CONFERENCE AIMS AND OBJECTIVES

This international conference is a forum for the exchange of ideas on critical issues related to turtle conservation, ecotourism, sustainable community development and the environment. Its aims and objectives are to:

- Develop a network of sector interest working groups;
- Expand and empower the networks of ecotourism, community development, environmental conservation and sustainable tourism development among Turtle Village Trust groups, individuals, professionals and practitioners;
- Empower stakeholders with innovative strategies for change;
- Advance ecotourism and sustainable tourism policy development at multiple levels of government;
- Promote effective change for environmentally and economically sustainable community development by utilizing best practice examples and lessons learnt;
- Engage local community groups as community ecotourism business leaders and environmental stewards in the sustainable growth of the tourism sector in communities;
- Actively promote change in industry practices to combat wild life conservation, sea turtle conservation, natural resources management, climate change and other threats to biocultural diversity;
- Enhance understanding and collaboration between academics and leaders of business and government so as to improve the quality of decision-making on developmental issues confronting communities.
A MESSAGE FROM THE HONOURABLE JOSEPH T. ROSS
MINISTER OF TOURISM
GOVERNMENT OF THE REPUBLIC OF TRINIDAD AND TOBAGO

JULY 28 – 29, 2009

The Government of the Republic of Trinidad and Tobago is committed to the establishment and promotion of best practices in sustainable tourism development. We embrace innovative and environmentally-friendly projects that have a commitment to safeguarding the cultural and natural heritage of our beautiful country whilst addressing poverty alleviation. It is in this regard that the Ministry of Tourism has partnered with the Turtle Village Trust in positioning Trinidad and Tobago as the premier turtle tourism destination globally.

Delivering a sustainable, people-centered and internationally competitive tourism product is our goal. We are engaging and empowering local communities in the planning and decision making for the development, management and ownership of tourism products and services. The ecotourism niche is being developed in such a manner so as to minimise the industry’s negative impacts whilst actively promoting the conservation of our unique biodiversity.

It is in this regard that we hope that this important and quite timely conference will provide a blueprint for a sound ecotourism policy for Trinidad and Tobago where the demands of tourists can be balanced with the needs and cultural traditions of local people, the landscape and environment.

I also take this opportunity to welcome the regional and international visitors in our midst to Trinidad and Tobago ... a beautiful and exciting country to visit. Enjoy!

Sincerely,

The Honourable Joseph Ross
MINISTER OF TOURISM
TRINIDAD AND TOBAGO
THE SIR ARTHUR LEWIS OF SOCIAL AND ECONOMIC STUDIES

The Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) was established in August 1999 as a result of a merger of the Institute of Social and Economic Research (ISER), established in 1948, and the Consortium Graduate School of Social Sciences (CGSSS), established in 1985. It has been named after Sir Arthur Lewis, 1979 Nobel Laureate in Economics and the first Vice Chancellor of the University of the West Indies. It has branches on the three campuses of the University of the West Indies: Cave Hill, Barbados; Mona, Jamaica; and St. Augustine, Trinidad and Tobago.

The Institute’s mandate is to conduct training and research of a regional, multidisciplinary and policy-oriented nature to serve the needs of small developing countries like those in the Caribbean. It has been designated as one of the principal units at the core of the University’s School of Graduate Studies and Research.

The mission of the SALISES is to undertake high-quality research and graduate teaching in the areas of social and economic development policy, governance and public policy with special reference to small developing countries. The staff of the Institute consists of active researchers in the social sciences who have published in regional and international periodicals and have been policy advisors and consultants to several organizations in the Caribbean region. Distinguished adjunct Institute staff with considerable policy experience will also be involved in the delivery of the degree programmes.

The Institute has published an extensive list of monographs and books over the years. In addition, three journals are produced by the Institute: Social and Economic Studies (Mona); Caribbean Dialogue (St. Augustine), and the Journal of Eastern Caribbean Studies (Cave Hill). Over the next five years, it shall be actively involved in a research project on climate change in the Caribbean and its impact on coastal communities. This project is funded by the IDRC of Canada.
THE TURTLE VILLAGE TRUST, TRINIDAD & TOBAGO

Linking communities, tourism, conservation and sustainable development.

Given the extensive range of the leatherback and Trinidad and Tobago’s unique role in providing some of the most important nesting habitats for the species in the Atlantic Ocean, the fate of this critically endangered species in the Atlantic is heavily influenced by management of the nesting turtles on Trinidad and Tobago. Management of this vital nesting colony is the responsibility of the Government of Trinidad and Tobago’s Department of Forestry (Wildlife Section) and the Turtle Village Trust (TVT) is one of four Community Based Organizations actively involved in the co-management of the nesting beaches in Trinidad & Tobago. As a result of their work, there has been a cultural shift within several coastal communities, away from exploiting nesting turtles and towards conserving them, as they learn for themselves about the value of turtles.

The TVT represents a number of community groups that are actively involved in turtle conservation, research, awareness and advocacy throughout Trinidad and Tobago and links them with each other and other stakeholders. Its board comprises representatives from community groups, government bodies, learning institutions, and the private sector. This board oversees the success of the business through a Management Team.

The Vision of the TVT is to make Trinidad and Tobago a premiere turtle tourism destination globally. To attain this vision we pursue our mission of fostering and strengthening strategic partnerships with turtle conservation groups and the wider coastal communities to protect the natural resources and create superior quality products and services for customers to achieve sustainable community growth.

The TVT recognizes the fact that the communities that host our nesting beaches are rural villages with low levels of development and limited sustainable employment opportunities. What unites the people inhabiting these villages is a common dependence on ecosystem services derived from the inherent natural resources. Because of the dominant role of ecosystem services in the region, any developmental work should concentrate mainly on the implications of these services on current trends and future options. TVT sees the potential to couple the sustainable development of these areas with conservation and tourism initiatives through the generation of sustainable employment associated with these initiatives. Therefore our goal is linking communities, tourism, conservation and sustainable development. This framework forms the basis of our Business Plan and strategically guides us toward the realization of our Vision and Mission.
DAY ONE- TUESDAY, JULY 28, 2009

Learning Resource Centre, UWI, St. Augustine

07:30 AM - 09:00 AM
Registration

09:00 AM - 10:00 AM
Opening Ceremony

Chairperson
Prof. Patrick Watson
Director
Sir Arthur Lewis Institute of
Social and Economic Studies
(SALISES)

Welcome Remarks
Prof. Clement Sankat
PVC and Campus Principal
The University of the West Indies
St. Augustine Campus

Dean’s Remarks
Dr. Hamid Ghany
Dean
Faculty of Social Sciences
St. Augustine Campus

Sponsor’s Address
Mr. Vincent Pereira
President
BHP Billiton Trinidad and Tobago

Sponsor’s Address
Mr. Oscar Prieto
Chief Executive Officer
Atlantic LNG

Opening Address
Dr. Carla Noel-Mendez
Chairman
Turtle Village Trust

Feature Address
The Hon. Joseph Ross
Minister of Tourism
Republic of Trinidad and Tobago

Vote of Thanks
Dr. Allan Bachan
Executive Director
Turtle Village Trust
Turtle Conservation, Ecotourism and Sustainable Community Development

10:00 AM - 10:20 AM
Coffee break
(Learning Resource Centre)

10:20 AM - 11:10 AM
Keynote Address
Chair Sonja Teelucksingh

Economic Valuation of Ecosystem Services and Biodiversity Conservation: a multidisciplinary approach

Prof. Paulo A.L.D. Nunes
Prof. of Environmental Valuation
Department of Economics
University of Venice
Senior Economist
Fondazione ENI Enrico Mattei
Biodiversity and Sustainable Economics Division

11:10 AM - 12:20 PM
Session 1:
Session Chair: Patrick Watson

Turtle Conservation, Ecosystems and Ecotourism

1. The Contribution of Marine Turtles to the Provision of Ecosystem Goods and Services in Marine Ecosystems of the Caribbean Sea
   By Sonja S. Teelucksingh, Scott Eckert, Paulo A.L.D. Nunes.

2. Development of Leatherback Ecotourism Based Initiatives in St. Kitts, West Indies.
   By Kimberly M. Stewart and Andrew J. Nibblett.

   By Bibian Isoto

4. The Effects of Seasonal Beach Dynamics on the Nests of Dermochelys Coriacea at Matura and Grand Riviere.
Turtle Conservation, Ecotourism and Sustainable Community Development

By Alana Kezia Joseph and Paul Shaw.

   By Marie-Louise Felix.

12:20 PM -1:50 PM
Lunch
New Student Administration Building, Conference Room (2nd Floor)

1:50 PM -3:00 PM
Session 2
Climate Change

1. Climate change and sustainable turtle conservation.
   By Anthony Ramnarine

2. Impacts of Climate Change in Small Communities.
   By Charmaine Gomes

3. A clear and present danger to the Caribbean: Climate Change or Climate Alarmism?
   By Reynold Stone

4. The effects of climate change on the leatherback turtle.
   By Julia C Parris, Asha Murphy, Danielle Rousseau and Ria Rodriguez

3:00 PM -3:30 PM
Session Chair: Alana Kezia Joseph
Session 3
Position Paper on Sea Turtle Conservation in Trinidad & Tobago Turtle Village Trust.
3:30 PM - 3:50 PM
Coffee break
(Learning Resource Centre)

3:50 PM - 5:00 PM
Session 4
Session Chair: Tanya Clovis
Sea Turtle Conservation and Sustainable Community Development.

1. Caura Valley Green Project.
   By Vernon Baptiste and Shango Alamu

2. Tourism, Turtles and the Dutch Disease in Trinidad & Tobago.
   By Roger Hosein and Martin Franklin.

   By Michelle Kalamandeen

   By Joanna Moses-Wothke, Jason Radix, Vernlyn Ross and Renee C. Deane.

5:30 PM - 7:00 PM
Welcome Reception
(Office of the Campus Principal)
Turtle Conservation, Ecotourism and Sustainable Community Development

DAY TWO – WEDNESDAY, JULY 29, 2009
Learning Resource Centre, UWI, St. Augustine

9:00 AM -9:50 AM
Chair: Thérèse Baptiste-Cornelis

Keynote Address
Neo-tropical Animals and Agro-tourism: A Trinidad and Tobago Opportunity.

Dr. Gary Garcia
Senior Lecturer in Animal Production
The University of the West Indies, St Augustine.

9:50 AM -10:05 AM
Coffee Break
(Learning Resource Centre)

10:05 AM -11:15 AM
Session Chair: Angela Ramsey

Session 5
Community-based Ecotourism and Sustainable Community Development

1. Does entrepreneurship help or hinder the Sustainable Tourism Development Strategy?
   By Thérèse Baptiste-Cornelis and Tenisha Brown

2. Whether Community-Based Ecotourism is a Sustainable Development driver: the Case of Surama, Guyana.
   By Paulette Bynoe

3. Integrating ICTs into ecotourism and sustainable community development.
   By Martin G. Franklin and Roger Hosein.
Turtle Conservation, Ecotourism and Sustainable Community Development

4. A new tourism policy in the French West Indies: from the end of the tourist resort of mass tourism towards a new policy for sustainable tourism and ecotourism
   By Olivier Dehoorne and Dominique Augier.

11:15 AM - 12:45 PM
Session Chair: Martin Franklin

Session 6
Round table discussion on Community-based Ecotourism, Community Development and Sea Turtle Conservation.

1. Mr. Dennis Sammy
   Managing Director, Nature Seekers

2. Ms. Tanya Clovis
   Director, SOS Tobago

3. Dr. Allan Bachan
   Executive Director
   Turtle Village Trust

4. Prof. Paulo A.L.D. Nunes
   Professor of Environmental Valuation
   Department of Economics
   University of Venice
   Senior Economist
   Fondazione ENI Enrico Mattei
   Biodiversity and Sustainable Economics Division

5. Ms. Angela Ramsey
   Wildlife Officer
   Department of Natural Resources & Environment
   Tobago House of Assembly

6. Mr. Anthony Ramnarine
   Conservator of Forests
   Forestry Division of Trinidad & Tobago
Turtle Conservation, Ecotourism and Sustainable Community Development

12:45 PM - 2:00 PM
Lunch
New Student Administration Building, Conference Room (2nd Floor)

2:00 PM - 2:40 PM
Session Chair: Patrick Watson

Session 7
Draft National Tourism and Ecotourism Policy for Trinidad & Tobago.

1. Draft National Tourism Policy for Trinidad & Tobago
   By Brian Gift
   Tourism Advisor II, Ministry of Tourism.

2. Draft National Ecotourism Policy for Trinidad & Tobago
   Turtle Village Trust

2:40 PM - 4:10 PM
Working sessions on thematic groups
Facilitators:
Tanya Clovis and Dennis Sammy

Facilitators:
Allan Bachan and Courtney Rooks

Working Group 1
Sea Turtle Conservation Models and Research Strategies in Sea Turtle Conservation.

Working Group 2
Community Based Ecotourism, Community Development and sustainable tourism policy development.

4:10 PM - 4:25 PM
Coffee Break
(Learning Resource Centre)

4:25 PM - 5:35 PM
Wrap up session
Session Chair: Patrick Watson

5:35 PM - 6:30 PM
Closing ceremony/Closing Reception
Turtle Conservation, Ecotourism and Sustainable Community Development

ABSTRACT OF PAPERS
SESSION 1
TURTLE CONSERVATION, ECOSYSTEMS AND ECOTOURISM

The Contribution of Marine Turtles to the Provision of Ecosystem Goods and Services in Marine Ecosystems of the Caribbean Sea

Sonja S. Teelucksingh¹, Scott Eckert², Paulo A.L.D. Nunes¹
¹ Fondazione Eni Enrico Mattei (FEEM)
² WIDECAST

One of the major assets of Latin America and the Caribbean (LAC) is its marine biological wealth. The continued biodiversity loss of the LAC is a principal global environmental problem, with the Caribbean Sea large-scale marine ecosystem under particular threat. In the small islands in particular, global biodiversity is most in danger. Marine biological resources available to island states can significantly contribute to the sustainable development of the region and, if left unmanaged, may most impact the poorer, coastal communities. However, biodiversity occupies a peripheral role in the LAC regional agenda.

This paper focuses on the role of marine turtles, identified in the ecological community as ecosystem engineers, and their contribution to the provision of EGS in key marine and coastal ecosystems of the LAC to a range of stakeholders at different spatial scales. We discuss their contribution to human welfare merging a context of climate change with existing threats such as pollution and human harvesting in the Caribbean Sea large-scale marine ecosystem. This paper blends ecology and economics in an MEA framework to (1) discuss their unique ecological role (2) properly identify and disaggregate their contribution to EGS in the LAC and (3) determine the appropriate economic valuation methods that are best suited to capturing these contributions.

Keywords (5): Biodiversity, Ecosystem Goods and Services, Valuation, Latin America and the Caribbean, Marine turtles

Development of Leatherback Ecotourism Based Initiatives in St. Kitts, West Indies.

Kimberly M. Stewart¹, ² and Andrew J. Nibblett²
¹ Ross University School of Veterinary Medicine, St. Kitts
² St. Kitts Sea Turtle Monitoring Network, St. Kitts

The St. Kitts Sea Turtle Monitoring Network (SKSTMN) is a community based sea turtle conservation organization operating in St. Kitts, West Indies. Three major ecotourism initiatives are being implemented by the SKSTMN as a result of UNDP GEF-SGP funding and WIDECAST partnerships. These initiatives include the development of a hotel friendly certification process, creation of a St. Kitts ecotour package, and initiation of craftmaking. For development of the St. Kitts Ecotour Package, a representative survey was prepared and distributed to three target groups: local citizens, tourists, and residents. A minimum of 100 people was surveyed in each
category, and an Ecotour Package was developed based on these results. Next, local citizens were approached and assessed for interest in creating turtle related crafts products. A partnership with Jo Bean Chambers and WIDECAST has resulted in local individuals producing beads from recycled glass and selling them in conjunction with the SKSTMN. Finally, hotels and beach bars are being targeted and educated regarding turtle friendly practices. A certification process under the direction of WIDECAST is being developed in which establishments must meet certain requirements in order to be promoted. Tourists will be sensitized by print media and encouraged to patronize businesses that meet turtle friendly requirements.

The role of International Law in Turtle Conservation

Mr. Bibian Isoto
Department of Government and International Affairs, University of Guyana

International law sets minimum standards for its subjects to adhere to in international relations. One such area that international law has regulated is international environmental law. Law plays a major role in the protection of nature and puts in place standards that must be incorporated into national law (if the state is dualist in nature) or automatically become national law and must be implemented by the states (in case of the monist states). Additionally, regional law compliments international law in ensuring that certain standards are met by countries within the region. This paper analyzes the law in respect to the protection of endangered species including turtles. It shall examine whether the legal regime is comprehensive based on state practice as reflected in law and policies.

The Effects of Seasonal Beach Dynamics on the Nests of Dermochelys coriacea at Matura and Grande Riviére

Alana Kezia Joseph and Paul Shaw
Department of Geography, The University of the West Indies, St. Augustine

The Dermochelys coriacea (leatherback turtle) is identified on the IUCN Red List of Threatened Species 2008, as being critically endangered. The beaches at Matura and Grande Riviére have been identified as important nesting sites for this species of marine turtle in Trinidad. Seasonal beach and river mouth erosion is regarded as a natural threat to leatherback nests at both these locations. This research aims to determine the relationship between seasonal beach and river mouth dynamics and the spatial and temporal nesting patterns of Dermochelys coriacea, in addition to nest loss at the Matura and Grande Riviére beaches. Primary data will be collected by conducting beach topography surveys and locating turtle nests on the beaches using GPS coordinates. The data collected from the beach surveys will facilitate the creation of Digital Terrain Models and maps to illustrate changes in beach morphology. The GPS locations of the turtle nests will be used in conjunction with the beach maps to establish zones of variable stability and subsequent susceptibility of the nests to erosion. It is hoped that this research will increase our understanding of the potential effects of sea level rise on the nests of the leatherback turtle.

Marie-Louise Felix  
World Wildlife Fund Guianas, Paramaribo, Suriname.

The villages of Galibi are located at the mouth of the Marowijne River in Suriname next to the Galibi Nature Reserve where the leatherback turtle, *Dermochelys coriacea* and the green turtle, *Chelonia mydas* nest frequently. The lives of residents are historically and culturally entwined with that of marine turtles as most traditionally consumed turtle eggs and many continue to do so despite legislation that protects all marine turtles. However, another type of interaction with marine turtles has developed in the last decade, with support from conservation NGOs like WWF. Ecotourism has however not impacted equally on all residents. A recent assessment of the community by WWF confirms that guest house owners also own the boats, the tour operations, and employ family as boat operators, cooks and housekeepers. The question thus arises on the effective role of ecotourism in turtle conservation if egg traders are not amongst the beneficiaries. Can ecotourism in fact increase the economic rift in some communities, consequently contributing to an increased egg trade? This paper explores the role of egg traders in ecotourism in Galibi, and proposes criteria for tourism development to ensure sustainability, thus safeguarding biological and cultural diversity in coastal areas.

**Keywords:** Ecotourism, egg traders
Climate change and sustainable turtle conservation

Anthony Ramnarine
Conservator of Forests, Forestry Division of Trinidad & Tobago

The Forestry Division has been the Government of Trinidad and Tobago's lead agency engaged in marine turtle conservation for several decades. Efforts at protecting the species have been successful due to a number of integrated strategies, including the creation and application of policy, legislation, training and co-management with corporate, international and local community-based stakeholders. The rapid increase in the turtle population now requires a wider management focus aimed at the sustainable conservation of these still endangered species on land and at sea.

Impacts of Climate Change in Small Communities

Charmaine Gomes
Environmental Affairs Officer, ECLAC Subregional Headquarters for the Caribbean

Climate Change is arguably the biggest environmental challenge of our time. In the last year, it has captured the public imagination in a way that few environmentalists thought possible. The impacts on small communities may be even more significant than on larger communities as the existing disadvantage indigenous peoples have of increased experience of significant health problems, insecure and inadequate housing and comparatively lower standards of education and training and lower economic standards of living render indigenous peoples more vulnerable to the impacts of climate change. These communities may well suffer the impacts of climate change in areas of agriculture, health and housing all of which would inevitably have downstream effects on education, life expectancy and in general, quality of life. It is therefore important that measures be put in place to adapt to, and mitigate against these impacts. Such measures include, the development of salt-tolerant crops, engineering drought-resistant crop varieties, build/reinforce sea defences, developing measures to protect drinking water sources and embark on public education and awareness strategies so as to empower communities to cooperate with, and to take action in adapting to climate change. It would also be recommended that strategies to reduce community anxiety about climate change and loss of well being, should be pursued.

A Clear and Present Danger to the Caribbean: Climate Change or Climate Alarmism?

Reynold Stone,
Department of Food Production, The University of the West Indies, St. Augustine

There is now widespread belief that the frequency of warm days is increasing due to anthropogenic greenhouse-gas-induced global warming. Recently, a composite time series of annual percent of warm days (Y) for the years 1958 to 1999 (X) using data from several
Caribbean meteorological stations was presented to promote this belief. Least squares (LS) regression allegedly demonstrated an increasing linear trend which was reported to be statistically significant at the 1% level. Unfortunately, no information was provided on the slope, intercept, and coefficient of determination, $R^2$, or on whether any diagnostic checks were carried out to assess the adequacy of the fitted regression line. This study was undertaken to address this deficiency and to investigate a suspected flaw in the use of LS regression analysis. Least squares regression of the 42 data points yielded the equation, $Y = -254 + 0.132 X$, with a coefficient of determination, $R^2 = 0.186$ ($P = 0.004$) thereby confirming the previously reported 1% level of significance. Diagnostic checks of the residuals, however, revealed a violation of the homoscedasticity assumption and the presence of three outlier cases which therefore cast serious doubt on the statistically significant increasing trend detected (type I error). Regression analysis excluding these three cases yielded the equation, $Y = -78 + 0.042 X$, with a coefficient of determination, $R^2 = 0.048$ ($P = 0.18$). This result indicates that the slope of the regression line is not significantly different from zero and thus demonstrates the absence of an increasing trend in annual percent of warm days. Consequently, the claim of a steadily increasing frequency of warm days in the Caribbean region for the period studied has no valid statistical basis, is inaccurate and therefore misleading. It is recommended that Caribbean climate scientists and researchers exercise greater care in their statistical analyses so as not to create an artificial climate of fear and anxiety in the region.

**Keywords:** Climate Change, Global Warming, Warm Days, Least Squares Regression, Increasing Trend.

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**The effect of climate change on Turtle conservation**

**Julia C Parris, Asha Murphy, Danielle Rousseau and Ria Rodriguez**

The University of the West Indies, St. Augustine

Globally, the Earth’s temperature has been increasing steadily and according to the Inter-governmental Panel for Climate Change (IPCC), global climate change threats for small islands include sea level rise and the increase in the atmospheric temperature. Scientists believe that this increase in temperature has caused the population of the leatherback turtle, *Dermochelys coriacea*, to become statistically mostly female. The lack of males has a significant effect on the population of the leatherback turtle. This paper reports on a project monitoring the leatherback population from the time the females enter the beach in Matura until the hatching season through the modification of the nest incubation temperatures by using organic mulch, a plastic covering ten inches above the surface of the soil, and a tent with a constantly controlled internal environment. All of these methods where employed singly in an attempt to discover which of them prove the most effective in the artificial control of the nest temperature and resulting in the production of male turtles.
Turtle Conservation, Ecotourism and Sustainable Community Development

ABSTRACT OF PAPERS
SESSION 4
SEA TURTLE CONSERVATION AND SUSTAINABLE COMMUNITY DEVELOPMENT

Caura Valley Green Project

Vernon Baptiste and Shango Alamu

The paper focuses on empirical evidence obtained in the Caura Valley in developing solutions to some of the challenges of agricultural production. These include: the implementation and use of agricultural cooperatives; the response of local farmers in the Caura Valley and the impact of reeducation in eco friendly methods on continuing cultivation practices; the search for profitability through the development of niche markets for organically grown produce; the fostering of civic pride in the Caura Valley through collaborative projects of civic improvement, cultural events and cottage industries based on agriculture; the development of the Caura Valley as a tourist venue with expanded tours of the natural richness of the area.

Keywords: Perma culture, profitability and sustainability, community development, agro tourism, biodiversity loss, agricultural footprints, organic agriculture.

Tourism, Turtles and the Dutch Disease in Trinidad & Tobago

Roger Hosein and Martin Franklin
Department of Economics, The University of the West Indies, St Augustine

This paper investigates the impact of the oil sector on Trinidad and Tobago’s tourism sector. It provides an overview of the symptoms of the Dutch disease in the aggregate macro economy and assesses the various implications for the mass tourism sector. It then focuses on how an ecotourism strategy, founded on the leatherback turtle, could be used as a basis for invigorating this segment of the tourism industry. The paper closes by offering some relevant policy suggestions regarding an overall framework within which such an ecotourism strategy should be founded.

Community Participation in Sea Turtle Conservation in Guyana: The Leatherback Scenario

Michelle Kalamandeen
Guyana Marine Turtle Conservation Society, Georgetown, Guyana.

The leatherback sea turtle (Dermochelys coriacea) is classified globally as Critically Endangered by the World Conservation Union (IUCN, 2004). In Guyana, no formal listing of the species occurs as to its endangerment, and as such, the global listing is held.

Along the northwestern coast of Guyana, lies a-120 km stretch of beach and mudflats, known as Shell Beach which provides nesting grounds for leatherbacks, along with three other species of sea turtles, including green turtle, olive ridley and hawksbills. Information regarding the biology and population size of these species in the area has been scarce. In 1998, to access leatherback
abundance and distribution along the coast, we turned to sea turtle hunters for assistance because of their regular contact with this species along the nesting beaches. We drew on traditional ecology knowledge and developed data gathering skills of the hunters to collect information on nesting females. Over the past 20 years, this species has experienced a significant increase in population, from four sighted individuals in 1965 to, on average, 398 yearly. Through this project, many sea turtle hunters have converted to conservationists and in turn various projects have been developed to ensure poverty reduction and community development in surrounding communities of the Shell Beach area is achieved. This model of collaborating with sea turtle hunters offers promise for conservation of marine species, including sea turtles, in Guyana and elsewhere.

Community Assessment of Matura: Towards an Integrated Sustainable: Rural community Tourism Approach

Joanna Moses-Wothke, Jason Radix, Vernlyn Ross and Renee C. Deane
Tourism Development Company Limited, Trinidad

Rural communities like Matura in Trinidad, may find new means of fuelling development through a melding of tourism and conservation. The village of Matura has endeared significant local and international support for turtle conservation efforts and is a popular ecotourism destination. This paper assesses the level of sustainable development in Matura along economic, social, political and environmental dimensions. It highlights the general perception of the level of development held by the residents of the community, as well as examines the tourism potential of Matura. The results indicate that, though to many Matura may be synonymous with turtle conservation, village residents appeared naive to the value of the tourism potential of Matura and its viability as an ecotourism destination. Thus, an integrated sustainable rural community tourism approach is viewed as a recommended foundation for building a successful community ecotourism product.

Keywords: community, conservation, ecotourism integrated, leatherback turtles, rural development, sustainable, tourism
ABSTRACT OF PAPERS
SESSION 5
COMMUNITY-BASED ECOTOURISM AND SUSTAINABLE COMMUNITY DEVELOPMENT

Does Entrepreneurship Help Or Hinder the Sustainable Tourism Development Strategy?

Thérèse Baptiste-Cornelis and Tenisha Brown
Faculty of Social Sciences, The University of the West Indies, St. Augustine

The tourism industry is a dynamic activity that is present in almost all the nations of the world today. The industry is considered to be the fastest growing in the world economy and one of the largest global employers. This industry can be traced back to the very start of civilization and according to Gartner (1996); the attempt to detail the history of tourism development is equivalent to writing the history of humanity. Entrepreneurship has always played a central role in the development of the tourism industry and more specifically the evolution of destinations. The question that has arisen is “Does Entrepreneurship help or hinder the Sustainable Tourism Strategy?” This paper investigates the relationship between the tourism industry and entrepreneurship by first defining tourism and entrepreneurship and looking at the traditional relationship that exist between the two constructs. It then explores the nature and meaning of sustainable tourism and seeks to illustrate how entrepreneurship (and thus sustainable entrepreneurship) is contributing to sustainable tourism development. The methodology used for evaluation and subsequent conclusions are based on the three tenets of sustainability i.e. environmental sustainability, socio-cultural sustainability and economic sustainability.

Keywords: Entrepreneurship, Tourism, Sustainable Tourism Development; Environmental Sustainability, Socio-Cultural Sustainability, Economic Sustainability, ecopreneurs, Strategy

Whether Community-Based Ecotourism is a Sustainable Development driver: the Case of Surama, Guyana

Paulette Bynoe
School of Earth and Environmental Sciences, University of Guyana

This paper examines the local community-based ecotourism initiative in a rainforest area in Guyana. In particular, it analyses the livelihood profiles of households in the Surama Amerindian village and further examines the extent to which ecotourism has impacted on the sustainable livelihoods on the local people. The paper reveals the relatively limited economic impacts, but points to positive initiatives with respect to community conservation initiatives and the enhancement of their social and human capital. In conclusion, the paper emphasizes the need for the creation of an enabling environment and the establishment of partnerships at various levels.
**Integrating ICTs into ecotourism and sustainable community development**

Martin G. Franklin and Roger Hosein
Department of Economics, The University of the West Indies, St. Augustine.

Sea turtles face many natural threats to their existence due in the main to the actions of fishermen, residents and visitors of communities that intersect with the habitats that are visited annually by turtles. As far back as 1996, the International Union for Conservation of Nature and Natural Resources listed all species of sea turtles as being endangered. Turtle conservation is an imperative for all communities irrespective of whether these are turtle nesting sites or not. According to Weaver (2001), ecotourism is any form of tourism that is wildlife based and preserves the environment. Because of the synergy between ecotourism and turtle conservation, it is critical that these be sustained at the level of the community.

Communities worldwide continue to be challenged by the globalization and technological shifts that have stimulated a revolution in the information and communication industry. In addition, the potential and role of information and communication technology (ICT) as a tool for contributing to development has received much attention in the literature. This paper explores the integration of ICT into ecotourism and sustainable community development. Key issues discussed are priorities for ICT in community development as well as ICT interventions at the community level in areas such as social networking, governance, energy efficiency, local content, ecotourism, turtle conservation, and the increasing awareness of the issues in and alternative livelihoods to turtle consumption.

**A new tourism policy in the French West Indies: from the end of the tourist resort of mass tourism towards a new policy for sustainable tourism and ecotourism**

Olivier Dehoorne and Dominique Augier
Université des Antilles et de la Guyane

In the context of this study, we propose to analyze the limits of mass tourism in the French Antilles (depreciation of tourism, economic limitations, and ecological nuisance). Recognition of these limits is at the origin of late awareness of the need to define another model for tourism development. In the coastal sector the most popular, as in the south of Martinique, it is put in place new regulations to protect marine resources. This requires the development of new practices and awareness of the tourists, for example, around coral reefs and mangrove. Programs around ecotourism also aim to give the visitor the wealth of forest resources and biodiversity in general. It also includes small rural businesses that receive new revenues through tourism.
ABSTRACT OF PAPERS
POSTER SESSION

Distribution, abundance and an assessment of the value of the Hawksbill (Eretmochelys imbricata) and Green turtles (Chelonia mydas) foraging on the reefs of Tobago, W.I.

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Trinidad and Tobago is best known for its large nesting population of leatherbacks, but four other species of marine turtles have been reported on its beaches and in its waters. This paper is a first attempt to assess the population of two other species of turtles that inhabit the potentially important foraging ground reef habitats: the hawksbill (Eretmochelys imbricata) and green turtles (Chelonia mydas). It was carried out over a period of 15 months and involved 244 SCUBA dives, accounting for about 192 hours, at 44 dive sites scattered around Tobago. Apart from their likely value to the ecology of Tobago, both species have direct economic value through their consumptive use by fishermen and indirect use by SCUBA divers. A survey was conducted to determine the extent of turtle fishery. The value of live turtles to SCUBA divers in Tobago is investigated using choice modeling, a stated preference technique for economic valuation of non-market goods. Over 100 SCUBA divers completed the model questionnaire at dive shops scattered around Tobago. Results are pending but the value of live turtles to SCUBA divers is expected to exceed the value to fishermen. The results of this study can inform management decisions locally including: choosing critical habitat for protection, reviewing existing fisheries legislation, and establishing regular monitoring sites.
Turtle Conservation, Ecotourism and Sustainable Community Development

Session 7
Draft National Tourism and Ecotourism Policy for Trinidad & Tobago

By Allan Bachan, Courtenay Rooks, Brian Gift, Carol Alfred

Trinidad and Tobago is endowed with a very rich spectrum of landscapes, forests, wildlife, wetlands, community reserves, conservation reserves and cultural diversity. It is also home to several endangered species including the leatherback turtle. Trinidad and Tobago has the potential to become a premier eco-destination. Presently, a majority of tourists are deprived of experiencing other lesser known but potentially rich facets of Trinidad and Tobago's natural heritage.

Ecotourism or Ecologically Sustainable Tourism has been defined as responsible tourism to natural areas that conserves the environment and improves the well being of local communities. General public are, now, more willing to visit the forests and appreciate their splendor and imbibe their values. The cause of conservation of forests and wildlife can be further strengthened if they are allowed to be visited in a responsible manner and appreciated, respected and enjoyed by the public to encourage them to become a stakeholder in conservation efforts.

Ecotourism is one of the tools whereby people are encouraged to visit natural beauty of forests to promote action to conserve it. It is about striking harmonious synergy between cause of conservation, aspirations of local communities and need for sustainable travel. It accommodates and entertains visitors in a way that is minimally intrusive or destructive to the environment and sustains & supports the native culture.

With this background, the Government of Trinidad and Tobago has resolved to make the promotion of ecotourism in our twin island State a priority area. It shall be developed in harmony with the broad framework outlined in the Tourism Policy and the Tourism Master Plan.

The focus shall be on conservation of natural resources through awareness building, diversification of tourism activities and destinations, and local community participation and synergy with general development of tourism sector. This Policy is aimed at informing and sensitizing the general public and related Government Departments towards ecotourism and laying down the framework for its growth in Trinidad and Tobago in an environmentally, socially and economically sustainable manner.
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