with the Caribbean Community (CARICOM) to help the region develop resilience against the effects of climate change.

The assurance was given at the March 23- 24 Second Caribbean Community Conference on Climate Change held in Castries, St Lucia.

Representative from the United States Agency for International Development (USAID) Caribbean, Julie Kunen, assured the conference that climate change was still a priority issue on the United States agenda and that the U. S. government would continue to support the Caribbean's efforts in developing adaptation strategies and other initiatives to respond to climate change.

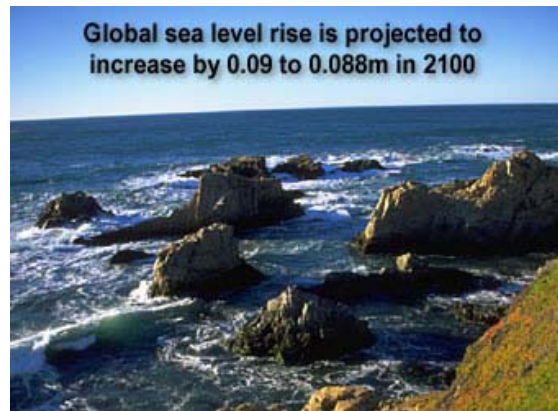
Outlining the USAID's involvement with the Caribbean, she said USAID had been very active in activities ranging from forest management, coastal and marine conservation, disaster response, early warning system and development, and promoting the sustainability of productive activities such as tourism in the Caribbean, particularly in Guyana and Haiti. She added that their plans for the future include mainstreaming adaptation to climate change.

“Our goals in adaptation are to enable project designers in the region to plan more resilient, robust projects by understanding climate change and how it may affect projects. Assisting them as they incorporate this understanding into project design,” she stated.

Meanwhile, Dr. Reynold Murray, United Nations Development Programme (UNDP) representative, said that contrary to recent criticisms of the CARICOM, it was still a powerful force in the region and it was the intention of UNDP to forge greater ties with the Community in ensuring that effective responses to the global phenomenon of climate change were developed. He explained that part of the UNDP's strategy was to build country-level capacity to address climate change by providing a set of integrated support services.

One of the UNDP's considerations was the establishment of the Climate Change Development and Advisory Committee to support the task force set up by the heads in 2008. The body is tasked with defining and addressing the region's climate change agenda for the negotiations leading up to the 2012 Post-Kyoto regime as well as to provide support and representation for the Community with respect to critical sectors affected by climate change.

Caribbean Community Climate Change Centre





## IMPACT OF CLIMATE CHANGE ON CARIBBEAN FISHERIES SECTOR UNDER-RESEARCHED

Climate change has started to have serious negative effects on the fragile marine ecosystems that support the Caribbean's fishing industries, yet many fisheries management plans do not provide for these effects nor are fisher folk receiving the necessary information to help them adapt.

These are two of the concerns raised in a report recently released by the Marine Resource Governance in the Eastern Caribbean Project of the Centre for Resource Management and Environmental Studies (CERMES) at the University of the West Indies, Cave Hill in Barbados.

The report stems from the Fishers Forum on "Climate change and small-scale fisheries in the Caribbean" that occurred at the 61st Gulf and Caribbean Fisheries Institute (GCFI) Conference in Guadeloupe last November.

The report compiles perspectives on the impact of climate change on the livelihoods of fisher folk from presentations made at the Forum by CERMES senior lecturers Dr. Patrick McConney and Dr. Leonard Nurse; CERMES MSc student and Antiguan deputy chief fisheries officer, Philmore James; regional fisher folk leader Mitchell Lay; and veteran Barbadian fisher Anderson Kinch as well as other fisheries scientists, fishermen, and marine science experts gathered for the meeting.



The report points out that, while much attention has been paid to the devastating impact that climate change can have on coral reefs in the region (including the widespread 'bleaching' death on reefs across the Caribbean in 2005

due to rising water temperatures), little research has been carried out into the potential impact of the phenomenon on the fishing, fish processing, trade and fisheries technical support services related to small-scale fisheries.

Changes to migratory patterns of fish and bird species throughout the Caribbean region; the invasion of marine species previously unknown in regional waters; the increase in ciguatera poisoning of fish in the north-eastern Caribbean; and the impacts of sea level rise and warmer waters on fishing activity were all scenarios that participants raised during the forum.

This, stated the report, pointed to a need to place on the regional climate change agenda more demand-driven research regarding the phenomenon's effects on small-scale fisheries, especially given the uncertainty about the impacts on their livelihood from climate change and the possible responses fishers could take to mitigate its negative effects.

These effects, stated the report, could include the destruction of fishers' homes and fishing grounds along coastal areas due to sea level rising, storm surges and the increased violence and frequency of hurricanes. It was noted that small-scale fishers are also particularly vulnerable to these natural disasters due to a general lack of insurance and institutional support to help them recover in the aftermath of these extreme events.

## CARIBBEAN RENEWABLE ENERGY WEBSITE PROVIDING CRITICAL INFORMATION

Chairman of the Scientific Research Council (SRC), James Moss-Solomon, has disclosed that the Caribbean Information Platform on Renewable Energy (CIPORE) has received over 100, 000 hits since it was enabled at the beginning of April. The website, located at [www.cipore.org](http://www.cipore.org) was officially launched at the Scientific Research Council, on Hope Road, Kingston, Jamaica.



CIPORE is the information and communication system for the exchange of renewable energy information for the region. Information on the website is available in the four major languages of the Caribbean; French, Spanish, English and Dutch. However, Mr. Moss-Solomon said CIPORE is more than a website. "I like to think of it as a developmental tool, because it is providing more than just specific information, it is giving you a broader view across the region as to what is really happening," he said.

The platform includes an information centre with articles and speeches on renewable energy, a projects database, legislation, statistics, and energy calculator. There is also a communications centre, which features a directory, forums, chat rooms and access to host live meetings with up to 20 persons online from anywhere in the world. Other features are a demonstration centre; country pages for each participating territory and a news section devoted to Renewable Energy developments in the region.

Uploading of information to CIPORE will be done from the National Focal Points (NFPs) in the 13 participating territories. Programme Manager for the CARICOM Secretariat's Energy Unit, Joseph Williams noted that CIPORE is an important tool that could be used to harmonise energy initiatives across the region. "The entrance of the CIPORE will necessarily mark the exit of ignorance as far as renewable energy is concerned," he added.

Mr. Williams also noted that potential investors and entrepreneurs could use the website as a tool for improving their businesses. CIPORE emerged out of a Memorandum of Understanding between the SRC and CARICOM, which was signed on September 26, 2008. The Caribbean Energy Information System, which is headquartered at the SRC, won the consultancy to develop the platform, which was also funded by the United Nations Development Programme (UNDP).

For more information visit <http://cipore.org>

## MORE INVESTMENT IN RENEWABLE ENERGY - DR. POTOPSINGH



**Dr. Ruth Potopsingh**

Group Managing Director of the Petroleum Corporation of Jamaica (PCJ), Dr. Ruth Potopsingh has called for more investment in renewable energy initiatives to address the effects of climate change.

She pointed out that the use of conventional fuels such as petroleum and coal, contributes significantly to greenhouse gas emissions, which cause climate change and more focus must be placed on efficiency, conservation and alternative energy options.

Addressing the topic: 'Solutions to the Climate Change Crisis - What can we do?', at the Jamaica Institute of Environmental Professionals (JIEP) public lecture at the Jamaica Pegasus Hotel in New Kingston, Dr. Potopsingh stated that the PCJ "has been working assiduously in the area of accelerating renewable energy resources. But, we must confess that the focus has really been to reduce our over US\$2 billion import of petroleum and petroleum products."



"We (PCJ) have introduced ethanol in our fuels, (and) we have plans to expand (this and other undertakings). We have tied up our negotiations for the expansion of the Wigton wind

farm, and there are discussions going on for another phase of development. We also have a number of small hydro projects that we are expecting to come on stream within the next two to three years, to meet our renewable energy target of 10 per cent and 15 per cent by 2020," Dr. Potopsingh informed, while citing the need for more commitment for investments in these projects by the private sector.

She noted that "there are opportunities, when we take on the whole arena of climate change, for funding for corporate, social and individual responsibility. A renewable energy policy is critical to this accelerated investment. (and) will be focused on getting more investments," she stated, while stressing the need for attractive incentives that will encourage a buy-in by the private sector as well as householders.

Dr. Potopsingh informed of "strong interest" in bio-fuels locally, particularly bio-diesel, and disclosed that at least two companies are pursuing the establishment of small bio-diesel plants. One of these, she said, is exploring the use of cooking oil, while the second is pursuing another option.

Regarding the renewable energy policy, she said it will address issues such as specific measurable and achievable targets; capacity building that will adequately facilitate the transfer of energy options inclusive of wind, solar, geo-thermal, and bio-fuels.

## STATEMENT FOR EARTH DAY

By Organisation of Eastern Caribbean States (OECS) Secretariat



*A scenic view in Grenada*

The sustainability of our economies and the quality of life of the peoples of Small Islands like the OECS will in large part be shaped by the decisions we take today to prepare for the impacts of global warming.

Countries all over the world are already experiencing changes to physical environments, biological processes and weather systems, necessitating not only reactive responses, but more importantly the development of a strategic framework that would enable a planned preemptive programme to address future impacts of climate change.

It is therefore important for OECS governments to prepare today for the changes that are predicted; otherwise the impacts of unsuitable decisions could severely hurt the long term viability of the fragile economies of these Member States.

One climate change expert points out that 'the example of most islands requesting external assistance in crisis times is testimony to the inability of governments to respond to their own needs, adding further, that "if climate change continues unchecked, money that could be used for poverty alleviation and other social services, or for economic development, will instead be diverted to disaster recovery" or other reactive response efforts.

The global economic down turn and the impacts on local economies will no doubt lower the priority weighting of climate change. Yet, for the economies of the OECS countries to survive, actions must be initiated today to address alternative energy options and adaptive responses to the impacts of climate change within a framework of the equitable distribution of land resources.

The ability of OECS Governments to provide for its people against those odds must be informed by the balanced distribution of land. Land resources, or according to the economist – natural capital – is the underpinning of growth of all our economies. The skewed allocation of land in favour of one sector, such as tourism, is detrimental to the ability of other sectors to cater to the needs of a population twenty five years from now.

The reality is that climate change may induce changes in reproductive patterns in plants and animals affecting our ability to feed ourselves with implications for our food security; may create an environment for disease vectors putting more pressure on our health services and will put coastal communities at greater risk from flooding and storm surge, with implications for housing, disaster preparedness and emergency response.

It will affect livelihoods dependent on natural resources when these are either degraded or lost altogether, with implications for social services; all these and more will challenge the ability of sectors and governments to address these issues.

Our only solution today is to allocate our land resources in a manner that ensures that all sectors can adequately provide for population needs into the future. There will be no simple solutions, only intelligent choices as our only hope for survival rest in how we relate to our environment and how we adjust our practices to ensure sustainability.



## BARBADOS ATLANTIS SUBMARINES FIRST TO BE CERTIFIED BY GREEN GLOBE/GREEN CERTIFICATIONS PROGRAMME

Green Globe International, Inc. and Green Certifications, Inc., which have together launched a dual certification program for businesses in the travel and hospitality markets, announced that Atlantis Submarines Barbados is the first attraction to achieve certification under the dual Green Globe/Green Certifications program.

Atlantis Submarines in Bridgetown, Barbados operates an authentic submarine which is part of the largest fleet of recreational submarines in the world and daily takes guests to depths of 130 feet and deeper to explore the natural reef off the west coast of Barbados.

"This is a fantastic achievement for us, and it signals that we have started down a positive path to measuring and eventually reducing our carbon footprint as well as increasing our overall positive impact on the social and natural environment," said Roseanne Myers, General manager of Atlantis Submarine Barbados.

"We already had a number of safety, quality, and preventative maintenance program in place, but we did not realize that the Green Globe/Green Certification would include an assessment of these as well as environmental education and management systems. Most of all, it was paperless and painless, though we have lots more work to do."

Green Globe International and Green Certifications, Inc. have established a co-branding relationship under which they deliver a dual certification to identify compliance with internationally accepted green, sustainability standards to tourism properties and businesses.

## JAMAICA URGED TO MOVE QUICKLY TO IMPLEMENT RENEWABLE ENERGY OPTIONS

Former Ambassador to the United Nations, Anthony Hill, is advocating that the country moves post-haste towards the implementation of renewable energy options to fossil fuels, in order to mitigate the factors influencing climate change.

Climate change refers to long-term changes in regional or global weather patterns, reflecting abnormal climatic variations.

Speaking at the Jamaica Institute of Engineering Professionals (JIEP) public lecture and panel discussion in May on the theme: 'Solutions to the climate crisis - What can we do?', Ambassador Hill cited the consequential impact that the high consumption of fossil fuels, such as oil and coal, has on the environment, which is influencing climate change.

"We, in Jamaica, have been following a high consumption model, and we need people to accept and believe that climate change is not something too distant from impacting us, and that we have responsibilities. Even if we are not contributors to the global factor, because it is global, it affects us, and therefore, we have to take adaptation measures, what is called mitigation steps," he contended.

These, the Ambassador suggested should focus on reducing the emissions of high energy consumption, by employing conservation measures, and implementing new and renewable energy options.

The Earth Conscious **GREEN TIPS** are as easy as



These environmentally-friendly, green tips have been carefully put together for you by Earth Conscious. If you follow these tips, you will contribute in your own small way to greening the environment, as well as contribute to your own personal green-being. "It's not easy being green" - but it certainly is VERY EASY to try!

**E**at locally or home-grown fresh fruits and vegetables every day

**A**void products that are excessively wrapped in plastic

**R**ecycle and reuse envelopes

**T**ake a day off in the middle of the week to stay home, catch your breath and relax

**H**ost a green event and share information and tips in an enjoyable way

**C**lean your home with vinegar or baking soda in water (instead of chemical based cleaners)

**O**rganize a neighbourhood walkabout or outdoor exercise session

**N**ever keep the lights on your computer monitor and DVD players when you switch off

**S**witch from disposable to reusable products (e.g. containers, shopping bags)

**C**arpool, carpool, carpool

**I**nitiate a Green Day at your workplace. Be creative and spread the good habits

**O**pen windows for natural air, cutting down on AC use

**U**se more energy saving light bulbs

**S**team rather than boil vegetables to save water and retain as much of the value of the veggies as possible



# Environment and FAITH



By Chandani Jayatilleke from Varanasi

A comfortable overnight train journey which began from Agra brought us to this fascinating city of Varanasi, one of the oldest and holiest cities of India. Having read about the diverse cultural and religious values of this holy city which is often referred to as Banares by Buddhists, I always longed to visit this mysterious city. My first impression of the city was the exact picture which I had earlier visualized of - the people, their clothes, the streets, the transport system and the police officers appeared exactly the same as explained in many books.

Varanasi also known as 'Kashi' is located on the banks of the River Ganga in the north Indian state of Uttar Pradesh. Therefore, the city's main attraction undoubtedly is the River Ganga.

Varanasi is considered an important religious centre for Hindus and Buddhists alike. It is a sacred place where any Hindu or Buddhist devotee would dream of visiting.

Hindus from world over come to Varanasi to take a dip in River Ganga and to wash away a lifetime of sins in the river or to cremate their loved ones and flow their ashes.

After taking a dip in the River Ganga, it is believed by Hindus that the soul will liberate from human bondage to the God. Varanasi Ghats are visited by literally hundreds and thousands of people everyday and during festival periods the city is swamped by Hindus which runs sometimes in millions. A large number of local priests or Brahmins perform rituals to the visiting Hindu devotees.



Hindu devotees worshipping Ganga



Sunrise from Ganges

**As far as the Buddhists are concerned Varanasi or Banares is the sacred city where Lord Buddha preached his first sermon. The exact location is now called – Saranath; here the Buddha revealed the eight-fold path that leads to the attainment of Inner Peace, Enlightenment and Nirvana.**



In Saranath, there are many Buddhist temples and archaeological sites to visit. The well-kept museum houses the famous Ashok Pillar, four back-to-back lions standing on top. This has been adopted as the state symbol of India.

When I visited Varanasi recently, I felt proud to have visited this great city. However, as a person who loves environment and who encourages others to protect their environments, I was shocked to see the magnitude of pollution of River Ganga, largely owing to various cultural beliefs. The River Ganga provides millions of Indians with an important link to their spirituality...every day at the dawn, thousands of people go down to the Ghats to take a holy dip. Along the same area several large sewers are continuously discharging into the same river!!!



We had the opportunity to go down to the Ghats for a boat ride on the River Ganga early one morning. We saw people getting ready to go into the water for their holy bath and Hindu priests gathering around Ghats for their rituals. Traders were selling tiny wax lamps to be offered to the Sun God.

It was still dark when we set sail. We sailed past Ghats and sewerages, watching bathing men and women and listening to the prayers of devotees.

And when finally the sun rose from the Eastern end, we placed our wax lamps on the water of Ganga. We enjoyed the sun rise and its thick red rays flashing on the heavily polluted water. What a contrast! The beauty and the pollution of environment meet together at one location. This is etched in my memory forever.

Says Dr. Binod Agrawal – a native of Varanasi – “When I was child, I visited Varanasi with my grandparents to take bath at the Ganga Ghat. In last 40 odd years, I do not remember having taken bath, though often I have gone there with my friends.”

A number of studies have been carried to understand sociological dimensions of Varanasi-Ganga Ghats, in which the socio-economic aspects have been analysed. Indian experts - Professor Vidhyarthi and Professor Saraswati have published monographs on the sacred complex of Varanasi.

Dr Agrawal says; “My first impression of Varanasi-Ganga Ghats is quite exotic and I stood there and wondered as to how literally men, women and children take baths without any consideration of privacy, environment and outside temperature in the middle of winter. Of course, it reaffirms faith of Hindus in their religion.”

A great deal of discussion has taken place about several environmental issues relating to Varanasi-Ganga Ghats. For example, the cremation of dead on the Ghat and leaving a whole lot of other materials used by humans, all leading to serious environmental problems. Often people have asked whether it will not lead to health problems.

In a nutshell Varanasi, according to Mark Twain, “is older than history, older than tradition, older even than legend”. Hindus believe that one who is graced to die on the land of Varanasi would attain salvation and freedom from the cycle of birth and re-birth. Abode of Lord Shiva and Parvati, the origins of Varanasi are yet unknown. Today Varanasi is a tourist destination for almost all visitors to India.

*Chandani Jayatilleke is a Sri Lanka-based journalist, specializing in environmental issues.*

*Pictures by Rohan Gunasekera*

## WORLD FACING MULTIPLE ENERGY CHALLENGES, SUPPORT URGED FOR NEW SUPPLIES, INCLUDING RENEWABLES



**Spatial Panitchpakdi**

The global credit squeeze, which makes energy supplies more difficult to obtain; concerns about carbon emissions and their effects on the climate and potential declines in conventional oil reserves mean that the world and especially developing countries are facing serious obstacles in improving living standards and expanding their economies, UNCTAD's Trade and Development Commission was told by a series of experts.

The discussion held in May on "Energy-related issues from a trade and development perspective" focused on matters of supply and on the potential for the world's poorer nations to find opportunities in the coming demand for renewable forms of energy.

Jeremy Leggett, Executive Chairman of Solar Century (United Kingdom), opening the debate by video link, reviewed concerns about when peak oil production may be reached – a matter of great importance for global energy supplies, and lending urgency to the search for viable renewable sources.

Mr. Leggett said the international community should call for, and achieve, greater transparency in oil reserves. Steps also should be taken internationally to combine efforts to deal with declining oil supplies with efforts to cope with climate change, he said. And he termed it necessary to accelerate new "green deals" that encourage advances in renewable energy.

Meeting even current demand is difficult. UNCTAD Secretary-General Spatial Panitchpakdi in opening the week-long commission session said some 1.6 billion people, mainly in Asia and sub-Saharan Africa, lack access

to electricity, and some 2.4 billion do not have access to modern fuels for cooking and heating.

Energy demand will continue to increase. Projections are that trade in oil will double by 2030 and trade in natural gas will triple over the same period. Expenses also will rise: by 2030 it is estimated that US\$22 - 27 trillion will be needed in the energy sector for extraction and development of the power industry and related infrastructure. About half this investment will occur in the developing world.

In addition, climate change is rapidly becoming a more prominent challenge. Some 64% of electricity worldwide now comes from the combustion of fossil fuels which add to greenhouse-gas emissions.

Mr. Supachai however, said that these challenges should also be looked at as opportunities for developing countries. Investment, planning, and research should be applied to making rapidly expanding energy supplies in such nations cleaner, more efficient, and ultimately – it is hoped – less expensive as technology advances. Promoting clean and energy-efficient industries and infrastructure also could make developing countries more attractive as investment locations, he said, and progress in renewable energy could heighten their global competitiveness. Even during the current global financial crisis, he said, it is imperative to find the financing to achieve progress in developing affordable renewable energy.

Other speakers included Salvador Namburete, Minister of Energy of Mozambique, who described his country's plans to establish a viable domestic market for biofuels – noting that, if well managed, such a system would have the added benefit of encouraging entrepreneurship and providing steady income and employment in rural areas. Motivation for greater production of biofuels included unpredictable, volatile swings in world oil prices; the country's need for greater energy security and reduced dependence on imported fossil fuels; and the mitigation of global warming through the use of a clean energy source, Mr. Namburete said.

## UNEP ANNOUNCES THE 2009 CHAMPIONS OF THE EARTH

Six tireless innovators of positive environmental change and an inspirational anti-poverty organization from Africa were named as the UN Environment Programme's (UNEP) 2009 Champions of the Earth. This year's winners are: Norwegian Environment Minister Erik Solheim; tropical forest and climate campaigner Kevin Conrad; photographic and public awareness pioneer Yann Arthus-Bertrand; wind power entrepreneur Tulsi Tanti; biomimicry specialist Janine Benyus; recycling innovator Ron Gonen; and the youth-empowering Ethiopian organization Tena Kebena. All seven laureates gathered in Paris on Earth Day to receive their trophies at a gala event attended by more than 200 personalities from business, politics and civil society.

"Today we celebrate and honour seven catalysts of positive environmental change who, through the worlds of politics, business, science, photography, resource efficiency and civil society have challenged the status quo and demonstrated across communities and countries new and transformational solutions to persistent and emerging environmental threats," said Achim Steiner, UN Under-Secretary-General and Executive Director of the United Nations Environment Programme, who presented the awards to the winners.

"Passion, creativity, intellect, vision and drive unites each of our 2009 winners - key qualities urgently needed with less than 230 days to go to the crucial UN climate convention meeting in December. Qualities also essential to turn the current and coming crises into an opportunity to realize a sustainable, Green Economy for the 21st century," he said.

This year, the awards - which are hosted in conjunction with the annual Business for the Environment Summit (B4E) - moved away from geographical distribution to recognize achievements in the areas of Policy Leadership, Science and Innovation, Entrepreneurial Vision, Inspiration and Action, and Next-Generation Champions.





**Eric Soheim**

## Policy Leadership: Erik Solheim and Kevin Conrad

Erik Solheim, Norway's Minister of Environment and Minister of Development, has been a key supporter of environmental actions at national and global levels throughout his political career, spearheading for example the early implementation of REDD - Reducing Emissions from Deforestation and Forest Degradation. He also paved the way for Norway's membership as one of the founders of UNEP's Climate Neutral Network, catalyzing his country's action towards a low carbon society.

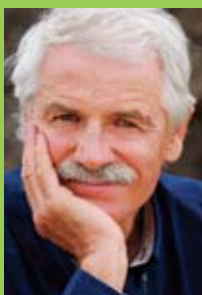
His fellow laureate Kevin Conrad, the Executive Director of the Coalition of Rainforest Nations, hit the headlines at the 2007 UN Bali climate change talks when he urged the United States to take leadership on climate change.

Mr. Conrad has become a tireless and vocal campaigner on better aligning fiscal and market incentives for improved management of tropical forests that better capture the economically-central services they provide to communities and to the global community.

Millions of dollars are now flowing into new and more creative ways of tropical forest management. It is likely that when governments gather in Copenhagen in December for the UN climate meeting, these efforts will bear even greater fruit triggering substantial flows into forestry conservation and nature-based carbon storage.



**Kevin Conrad**



**Yann Arthus-Bertrand**

## Inspiration and Action: Yann Arthus-Bertrand

French photographer Yann Arthus-Bertrand has helped people around the world see our planet in a new light - beautiful, fragile, threatened - through his breathtaking aerial photographs from the remotest parts of the globe.

In 2005, Arthus-Bertrand formed GoodPlanet.org - an environmental organization whose objective is to educate about sustainable development and urge individuals across every culture and background to think about the future of all of our planet's inhabitants.

In recognition of his environmental achievements, Yann Arthus-Bertrand has been named as a UNEP Goodwill Ambassador. His latest project is 'Vu du Ciel', a documentary series broadcast on French television station France 2 that uses High Definition video and investigative journalism to document environmental degradation around the globe. The show celebrates scientists, environmentalists and members of the public who are engaged in the fight to save our planet.



**Tulsi Tanti**

## Entrepreneurial Vision: Tulsi Tanti and Ron Gonen

Tulsi Tanti is the Chairman and Managing Director of Suzlon Energy, the fifth largest wind turbine manufacturer in the world and the largest in Asia.

His company was an early mover in the multi-billion dollar renewable energy industry, exploring wind energy in the late 1990s as an alternative to costly and erratic electricity supply to its textile business. Suzlon has successfully demonstrated that renewables are not just a business opportunity for the developed economies, but a major contribution to the sustainable development of the developing world a key element towards a low carbon, Green Economy.

Environmental activist Ron Gonen's brainchild, RecycleBank, has helped increase recycling to over 90 per cent in many communities across the United States through a reward system.

The company, which has now spread to 18 states, is also working with schools and is running a pilot program with New York City's Columbia University where special recycling kiosks are set up in cafeterias and dorms. To date, RecycleBank households have diverted thousands of tonnes of recyclables from landfills, saving over 98 million gallons of oil and more than one million trees.



**Ron Gonen**



**Janine Benyus**

## Science and innovation: Janine Benyus

Janine Benyus, the winner in the Science and Innovation category, is a pioneer and champion of the biomimicry movement who is at the helm of the eco-design revolution.

Her 1997 book 'Biomimicry: Innovation Inspired by Nature' inverts the way we all think about design, industrial processes and areas from pharmaceuticals to energy developments. Ms Benyus's central theme is that, by unraveling and learning how plants, animals and life-forms like bacteria have evolved over millennia, many of the innovations and solutions to the world's pressing problems can be found setting the stage for new, biologically-based businesses and jobs.

## Next-Generation Champions: Tena Kebena

The Next-Generation Champions category was created to celebrate the new generation of dynamic, passionate individuals and organizations around the world who are making a real difference for the environment. The winners are Tena Kebena, an organization in Ethiopia that brings together around 80 children and youth who have been mostly orphaned by the HIV/AIDS pandemic.

The group cleans up and rehabilitates garbage dumpsites around the city of Addis Ababa through reforestation, turning mountains of trash into hills green with trees, herbs and flowers.

The sites are also used for urban agriculture - on what used to be a waste pile, the young gardeners are churning out lush rows of vegetables through organic methods and waste water collection. And agricultural produce and herbal medicines grown from the urban farm are sold to provide funding for the project and for the children's learning activities.



**Tena Kebena**

## IPCC TO PREPARE REPORT ON EXTREME EVENTS AND DISASTERS



Rajendra Pachauri, Chairman, IPCC

The Intergovernmental Panel on Climate Change (IPCC) will prepare a Special Report on 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation'.

The decision was taken by the 30th Session of the Panel held in April in Antalya, Turkey. The IPCC Working Group II (WG II), which deals with "Impacts, Adaptation and Vulnerability", will carry on with the preparation of the report.

"In its Fourth Assessment Report (AR4), the IPCC had found that climate change was being manifested in the nature of changed frequency, intensity and length of many extreme events, such as floods, droughts, storms and extreme temperatures.

This special report will generate knowledge on these extreme events and their characteristics, whereby the global community can prepare more effectively for adapting to future risks posed by the hazards that these occurrences will present.

"Communities at the local level and national governments can deal with such extreme events by adopting a range of disaster risk reduction strategies, and prevent some of the worst humanitarian consequences that they are projected to give rise to" says Mr Rajendra Pachauri, the Chairman of the IPCC.

The Special Report was proposed at the Panel's 29th Session by the government of Norway with the involvement of the International Strategy for Disaster Reduction (ISDR), the UN organization overseeing the development of disaster reduction policy. A meeting of more than one hundred experts from 51 countries was convened in March 2009 to provide advice to the Panel on whether to develop a Special Report.

"There has been a consensus among the experts on the opportunity to produce such a report" – explained Mr Vicente Barros, WG II Co-Chair, to the Panel.

"Extreme events are one of the direct consequences of climate change, with severe economic repercussions. There's new and relevant scientific literature subsequent to the AR4, in particular on disaster risk management, most of which is grey literature, which will make the effort to assess. The report will be an extremely useful tool for governments to learn how to manage disasters, and it is also a very important support to the United Nations Framework Convention on Climate Change (UNFCCC) work, in particular the Nairobi work program to help parties make informed decisions on practical adaptation actions".

The expert meeting provided an outline for the report which was approved by the Panel. It will include 9 chapters, three of which on managing the risk, focusing on the different levels of organization: community based responses; national scale responses and international responses. Two main case studies will be carried out throughout all chapters, while chapter 9 will be entirely dedicated to case studies.

Key main topics to be assessed will be the frequency, intensity and duration of extreme events; vulnerability; and disaster risk reduction and climate change adaptation. The 200- 250 pages Special Report is planned to be released in the second half of 2011.

## WORLD CLIMATE CONFERENCE 3: CLIMATE PREDICTION FOR DECISION-MAKING

### World Climate Conference-3

Better climate information for a better future



www.wmo.int/pages/world\_climate\_conference

Geneva, Switzerland  
31 August – 4 September 2009  
International Conference Center, Geneva



World Climate Conference-3 (WCC-3) taking place in Geneva, Switzerland later this year will seek to establish an international framework to guide the development of climate services which will link science-based climate prediction and information with climate risk management throughout the world for adaptation to climate variability and change.

WCC-3 will be held from 31 August to 4 September 2009 under the auspices of WMO in cooperation with other UN agencies, national governments and the private sector.

It is organized as a contribution in support of the United Nations leading role in climate variability and change, and to support the work of countries in adapting their societies to the immediate challenges arising from climate variability and change in the next two decades.

The theme of WCC-3 will be "Climate prediction for decision-making", focusing on the application of climate information and predictions to societal problems enabling adaptation to climate variability and change in areas such as agriculture, water, health and to sustainable development in general.



## WINNERS OF 2009 SEED AWARDS ANNOUNCED LOCAL ENTREPRENEURSHIP CELEBRATED AT THE UN COMMISSION ON SUSTAINABLE DEVELOPMENT

The winners of the 2009 SEED Awards for Entrepreneurship in Sustainable Development were announced at a high level award ceremony and reception in May. The international award recognizes innovation in local, environmentally-responsible and sustainable entrepreneurship.

Twenty local initiatives from across the developing world received this year's award. Together, the winners cover a diverse range of promising business models that will tackle poverty and environmental stewardship in areas such as water and waste management, sustainable energy, recycling, and fish farming.

The SEED Award is the flagship programme of the SEED Initiative, a partnership founded by the United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), and International Union for Conservation of Nature (IUCN). These SEED winners were selected from more than 1100 applications from close to 100 countries worldwide, representing the collaborative efforts of about 5000 organizations from the private sector, non-governmental organizations, women's groups, labour organizations, public authorities, international agencies and academia.

### Some of the 2009 SEED Award Winners:



**Bangladesh:** "Solar conversion of traditional kerosene hurricane lamps". A national NGO in partnership with a local NGO and a cooperative have developed an innovative device called "SuryaHurricane", a low-cost solar lantern made from recycled parts of the conventional and much used kerosene lantern.

**Brazil:** "One Million Cistern Program (P1MC)". Local NGOs and local community associations have joined forces with the national government and international agencies to develop and build one million

home cisterns to collect and store rain water in the semi-arid region, bringing access to potable water for poor rural families.

**Brazil:** "Eco-Amazon Piabas of Rio Negro". A national NGO, a cooperative of small producers and public authorities are working together to build a niche market of specialty ornamental fishes and to introduce a fair trade system through socio-environmentally responsible fishing.

**Burkina Faso:** "Nafore & Afrisolar energy kiosks". A small business and international NGOs are cooperating to provide sustainable energy supply to poor communities by expanding the use of "Nafore", a PV-based telephone charger, powered 100% on solar energy.

**Colombia:** "Oro Verde® - Facilitating market access for artisan miners". A national NGO and local community associations are engaged in an initiative to reverse environmental degradation and social exclusion produced by illegal and uncontrolled mechanized mining. A mining certification process and capacity building program have been created. More than 1000 artisan mines are now following social and environmental criteria.

**Colombia:** "Camarones Sostenibles del Golfo de Morrosquillo". The partners of this project are a community-based organization, a local NGO and a small business which are aiming to establish a cooperative enterprise that includes families of traditional fishermen in the Morrosquillo Gulf, farming shrimp in a way which produces zero emissions.

**Cook Islands:** “Innovative inland oyster aquafarming”. A local business in partnership with a national NGO is farming oysters under controlled conditions in an environmentally friendly and wholly sustainable manner. Farming fish provides relief from subsistence fishing of the over-harvested lagoons in the region as well as new food security and income generation to communities involved.

**Kenya:** “MakaaZingira” produces FSC certified charcoal for conservation and livelihood creation. A national NGO, a community-based organisation and a small business network aim to establish a sustainable eco-charcoal production model, helping small scale farmers to replace unsustainable practices while also bringing social benefits.

**Mozambique:** “The clean energy initiative”. This project aims to provide rural electrification using sustainable energy, generating local employment and promoting entrepreneurial skills, by offering capacity building in the manufacture, installation and maintenance of micro wind turbines. The partners of this project are local small businesses and an academic institution.

**Niger:** “Almodo”. A partnership between a small business and a research institution is developing a sustainable self-financing solid waste management system that contributes to improving living conditions of the poorest population, in collaboration with a women’s group that collects solid waste in poor urban areas of Niger’s three biggest cities.

**Panama:** “Planting Empowerment”. An initiative involving a small business in partnership with a community-based organization and an international agency is leveraging private capital to increase conservation and provide sustainable livelihood opportunities to the local population as the same time as improving natural resource conservation in fragile environmental areas.

**South Africa, Namibia and Botswana:** “Biocultural protocols - community approaches to Access and Benefit Sharing”. Civil society organizations have mobilized efforts to develop bio-cultural protocols with different local indigenous communities which will help to provide a model whereby local communities can share the benefits if local resources and expertise are developed for market purposes.

**Sri Lanka:** “Solar energy, education & fishing”. National and international NGOs, with the cooperation of public authorities, are working to expand the use of an alternative lighting system in rural villages, through the replacement of kerosene lamps with solar panels.

**Tanzania:** “KOLCAFE - Smallholder coffee revenue enhancement”. This initiative, involving national NGOs and a local research institution, aims to empower coffee farmers and increase coffee production by improving agronomic practices and adding value through building product processing infrastructure and selling products directly to export markets.

## WHAT ARE YOU DOING FOR THE ENVIRONMENT?



At home and on campus I recycle by printing on both sides of paper sheets and then only print if necessary. I take recycling a step further

and cut out the clean bits for notepaper and to make lists, the blank side of cash register receipts are also ideal for this purpose. Some people may be angry and disappointed to hear this but I prefer to send e-greetings for the holidays and use email instead of paper mail. But it is good for the environment as it conserves our paper resources and is a lot faster.

Simple tasks like turning off the lights, fans, television sets when not in use or the water when you are brushing your teeth are just some ways I try to do my part to help preserve what resources we have. Rather than have my garden cuttings hauled off to the dump I maintain a compost heap and use the organic material produced in my garden.

Through my research I also try to add to the body of knowledge particularly in biodiversity, where I have conducted surveys of the spider fauna of Trinidad and Tobago as well as that of other island in the Eastern Caribbean, such as Antigua, St. Kitts, Nevis, Grenada and Anguilla.

I also try to help the environment by educating the public through my articles in newsletters of various NGOs in the Eastern Caribbean and Trinidad and Tobago and via a weekly column in the Tobago News newspaper for the local NGO, Environment TOBAGO.

Personally I find that people will respect and appreciate this planet and its environment once they know more about it and its functionality and how without it the human race together with numerous species of plants and animals will cease to exist.

Jo-Anne Nina Sewlal  
Dept of Life Sciences,  
University of the West Indies  
St. Augustine, Trinidad.





“**Thailand** has the amazing ability to mix traditional culture with modern living and greenery with cement structures. In the midst of busy Bangkok, the green homes, ponds, banana trees and a variety of other natural edibles make one realise what one’s missing when one stares at cement, steel and glass structures! For sure nature can be preserved if we remain closer to the roots of our lives.”

Sharif D Rangnekar,  
New Delhi, India:

## A little gravel in the yard makes a big difference

By Garfield King

There was a time when a green building simply meant the colour you painted the structure. Now there's a whole different definition.

Some years ago while working on an article on facilities management in Trinidad and Tobago, I was introduced to the concept of Green Buildings. I had known about the development for some time, but was unaware of the phenomenal growth of the Green Building movement. According to the International Facility Management Association "The aim of green (sustainable) building is to minimize the disturbance and improve the function of ecosystems during a building's construction and service life."

Constructing a green building, or converting a commercial property into one, obviously has significant environmental benefits, but the financial gains and positive impact on human capital are equally impressive. Economic benefits can range from simply reducing operating costs to improving asset value and profits. The plusses for people working in green buildings include a healthier working environment which leads to a higher level of employee satisfaction and increased productivity. The community also benefits because a "sustainable" building puts less strain on local infrastructure.

This all sounds fine, but what about my home? For many people building or buying a house may be the biggest investment they make. It's a goal as we work and save to raise the deposit and then it's a responsibility we shoulder until the mortgage is paid up. We move into the house and work on making it into a home. For some it might be called a dream home, but it can easily become a nightmare in these challenging economic times as we struggle to meet the maintenance costs. If you negotiated an excellent mortgage rate you have every reason to feel proud, but did you calculate the cost of running and managing the building? If yes, did you factor in the rising cost of that maintenance?

Living in the Caribbean the sun is ever present so heating bills for the house are not an issue, but what about cooling? Then there's the question of water. This is where heating might be of concern, because getting hot water flowing through the house can send energy bills through the roof. And it's up on the roof where we should have solar panels for heating our water, but we'll explore that another time.

Water in the Caribbean can flow from scarcity to superfluity with speed. During the dry season many Caribbean territories experience water scheduling, a diplomatic way of saying rationing, and when conditions deteriorate there's the possibility of drought. The Hurricane Season brings the heavy rains and flash floods to several areas, sometimes caused by poor infrastructure and thoughtless building practices.

Dave is a friend of mine living in Barbados. He's a Civil engineer and has worked in several Caribbean countries. He recently designed and constructed a house that he plans to eventually make 100 percent self sufficient. I asked Dave for one suggestion homeowners could put into practice, without spending too much money, to make their property more eco friendly. Without missing a beat he said "Cut down on planned paved areas around the house. Find a means of allowing your run off to run down. Don't let it run off into other people's property and limit the amount

of water that runs into the road, because invariably it takes the soil with it as well."

In an effort to make their yard low maintenance many people set about paving as much of the land as possible. Dave, who has more than 27 years experience in Civil Engineering, Structural Engineering, Construction Management, and Project Management says that's a common misunderstanding. He believes gravel is the way to go. External non-grassed areas around his house, such as the driveway and parking areas, are gravelled. It's cheaper to put down and more economical to maintain than concrete. You can choose the colour of the gravel to match the house colour scheme or to complement your landscaping.

A significant environmental benefit of using gravel is that it allows maximum infiltration of surface water into underground cavities and the aquifers that store Barbados' water supply. An aquifer is "a geologic formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield significant quantities of water to wells and springs."

Aquifers allow much of Barbados' water supply to be pumped from underground. It's not just Barbados, the American Geophysical Union notes that "aquifers represent significant sources of water on several Caribbean islands including Jamaica and Tobago and an important auxiliary water source on several others."

Using gravel instead of casting concrete also minimizes the run-off from the site thereby not contributing to drainage problems downstream. Dave points out that in Barbados silt flows into the sea and kills the coral. "Our run-off is killing the coral all along the West Coast of Barbados," he laments. "The run-off that's coming from higher up in St. James and St. Thomas gushes towards the coast bringing everything with it, especially the silt, and it is just killing the coral. So, a lot of our coral reefs along the West Coast have died as a result. Added to that has been the pollutants from the hotels." A very simple solution is to limit the amount of sediment going downstream clogging those wells and getting into the ocean.

Even aesthetically, gravel comes out on top. A concrete paved yard is going to turn black after a time and will need pressure washing or painting on a fairly regular basis if you want it to keep looking good. In other words, you're back with maintenance costs again. Dave says when his gravel starts to look a bit mossy all he has to do is get a rake, pull it through the gravel and it turns over and exposes the other side. That's it, instant fresh driveway or parking spaces! The bottom line, for a small outlay and almost zero maintenance these areas are always looking fresh.

If you don't want to be driving on gravel, use two strips of paving for just the wheel areas and use gravel in between and on the sides. "Be creative with it," says Dave "You can make a pattern with paving stones where the wheels will travel and gravel in between."

While the effects of water run-off are easily visible during the rainy season and we often blame those living on higher ground, it might be an idea to stop to think about how our quest for a low maintenance yard may be having its own negative impact on our environment.

In a future issue of Earth Conscious we will have a look at how Dave designed and built his environment friendly house; how the concept saves him hundreds of dollars a year in maintenance costs and how, for a small outlay, anyone can modify their current home to achieve similar benefits.

*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. He can be contacted at [inkings@tstt.net.tt](mailto:inkings@tstt.net.tt)*







## Parents being disempowered



By Barbara King

Parents often get a bad rap. When there's a problem with the children, the finger usually gets pointed at the parents. Though it may seem as though the vast majority of parents have given up on parenting, my experience as a teacher and a parent educator over the last twenty years is that the vast majority of parents have not.

Despite numerous challenges – physical, environmental, financial or emotional – parents are working very hard to be good parents, at the very least, to be in some way better than their own parents.

Yes, many parents seem not to be parenting well or not at all. Why? We really need to look at what is happening to parents in the Caribbean today. To see them at work or walking on the road they may look well turned out or sharply dressed, because that is what is expected of them, but the reality is many parents are engaged in “survival parenting”. That is, doing their best to make sure there is a home for the family and food for the next meal. They are ensuring that the utility bills can be paid and that there is money to cover the medical bills and medicines so many children need, so often.

Parents are being disempowered. Many of the parents labeled as “bad” are actually ordinary people who are doing their best to keep the jobs they have because “a bad income is better than no income.” Parents are disempowered by systems that have them working long hours, late shifts, away from home, or seven days a week for inadequate wages and no access to union representation. Vulnerable parents are penalized for staying home to

take care of sick children or for visiting a teacher to find out how the child is learning. Many of the parents who are failing to parent as critics want them to, are people simply trying to keep themselves and their children alive and functioning. When survival is the focus of attention the “frills” like building self-esteem and teaching them social responsibility take second or third place.

It is time to get real. If we want parents to parent better, employers have to allow them the space to be parents – without penalties. But the family is often regarded as a secondary concern in the world of work. The message being sent loud and clear is “if you want to earn money to look after your family you have to put your job before your family.”

If the majority of people are being paid a wage just above subsistence level, they will be forced to work overtime and possibly extra jobs to provide those “little extras” for the family. So while they struggle to provide the basics, the essential emotional needs of the children often go unmet.

**Parents are disempowered by systems that have them working long hours, late shifts, away from home, or seven days a week for inadequate wages and no access to union representation.**

Addressing a Parent Teachers meeting at a primary school in East Trinidad, I asked the group to comment on some of the challenges they face. A group of parents shared experiences of taking care of their children's needs. The areas most of them give priority to are providing food, shelter and clothing. Others included education, and spiritual guidance on their list. But in the midst of the daily challenges some parents are aware that material things are not everything. One young mother added communication to her priorities. She explained that while the other things are important, children also need to know that they are loved and that we are present for them. “We, as parents, have to keep working at bonding” she said. Bonding with our children at all ages has to be a priority for parents.

When we are under pressure and stressed by life's increasing challenges, we may end up giving less of ourselves and our time to our children. We become focused on providing the essentials for physical survival and that is when our children need emotional comfort and support from us. They need to be reassured that all will be well.

### Influences of the past

The experiences of our own upbringing can have a powerful influence on how we relate to our children in times of stress. The parents shared their memories of what they yearned for or wanted from their parents when they were children. The list included: money, education, time with a mother, pretty clothes and bobbles and one mother said she had wanted understanding from her parents. Some of us can recall having to go to school without shoes, school books or the latest fashions. And so when we have children we try to make sure they have the things we lacked.

The danger in this is that we can end up giving our children what we needed, but not what they need. Our children may get frustrated with us, being behind them about homework, because no one helped us with ours. Or pressuring them to take subjects we would have liked to do. One mother wondered whether we are really aware of our children's needs at this time or are we busy focusing on our wants?

My personal experience is that the majority of parents want to do a better job than their own parents did. And many, many parents are doing an excellent job of raising, responsible, intelligent young people. Look out for them, they are everywhere.

*Barbara King is a professional facilitator and parent educator. She is the presenter of Baby Talk on Music Radio 97, conducts parenting talks and workshops for T&T Innovative Parenting Support and Creative Parenting for the New Era and is editor of Parenting Support Newsletter. Email: [baking@tstt.net.tt](mailto:baking@tstt.net.tt)*



Dear Earth Conscious:

I received a pdf copy of your April issue and I was very impressed with it. I like the fact that I can now follow what the Caribbean is doing in terms of Climate Change. There are almost never any reports in the newspapers of what the Caribbean is doing to have a sustainable environment.

I also enjoyed reading what children are saying to us. They sound really grown up and very serious about what they want adults to do to help save the environment. I'm taking their advice!

Kudos as well to your two columnists, Barbara King and Garfield King. Good insightful information from them on life and living.

I have forwarded a copy of your magazine to everyone I know with a comment to them to spread it along to their own friends, colleagues and relatives.

Thank you so much and I'm really looking forward to your next issue.

Regards,  
Michael Banks,  
BVI



To the Publisher of Earth Conscious:

Excellent magazine, great lay-out and very informative articles. I also enjoyed the photography from Mark Pegus. He certainly has an eye for extraordinary shots.

Camille,  
Toronto



Dear Linda,

Congratulations on this effort! I am quite impressed with this and surprised that I have not heard of it before since this is your third issue.

Roma,  
Trinidad

Caribbean Community Climate Change Centre

**Temperatures have already affected the length of the growing season for plant species; earlier flowering of trees and earlier egg-laying in birds**



(IPCC 2001)

## 1st Eastern Geothermal Conference 2009

The Nevis Island Administration (NIA) in collaboration with the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), the Organization of American States (OAS), and the Caribbean Renewable Energy Programme (CREDP/GTZ) are hosting the first Eastern Caribbean Geothermal Conference from June 30, 2009 to July 2, 2009 at the Mount Nevis Hotel on the island of Nevis.

This Conference will offer participants the opportunity to learn from experts, developers, product suppliers and regional government officials about the latest developments in geothermal development. Specific topics that will be covered include:

- State-of-the-art" geothermal exploration and exploitation
- Situation & perspectives of geothermal development in the Eastern Caribbean
- Challenges & opportunities for geothermal development in the Eastern Caribbean: proposals for a New Agenda
- Geothermal exploration and development in Nevis (includes field trip)
- Training opportunities in geothermal

## Caribbean Renewable Energy Forum to be launched later this year

Montego Bay in Jamaica will be the venue for the launch of the Caribbean Renewable Energy Forum (CREF) on October 15 and 16 this year.

CREF is the region's first comprehensive public-private sector event dedicated to driving forward renewable energy implementation across the Caribbean. The Forum will assemble an influential audience of regional energy decision-makers and international providers of financing, technology and regulatory expertise.

CREF, which is hosted in association with Caribbean-Central American Action (CCAA), has institutional backing from the Organization of American States (OAS), Caricom, the Inter-American Development Bank (IADB), the Overseas Private Investment Corporation (OPIC), the Caribbean Electric Utility Services Corporation (Carilec), and other key stakeholders in the region's renewable energy sector.

CREF's speakers and participants will debate and analyse:

- How to secure financing for renewable projects in challenging economic times
  - How the Caribbean can encourage global investment in its renewable energy sector
  - The type of regulatory environment we need to ensure the long-term success of the Caribbean renewable energy sector
  - What the Caribbean can learn from renewable energy success stories in the region and world-wide
- The optimum cutting-edge wind, solar, hydro, waste-to-energy, biomass and geothermal technologies for Caribbean implementation



Mark Pegus



"It is a wholesome and necessary thing for us to turn again to the earth and in the contemplation of her beauties to know the sense of wonder and humility."

-- *Rachel Carson*

# Caribbean PR Agency

Offers a variety of media and public relations services to governments and the private sector

## Events

### Events

- Seminars
- Press conferences
- Conference support

## Script

### Script

- Press releases
- Speeches

## Press

### Press

- Newsletters
- Advertorials

## Multimedia

### Multimedia

- Pre-recorded radio programmes
- Photography
- Video-taping
- Web design

## Global Reach

Our Press Release Distribution Service reaches media organizations in the Caribbean and in various metropolises such as London, Toronto, Miami and New York where large numbers of Caribbean people reside. Our data base also includes governments, professional and business organizations and academia operating in the Caribbean and embassies in Europe and Washington.

## Contact

#268 Harold Fraser Circular, Valsayn, Trinidad  
PH/FX (868) 645-0368; CELL: (868) 686-9797; EMAIL: caribbeanpragency@ gmail.com