Caribbean Natural Resources Institute (CANARI)

"Forests for People, People for Forests: Forest-based livelihoods in the Caribbean"

May 4th – 6th, 2010

Cascadia Hotel, St. Anns, Port of Spain, Trinidad

PROGRAMME

Overarching goal: To identify and promote policies and practices that support sustainable forest-based livelihoods in the islands of the Caribbean, based on sharing of stories, experiences and lessons learned from the findings and conclusions of Phase 1 of CANARI's project funded by the Food and Agricultural Organisation (FAO) National Forest Programme Facility and its project funded by the European Commission (EC) Programme on Tropical Forests, as well as the experiences of other participants.

Tuesday 4th May 2010 8:30 am- 01:00 pm			**Theme** **Forest for sustainable livelihoods and poverty reduction**
8:30 – 9:00 am Conference room 1			**Plenary presentation**
Name	**Organisation/ Institution**	**Presentation**	**Abstract**
Akilah Jaramogi, 2	Fondes Amandes Reforestation Project, Trinidad	Role of community organisations in developing sustainable forest-based livelihoods	The Sustainable Livelihoods approach to poverty reduction came about as a result of the limitations of conventional methods, and through a new understanding of the nature of poverty. This approach focuses on increasing income but also, significantly, on reducing the factors that prevent a community's ability to make a living in an economically, ecologically and socially sustainable way. In our presentation, the Fondes Amandes Community Reforestation Project (FACRP) will show the importance of the forest in preserving our ecosystem (fresh water, plants, wildlife), supporting biological diversity and preventing natural disasters, for example forest fires, and the link between conservation and the sustainability of both the environment and the human beings who live within the forested areas. FACRP began as an individual family's effort to bring people together to preserve the forest in the Fondes Amandes area of the St Ann's valley, in Trinidad. It is now recognized as a successful community development project that continues to grow and expand its activities, while keeping its focus on conservation and community. The main modules in FACRP's calendar of activities are: • Bush Fire Prevention in the dry season • Tree Planting • Animal Husbandry • Wildlife Conservation • Organic nursery • Agro-forestry products • Jewellery made from seeds and other natural materials gathered from the forest • Eco Tourism

			• Vacation Camp for children • Disaster Prevention Caravan The presentation will show the development of the project from its origins to the work we are doing at present and discuss where we would like to see the project go in the future.
9:00 – 10:30 am Conference room 3			**Breakout Group 1** ***Community livelihoods from protected areas***
Marlon Beale	Jamaica Conservation and Development Trust	Protecting the Forests of Jamaica: The Jamaica Conservation and Development Trust - Management of the Blue and John Crow Mountains National Park	The Blue and John Crow Mountains National Park is located in eastern Jamaica, and covers the upper sections of ten watershed management units. It has a planimetric area of 495.5km^2 and protects thirty percent of the island's remaining Closed Broadleaf Forest. The property is managed for the protection of its biological diversity, ecosystem services and recreational opportunities. Operational management is the responsibility of a non-government organisation, the Jamaica Conservation and Development Trust under a delegation agreement with the Natural Resources Conservation Authority and a collaborative management agreement with the Forestry Department. Management of the National Park is guided by a management plan which describes six programmes. These programmes are geared at addressing the root causes of the threats to the park's ecosystems. The conservation sciences programmes are focused on forest conservation, monitoring and rehabilitation activities. These activities act as both mitigation and adaptive management strategies for Park management. The objective of "facilitating capacity building, through education and training of communities" is an important part of the education and public involvement programme. It also highlights the minimal use of natural resources to generate income through environmentally friendly activities. The other management programmes focus on encroachment reduction to the park boundary and income generation through two established recreational areas, and diversified tourism based activities. Critical to management success and enhancement is the incorporation of lessons learnt through project activities and the participatory approaches with government agencies and buffer communities of the Blue and John Crow Mountains National Park
Rildez Sanchez	Reserve Ebano Verde,	Livelihood benefits from managing a forested	

	Dominican Republic	protected area	
Veronica Anadon	Birdlife, Puerto Rico	Important Bird Areas for forest conservation and community livelihoods	Important Bird Areas (IBAs) - key sites for conservation - have been designated throughout the Caribbean with a high number laying in forests for their outstanding biological attributes and exceptionally important for community livelihoods. Many people rely on forest resources, and the ecosystem services they provide but unsustainable use (e.g. through charcoal production and timber extraction) and other threats such as mining, unplanned urban sprawl and tourism have been fragmenting these sensitive ecosystems, and compromising their ecosystem services provision. 57% of these IBAs are partially or wholly within formal protected area systems though management capacity and political will to establish new protected areas is lacking in most countries. BirdLife International has been supporting partners to implement actions for forest conservation and sustainable livelihoods in communities around IBAs. In Cuba, the National Centre for Protected Areas has been developing ecotourism potential in Turquino and Bayamensa national parks. Grupo Jaragua in the Dominican Republic has been empowering Local Conservation Groups around the Jaragua-Bahoruco-Enriquillo Biosphere Reserve, creating direct incentives to the communities. In Haiti, Société Audubon Haïti renovated a school and established tree nurseries for watershed restoration within communities in Massif de la Hotte. Windsor Research Centre has been establishing agro-forestry alternatives for communities in Jamaica's Cockpit Country. Full participation of communities and government in the conservation of IBAs will help secure their future for generations to come.
9:00 – 10:30 am Conference room 3		**Breakout Group 2** ***Government initiatives to promote community forestry***	
Noel Bennet	Forestry Department, Jamaica	Facilitating community forestry in Jamaica: The Local Forest Management Authority experience	

Anthony Ramnarine	Forestry Division Ministry of Agriculture, Land and Marine Resources, Trinidad	Climate Change and Sustainable Turtle Conservation	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. The current process of developing new Policies on Climate Change, Forestry and Protected Areas promises to enhance the holistic approach toward more effective sustainable livelihoods and conservation of the resource.
Fitzgerald Providence	Forestry Department; Ministry of Agriculture, Forestry and Fisheries, St. Vincent & The Grenadines	Creating a world where forests belong	The Forestry Department in the Ministry of Agriculture and Fisheries recognized the need to examine and redirect its approach to management of the forest resources of St. Vincent and the Grenadines. This new approach would assist the department in more effectively achieving its mission 'to conserve, protect and develop the forest resources for the optimum benefit of the entire community of St. Vincent and the Grenadines'. St. Vincent and the Grenadines has between 25 to 30 percent forest cover remaining. This includes coastal forest and interior tropical rainforest. Our forests are important to us for the maintenance of biological diversity, protection of our watersheds and the aesthetic quality of our islands, among many other direct and indirect benefits. However, the islands are losing these forests at an estimated rate of 3% per annum. This is due to the increasing rate of loss of interior forested areas to the cultivation of seasonal crops both legal and illegal. Also coastal forests (dry woodlands and mangroves) are under threat from changes in land use, particularly the increasing demands for housing and coastal development. The loss of forest is also catalyzed by the ineffectiveness of the conventional approaches to enforcement against illegal crop cultivation, squatting and deforestation and the absence of effective land use policies in relation to land use, resulting in uncontrolled development. The Government through the Forestry Department initiated a more participatory and integrated approach to forest management through and initiative called the Integrated Forest Management and Development Programme. A major component of this programme was the development of alternative livelihood with and for those individuals in activities that threaten

			the sustainability of the forest resources.
9:00 – 10:30 am Conference room 4			**Breakout Group 3** ***CANARI's research on participatory forest management and livelihoods***
Andrew Simmons	Kings Hill Development Solution		The paper will present an overview of the socio economic challenges facing the Chateaubelair/Fitzhughes community in particular and St Vincent and the Grenadines in general and states how poverty is impacting on the livelihoods and resource base of the community. Although there are numerous natural resources located in the area which possess potential for eco tourism, agriculture and related economic activity, the community is plagued with a) serious gun and drug culture, b) political divide, c) low literacy levels, d) low economic activities and e) high incidence of deforestation and soil depletion. The presentation will explore the use of the Chambers and Conway definition of sustainable livelihoods as a way of setting the framework for resolving the livelihood challenges in the community.It would show how the mentor used the Ethno methodology and Participatory Research path methodologies as the basis for assessing the socio economic, political cultural and governance dynamics within the groups and the community and to develop and implement strategies in collaboration with the group and the community to address these challenges. The presentation will explore how the methodologies were used by the mentor, the strengths and weaknesses of these methodologies and what are the critical factors for their success. It will highlight the contributions of the project to the community such as a) capacity of group and wider community being built i.e. for negotiation with political directorate, b) social benefits and empowerment benefits were significant, c) use of the model to advance the gains in community sustainable development and c) influencing the work of the international and development agencies operating in St Vincent and the Grenadines such as GEF SGP, FAO and IWCAMP/GEF/CEHI. The presentation ends with an assessment of the lessons learnt from implementing the model such as a) the ALG and how it has significantly motivate members of the group and the community as a whole, b) how it valued the interaction with regional ALG members and c) most significantly, the importance

			of selecting the right mentor.
Nicole Leotaud	CANARI	Moving from rhetoric to reality: how can participatory forest management contribute to improving the livelihoods of the rural poor in Caribbean small island states?	This presentation examines whether participatory forest management (PFM) in Caribbean islands is improving the livelihoods of the rural poor. It presents findings from research conducted under two regional research projects being implemented by the Caribbean Natural Resources Institution (CANARI) in eight countries – Barbados, Commonwealth of Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. These are funded under the FAO National Forest Programme Facility and the EU Tropical Forestry Programme. The research looks at the impact of PFM initiatives on livelihoods of rural communities by examining changes in the financial assets, social assets, human assets, natural assets, physical assets, and political assets. Lessons are also drawn on whether formal or informal arrangements work best, how to provide support to ensure sustainability, and what capacities are needed of community groups and their partners.
Sarah McIntosh	CANARI	Warmmae Letang and Grande Riviere case studies	-
10:30- 11:00 am		BREAK	
11:00 – 12:30 am Conference room 4		**Breakout Group 4** ***Exploring potential for forest based livelihoods in rural communities***	
Albert Gallion	Forestry, Wildlife and Parks, Dominica	The Contribution of non-timber forest products to forest-based livelihoods	Non-Timber Forest Products (NTFPs) are goods of biological origin derived from forests and allied land uses. These include natural products such as mushrooms, leaves, seeds and fruits, reeds, gums and resins, vines, the bark of plants, roots, and medicinal herbs among other products. The sustainable use of national forestry resources is becoming more critical if the issues of poverty alleviation, income generation, gender equity and rural development are to be realized. Over the ages, rural communities have been utilizing raw materials originating

			from various forest types. Some rural communities are more heavily dependent upon steady supplies of NTFPs for their livelihoods than others. However, with growing concerns of overharvesting of these natural resources, the trend to establish Protected Forest solely for protective purposes poses a threat to those livelihoods that depend on the forest. Therefore, there is the need to highlight the contributions of Non-Timber Forest Products towards national development. These Non-Timber Products do contribute much needed income generating opportunities for the rural communities which are intertwined with the tourism industry. The emerging challenge would be the development of adaptive approaches to enhance on harvesting and new and innovative utilisation techniques that would minimize on the extent of raw material needed, and the regeneration of the prime vegetation from which these non-timber forest products are derived. While the total contribution of the NTFP sub-sector has not been quantified in empirical terms, the Researching and Documentation of the impact of NTFPs on the socio-economic well being of both the rural and urban communities need to be continuously analysed.
Dennis Sammy	Nature Seekers, Trinidad	Livelihood opportunities and the sustainable use of the forest	
Santiago Rivas Laureano	Center for Agricultural and Forestry Development, Inc. (CEDAF)	Developing associations for promoting forest-based livelihoods: Case study of Dominican Beekeeping Network	Beekeeping is an important alternative for the development of family and associative enterprises in Caribbean forest environments because it is a productive activity with low investment with low capital requirements, does not require much land, depends on accessible technologies of local implementation, generate products with assured local and international market, is feasible to develop in the environments of many of the countries in the region, contributes to a non extractive use of the forest that favors its sustainability, benefits agriculture, biodiversity and the conservation of natural resources through pollination. The modernization of beekeeping in the Dominican Republic started at the beginning of the Twentieth Century. There are approximately 3,500 beekeepers with 100,000 beehives, 30-40% rustics (Log Hives). With the objective to promote beekeeping like a competitive farming business activity by encouraging its conservationist and environmentally friendly production, in 1997 the Dominican Beekeeping Network (REDAPI) was created. REDAPI is a joint effort financed and coordinated by the Center for Agriculture and Forestry

			Development, Inc. (CEDAF) with the participation of public and private organizations related to beekeeping. REDAPI's activities are concentrated in aspects like the strengthening of beekeepers organizations, generation and transfer of technology, training, commercialization and publications. The Network operates in coordination with the 37 beekeepers associations that exist in the country. Today REDAPI works in the conformation of an operative structure that contributes to improve efficiency in the identification of beekeeper's necessities as well as the participation and coordination of the organizations able to collaborate with them.
11:00 – 12:30 am Conference room 5		**Breakout Group 5** ***Forest poverty Interactions***	
Steve Koester	UC Denver	Reflections on alternative livelihoods for forest farmers in St. Vincent: Challenges and lessons for integrated forest management	In 2001 when I first began working with Forest farmers, I was a consultant with CANARI and working with St. Vincent's Department of Forestry. My task, as an anthropologist, was to talk with farmers about farming in the forest and about the Forestry Department's concerns that their farming practices might contribute to deforestation and have negative impacts on the island's watershed. I talked with farmers about Forestry's interest in working with them to develop alternative forest-based strategies that would be more sustainable environmentally and in terms of livelihoods than growing ganja. Since then I have returned to St. Vincent intermittently to look at the country's informal economy in more detail. My comments highlight some of the challenges for integrated forest management when faced with an illicit but potentially lucrative forest-based enterprise.
² ɨyãű2y˝RudŘŜ	The Cropper Foundation, Trinidad	Forest-influenced livelihoods: Case of the Northern Range in Trinidad and Tobago	The Northern Range of Trinidad and Tobago covers approximately 25 percent of the land area of Trinidad. It provides a range of ecosystem services critical to the sustenance of the economic, environmental and socio-cultural life of the country. The presentation discusses the Report of An Assessment of the Northern Range, highlights the methodological framework and processes, examines the sphere of influence of the ecosystem services on sustainable livelihood options and analyses the responses and challenges of the follow up, inclusive of activities being undertaken by The Cropper Foundation and its partners. Special emphasis in the presentation is placed on understanding and promoting forest-influenced livelihoods.

Melanie McDermott	Rutgers University (US)/ CANARI s University	Equity in community forestry: How do the poor benefit?	Who benefits from community forestry – and who gets left out? Soon after it emerged as a significant trend in the global South in the 1980s, practitioners, advocates and scholars began to ask such questions of community forestry. The distributional impacts of its more recent development in industrialised countries have been less examined. More unusual still has been the explicit attempt to exchange experience between North and South. This presentation takes on that challenge, drawing on cases in the US, UK, Nepal, Kenya, and Tanzania, and puts forward four key findings. First, community forestry reduces social inequity only when it explicitly targets the poor and marginalised; similarly, community forestry significantly reduces poverty only when it adopts poverty alleviation as an explicit goal. Second, community forestry expands the decision-making spaces available to community members, thereby enabling them to sow change and reap multiple benefits. Third, the poor and marginalised can expand their share of benefits by gaining entry and actively participating in those decision-spaces. Fourth, poor and marginalised households and household members are more likely to share in the benefits that community forestry delivers to the community as a whole than they are to gain from it individually. Some benefits may rise to the *supra*community level, such as national policy reform. Finally, while community forestry cannot itself fix all the structural inequities that perpetuate poverty and marginalisation, it can begin to equip communities with the resources and capacity to come together to challenge them.
11:00-12:30 pm Conference room 2		**Breakout Group 6** **PANOS Caribbean Communication Workshop**	
Indi McLymont-Lafayette	PANOS Caribbean	Building great media relationships	**Target group**: Representatives of community-based organisations (CBOs), non-governmental organisations (NGOs), private sector organisations, private landowners, and individuals from civil society working on forest conservation and forest-based livelihoods; Policy-makers and technical staff from government agencies and academic institutions **Content:** The 90 minute session would be a very interactive one where participants would share in a discussion on how to relate to the media. Special attention would also be paid to preparing for an interview and how to avoid being 'ambushed' by the media. Participants may also be asked to participate in mock interviews. **Learner objective:** By the end of the workshop participants will be better equipped to plan their personal strategy for working more effectively with the media as well as identifying key

			media messages while giving better interviews.
12:30-1:00 pm		**Plenary Reporting**	
1:00-2:00 pm		**LUNCH**	

Tuesday 4th May 2010 2:00-4:30pm			**Theme Potential uses of abandoned agricultural estates to develop forest-based livelihoods**
2:00-2:30 pm Conference room 1			**Plenary presentation**
Ivan Laughlin	Independent Consultant	Forestry-sustainability and viability: a human settlement approach-Integrating the land	Today humankind is adversely affected by: • rapid urban expansion • population growth • growing poverty and unemployment the result – irrational and often unplanned or poorly planned land development, deforestation and environmental degradation.The Caribbean Archipelago of mainly small islands is very vulnerable. My underlying perception is – *how you shape the land so will you shape the civilization*. I have over the years developed a Human Settlement Approach in relation to integrating land development. I therefore look at the total picture of land usages, of which forestry is vital, all of which are linked and have to be captured in formulating regional, national and local development endeavours if sustainability and viability are to be achieved. I will use three projects I have and am working on to illustrate the approach in which I emphasise – Nature Reserves, Agroforestry and Homesteading :

			• Mt. Reuil – Grenada • University of the Southern Caribbean – Maracas Valley, Trinidad • Rincon Development – Las Cuevas, Trinidad.
2:30-4:00 pm Conference room 3		**Breakout Group 1** ***Approaches to utilising abandoned agricultural lands***	
Claus Eckelmann & Neila Bobb-Prescott	FAO Barbados-CANARI	Vegetation cover changes: a chance for forestry	The Caribbean Islands are one of the few regions in the world where forest cover is increasing. This is partly due to a sustained reforestation programme in Cuba and a few other countries but most the increase of forest cover can be attributed to natural regeneration of forest on abandoned agricultural land. Recent WTO ruling discontinued the export of sugar and bananas to the European market under preferred access regulations. Having lost the main markets for these traditional agricultural commodities it is likely that more agricultural land will fall fallow. Converting former agricultural land into forest plantation can be an attractive economic alternative to agriculture. Depending on the economic model used to calculate the returns of an investment in forest plantation an annual rate of return of 15% or more can be achieved. However forest plantations take long to mature. So while timber plantations are economically attractive it is only viable for those who are rich enough to wait. Timber will always have a market in the Caribbean; in addition to the economic returns well managed forest plantations also provide environmental benefits; so the challenge is to design effective incentive systems to encourage smaller and not so wealthy land owners to plant forest
Carol James	ASA Wright Nature Centre	Asa Wright Nature Centre: from abandoned estate to successful forest based ecotourism enterprise	The Asa Wright Nature Centre (AWNC),perhaps the Caribbean's oldest and most successful nature conservation organization, has gained considerable insight into conservation of forest biodiversity, especially birds, during its forty-three year existence. Management strategies and actions refined through trial and error can serve as guidelines for similar initiatives within the Caribbean and elsewhere. Its conversion in 1967 from an abandoned cocoa and coffee estate comprising 165 acres nestled within Trinidad's Northern Range mountains, where its plantation great house served as host to friends and guests visiting the distinguished scientist William Beebe at the nearby Tropical Research Field Station of the New York Zoological Society at Simla, to a world class bird conservation centre, is of unique historical significance

			internationally. Successful use of its establishment asa not-for-profit Trust, and the adoption of its central conservation strategy of using the proceeds of bird based ecotourism to purchase additional forested lands within the Northern Range, resulted in the landmark sustainable development milestone that four decades later, the AWNC owns more than fifteen hundred acres of land dedicated to conservation, almost tenfold its original holding. Other lessons on sustainable management practice on how the AWNC overcame its many economic and human resource challenges, some emanating from externally driven global political or economic shocks, and its focus on building human capacity within surrounding communities have been shared in this presentation.
Justin Gurley	Environmental Management and Planning Associates Ltd.	Private Forestry on abandoned or underutilised agricultural lands	
2:30-4:00 pm Conference room 3		**Breakout Group 2** ***Using abandoned agricultural land for livelihoods***	
Valmiki Kempadoo	Terra Form, Trinidad	Permaculture	
Felix Finisterre	Independent consultant, St-Lucia	Opportunities for forest-based livelihoods from abandoned agricultural estates, e.g., from Grenada, Saint Lucia and Martinique	The power-point presentation will seek to examine the transformation of plantation agriculture resulting from the failure of mono-crop production of primary products such as sugarcane, cocoa and coconut into agri-tourism. This results in a number of former estates being used for conducting tours and other tourism related activities. The presentation seeks to use these examples to illustrate the new linkages between agriculture and tourism for job creation and new economic activity. In the process the various sources markets, as well as the range of activities and product offerings are examined. The challenges facing this emerging sector and the steps required to offset them are also discussed.

2:30-4:00 pm Conference room 4		**Breakout Group 3** ***Economic valuation and payments for ecosystems services***	
Stephen Mendes	Department of Environment, Ministry of Agriculture, Montserrat	Economic Valuation of forests in Montserrat	This review gives an overview of Montserrat in terms of its geographical attributes and species abundance, and briefly touches on the impact of volcanic activity that amplifies the need to have management systems in place for the remaining resources. It will review the findings of and OTEP funded project "Economic Valuation of the Montserrat Centre Hills". The presentation will very briefly explain the need for the project, how it was conducted using various survey and valuation models and results. The presentation will examine the usefulness of the project exercise, and explore the strengths and weaknesses. It will briefly address the communication strategies involved and possible future actions.
Nicole Leotaud	CANARI	Why are biodiversity and ecosystems important for sustained growth and equity in the Caribbean: a UNDP/UNEP regional study.	The UNDP Regional Programme for Latin America and the Caribbean is currently implementing a regional project entitled "***Biodiversity and Ecosystems: Why these are Important for Sustained Growth and Equity in Latin America and the Caribbean"***. The main goal of this Initiative is to produce a report with sufficiently valuable and robust data to inform policy and decision makers in Latin America and the Caribbean of the need to invest in and maintain biodiversity and ecosystem services. The report will focus on presenting concrete financial and economic benefits and costs to countries from sustainable ecosystem management. It will look at the contribution of biodiversity and ecosystems to sectoral production and outputs to determine their economic value and role in promoting growth and equity. The report will be accompanied by a communication strategy to guide how findings of the study are translated into key messages for policy makers. UNDP recently held a regional meeting to get stakeholder input on the report and is currently seeking additional specific case studies from around the region.
Claus Eckelmann	FAO Barbados	Practical experiences of compensation mechanisms for water services provided by forests in Central America and the	This presentation summarizes a qualitative analysis of 27 experiences of compensation mechanisms for the hydrological services provided by forests throughout Central America and the Caribbean. Most of the compensation mechanisms studied are taking place at a local scale in response to problematic water supply situations. External actors such as NGOs and government agencies have played the important role of facilitators of these processes. In general, the cases analyzed reflect social and political negotiation processes that need to be

		Caribbean	strengthened; the need to find suitable permanent financial schemes seems to be the critical issue for the long-term sustainability of the initiatives. Although national governments do not participate directly in many of the initiatives, they are playing an important role for the advancement of the issue since they carry out public policies that both regulate and provide incentives for natural resource use. Finally, conclusions are drawn from the global analysis of the cases and some areas for action are suggested in order to strengthen the issue in the region
Sarah McIntosh	CANARI Associate	Benefits to the poor from payments for ecosystem services: The Who Pays for Water project	
Wednesday 5th May 2010 8:00 am - 6:00 pm		**Field Trips**	
Private Forestry initiatives, south-central Trinidad		This field trip will visit two private forestry initiatives in central Trinidad to explore practices being applied and lessons learnt. This initiative is coordinated by the Forestry Division of the government of Trinidad and Tobago. 1- The first site to be visited is an estate in Manzanilla owned by Mr. Motilal Guyasingh. The impressive 8 hectare estate won him the Special Award of Conservation of the Environment at the annual National Agricultural Entrepreneurial Competition 2009. Below is a description of the estate written by the judges justifying the nomination. "A number of considerations were brought to bear when the elderly Mr. Guyasingh was considered for this special award. The general ambience of bird sounds, excellent forest tree cover, signs of wildlife feeding, and clean water were immediate indicators of good conservation practice. His deliberate measures to encourage the presence of bats at the 'bat house' and the astute articulation of their connection with seed dispersal, biological control, and increased floral diversity on his estate also spoke to his consideration for this special award. His non-use of chemicals, work with a diverse gene stock of mangoes, facilitation of access to seed trees by the Forestry Division and provision of wild forest seedlings also weighed in as major factors. His move to non-extractive use of the estate as a tool for education of university and other tertiary-level students and outdoor passive recreation for visitors were contributing factors. It remains a rarity to find those who are not dedicated to the "Almighty Dollar". Embodying all the considerations was Mr. Guyasingh's deep passion for his robust and majestic trees. He sees in them much more than financial value." 2- The second estate spans 102 acres and is located on the 16 ½ Mile Mark Four Roads Tamana. The estate was originally an abandoned cocoa estate and over the years, the farmer planted some first class timber species and also	

	agricultural crops like citrus and banana that would yield immediate cash return. Mr. Salandy's estate also won him Best Agroforestry Estate 2008 in the first year of the annual National Agricultural Entrepreneurial Competition.
Nature Seekers	Nature Seekers (NS) is a local community-based organisation located on the Toco main road, in Matura, on the east cost of Trinidad. NS was formed in 1990 with the objectives of reducing negative impacts on the endangered leatherback sea-turtles through community beach patrols and ecotours. Nature Seekers manages one of the 55 reforestation projects in Trinidad & Tobago under a co-management arrangement with the National Reforestation and Watershed Rehabilitation Programme in the Ministry of Public Utilities and the Environment. Nature Seekers has the responsibility to reforest five hundred acres of land that was either burnt or deforested over a period of time. The plan is to accomplish this over a ten (10) year period at the rate of fifty (50) acres per year. The project started in November, 2004. Community involvement and participation at all stages are encouraged. Additionally, under the CANARI Action Learning Projects (ALPs) in Participatory Forest Management**,** Nature Seekers has been identified as one of the Community-based Organisations (CBOs) to contribute to the strengthening of civil society organisations. The overall objective of the ALPs is to support the improvement of the socioeconomic and environmental benefits that can be derived from forest management by analysing, promoting and building capacity for participatory planning and management of forest resources at the regional, national and local levels. Nature Seekers is also part of the Matura to Matelot Network (M2M), established in 2000 with the aim of fostering communication and participation, and facilitate collaboration among CBOs. The M2M had identified some of its priority actions area as the development of a community-based tourism plan for the Matura to Matelot area, and the protection of its cultural heritage.
Permaculture	This field trip will visit a permaculture site to view practices being applied and lessons learnt. Permaculture *(permanent agriculture) is a term created by Australian Bill Mollison to describe a land use system that is modelled after natural eco-systems. It refers to the conscious design and maintenance of agriculturally productive ecosystems that have the diversity, stability and resilience of natural ecosystems.* The Permaculture philosophy is one of working with rather than against nature and is applicable in urban, suburban, and rural environments and offers a proactive approach to addressing the escalating environmental crisis. Wa Samaki Ecosystems, a privately owned company promoting the practice of permaculture is located in Freeport within the Central Range of Trinidad. Agriculture practiced within this area went through successive stages of tobacco, sugarcane and citrus with much of the land currently being used for short crops or slowly being turned into housing. Back in 1997, the initial Wa Samaki project was the starting of the fish farm to produce fish for the ornamental trade and now features a plant nursery, a large collection of heliconias, decorative bananas, among others, as well as a variety of tropical fishes. Wa Samaki has also been providing landscaping services since 2007.
Fondes Amandes	This field trip will include a tour of a hillside area being managed by a community organisation as well as a discussion with members and their key partners (from government, donor agencies, and national and regional NGOs) about the development of this initiative, its impacts on the watershed and community livelihoods, and lessons learnt.

	Fondes Amandes is a hillside community developed around a former cocoa estate now partially owned by WASA, and is located in St. Ann's, a mainly middle class residential suburb of Port of Spain, adjacent to an important reservoir serving metropolitan Port of Spain. Fondes Amandes has gained notoriety over the years thanks to its reforestation project, the Fondes Amandes Community Reforestation Project (FACRP) that has been quite successful in responding to the challenges posed by the degradation of the watershed. The expansion of housing development into forest areas, dry season fires, poor sanitation facilities and improper sewage disposal practices in upland, as well as poor soil and water conservation measures on hillside agricultural lands are some of the challenges that the reforestation and watershed protection initiative has addressed, through agro-forestry initiatives and activities. Over the years, the FACRP has been involved in planting of trees for restoration of the watershed, while protecting it from bush fires, developing proper drainage and terracing. Additionally, there has been an improvement in the quality of life of the community of Fondes Amandes, through the creation of employment and the provision of basic services and facilities. Before, there was no pipe borne water in the community, which is why households used to rely heavily on river water or rainwater harvesting for their water supply. The rehabilitation of the hillside, coupled with organic farming methods, has provided food but also help to reduce the impact of soil erosion on the river. In 2001, the establishment of the Clean Trees Organic Nursery (CTON) provided a reliable source of organic inputs to the FACRP's reforestation activities as well as to small-scale farmers and other individuals interested in organic methods of farming. It also provided landscaping and lawn maintenance services. That same year, a community shelter was constructed, and has since then served as a venue for training programmes. Community development, the promotion and the development of sustainable, responsible ecotourism in the St Ann's watershed, the protection of the biodiversity of flora and fauna are all key objectives of the FACRP, and this is now viewed as a model of successful community-based watershed management.
Nariva Swamp	This field trip will look at government-led efforts for restoration of degraded areas of a wetland through planting of trees by communities. This intends to benefit both community livelihoods and serve as a potential model for development of a carbon sink through community reforestation. Nariva Swamp is the largest fresh-water wetland in Trinidad and Tobago and one of the largest in the Caribbean. It is located on the eastern coast of Trinidad, and covers an area of approximately 7,000 ha. The swamp is fed by a few rivers, and also receives water from the ocean through seepage. The vegetation is diverse, including four major wetland types (mangrove swamp forest, palm forest, swamp wood and freshwater marsh). A high number of rare species of reptiles, mammals and birds can then be found in Nariva, and several communities, comprising thousands of residents, depend on the natural resources of the area for commercial and subsistence purposes. Fishing, hunting, and cultivation of watermelons, rice, cucumbers and tomatoes are among the main activities

		of the Nariva Swamp communities, as well as residents of nearby villages. In the early 1980s, illegal large scale rice farmers started using heavy machineries, digging canals to drain the wetlands, setting up fires to the forests, in order to clear the accumulated organic matter for rice cultivation. These practices highlighted the necessity to better manage and protect the Nariva Swamp. The government of Trinidad and Tobago, together with national NGOs, the National Wetland Committee, the University of the West Indies, embarked on an effort to remove squatters and illegal farmers, fill the canals and create a fire control tower at the southern end of the Nariva protected area. An Environmental Impact Assessment (EIA) was also developed. Since then, the main challenges have been to prevent and resolve the conflicts that have arisen over the use of Nariva Swamp's resources by small-scale farmers, fishermen, residents.	
Thursday 6th May 2010 8:00-11:30 am		**Theme Climate change and forests in small islands**	
8:00-9:00 am Conference room 1		**Plenary presentations**	
Pr. John Agard	University of the West Indies, Trinidad	Nariva Swamp Restoration, Carbon Sequestration and Livelihoods Project	The project will seek to optimize the provision of often conflicting baskets of ecosystem services such as wildlife conservation, carbon sequestration, crop production, fishing, and hunting. The main objectives are: • **To restore and conserve the Nariva wetlands, through the recognition of the services it provides as a a biodiverse ecosystem and carbon sink and.** This will be accomplished through reforestation of 1339 ha of forest previously destroyed by illegal farming. The restoration of the wetlands will result in additional environmental benefits, including reduction of GHG emissions, provision of expanded habitat for endemic and endangered species in the area, and recovery of the protection and storm buffering character of the wetland • **To develop sustainable livelihood opportunities for surrounding communities who depend on the swamp's resources:** o **The provision of job opportunities through the Reforestation activities** in nursery operations, planting, tending and fire prevention within reforested areas. o **To develop the capacity of CBOs** for organization and entrepreneurial skills to facilitate livelihood sustainability through capacity building and training opportunities, including strategic and business planning. • **To develop a workable management regime for the Nariva Swamp with the full**

			participation of community and relevant national stakeholders. **To develop models for the determination and verification of levels of carbon sequestered** in a small scaled reforested tropical wetland environment. This is to be accomplished through applied research supported by climatic data, and the development of modelling for tropical species in this ecosystem
Dr. Ulric Trotz	Caribbean Community Climate change Centre, Belize	Climate change in the Caribbean	
9:00-10:30 am Conference room 3		**Breakout Group 1** ***Climate change impacts on forests, possible management responses, and public awareness***	
Owen Day	CARIBSAVE	The impacts of climate change on biodiversity in Caribbean islands: what we know, what we need to know, and building capacity for effective adaptation	
Howard Nelson		Managing forests for climate change and livelihoods	
Indi Mclymont-Lafayette	PANOS Caribbean	Communicating climate change and forest issues	This presentation will focus on the need for a stronger collaborative communication framework on climate change and forest issues in the Caribbean. It will touch on the challenges faced by the media on reporting on these issues while identifying possible solutions that need to be taken on by government agencies, civil society and the media at the

			regional level. It will also touch on communicating these two issues to the international community.
9:00-10:30 am Conference room 3		**Breakout Group 2** ***Climate change impacts on communities and their responses***	
Neila Bobb-Prescott	CANARI	Impact of climate change on forest-based livelihoods: Results of the CARUTA research project	The impacts from climate-related phenomena and weather patterns are already affecting forest resources and being observed by forest users in the Caribbean. Even though very little quantitative data exist on the value of forest-based livelihoods to communities, Caribbean people have made wide use of forest resources for subsistence and commercial purposes. Further, to date there has been no specific studies on the effects of climate change on forest-based livelihoods in the ten English-speaking Caribbean countries studied. Also, it can be expected that the impacts being currently observed will be exacerbated as climate change continues. However, there are recommendations based on lessons learnt and experiences that can be made to policymakers, donors and others who can support communities to protect their livelihoods from the adverse impacts of climate change.
Judi Clarke	CANARI Associate	Assessing community vulnerability	Vulnerability is the degree to which a system is susceptible to, or unable to cope with, adverse effects of *climate change*, including *climate variability* and extremes. Broadly stated, it depends on a system's *exposure* to impacts; the *adaptive capacity* of the system being impacted and the *enabling environment* affecting that system to respond to such impacts. A community's coping and adaptive capacities in the face of current climatic variability and extremes is used as proxy for its level of coping and adaptive capacity for future climate change. To assess the vulnerability of a community to climate change one must therefore have an indication of current and project climate-related impacts on the community. This information is gathered through community experiences and perceptions, and extrapolation of projected impacts from regional climate models. Additionally, it is important to identify the institutions with the requisite capacity for responding to climate change - at the both the community and national levels. Assessing access to the 5 main categories of livelihood assets at the household level gives an indication of the extent and diversity of such assets that contributes to a household's - and hence a community's adaptive capacity. All of this information may then be use to make a determination of the community's vulnerability to climate change, thus forming the basis for

			community adaptation.
Neila Bobb-Prescott & Judi Clarke	CANARI	Facilitating community-owned adaptation responses: CANARI's approach	

9:00-10:30 am Conference room 4		**Breakout Group 3** ***Climate change mitigation options and issues: what could work for the Caribbean?*** **(Panel discussion)**
Melanie McDermott	Rutgers International	Climate change and equity for communities
Claus Eckelmann	FAO	Capacity needed for forest management
Robyn Cross	Environmental Management Authority (EMA), Trinidad	The Nariva project
Ulric Trotz	Caribbean Community Climate Change Centre -CCCCC	

10:30-11:00 am	BREAK
11:00-11:30 am	**Plenary reporting**

11:30-12:30 pm		**Theme** **Adaptive, collaborative, ecosystem-based approaches to forest management**	
11:30-12:30 pm **Conference room 1**		**Plenary presentations**	
Marylin Headley	Forestry Department, Jamaica	Forestry support for national development - Evolving forest governance	
Cletus Springer	Department of Sustainable Development, Organisation of American States	Towards a Policy Framework for Adaptive, Collaborative, Ecosystem-based approaches to Forest Management	Working from the premise that policy is the best framework for effective action, my presentation will seek to make a case for Caribbean countries to establish and or strengthen integrated forest management policies in the light of emerging knowledge and understanding of the multiple roles and functions of forests and their contribution to social, economic and environmental stability. The presentation will distill the national policy implications of emerging international instruments such as the UN Framework Convention on Climate Change (UNFCCC); and Reducing Emissions from Deforestation and Forest Degradation (REDD)
12:30-1:30 pm		**LUNCH**	

2:00- 3:30 pm Conference room 3		**Breakout Group 1** ***Partnerships for effective forest management***	
Aleyda Capella	Consorcio Ambiental Dominicano, Dominican Republic	Building partnerships for Community-Based Tourism in protected areas: 27 waterfalls Natural Monument, Dominican Republic	Natural Monument Damajagua River Falls is a protected area created in 2004. Before being declared a protected area a group of young people from nearby communities to the area, used the waterfalls for tourism. With support from the Peace Corps that youth group was organized in an Association of Guides to provide the service. Natural Monument is bordered by about 10 small communities. This protected area lacked management mechanisms, and a total lack of personnel to its management. Numerous conflicts with neighbors who threatened the integrity of its resources. In 2005 a co-management agreement between the Ministry of Environment and Guides Association. This agreement sets out the responsibilities and the benefits of the parties, besides the rate of visitation. The co-management agreement establishing the co-management council where representatives of the Minister of Environment, the Association of Guides, the Ministry of Tourism, the local council, a representative of landowners and a representative of the Association of hotels. All investments are made on the protected area or in any of the surrounding communities are subject to the approval of the board and respond to an annual operating plan. The benefits generated by ecotourism activities are divided into four parts: to manage the area, to the land-owners fund, for the community fund and Guides Association.Besides the economic benefits generated by ecotourism, some achievements have been reached: Management plan, generating jobs among community nearby; protected area's neighbors with a new vision of conservation and preservation; Management and shared responsibilities; Decreased conflicts.
Robyn Cross	Environmental Management Authority (EMA), Trinidad	The ESA Stakeholder Management Committees: Experiences, challenges	In designating new protected areas in Trinidad and Tobago under the EMA's legislation for Environmentally Sensitive Areas, the EMA also set up Stakeholder Management Committees for each area in an effort to bring NGOs, CBOs and other stakeholders to the table. The SMCs include those for the Matura National Park (montane forest ecosystem), the Aripo

		and future directions	Savannas (natural lowland savanna) and for the Buccoo Reef, with the last one being planned for the Nariva Swamp (freshwater swamp ecosystem). Each of these committees faces its own challenges and directs its work programme, and is at a different stage in its life cycle. The presentation will review the challenges of the SMCs, look at what has worked and make recommendations on how they could proceed. Challenges include representation, capacity, responsibility of stakeholders, recognition, culture of organisations and their level of interest.
Sesar Rodriguez	Consorcio Ambiental Dominicano, Dominican Republic		
2:00- 3:30 pm Conference room 3		**Breakout Group 2** ***Managing forests and ecosystems***	
Chris Cox	CEHI	Watershed Management	
Howard Nelson	University of the West Indies	Managing forests at landscape scale - Ecosystem management	
Claus Eckelmann	FAO	Silvicultural systems and their social linkages	The success of restrictive silvicultural systems such as diameter limits and other harvesting regulations depend mainly on the vigour of the forest administrations to ensure that these rules and regulations are adhered to. The successful implementation of the more constructive silvicultural systems is characterised through their social ties. The establishment of forest plantations in state forests either require large amount of public funding or some kind of partnership where both parties obtain direct benefits from practising silviculture. The Trinidad Shelterwood system was only feasible because the charcoal burners did the felling of undesirable trees and the clearing of the underbrush. After charcoal burners created the shelterwood conditions the forest regenerated naturally. The cultivation of forest trees together with agricultural crop in the Taungya system is

			another partnership system. It relied on the need of landless farmers to use forest land for their agricultural production. With the decline in the charcoal market and the general decreasing pressure for agricultural land these silvicultural systems were no longer viable. The affiliation of the periodic block system with privately organised forest workers is the result of a political decision to utilize state-owned timber resources to provide income opportunities for rural poor. In Trinidad these forest workers are called 'woodworkers'. Rural people without employment were/are granted the exclusive right to buy from the Forestry Department up to ten timber trees not exceeding 500 cubic feet (14,15 m^3). The trees are sold standing to registered woodworkers and they are allowed to harvest the trees and to sell them to a saw-miller. As the block system reduced the general availability of timber to the woodworkers they established a self-help association to lobby for higher timber allocations from the state forestry reserves. They devised a system to share the available timber allocations among the group and in some cases they were able to strengthen their position against the powerful group of saw-millers. Two Woodworkers Associations were established in Trinidad but only one, the Nariva Mayaro Woodworkers Co-operative Society, established in 1964, still exists.
2:00- 3:30 pm Conference room 4		**Breakout Group 3** ***New direction in forest policy and planning***	
Nicole Leotaud	CANARI	Forest policy to guide coordinate management of a country's forests	
Lyndon John	Forestry Department, St-Lucia	Conservation of the Latanyé Palm (*Coccothrinax barbadensis*) in St-Lucia	Since the decade of the nineties, the Forestry Department of the Ministry of Agriculture, Lands, Forestry & Fisheries has been concerned with the plight of the Latanyé species in wild. The manufacture of local brooms from the Latanyé palms is a traditional activity, but indiscriminate harvesting of the leaves for broom production had threatened the survival of the species. Very few Non Timber Forest Product (NTFPs) have benefited from a concerted effort by way of research and cultivation as a means of reducing dependency on harvesting from the wild. An example of such efforts would include the harvesting of bay leaf for the bay oil industry and vanilla production in Dominica. The Forestry Department in Saint Lucia sought to promote the latanyé palm and mauby cultivation as part of a programme thrust

			towards promoting agroforestry and addressing rural poverty. In 2009, the Forestry Department under the EC-SFA 2005 implemented a project entitled *Institutional Support for Latanye/Mauby Producers in St. Lucia*, through the Inter-American Institute for Cooperation on Agriculture (IICA). The main objectives of this nine month project was; (i) the conduct of a Latanye production and marketing needs assessment;(ii) Establishment of a nursery for the production of Latanye/Mauby seedlings; (iii) Training in all aspects of nursery and farm management, business skills, small enterprise management, organizational leadership and group dynamics, standards and quality control, and environmental management issues. The total project budget was EC$140,778 (US$52,140).
Kathleen Belcon	Forestry Division, Trinidad	Scope for change- Forestry Sector, Trinidad	Learning strategies and enhanced flexible thinking have each been argued as strategies to increase the adaptive capacity or the ability of individuals to cope with surprises within ecological systems. Therefore the concepts of learning, flexible thinking and adaptive capacity should be studied to gain insight into the ability of natural resource managers to deal with surprises within the system. I evaluated whether a relationship exists between, learning, flexible thinking and the influence of these variables on adaptive capacity. From questionnaires and informal interviews conducted with personnel of the forestry sector of Trinidad information was gathered about their concept of forestry, learning strategies utilized, and the adaptive capacity of the institutions that they are a part of. An analysis of the data showed that increased opportunities for training can result in innovative and creative thinking that may lead to adaptive individuals who are better able to cope with changes and surprises that are inherent when managing ecosystems.
Keith Gibson	Environmental Design, Canada	Taking Advantage of Uncertainty and Change – Resilience and Innovation in Ecosystem Management	There is growing international recognition that our world is changing more quickly than we can control it. When we try to manage an ecosystem, our actions have intended AND unintended consequences. What then can we do? Change, whether it is institutional, policy, or environmental, opens up opportunities for innovation, new ways of doing things. I will discuss how ideas about innovation and change can tangibly help stakeholders who depend on and manage forest ecosystems.
3:30- 4:00 pm Conference room 1		Plenary Reporting	

4:00-6:00 pm	Wrap-up and Closing session	- Reports from CBO workshop and field trips - Rapporteurs present key messages from the conference - Thanks and close