



Promoting Sustainable Development through Civil Society: Case Studies from the GEF Small Grants Programme in

Trinidad and Tobago

Table of Contents

Location of Projects - Map Showing Distribution of selected GEF SGP Projects in Trinidad & Tobago) 1
Foreword	2
About the GEF Small Grants Programme in Trinidad and Tobago	3
Building Capacity of Asa Wright Nature Centre to Facilitate	
Conservation, Ecotourism and Community Development	4
Protecting Pawi – Community Based Educational Outreach and Training	6
Pilot Project: Community Action to Build Climate Change Resilience in T&T	8
Community-Led Forest Conservation and Sustainable Livelihood Development in Caura, Trinidad	10
Strategic Project: Building Small Scale Farmers' Capacity to Implement Sustainable Farming Practices in Trinidad's Northern Range	12
Fondes Amandes Community Reforestation Project: Green Wave Tree Planting Caravan	14
Children's Water Camps in Rural and Urban Communities in Trinidad and Tobago	16
Issues of Sustainable Development for Maracas Valley	18
Planning Grant: Trinidad East Coast Sea Turtle BycatchReduction Project	20
Capacity Development Programme 2012 – Establishing Sustainable Eco-Tourism for the Charlotteville Community through Sea Turtle Conservation	22
Biodiversity-Linkages & Humans	24
Mainstreaming Renewable Energy Resources in Secondary School Labs and Raising Youth Awareness onDiversified Alternative Energy Solutions in T&T	26













Biodiversity

Climate Change

Land Degradation

Sustainable Forest Management

International Waters Ch

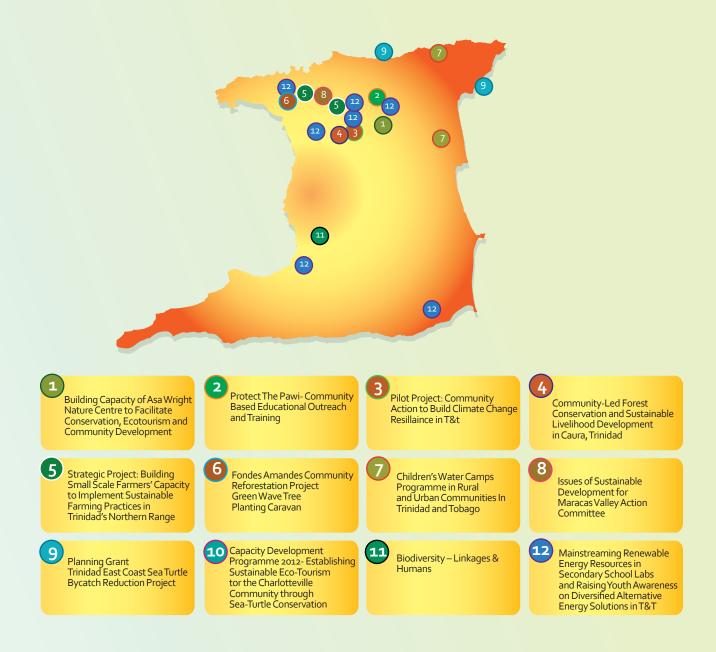
Chemicals

Page

Location of Projects

Map showing Distribution of selected GEF SGP Projects in Trinidad and Tobago





Foreword



Mr. Richard Blewitt UNDP Resident Representative and UN Resident Coordinator UNDP Trinidad and Tobago, Suriname, Aruba, Curacao and Sint Maarten



Dr. Nesha Beharry-Borg National Coordinator Global Environment Facility (GEF) Small Grants Programme (SGP)

The objective of this publication is to present a selection of case studies in varying environmental focal areas that showcases the work of the Small Grants Programme in Trinidad and Tobago over the past 17 years. This booklet will highlight the work of (GEF) Small Grants Programme (SGP) with Grantee organisations and aims to:

• Facilitate the exchange of experiences among civil society groups and other stakeholders working to address global environment issues.

- Network and promote the exchange of knowledge and replication of best practices among these organisations.
- Improve awareness and understanding about the GEF SGP country programmes missions, strategies and results and to raise awareness of community-based perspectives on environmental protection.

• Encourage partnerships among all concerned stakeholders, such as civil society, international funding agencies, government and local authorizes the business community and local communities.

About the GEF Small Grants Programme in Trinidad and Tobago

Established in 1992, the year of the Rio Earth Summit, the GEF Small Grants Programme embodies the very essence of sustainable development by "thinking globally acting locally."

By providing financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods, SGP demonstrates that community action can maintain the fine balance between human needs and environmental imperatives.

SGP recognizes that environmental degradation such as the destruction of ecosystems and the species that depend upon them, increasing levels of carbon dioxide and other greenhouse gases in our atmosphere, pollution of international waters, land degradation and the spread of persistent organic pollutants and chemicals are life-threatening challenges that endanger us all. However, poor and vulnerable communities – SGP's primary stakeholders- are most at risk because they depend on access to natural resources for their livelihoods and often live in fragile ecosystems.

The principle objectives of the Small Grants Programme are to:

- Develop community-level strategies and implement technologies that could reduce threats to the global environment if they are replicated over time.
- Gather lessons from community-level experience and initiate the sharing of successful community-level strategies and innovations among CBOs and NGOs, host governments, development aid agencies, GEF and others working on a regional or global scale.
- Build partnerships and networks of stakeholders to support and strengthen community, NGO and national capacities to address global environmental problems and promote sustainable development.
- Ensure that conservation and sustainable development strategies and projects that protect the global environment are understood and practised by communities and other key stakeholders.

Over the last two decades, SGP has linked matters of local, national and global importance through a transparent, participatory and country driven yet globally coherent approach to community based project planning, design and implementation. Grants are approved by a voluntary, multistakeholder National Steering Committee. Grants are made directly to CBOs and NGOs in recognition of the key roles they play as a resource and constituency for sustainable development concerns. The decentralized structure of SGP encourages maximum country and community initiative and ownership, and the local demand-driven nature of SGP projects contributes to future sustainability.

The programme is funded by the Global Environment Facility (GEF) as a corporate programme, implemented by the United Nations Development Programme (UNDP) on behalf of the GEF partnership, and executed by the United Nations Office for Project Services (UNOPS).

The programme provides grants of up to \$50,000 directly to local communities including indigenous people, community-based organizations and other non-governmental groups for projects in: Biodiversity, Climate Change Mitigation and Adaptation, Land Degradation and Sustainable Forest Management, International Waters and Chemicals.

UNDP GEF SGP has been operating in Trinidad and Tobago for 17 years and has funded over 85 projects with significant co financing from various organisations.

Within the Latin American and Caribbean regions, local UNDP offices are repositioning to respond more effectively to local grantees needs for:

- capacity building and institutional strengthening
- the promotion of evidenced-based practices
- the creation of mechanisms for sharing information and knowledge to promote learning, improve organizational practices and achieve successful outcomes

BUILDING CAPACITY OF ASA WRIGHT NATURE CENTRE TO FACILITATE CONSERVATION, ECOTOURISM AND COMMUNITY DEVELOPMENT

Project No: TRI/SGP/OP5/Y1/CORE/BD/12/09 Grantee: Asa Wright Nature Centre and Lodge Location: Arima Valley SGP Contribution: US \$50 000 Cash Co-Financing: N/A In-Kind Co-Financing: US \$73,422 Project Duration: 2 years Number of people served: TBD Focal area: Biodiversity

Background

The Asa Wright Nature Centre is a non profit, NGO whose mission statement is "to preserve a part of the Arima Valley in its natural state; to create a conservation and study area; and to protect the wildlife therein for the enjoyment and benefit of all persons of this and succeeding generations."

The proposed project involves the enhancement of the capacity and capabilities of Asa Wright Nature Centre, to strengthen and execute its ongoing conservation education and community development programmes and its ecotourism operations.

Project Objectives and Key Activities

The project aims to: strengthen relationships and partnerships with target communities (Arima, Brasso Seco, Morne La Croix, Blanchisseuse, Lopinot, Guanapo and Aripo) in the planning and undertaking of mutually beneficial community-based initiatives; to enhance the Centre's capacity to execute its Education and Interpretation Programme; to develop a sustained Research Programme that will fill gaps in scientific information critical to biodiversity conservation, ecosystems and economic valuations; to heighten the Centre's profile as an international destination for ecotourism and to improve the financial status of the Centre, and thus the ability to carry out its Mission.

A simultaneous and complementary project involves the establishment of the Jonnie Fisk Conservation and Administration Centre (JFCAC). This

involves the expansion of a building which will facilitate the ongoing programmes of the Asa Wright Nature Centre. Project activities include educational outreach to 17 schools in the Arima/Blanchisseuse Valley, and approximately 50 schools in the wider North-Eastern area. It is expected that 6 communities within the Arima/Blanchisseuse Valley 25 AWNC staff will benefit from community workshops and entrepreneurial arrangements with the Centre for production and sale of products at the in-house shop. Improved engagement with visitors, both local and foreign as well as scientists and researchers is also expected.

Environmental and Social Impact

The project will contribute to national efforts towards biodiversity and watershed conservation, integrated land management, environmental education, economic diversification, poverty reduction and rural development.

Policy Impact

It is aligned with the national policy and planning framework as it relates to commitments to Multilateral Environmental Agreements e.g. UNCBD, NBSAP, UNFCCC, UNCCD National Action Programme. There is also a strong positive correlation between project outputs and outcomes and the GEF/SGP Country Programme Strategy, specifically: increased advocacy and education on environmental issues; capacity building and institutional strengthening; increased linkages between project activities and national initiatives and the inclusion of micro-enterprise components (the space will facilitate entrepreneurial and marketing arrangements and thus promote micro-enterprise development).

Replication and Upscaling

The Asa Wright Nature Centre aims to be catalytic and strategic in its initiatives implemented with limited resources and therefore realizes the key to project sustainability and replication expansion is to secure buy-in. With this project, buy-in would be needed by its management and staff, members of the local communities, schools, scientific/ research community, relevant government institutes (e.g. Ministries of Education, Housing and the Environment, Tourism and Community Development) and its local and foreign visitors. The main approach to replication would be to actively engage key stakeholders to disseminate information on the project, results achieved and to market the products and services of the Centre.

Pathnerships

This study will collaborate with schools in the Arima Valley as well as schools throughout Trinidad and Tobago. COPE, UWI, UTT and foreign universities will also engage in this project.





The organisation's mission is to preserve a part of the Arima Valley in its natural state; to create a conservation and study area; and to protect the wildlife therein for the enjoymentand benefit of all persons of this and succeeding generations.

PROTECT THE PAWI- COMMUNITY BASED EDUCATIONAL OUTREACH AND TRAINING

Project No: TRI/SGP/OP4/Y3/CORE/2010/05 Grantee: Guardian Life Wildlife Fund Location: Brasso Seco, Grande Riviere, Matelot, Matura, Blanchisseuse, SGP Contribution: US \$47 620 Cash Co-Financing: US \$47 620 In-Kind Co-Financing: US \$23 216 Project Duration: 2 years Number of people served: Approximately 75 persons Focal area: Biodiversity

Background

The Trinidad Piping Guan, Pipile pipile, is currently one of the world's most threatened Galliformes due to hunting and habitat destruction due to deforestation, illegal quarrying and encroachment of the built environment. With an estimated 230 individuals left in the north-eastern forests of Trinidad (Hayes et al. 2009), the bird's conservation status is precarious. Conservation of this species is particularly significant on a global level since it is endemic to the island of Trinidad. The Guardian Life Wildlife Fund (GLWF), established in 1992, supports projects, local communities and institutions that preserve our endangered wildlife and natural, indigenous heritage. In addition, it pursues an educational mandate, to nurture an environmentally responsible national consciousness.

Project Objectives and Key Activities

The GLWF in collaboration with national and international partners has taken up the challenge to help save the Pawi and has embarked on its "Pride in Pawi" Project -a comprehensive communication programme aimed at educating nationals on the Pawi and encouraging protection of this endangered bird. This umbrella project has three main platforms: Platform I – Community Intervention and Capacity Building, Platform II – Schools Campaign, and Platform III – National Awareness. The GEF SGP has facilitated the execution of Platform I of this project.

It's focus was to educate hunters and the local communities in areas in which the Pawi has been sighted, and other stakeholders about the threatened status of this species, its national importance and value to conservation. This community-based approach serves to increase local community interest and participation in conservation of this guan, particularly with respect to conserving its habitat and promoting guan based eco tourism. Specific activities included workshops, selection of 'Pawi Guardians' and training sessions.

The project had three key stages: the project preparation and community mobilization phase; the execution phase and the reporting and record keeping phase.

Environmental and Socio Economic Impact

Following 40 educational workshops, 25 out of 70 willing participants were trained in First Aid and 22 were trained in GPS data collection. Participants spent 177 days interacting with community members and patrolling forests to collect data. Of the 20 new Pawi Guardians selected from participating communities, 2 were chosen to continue to spread the word to communities.

The 5 target North communities now have a wider and deeper appreciation of the need to protect the indigenous and endangered Pawi since they now understand it plays a unique role in sustaining the vital forest as our largest seed carrying bird. They also have a greater appreciation of how conserving the Pawi and its habitat can have economic benefits for their community since it is a resource that has tourism attraction value. The project has also provided them with skills and experience which would enable them to play a more influential role within and outside their communities in lobbying for Pawi conservation efforts and perhaps even initiating them on their own.

Lessons Learnt

The various workshops conducted, along with the participatory approach to the several community meetings, provided numerous opportunities for information sharing which generated a sense of ownership and understanding of the plight of the Pawi as well as a determination within the community to protect the Pawi and its habitat. Through the various project activities and the forest patrol data gathered, there is guarded encouragement for the existence of the Pawi in widespread locations around the target communities based on actual documented sightings and numerous verbal reports of non documented recent sightings. An important point emerging from the forest patrol maps is that wherever the Pawi was sighted the forest was intact. While this is encouraging and instructive, at the same time, the results of the patrols and the data gathered during this project suggest that more data is required and a deeper thrust in the same areas is required to get a clearer and more scientific assessment of the status of the Pawi in these locations.

Partnerships

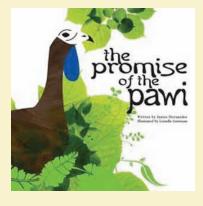
This project has been assisted by organisations such as the Asa Wright Nature Centre, Birdlife International, The Environmental Management Authority, The World Pheasant Association, The Pawi Study Group, Pawi Guardians, Nature Seekers' Grande Riviere Community Group and The Confederation of Hunters Associations for Conservation

Reference:

Hayes FE, Samad I, Sanasie B. 2009a. Status and conservation of the Trinidad piping-guan (Pipile pipile). Endangered Species Research7: 77–84

 The organisation's mission is to assist citizen groups in the conservation of the country's living resources and their babitats 99







PILOT PROJECT: COMMUNITY ACTION TO BUILD CLIMATE CHANGE RESILLAINCE IN T&T

Project No: TRI/SGP/OP5/Y1/CORE/CC/12/03 Grantee: Caribbean Natural Resources Institute Location: Caura Valley SGP Contribution: US 50 000 Cash Co-Financing: N/A In-Kind Co-Financing: US 80 000 Project Duration: 1 year Number of people served:

Background

Climate change is one of the most critical issues affecting Small Island Developing States. Economic activities, particularly those linked with coastal regions, forested areas and agricultural industries are key areas for concern, as coral reefs, fish and shrimp nurseries, forest resources and crop lands are major targets for the environmental impact of climate change. Piloting the development and testing of mechanisms for resilience to climate change at the community level is a necessary step that needs to be taken in addressing present shortcomings of vulnerable communities and livelihoods. This approach will contribute to building the knowledge base of these stakeholders and encourage greater advocacy for policy development and advancement.

Project Objectives and Key Activities

With funding from the GEF SGP the project aims to increase the resilience of a community to the impact of climate change due to increased knowledge and understanding of climate change impacts and resilience-building strategies. Specific Objectives include increasing the understanding of key climate change issues and disseminating relevant scientific and research to key stakeholders in a selected vulnerable community; formulating, with technical expertise and shared experiences, appropriate community-level resilience-building strategies in the community; developing and testing community-level resilience-building strategies in the selected community.

The Caura Valley community was selected as the project's focal community based on its vulnerability to climate change. A 3 day workshop was conducted where participants identified the main factors contributing to vulnerability in the Caura Valley and measures to be put in place to mitigate these factors. The aim of the workshop was to design and implement a community resilience building plan. Mentoring by CANARI and monitoring and evaluation of the project were key components of the project.

Environmental and Social Impact

Focal area: Climate Change

Project participants built awareness on climate change, undertook vulnerability assessments and developed a resilience building plan. They collaborated with other stakeholders and initiated action through development of public awareness material. They also received training in rainwater harvesting and installed a rain water harvesting system at the Caura Activity Centre for the benefit of all community members.

Policy Impact

Trinidad and Tobago is a member state of the Caribbean Community (CARICOM) and this project is in support of the implementation programme of CARICOM's "Regional Framework for Achieving Development Resilient to Climate Change" (2011-2021). The project fits the Global Strategic Framework and Trinidad and Tobago Country Programme Strategy, serving as a demonstration and capacity development project. It is designed as a pilot project, the results of which are to be documented and shared with similar communities in which adaptation and resilience-building strategies are needed. Its goal is to broaden the understanding of key climate change issues and disseminate relevant scientific research to key stakeholders in a vulnerable community.

Lessons Learnt

This project has been designed as a pilot demonstration project, as it moves one step beyond awareness building and leads a vulnerable community through recognising its vulnerability to taking action to build resilience. CANARI can continue to work with this community to provide additional support and capacity building and so contribute to sustainability and enhanced outcomes of this project.

Additionally, the community should commit to expanding on this work both in the community and through information dissemination, monitoring and evaluation, and seeking funding for follow-up projects.

The community will be encouraged to share its experience with the wider community. The leanings gained by this community can be applied with some adaptation by others. CANARI will encourage and facilitate the horizontal sharing of knowledge between communities by involving this community in future knowledge-sharing projects which it implements with other communities. This will involve sharing of experiences and also field visits to the community ensuring the sustainability of this project.

Parthnerships

Various organisations were involved in this project from the early planning stages to the actual implementation, execution and evaluation of the project. These organisations include: the Community Development Fund, Ministry of Community Development, Fisheries Division, Ministry of the Environment and Water Resources, Institute of Marine Affairs, Office of Disaster Preparedness and Management, Environmental Management Authority, Insect Vector Control Division, Office of the Member of Parliament, Trinidad and Tobago Red Cross Society, Caura Valley Farmers Association, Caura Northern Range Hiking Group and the Caura Women's Empowerment Group.





The organisation's mission is to promote and facilitate equitable participation and effective collaboration in the management of natural resources critical to development in the Caribbean islands, so that people will bave a better quality of life and natural resources will be conserved, through action learning and research, capacity building, communication and fostering partnerships.

COMMUNITY-LED FOREST CONSERVATION AND SUSTAINABLE LIVELIHOOD DEVELOPMENT IN CAURA, TRINIDAD

Project No: TRI/SGP/OP5/Y1/CORE/BD/12/04 Grantee: Caura Valley Village Council Location: Caura Valley, Northern Range, Trinidad SGP Contribution: US \$33 097 Cash Co-Financing: N/A In-Kind Co-Financing: US \$14 000 Project Duration: 7 months Number of people served: 700 persons Focal area: Land degradation and Sustainable Forest Management Biodiversity Climate change

Background

Forest fires are a key problem in the Northern Range, particularly during the dry season, when low levels of rainfall, moisture and humidity result in drying-out of the forest and consequent increase in susceptibility to fires. Forest fires result in degradation of the forest, and subsequent reduction in the services that forests provide. As such the Caura Valley Village Council (CVVC), a local CBO, initiated this project which seeks to develop a pilot payment for ecosystem services (PES) model in the Caura Valley as one approach to forest conservation and livelihood development in the area.

Project Objectives and Key Activities

Through partnering with the GEF SGP and the Forestry Division, the project aims to promote the interest and welfare of the community by promoting and facilitating cultural, recreational, educational, spiritual, social and economic activities. It also seeks to mobilize the co-operative efforts of all members of the community in the pursuit of self-help and other measures for total development.

This project involved workshops for training of the fire guardians in the Caura Valley, mapping of fire trails with a GIS, developing a system of monitoring and recording the activities of fire guardians, developing eco-tourist trails in the Caura Valley from the fire trails, and recording and documenting the challenges and barriers in implementing the PES model. Such a project is well placed within the GEF's focal areas of biodiversity conservation, climate change and land degradation. The project also focuses on capacity building within communities, and developing sustainable livelihoods. The project also acts as a pilot project to test a

small-scale community payment for ecosystem services (PES) scheme; the results of this pilot will be used to make an application to the Green Fund of T&T to support a larger PES project in the Caura Valley.

Environmental and Socio-Economic Impact

A fire guardian system has been developed that comprises approximately 12 members of the Caura Community who are responsible for cutting and maintaining fire trails and working with the national Fire Services Authority to contain and suppress fires when and where they occur. 6km of fire tails have been cut including, one main fire trail and several smaller trails.

The project has resulted in Greater awareness among members of the Caura Valley community regarding the importance and value of ecosystem services there. Community participation has been an integral part of the project from conceptualizing of the idea to participation in development of the completed proposal. 50 community members from Upper Caura Valley have directly benefited from the project. They have gained skills in forest and forest fire management and GIS mapping. The commitment of the Caura community to sound ecosystem-based environmental management practices has provided the motivation and impetus for continuation of the actions proposed in this project and building capacity in the community as a means of sustaining livelihoods.

Policy Impact

This project is linked to a national initiative being undertaken by the University of the West Indies (UWI) St. Augustine Campus, called the Project for Ecosystem Services, focused on determining the economic value of regulating ecosystem services, towards inclusion of these services in the national accounts of T&T.

The project also aligns with the National Reforestation Programme which has been ongoing in key areas of the Valley since 2009. The present reforestation initiative and the CVVC project are linked in that they have the same desired objective; the preservation of a forest eco-system primarily through managing forest fires. This project also assists the Forestry Division's National fire management programme to help manage the Northern Range watersheds against fires.

Replication and Upscaling

A workshop will be held in the final month of the project, to disseminate the results of the PES pilot project and to give stakeholders an opportunity to share ideas and discuss PES approaches and the benefits and challenges of implementing these. The Green Fund and the UWI will be among key stakeholders invited to this workshop.

The Community of Caura recognize the importance of the ecosystems there for providing services that are vital to human well-being, and as such have for decades undertaken measures to protect those ecosystems. The commitment of the Caura community to sound ecosystem-based environmental management practices will provide the motivation and impetus for continuation of the actions proposed in this project and future projects in other communities in T & T.

Partnerships

Key partners include: the National Association of Village and Community councils (this is the National body for all Village and Community Councils in Trinidad and Tobago), St. George East Branch Association of Village and Community Councils, Caura Women's Empowerment Group, Caura Valley Farmers Association, Caura Valley Hiking Clip and the Forestry Division.





The organisation's mission is to promote the interest and welfare of the community by promoting and facilitating cultural, recreational, educational, spiritual, social and economic activities 99

STRATEGIC PROJECT: BUILDING SMALL SCALE FARMERS' CAPACITY TO IMPLEMENT SUSTAINABLE FARMING PRACTICES IN TRINIDAD'S NORTHERN RANGE

Project No: TRI/SGP/OP5/Y2/CORE/BD/12/06 Grantee: The Cropper Foundation Location: Aripo Valleys, Santa Cruz, Lopino SGP Contribution: US \$138 684 Cash Co-Financing: US \$33 796 In-Kind Co-Financing: US \$44 487 Project Duration: 18 months Number of people served: TBD Focal area: Land Degradation and Sustainable Forest Management

Background

Small scale subsistence farming (SSSF) is prevalent on the slopes of Trinidad's Northern Range. These SSSF activities contribute to livelihoods and local food production, and are thus considered important in alleviating poverty and playing a role in Government's efforts to make T & T a food secure nation. What has become evident however that is the preferences for short-term (cash) crops in SSSF, and the use of land clearing practices such as slash and burn on the hillsides, with little or no investment in soil conservation measures, is having perceptible impacts on key ecosystem services (water availability and quality, flood and erosion prevention) provided by the Range. The loss of these services is having a direct impact on the livelihoods of the farmers.

The Cropper Foundation is a non-profit NGO whose goal is to act as a framework mechanism for networking people, dialogue and resources across various sectors of the society for the public good and to influence, participate and contribute to Sustainable Development policy and practice – locally, for the Caribbean region, and globally.

Project Objectives and Key Activities

This project is designed to address the issue of land degradation and is developed as part of a larger initiative being implemented by The Cropper Foundation and its partners. It seeks to build capacity of small-scale subsistence farmers within the Northern Range to implement sustainable farming practices (SFPs), explore opportunities for improving livelihoods and food security, and reduce the negative environmental impacts of

unsustainable hillside farming.

The project will draw on lessons and experiences of a recently-concluded project in the Maracas and Caura watersheds of the Northern Range and aims to: undertake a baseline assessment of farming conditions in three Northern Range watersheds (Santa Cruz, Lopinot and Aripo Valleys); design a strategy for engaging farmers, building capacity and providing technical support for the implementation of SFPs in the selected watersheds; design and implement a pilot approach for enhancing community governance arrangements in the selected watersheds and implement SFPs in one of the selected watersheds.

Environmental and Social Impact

Various environmental issues will be addressed including unsustainable land clearing practices, lack of soil stabilization techniques, soil erosion, nutrient depletion, unregulated input of inorganic pollutants, reduction of biodiversity on farms due to pesticides and mono cropping techniques. The need for better information on linkages between agricultural activities and the environment in order to support decision and policy-making at the local and national levels will also be addressed.

Socio economic factors will also be addressed such as: lack of awareness and capacity among small-scale subsistence farmers to implement more sustainable forms of farming; inadequate governance arrangements in farming communities to support farmers to facilitate a more landscape-based approach to managing agricultural activities; the need to enhance relationships between farming communities and public agencies responsible for agriculture, especially the Ministry of Food Production, better information on agricultural issues (including food security and community resilience) to support decision and policy-making in Trinidad and Tobago

Partnerships and Sustainability

This project is being designed within the overall context of Government of Trinidad and Tobago's (GoRTT's) Medium-term Policy Framework document, which lists agriculture and food security as one of the country's five strategic priorities (2011 - 2014). The approach and activities suggested as a part of this project are therefore directly aligned with the Ministry of Food Production's National Food Production Action Plan (2012 - 2015); the Food and Agriculture (FAO's) regional strategy, and the interests of the UNDP SGP. These frameworks provide a very concrete platform upon which the effectiveness and sustainability of this type of project could be achieved.

The Cropper Foundation's established track record in working with agricultural communities in the Northern Range for the past eight years, as well as the Foundation's strategic partnerships, developed with a number of key agricultural stakeholders (including the Ministry of Food Production, research institutions like the UWI, FAO, IICA and CARDI, and civil society organizations) provides a robust framework for ensuring that the results of this project are fed into other initiatives which can apply its results and lessons.

• The organisation's mission is to act as a framework mechanism for networking people, dialogue and resources across various sectors of the society for the public good, and to influence, participate and contribute to sustainable development policy and practice – locally, regionally and globally 99





FONDES AMANDES COMMUNITY REFORESTATION PROJECT GREEN WAVE TREE PLANTING CARAVAN

Project No: TRI/SGP/OP4/Y2/CORE/2009/01 Grantee: Fondes Amandes Community Reforestation Project (FACRP) Location: Fondes Amandes Hills, POS and environs SGP Contribution: US \$2 385 Cash Co-Financing: US \$9 205 In-Kind Co-Financing: Project Duration: 4 months Number of people served: Approximately 150 persons Focal area: Biodiversity, Climate Change, Land Degradation

Background

Forest fires are a key problem in the Northern Range, particularly during the dry season, when low levels of rainfall, moisture and humidity result in drying-out of the forest and consequent increase in susceptibility to fires. Forest fires result in degradation of the forest, and subsequent reduction in the services that forests provide. As such the Caura Valley Village Council (CVVC), a local CBO, initiated this project which seeks to develop a pilot payment for ecosystem services (PES) model in the Caura Valley as one approach to forest conservation and livelihood development in the area.

Project Objectives and Key Activities

Through partnering with the GEF SGP and the Forestry Division, the project aims to promote the interest and welfare of the community by promoting and facilitating cultural, recreational, educational, spiritual, social and economic activities. It also seeks to mobilize the co-operative efforts of all members of the community in the pursuit of self-help and other measures for total development.

This project involved workshops for training of the fire guardians in the Caura Valley, mapping of fire trails with a GIS, developing a system of monitoring and recording the activities of fire guardians, developing eco-tourist trails in the Caura Valley from the fire trails, and recording and documenting the challenges and barriers in implementing the PES model. Such a project is well placed within the GEF's focal areas of biodiversity conservation, climate change and land degradation. The project also focuses on capacity building within communities, and developing

sustainable livelihoods. The project also acts as a pilot project to test a small-scale community payment for ecosystem services (PES) scheme; the results of this pilot will be used to make an application to the Green Fund of T&T to support a larger PES project in the Caura Valley.

Environmental and Socio-Economic Impact

A fire guardian system has been developed that comprises approximately 12 members of the Caura Community who are responsible for cutting and maintaining fire trails and working with the national Fire Services Authority to contain and suppress fires when and where they occur. 6km of fire tails have been cut including, one main fire trail and several smaller trails.

The project has resulted in Greater awareness among members of the Caura Valley community regarding the importance and value of ecosystem services there. Community participation has been an integral part of the project from conceptualizing of the idea to participation in development of the completed proposal. 50 community members from Upper Caura Valley have directly benefited from the project. They have gained skills in forest and forest fire management and GIS mapping. The commitment of the Caura community to sound ecosystem-based environmental management practices has provided the motivation and impetus for continuation of the actions proposed in this project and building capacity in the community as a means of sustaining livelihoods.

Policy Impact

This project is linked to a national initiative being undertaken by the University of the West Indies (UWI) St. Augustine Campus, called the Project for Ecosystem Services, focused on determining the economic value of regulating ecosystem services, towards inclusion of these services in the national accounts of T&T.

The project also aligns with the National Reforestation Programme which has been ongoing in key areas of the Valley since 2009. The present reforestation initiative and the CVVC project are linked in that they have the same desired objective; the preservation of a

forest eco-system primarily through managing forest fires. This project also assists the Forestry Division's National fire management programme to help manage the Northern Range watersheds against fires.

Replication and Upscaling

A workshop will be held in the final month of the project, to disseminate the results of the PES pilot project and to give stakeholders an opportunity to share ideas and discuss PES approaches and the benefits and challenges of implementing these. The Green Fund and the UWI will be among key stakeholders invited to this workshop.

The Community of Caura recognize the importance of the ecosystems there for providing services that are vital to human well-being, and as such have for decades undertaken measures to protect those ecosystems. The commitment of the Caura community to sound ecosystem-based environmental management practices will provide the motivation and impetus for continuation of the actions proposed in this project and future projects in other communities in T & T.

Partnerships

Key partners include: the National Association of Village and Community councils (this is the National body for all Village and Community Councils in Trinidad and Tobago), St. George East Branch Association of Village and Community Councils, Caura Women's Empowerment Group, Caura Valley Farmers Association, Caura Valley Hiking Clip and the Forestry Division.



• The organisation's mission is to conserve the St. Ann's watershed, using ecological restorative methods;" it is committed to developing and uplifting the community through activities that enhance the environment. ? ?





CHILDREN'S WATER CAMPS PROGRAMME IN RURAL AND URBAN COMMUNITIES IN TRINIDAD AND TOBAGO

Project No: TRI/SGP/OP5/Y1/CORE/12/07 Grantee: Institute of Gender and Developmental Studies Location: Biche and Matelot SGP Contribution: US \$46 114 Cash Co-Financing: In-Kind Co-Financing: US\$ Project Duration: 10 months Number of people served: Approximately 140 persons Focal area: Multifocal

Background

The Institute for Gender and Development Studies (IGDS)/Women Gender Water Network (WGWN) is a group of UWI researchers as well as practitioners from governmental and non-governmental organisations and community members, from T &T and across the Caribbean. The WGWN emerged out of the experience of a research project entitled, *The Nariva Swamp: a Gendered Case Study in WetlandResource Management*, which was carried out by the IGDS, St Augustine (1998-2000). One of the many issues that arose out of the Nariva project was that water-related issues were not sufficiently examined. The WGWN creates opportunities for training and sharing of knowledge within the field of women, water and gender studies, and thus bringing researchers and practitioners closer together in solving the challenges related to gender, water, water use and management.

Project Objectives and Key Activities

The objective of the Children Water Camps is to provide campers with a fun experience in green living, while at the same time allowing them to explore the relationship and role of water in the production and manufacture of our food. It aims to: train personnel to provide them with the knowledge and skills to execute the camps; provide the tools, technology, knowledge and instructions necessary for facilitators to ensure the institutional memory remains within each community and can be used in other ventures; promote respect, increase awareness and understanding about water, its use and sustainable management among children and create an environment where children can interact socially, and be provided with an opportunity to form strong bonds to help in the protection our water resources.

Follow up activities are planned, including children teaching children activities where the campers do a session with their schools, parents and community to highlight what they have learnt during the camp. Another follow-up activity is the development of water networks within the communities that will monitor the quality of neighbouring water resources and promote activities that will improve/maintain high water quality standards.

Environmental and Socio-Economic Impact

The impact of the programme is long term and far reaching. It is meant to influence people's water practices in Trinidad and Tobago communities through teaching children who, it is believed, can be key agents of change intheir families/households and communities. It is hoped that lessons learnt in this Programme can be used to develop similar educational programmes for children in Trinidad and Tobago, the Caribbean and elsewhere.

Thus far 17 persons have been trained in the Water Camps Train-the-Trainers Programme, 8 of whom were assigned to the Biche and Matelot camps. 104 children attended the Matelot and Biche camps. A Chief Facilitator and 5 facilitators worked in each camp. By the children taking the lessons learnt about water use and management, and food production and practicing them at home and school. The hope is that these messages will be disseminated widely through their example to their family members, teachers and classmates who did not attend the camps.

Project Success/ Lessons Learnt

The IGDS/WGWN will hold discussions with the Ministry of Education on the use and distribution of Children Water Education learning and teaching tools generated in the camps in the primary school system. In addition, resources produced during the camps (children and water learning tools for children and instructors, photographs, video clips, reports, etc.) will be made available online for use by the wider community.

The children were engaged by the presentations and activities and showed retention and practice of what they were taught through follow up visits and testimonials by parents and guardians. Community Members received training on these strategies and were able to teach the children what they learnt during the camp as well. 6 The organisation's mission is to produce and disseminate knowledge to transform gender relations in the Caribbean in support of the UWI's mission to enhance regional and international development 99







ISSUES OF SUSTAINABLE DEVELOPMENT FOR MARACAS VALLEY

Project No: TRI/OP4/CORE/08/02 Grantee: Maracas Valley Action Committee Location: Maracas Valley,St Joseph, Trinidad SGP Contribution: US \$49 020 Cash Co-Financing: N/A In-Kind Co-Financing: US \$27 363 Project Duration: 14 months Number of people served: 500 Focal area: Biodiversity Land Degredation

Background

The Maracas Valley, a relatively pristine area in the Northern range, has been subjected to major development in recent years, namely the construction of houses and the expansion of schools and quarries. This type of development significantly affects this watershed area. It reduces the area of forest cover and thus reduces water supply, it affects the riverine environment, results in noise and dust pollution and traffic congestion and damages the one access road in the area. Sedimentationfrom quarrying also negatively affects water quality and contributes to higher costs of treatment.The Maracas Valley Action Committee (MVAC) is a nonprofit CBO formed out of a concern about the degradation of the hillsides due to slash and burn farming and the increase in quarrying. The MVAC promotes the maintenance, restoration and enhancement of the Maracas Valley environment with an emphasis on community participation and empowerment.

Project Objectives and Key Activities

The main goal of the GEF SGP funded project was to establish the sustainable carrying capacity of the Maracas Valley based on past, present and future trends. The outcome would be aparticipatory-based plan which would serve to inform regional and national policy relating to the ecological, economic and socio-cultural aspects of the Maracas Valley.

The five key project activities included: a series of stakeholder/community consultations with an emphasis on participatory and inclusive approaches; a socio-economic study including house to house surveys in the study area; a land use study including the development of a Geographical Information System (GIS); an environmental study to evaluate the effect of changes in land use patterns and qualitative economic valuation. Based on these activities, challenges and mitigation measures were identified and conclusions and recommendations were developed.

Environmental and Socio-Economic Impact

Though the bulk of the project's recommendations for sustainable development have yet to be implemented, MVAC communication and lobbying efforts have been relentless and there is definitely an enhanced awareness among both Maracas Valley Residents and government bodies towards issues of sustainable development. Controversial projects such as the issuance of new quarry licenses in have possibly lost momentum as aresult of MVAC studies and activities demonstrating the qualitative and quantitative negative effects these controversial projects. The MVAC profile has certainly been raised as a consequence of the GEF project and the Association is regularly solicited by both Maracas Valley residents/communities and government bodies in development and dealing with issues.

Partnerships

The MVAC has working relations with the National Reforestation and Watershed Rehabilitation Programme, Forestry Division, Acono Village Dynamic Action Committee, La Seiva Village Council, UWI, UTT and The Cropper Foundation.

Lessons Learnt

The following factors contributed towards a successful project outcome: dedication of the project team and substantial amount of pro-bono work; quality of the various inputs from qualified professionals; engagement of the various community groups within Maracas Valley; collaboration with private and public entities which facilitated data collection and analysis and successful communication strategies.



66 The organisation's mission is to promote maintenance, restoration and enhancement of Maracas Valley's natural and man-made environment emphasizing on community responsibility, transparency and the value of public participation in the decision making process of the relevant public authorities or bodies concerned with the development of the Maracas Valley ??





PLANNING GRANT: TRINIDAD EAST COAST SEA TURTLE BYCATCH REDUCTION PROJECT

Project No: TRI/SGP/OP5/Y1/CORE/BD/12/05 Grantee: Nature Seekers Incorporated Location: North and East Coasts of Trinidad SGP Contribution: US \$3 983 Cash Co-Financing: N/A In-Kind Co-Financing: US \$6 230 Project Duration: 4 months Number of people served: N/A Focal area: Biodiversity

Background

This project seeks support to conduct a feasibility study on providing live bait to fishers on the North and East coasts of Trinidad, so that fishers will reduce their use of gillnet fishing gear which is incredibly destructive to endangered leatherback sea turtles. Each year more than 1,000 leatherback sea turtles drown in the coastal gillnets of Trinidad. This accidental mortality jeopardizes leatherback populations, and significantly affects tourism and the economy of North Eastern communities. It also jeopardizes fisher income as the damage caused to the nets by the turtle entanglement is highly detrimental to fisher livelihoods. Fishers working on the North and East coasts prefer to fish with live bait using turtle safe hook-and-line fishing methods, but lack of a steady bait supply has led them to use non-selective and environmentally destructive gillnet methods.

Project Objectives and Key Activities

Nature Seekers is a non-profit community based organisation with a focus on the conservation of Leatherback Sea Turtles. With grant funding from the GEF/SGP, the project seeks to evaluate the feasibility of a commercial system for generating live bait for the fishers on the North and East Coast. It has long been believed by Trinidad fishers the live bait fishing using "joshua" (sardine species) is preferable to gillnet fishing. However, lack of live bait on the NE coast of Trinidad has precluded such fishing during turtle nesting

season. Joshua is readily available in NW Trinidad during certain times of the year. The project will evaluate the logistics of catching or harvesting the live bait in the area; such as at Balandra bay. It will also evaluate the cost benefit associated with transporting the live bait and determine if transporting and retaining live bait at Matura to Matelot is feasible. This project will use a commercial live fish transport tank to haul bait from NW Trinidad to bait holding pens on the East and North coast. Live bait will be sold to local fishers from these bait pens. The feasibility of setting up an aquaculture system for rearing live bait on the east coast will also be determined.

Environmental and Socio-Economic Impact

The project resulted in greater interaction between the fishers and Nature Seekers. This project created the best platform to interact with the fishers in an attempt to find a solution to a common problem. Both fishers and Nature Seekers want to reduce the bycatch of marine turtles from existing fishingmethods. It was the first time the fishermen saw project suggestions as being good and beneficial to them. These benefits include: training young fishers, helping them increase the value of fish downstream and providing alternative fishing gear.

Replication and Upscaling

Future plans are focused on achieving various objectives such as: creation of awareness within the region on ways to improve and better manage the industry; reduction of the incidental catch of turtles in nets; strengthening of the fishing associations and turtle community groups to work together to improve the fishing industry in the area; expansion of the entrepreneurial opportunities to fishermen by the development of downstream industry and improving the governance of the fishing industry on the NE coast. These objectives can be addressed in future projects.

Lessons learned

It was quite clear that fishermen are just as eager to solve the bycatch problem as are the NGOs and the relevant governmental agencies. It was decided that the best solution would be the creation of opportunities to allow fishers to change their behaviour. Hence project solutions focus on the fishermen and their livelihoods and it is hoped that the indirect outcome will be the protection of the turtles.

Partnerships

This project has been implemented in partnership with the Environmental Management Authority (EMA) and The Wider Caribbean Sea Turtle Conservation Network (WIDECAST).

The organisation's mission is to protect and conserve wild flora and fauna by developing the natural and cultural resources of the community and providing superior quality products and services for our customers & partners to achieve long term valued relationships 99





CAPACITY DEVELOPMENT PROGRAMME 2012- ESTABLISHING SUSTAINABLE ECO-TOURISM FOR THE CHARLOTTEVILLE COMMUNITY THROUGH SEA-TURTLE CONSERVATION

Project No : TRI/SGP/OP5/Y1/CORE/BD/12/02 Grantee: North East Sea Turtles Location: Charlotteville, Tobago SGP Contribution: US \$37 041 Cash Co-Financing: N/A In-Kind Co-Financing: US \$6444 Project Duration: 1 year Number of people served: TBD Focal area: Biodiversity

Background

North East Sea Turtles (NEST) is a small-scale environmental CBO based in Charlotteville that aspires to protect the natural environment of the sea turtles in the North of Tobago. As one of the only locations on the island to see three nesting marine turtle species frequent the beaches: the Leatherback, Dermochelys coriacea, Hawksbill, Eretmochelys Imbricata, and Green Chelonias mydas, Charlotteville has the unique potential to diversify her economy into eco-tourism through NEST. However, environmental literacy is desperately concerning. Despite legislation stating otherwise, turtles in Charlotteville (and throughout much of Tobago) are eagerly sought after and whilst current laws prohibit the taking of nesting females and eggs, they are simply not enforced and thus the threat of illegal poaching faces every turtle that emerges to lay in Tobago. Despite NEST having been in existence since 2004, a myriad of hindrances - relational, topographic and financial - have prevented Charlotteville's beaches from receiving frequent sea-turtle conservation efforts throughout the past decade. As a result, the state of sea-turtle populations in the North of Tobago is presently unknown and for the most part environmental literacy remains unchanged – the economic and ecological value of the nesting sea-turtles remains to be appreciated.

Project Objectives and Key Activities

With funding from GEF SGP for a 12 month project, NEST aims to establish sustainable eco-tourism for the Charlotteville community through sea-turtle conservation which is anticipated to result from improving

sustainability of protected areas through community-based actions. A Project Coordinator provides leadership, training and helps to enable cohesion within the group and to further heighten environmental awareness and stewardship within the community. The project involves a three-phase activity program consisting of training, beach, turtle and hatchling monitoring and community stewardship (community outreach, radio programmes, workshops) executed by NEST. Through the implementation and success of these activities it is anticipated that foundation will be securely in place to establish sustainable eco-tourism.

Environmental and Social Impact

Thus far 17 NEST members have received training and gained experience in sea turtle monitoring practices. 14 nesting sites have been monitored and 98 tags have been applied to turtles. There has also been increased knowledge and participation with other environmental CBOs and NGOs. Capacity has been increased through workshops, first-aid training and computer literacy training. School students have gained knowledge of the importance of sea turtles and conservation issues in Tobago. Charlotteville community members have experienced revenue increases from volunteers and visitors for turtle watching tours with NEST. Approximately TT\$ 100 200 has been paid into the Charlotteville economy over a 12 week period. Illegal poaching still remains a problem; however poaching activity has been significantly reduced since extensive breach paroles have increased since 2012.

Lessons Learnt

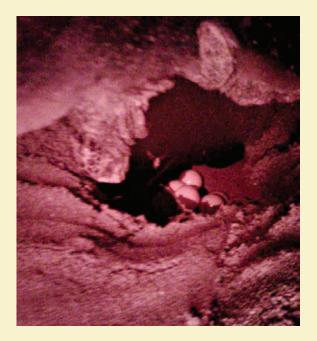
One challenge noted during project implementation was the lack of understanding about the NEST organisation, its capacity to implement and the level of 'buy-in' from NEST members. Essentially the baseline level of cohesion and organisation, activity, self-motivation, willingness, manpower, resources and ultimately ability to implement within NEST was inadequate and misaligned with the obligations of the UNDP-SGP project. Hence it was evident that organisation strengthening and development were needed and that the NEST organisation would have to be built from the foundations parallel to the implementation of the project to ensure project success. Recommendations for NGO strengthening include technical training, capacity building, recruiting of dedicated members and a baseline organisation assessment.

Partnerships

To ensure success and community participation, this project has engaged various organisations thus far including: NEST; volunteers from the Glasgow University; local fishermen/women; The Speyside Eco-Marine Park Rangers (SEMPR); Environment TOBAGO; Save Our Sea Turtles Tobago (SOS Tobago); Honorary Game Wardens from the Department Of Natural Resources and the Environment (DNRE); Nature Seekers, Trinidad; The Charlotteville Library, school and Radio Tambrin. The main target audience, the Charlotteville community, are expected to benefit not only in terms of empowering the locals to take pride in their environment, nor just encouraging an alternative form of revenue to the village community but also improving their local, regional and global networking.

66 The organisation's mission is to monitor and protect the sea turtles; whilst at the same time striving to encourage the ecological and economic wealth that the turtles bring to the local community **99**





BIODIVERSITY – LINKAGES & HUMANS

Project No: TRI/SGP/OP5/CORE/BD/11/01 Grantee: Pointe-a-Pierre Wildfowl Trust Location: South & Central Trinidad SGP Contribution:US \$50 000 Cash Co-Financing: US \$20 590 In-Kind Co-Financing:US \$227 413 Project Duration: 2 years Number of people served: 144 schools Focal area: Biodiversity

Background

Wetlands are one of the most bio-diverse and productive ecosystems on the planet and perform a variety of vital ecosystem services. However, there is a significant lack of understanding and hence appreciation for biodiversity (in particular wetlands and waterfowl) and the linkage that exists between biodiversity and man in Trinidad and Tobago. The health, resilience and resistance of these systems are threatened as a result of the pressures exerted by humans namely pollution and climate change, over-hunting and over-harvesting, habitat destruction and fragmentation, invasive species and the illegal trade of flora and fauna. It is imperative that these resources are conserved and that people are educated about their importance.

Project Objectives and Key Activities

With the support of the GEF SGP the Pointe-a-Pierre Wildfowl Trust (PaPWFT) received grant funding in 2011 for a two year Biodiversity-Linkages & Humans project. The PaPWFT is a local environmental NGO focused on raising awareness on environmental issues concerning biodiversity and wetlands. The Trust is also involved in the captive breeding of locally endangered waterfowl for reintroduction into wetlands in T&T.

Additionally the PaPWFT promotes and implements the judicious use of our natural assets and lobbies for improved environmental policies, and the conservation and wise use of our natural resources.

The main aim of the project is to promote and expand the knowledge base regarding the importance of waterfowl and how they relate to, and affect biodiversity and humans in Trinidad and Tobago. The project has a specific focus on: establishing the link between biodiversity and humans and establishing the link between biodiversity, wetlands and waterfowl.

Specific project activities include in-house and outreach 'Biodiversity and Man' education programmes and teachers' and community workshops which will be delivered to primary and secondary schools and communities in Central & South Trinidad. Local communities have been encouraged to initiate, plan, establish, and carry out various types of community projects such as tree planting and clean-up activities. Educational material such as a wetland teacher's pack, books, posters, games and brochures have been published and distributed. The project has also facilitated the importation, captive breeding and reintroduction of 2 endangered waterfowl species namely the white faced whistling duck (Dendrocygna viduata) and white cheeked pintail (Anas bahamensis), in Trinidad and Tobago. A domesticated Muscovy breeding programme will be established by members of the local schools and communities with the guidance and assistance from thePaPWFT. Success and sustainability of the project has been achieved thus far through continuous communication between schools, communities and the PaPWFT.

Environmental & Socio-Economic Impact

The knowledge gained from the education programmes, educational material and the Muscovy breeding programme has increased the understanding and appreciation for biodiversity, wetlands and waterfowl of Trinidad and Tobago. Students, teachers, parents and members of the local community have started to make the link between biodiversity and humans and are appreciating how vital biodiversity is to health and well-being. Thus far 4704 students and 440 teachers have benefited from the biodiversity education programmes and workshops. 144 schools have received biodiversity books, brochures, posters and teachers' packs. Many schools have started kitchen gardens and environmental clubs. The PaPWFT also held a Biodiversity, Wetland and Waterfowl Art competition

where 30 primary and secondary schools submitted creative art pieces. 2 schools have participated in tree planting activities. Feedback received from verbal communication and questionnaires distributed to teachers indicate that there has been some positive change in the way students and teachers relate to the environment. Many indicated that they are practising 'green' activities at home.

Sustainable livelihoods will be generated from the harvesting/sale of Muscovy ducks. The Muscovy breeding programme will be conducted with 3 community organizations and neighbouring schools in 2013. Its aim is to reduce hunting pressures on wild ducks, create jobs and generate income ensuring the sustainability of the programme. The programme will create an action oriented community and a school population, better aware and appreciative of the linkages between biodiversity and humans.

Replication and Upscaling

Thus far the project has made significants impacts in terms of educating students, teachers and communities on issues affecting biodiversity. However much more need to be done in terms of education. As such this project can be expanded to include more schools in other regions of Trinidad as well as schools and communities in Tobago. Future projects and activities can be designed to continue to address the knowledge gap concerning biodiversity and follow up on the progress being made by schools and communitied that have already benefited form the programme.

Partners

Thus far the main partners of the programme have been primary and secondary schools in South and Central Trinidad. The Sylvan Heights Waterfowl Institution in North Carolina has been closely involved in importing the 2 species of waterfowl.

• The organisation's mission is to Know is to Love, To Love is to Preserve 99





MAINSTREAMING RENEWABLE ENERGY RESOURCES IN SECONDARY SCHOOL LABS AND RAISING YOUTH AWARENESS ON DIVERSIFIED ALTERNATIVE ENERGY SOLUTIONS IN T&T

Project No: TRI/SGP/OP4/Y2/CORE/2009/06 Grantee: United Nations Association of T&T Location: Trinity College, Moka, Barataria South Secondary, El Dorado East, Arima North Secondary Mayaro Composite, Presentation College, Speyside, Trinity College East SGP Contribution: US \$47 772 Cash Co-Financing: In-Kind Co-Financing: US \$7 405 Project Duration: 4 months Number of people served: Focal area: Climate Change

Background

The research, development and use of Alternative and Renewable Energy Resources (ARERs) have increased within the last decade in the Caribbean Region. In addition, the Caribbean and Trinidad and Tobago in particular are endowed with the ideal environmental characteristics to facilitate the utilisation of value added technologies which harness and embrace solar energy resources. However, there is a noticeable deficiency in relation to the awareness, responsiveness and understanding of ARERs in this regard. Consequently, little or no energies have been expended in taking advantage of this natural resource as a means for energy efficient power generation.

Project Objectives and Key Activities

This project was intended to introduce the concept, value and use of alternative energy resources. The main objective of the project was to mainstream alternative energy in the secondary school system in Trinidad and Tobago, by installing solar energy devices in schools located in different communities across the country.

Sensitization and mentorship programmes were employed to inform students and teachers about solar energy generation and management systems being implemented in their work and school environments. These programmes took the form originally proposed by UNATT and the Rotary Club of Central Port of Spain.

By working with the schools, this project was expected to reach out to several communities, strengthening capacity at various levels. Students and teachers would be encouraged to share their knowledge and experience with their families and their wider community. The project aimed to directly reduce Green House Gas Emissions (GHGEs)

as a consequence of the adoption and direct application of solar energy.

Environmental and Social Impact

It is hoped that this project will advance the interest for in-depth alternative energy research and eventually an energy security revolution which will enable us to become independent of fossil fuels and more efficient in solar energy use.

The project provided an opportunity for the use of cheaper, cleaner energy sources in the **7 target** secondary schools throughout Trinidad and Tobago. Not only does it provide an avenue for reducing rising utility prices, but it also assists in safeguarding the environment in an economical way. Promotion of clean air, green environments and minimal waste by-products from petroleum electricity generation serve as an aid in the ecological sustainability process. It can provide jobs in the renewable energy field for citizens who will eventually be supported by the design and development of training and degree programmes in solar energy management systems and energy security and conservation.

Lessons learned

A post-project arrangement is required to ensure continuity and sustainability of the project, training and a broader involvement of other schools and the community. The implementation of the project revealed that most of the persons involved in the project did not know very much or anything at all about Alternative and Renewable Energy. However, one or two students who were craving for this knowledge and had some idea of the process were pleased to know that there was a window of opportunity for them to experiment and obtain hands-on training in the process.

There is need for continuous training, on a yearly basis, for those who have been exposed to the training as well as the teachers in the schools who are in charge of the projects in the schools. There is need to involve all the partners early in the planning of the project and to ensure that the persons identified to manage the project are trained as well.

Partnerships

Partners of the project include: the Rotary Club of Central Port-of-Spain, Ministry of Education, Ministry of Energy and Energy Affairs and the schools - Arima Senior Comprehensive School, Presentation College, San Fernando, Speyside High School, Tobago, Mayaro Composite School, Trinity College, Moka, El Dorado East Secondary School, Barataria South Secondary School, Trinity College East, Trincity.



• • The organisation's mission is to promote the full participation of all peoples in the pursuit of human progress by complementing and supporting the efforts of the united nations system through the dissemination of information to increase public awareness and understanding of its work and achievements, and to be a catalyst for the implementation of the united nations charter ??









GEF Small Grants Programme United Nations Development Programme







For more information please contact: GEF Small Grants Programme United Nations Development Programme UN House 3A Chancery Lane, Port of Spain

Phone: 623 - 7056 Fax: 623 - 1658 Email: registry.tt@undp.org; gefsgp.tt@gmail.com

Copyright GEF Small Grants Programme Trinidad and Tobago, 2013