

**TRINIDAD AND TOBAGO NATIONAL AWARENESS SEMINAR FOR
THE DEVELOPMENT OF THE NATIONAL ACTION PLAN FOR THE
IMPLEMENTATION OF THE UNITED NATIONS CONVENTION TO
COMBAT DESERTIFICATION (UNCCD)**

FRIDAY 17TH DECEMBER 2004

CARONI VISITORS' CENTER, CARONI

WELCOME ADDRESS

The welcome address was done by Mr. Ken Roach from the Ministry of Public Utilities and the Environment

FEATURE ADDRESS

Honourable Penelope Beckles

Minister, Ministry of Public Utilities and the Environment

This is our fourth consultation; we have had Arima, San Fernando, Tobago and then here in Caroni. To date all consultations have been well attended and have had really good responses. I am very pleased that we are able to have these consultations completed.

I have attended all four consultations. I have not stayed for the entire day for all four but like today, today is Parliament so I will only be staying for the morning period but I have been able to listen to all the presentations and I would like to personally thank all of them for their commitment shown in assisting the Ministry in having the process completed. I want to particularly thank the Committee that was responsible for organizing this consultation. I attended a conference in Brussels and returned on Monday and there are 79 ACP countries that are responsible for developing their action plan for this Convention and there are only nine countries that have not completed and Trinidad is one of the nine. Notwithstanding the fact that we have taken some time, we would be able to complete ours in June. As I said in Tobago there was a commitment to assist us with the funds to do this action programme and the funds took a little while to come and in fact we have not yet received the funds and that have been one of the reasons for the delay but together with the committee I agree it is the government responsibility to have the programme done, the action plan done and I took a note to the Cabinet and got the approval to do the consultations and we were able to have them completed.

At the launch of the fire season, the Forestry Division of the Ministry on 1st December launched what is called the fire season and the forecast by the MET Services is that next year will be one of the driest years seen in the country. If you look at today's papers where they are talking about global warming and climate change, the forecast is that over the next couple of years we would have increases in natural disasters and climate around the world changing and we would likely to have a drought. Now assuming that is correct we understand the importance of this exercise. Even if we argue that we are meeting an international commitment, the fact is that this exercise is very important to this country if we are to make the kind of decisions that are important in terms of the way forward. And whilst we talk about the concept of desertification as defined by the Convention, we are really referring mainly to a process whereby productive lands are transformed over time to unproductive lands. But in Trinidad and Tobago when we talk about land degradation, which is as a result of poor land management and the consequences been downstream flooding, landslides, mudslides, erosion, reduction in food production, reduction in soil productivity, damage to vegetation, reduction in land resilience, and reduction in water availability. The long-term effects of land degradation are extremely worrisome. They have not just dealt with the issue of desertification but they have included land degradation because desertification would have mainly applied to a lot of African countries but land degradation is what is really important to us. The consequences over the last couple of months has come straight home to us about some of our practices in relation to the hills, which of course relates to the whole issue of watershed, the availability of water and quality of water that we see.

I just want to make the point that the purpose of the exercise is to get your help as citizens, NGOs, members of other agencies that would assist the government in the development of the action plan. That is the purpose of today's meeting. We would have persons making presentations from different agencies but having made those presentations based on your experiences in your respective areas, we would really be asking you'll having listened to those presentations and based on what you know to assist us in developing that action plan. It is expected that that national action programme would assist in terms of specifying the role of the government, in terms of incorporating the long-term strategies to combat land degradation and be integrated with national policies for sustainable development. it will provide for effective participation at the local, national and regional levels of non-governmental organizations and local populations, to enhance national climatologically, meteorological and hydrological capabilities, enhance the implementation of preventative measures for lands that are not yet degraded or which are only slightly degraded; and allow for flexibility in response to changing circumstances at the local levels to cope with different socioeconomic, biological and geophysical conditions.

In closing I would like to express my thanks to the national coordinating body. I know that some people who may be a little skeptical about the exercise because of the length of time we have taken and the fact that some of these consultations did not yield some of the deliverables for which they think the country deserves. The truth is that we have had some good responses and in terms of some of the other things that the Ministry has been doing over the last year, we think this will help us to better in terms of improving the environment. We have been able to complete the consultations on the environment and complete the environmental policies. That was completed last year. The EMA Board has now approved that and the 30 day requirement for comments from the public by law should allow us to have that policy approved and taken to Cabinet so that your concerns in relation to the beverage container rule, the water pollution rule, hazardous substance rule and the air pollution rule can finally see the light of day. That of course is all related with what we doing here today. So I just want to let you know that we are very busy doing a number of things. We really look forward to the continued collaboration that started between the NGOs and the civil society because it could really bear fruits in terms of both the legislation and the programme that would be developed. I am looking forward to the national action plan been completed. And again I really want to say thanks to those who have spent all their time in the last four consultations making their presentations to help us. They did a really good job.

Thank you again.

CRITICAL LAND DEGRADATION ISSUES IN TRINIDAD AND TOBAGO

*Mr. Kenneth Roach, Senior Sector Specialist
Ministry of Public Utilities and the Environment*

Introduction

The Convention aims to promote effective action to combat desertification and mitigate its effects through innovative action programmes at the national, sub-regional and regional levels, and supportive international partnerships.

There are other important agencies for the prevention of land degradation and the implementation of UNCCD in Trinidad and Tobago.

- Ministry of Planning and Development
- Ministry of Local Government
- Tobago House of Assembly
- Ministry of Agriculture, Land and Marine Resources
- Chemistry/Food and Drugs Division
- Ministry of Energy and Energy Industries
- Lands and Surveys Division/Commissioner of State Lands
- Land Administration Division
- Land Settlements Agency
- Drainage Division, Ministry of Works

Linkages and Synergies with other UN Conventions

Trinidad and Tobago signed the Convention on Biological Diversity at the Rio Conference in June 1992 and ratified in August 1994. To date Trinidad and Tobago has developed its National Biodiversity Strategic Action Plan (NBSAP) which was developed in 2001. There are a number of synergies between implementation of the Convention of Biological Diversity (CBD) and the UNCCD. The Convention of Biological Diversity basically deals with threats to biodiversity is related to changing and land use and habitat destruction.

Another convention of importance is the United Nations Framework Convention on Climate Change (UNFCCC). Trinidad and Tobago acceded to this in June 1994 and to date we have submitted the initial communications which is like a first national report in June 2001 and currently developing our second national report or communication. Many of the activities to be undertaken in support of the UNFCCC are supportive of implementation of the UNCCD:

- enhancing agricultural management practices
- preserving forests
- reducing waste
- protecting the coastal areas

Another is the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention). Initiatives to implement the Ramsar Convention have led to a strengthening of national policy and organization framework for wetland conservation.

Recommendations to Improve the Implementation of UNCCD in Trinidad and Tobago

We are suggesting that to establish and maintain the UNCCD in Trinidad and Tobago we should:

- Strengthen the National Focal Point
- Develop a National Action Programme
- Enhancement of national physical development planning
- Enhancement of legal framework
- Enhancement of soil conservation practices
- Enhancement of practices in agricultural chemical use
- Enhancement of fire prevention and control measures

National Reforestation Project
Dr. Pascal Osuji, Project Coordinator
Ministry of Public Utilities and the Environment

With the background you have been given on UN Convention on desertification and the development of the necessary National Action Plan to mitigate the effects of land degradation, our government undertook a major initiative in setting up a programme within the MPUE, the programme is called the national reforestation and watershed rehabilitation programme. Within that name you would see that it response to most of the issues Mr. Roach referred to. What we do in the programme is to identify those areas that are degraded because of these other factors that we identified and attempt to mitigate the effects of degradation through reforestation, by which we mean, the planting or replanting of those areas with selected species, selected because they are suited to the areas, additionally, the objective of enhancing biodiversity, particularly wildlife biodiversity. So we select traditional fruits that encourage the development of wildlife.

The other programme that we attach a lot of importance to is fire prevention. The programme is community-base. Our groups are busy cutting fire traces to protect the over 11,000 acres that we are protecting this year. There will be these community groups that have been selected from people around the areas that they are affected so that they are living to close proximity to the affected areas and therefore quickly respond to any emergencies that might arise, for example, a fire. There are other component of the programme, the major one been watershed rehabilitation. As you know our water supply relies on the rain collecting in the aquifers and been harvested in whatever form be it surface or through boreholes. So behooves us to make sure that we protect our watershed in order to ensure that our water supplies are guaranteed not only for the present generation but also for future generation. The Programme has a lot of training and capacity-building.

Question

To date how many acres do you have?

Response

Over 11,000 acres.

Question

What areas were those acres?

Response

They range from the Northern range as far as Matura and down east to Toco and all areas in between. In Trinidad we have about 47 communities protecting an average of 250 to 500 acres of forest.

Question

Do you have any projects in Maracas Watershed?

Response

Yes, we have two projects in Maracas Valley, the Wharf Trace Community Council and the Maracas Valley Community and they are protecting between them about 1,000 acres of land. Those are the two areas that borders on the Maracas Watershed.

Question

Are the communities being paid for their work?

Response

In addition to the objectives identified we are also interested in enhancing sustainable livelihood among the communities. The idea being that if the communities do not have sources of sustainable livelihood they will not be able, in the long run, to sustainably protect the forest. So in fact I have not talked about the agro-forestry dimension of the programme because we intend to also contribute to the national security through the growing of agricultural crops alongside the forest. The communities are being paid.

Question

How do they protect the forest?

Response

One is through replanting of the areas that have been deforested. We supply the seedlings and they plant and protect them and to make sure whatever they plant do survive and grow into healthy plants.

Question

What about the illegal harvesting of the forest?

Response

The policing of the forest is the responsibility of the Forestry Division, that is enforcement.

We are not involved in fire fighting. Fire fighting is the responsibility of the fire service. But we train our people in fire suppression, and building fire traces and fire patrol to detect the fires. We are going to see the results of our efforts next year during the coming dry season.

Ms Penelope Beckles

Just to remember that this project is under the Ministry of Public Utilities and the Environment so we have the benefits of the Forestry Division and their expertise are to the assist the project in some of the things that Ms. Hilton is asking as well as SWMCOL, EMA, IMA, WASA, so that we are utilizing the benefit of all the different agencies that will really make the project successful.

Question

Within the reforestation programme have you looked at wildlife reforestation?

Response

Where that has been considered necessary we are doing it, for example, in the Nariva Swamp. We have community group dealing with that.

Impact of Agriculture on Land Degradation in Trinidad and Tobago

Dr. Ian Rampersad, Soil Scientist

Ministry of Agriculture, Land and Marine Resources

We deal with methods that deal with what causes land degradation in terms of agriculture. Although agricultural activities do contribute to land degradation there are some aspects which impact on agriculture that assist in land degradation. How many of us go a gas station or mechanic shop where they throw old oil down the drain and goes down into the water courses and the agriculturalist use that same water that contains oil in it and irrigate their crops. That is pollution of the soil. There is slash and burn is a particular case. Though slash and burn causes erosion they are other contributing factors lower down stream which contribute to the flooding of agricultural lands, in that people dump, throw bamboo into water course which block the cylinders and when the deluge comes it overflows onto the banks. Flooding does not only kill the plant but destroys the soil structure. It is a sort of capping of the soil and no air gets into the soil as a result crops cannot survive.

Another aspect is that farmers particularly like to use cocktails. Now if there is one chemical to do a particular job they tend to use a mix and when you mix chemicals in this cocktail you make create a more toxic product which may have residual effects on the land and interferes later on because it stays on the land and contribute to the non-productivity of these soils.

I have been involved in the one programme, the Tropical Relieve Foundation, which is a CBO where the community assists in something similar to what is happening under the aegis of the Ministry. This one was headed by Mr. Shan and I was responsible for all those lime green areas which are really guinea grass covered area. What has happen there is that because of the fires and the consequence rainfall the soil is loss. In some areas the soil is just two inches deep whereas in the protected area just above it could be just about six to eight inches before you reach the rock. So by removing the natural vegetation particularly on the slopes of the Northern Range and on the central ranges you then to get a lot of soil loss, increase runoff into the rivers and increase sedimentation of these rivers which later requires desilting of rivers, flooding of the down stream, and our old way of polluting in Trinidad, e.g., mechanic shops, gas stations, chemical and other areas.

Dr. Pascal Osuji

I think Ian said some referred to something which I missed in my presentation that is the work of the Tropical Relieve Foundation. We are collaborating with them in

Carenage, Bon Aire and other areas where we are having discussions in collaborating at this point in time.

Question by Minister Penelope Beckles

What I am finding in terms of my constitution that had 29 landslides in the last week or so, it is related to the issue of nature and land degradation as distinct from man. We tend to focus a lot on man and not on nature. I would like to hear a comment on the soil been saturated and how that affects some of the issues because I don't think we really deal with that a lot. In those areas where we do have the natural forest cover but it appears to me that when you have rainfall as we have been having that the soil becomes so saturated.

Response by Mr. Rampersad

What happens with the soil been saturated, particularly on the Northern Range when the water reaches the bedrock and causes pressure on the land, and it tends to slip off. As in the southern basin, these are more clayey soil and are more prone to land slippage. On the northern range is the bedrock and the saturation of the soil that causes the slippage.

Impact of Solid/Liquid Waste on Land Degradation in Trinidad and Tobago

Mr. Alban Scott, Manager of Environmental Projects

The Trinidad and Tobago Solid Waste Management Company Limited

Everything we do produces waste and we live in one globe where nothing comes in and nothing goes out. Therefore regardless of forest or whatever we do as long as we are producing waste we are going to eventually cause some form of degradation even ourselves if we do not get rid of the waste in our body our body will be destroyed and also if we don't take care of the waste within our globe we will be destroyed. Consequently the end result is we ourselves must take the responsibility for managing the waste that we produce. We look at the whole question of reduce, reuse and recycle in some quarters they are saying rethink. All of these things is necessary how we see ourselves, our culture response to waste disposal and waste management will be critical in our ability to maintain and sustain our livability within the context of our global environment. Waste is not specific to one place only and global waste affects our all. We all know we get the Sahara dust here and what the Sahara dust brings with it God only knows. In other countries in Europe one neighbour could affect the other through acid rain. Therefore they are all product of waste. Waste poisons, pollutes and destroys. Air and water are the two main carriers. Air and water takes the pollutants to destroy the land eventually. Land degradation would only come as an end result of us not managing or waste and putting new systems to deal with our waste comprehensively.

Question

I need to ask a question about cruise ship waste. I gather they do leak waste here.

Response

Cruise ship waste is considered international waste and is therefore put in the category of infectious to some extent because of the nature of it. It is not unlike waste that comes off the planes that come to Trinidad. So it is put into a special category. At the present time how we deal with it is that we do burial for that type of waste in Trinidad and Tobago. The question is a lot of cruise ships also have particular mechanisms on board which they no longer, when they try to put in for charges in other Caribbean countries they sort to beat the charges by putting incinerators on board that would reduce the waste and take it back to the main base therefore not having to pay the cost of waste disposal in other countries. So that is how they try to beat it because they compact the waste very small and take it back.

The Effects of Land Degradation on the Coastal Environment

Mr. Lloyd Gerald, Research Officer/Geographer

Institute of Marine Affairs (IMA)

The institute which is the IMA, our mandate is to conduct environmental research in the marine and coastal areas. I want to take your minds to the coastline. We have a lot of wetlands along the coast line which is a land building agent, a resource for fish nurturing, and all the rivers that flows throughout Trinidad and Tobago running into our coastal waters bringing down all the silt sediment into our waters. So I am just trying to draw an analogy of the relationship of the Institute as it regards to coastal degradation. It might not be a one on direct thing like the quarrying industry or solid waste industry or the agricultural industry, but we are downstream. We deal with water quality and take samples with regards to the water quality in rivers along the coastline, the bathing beaches. We also look at the land degradation of the swamps. We conduct environmental research in specific areas, where we got oil research, oil industry going on along the eastern part of the northern range in terms of micro biology. We look at the fish at Point Lisas and at the thermal waters. All these things would degrade the reefs if they are in close proximity. So there are a lot of other areas rather than the hard core land degradation one would see with regards to what we are discussing today.

Questions

I represent a group that looks after the wet lands in felicity, south of the Caroni Swamp. We have been working with the Institute on the biodiversity of the Felicity wetland because of its social and economic activities it has for the community. We are trying to get some information pertaining to the water and the effects it has on the biodiversity of the wetlands. One of our major concerns which we have written the Institute about is the silt built up at the mouth of the Madam Espanol. It was a great concern to us and we sent in a document in 1997 and we have not had any reply.

Response

I am very shock about that because we do try to respond to all the requests. The silt built up along this river might not necessarily come from the river. I don't know if you now that there is the blue river and the Caroni river just north of both the Madam Espanol and the lot of the silt comes down from the northern range through all the rivers that are attached to the Caroni river within the Caroni river basin and manifest itself along the coastline. We have coastal current that takes the sediment down the coastline and that will manifest itself along the coast in front of the river.

The Role of Civil Society in the Implementation of the National Action Plan

Ms. Zakiya Uzoma-Wadada, Director of Programmes

CNIRD

It is my duty to talk about civil society participation and the implementation of the UNCCD. Also the role of civil society in the design and implantation of the plan we are discussing today. Now the UNCCD has been established and takes very seriously a philosophy of a bottom-up participatory approach to sustainable development.

- That Parties to the Convention commit to “*ensure that decisions on design and implementation of programmes...are taken with the participation of populations and local communities and that an enabling environment is created at higher levels to facilitate action at national and local levels.*”
- That Parties also “*should develop, in a spirit of partnership, co-operation among all levels of government, communities, non-governmental organisations and landholders to establish a better understanding of the nature and value of land and scarce water resources in affected areas and to work towards their sustainable use.*”

At this point I would like to ask that we include in the collaboration partners the Ministry of Community and Development. We do have representation on our committee but I think our report should reflect their inclusion.

The UNCCD breaks new ground by ensuring a bottom-up, participatory approach in international law. The Convention also repeatedly emphasises the importance of stakeholder engagement and specifically underlines the important role that should be played by women.

The special role of non-governmental organisations is also stressed and they are assigned an important role in ensuring the successful implementation of the Convention.

In an effort to do this we had the establishment of an international network of NGOs know as RIOD.

RIOD

RIOD is an African acronym which means Réseau International des ONGS pour la Désertification (International Network of NGOS on Desertification).

This network was originated in March 1994 in Geneva, Switzerland when a group of 25 NGO representatives attended a workshop on North-South Solidarity and Cooperation in relation to the CCD, as part of the fourth session of the Intergovernmental Negotiating Committee for the establishment of the UNCCD. It was established in November 1994 at an international meeting of NGOs held in Ouagadougou, Burkina Faso

The aims of the net work are

- To enable NGOs to exchange information and experiences as well as to influence decision-making at all levels provided for in the Convention.
- To promote North-South solidarity.
- To promote action to combat desertification and to give CBOs and NGOs an effective role in the preparation, implementation and review of National Action Plans (NAPs)

RIOD - Mission and Objectives

- *Mission* – To promote and enhance the participation of civil society in the implementation of the UNCCD at all levels especially in the NAPs
- *Specific Objectives* – To facilitate networking and disseminate information and sharing of experiences within civil society.

RIOD – Mission and Objectives

- To facilitate capacity-building of RIOD members in the implementation of the UNCCD
- To develop and promote partnership among stakeholders at all levels
- To create frameworks and mechanisms that influence policy to enhance field implementation
- To develop innovative strategies and networks to combat desertification

In May 2001, at the third Regional Meeting of RIOD LAC, CNIRD was elected RIOD Caribbean Sub-Regional Focal Point.

In April 2002, the Trinidad and Tobago RIOD National Network was established.

Trinidad and Tobago National RIOD Members

- Environment Tobago
- Caribbean Forest Conservation Association
- Protectors of the Environment
- The Biodynamic Association of Trinidad and Tobago
- The Tropical Re-Leaf Foundation
- Greenplains Foundation
- Trinidad and Tobago Field Naturalists Club
- CNIRD

Role of Civil Society in the Design and Implementation of the NAP

- Active participation in all consultations and relevant fora
- Identification of problem areas in particular socio-economic issues
- Active involvement in national mechanism/s designed to facilitate design and implementation of NAP
- Advocacy for a people-centred, bottom-up approach to the implementation of the NAP
- Coordination between government and communities-public awareness and community based activities
- Partnership with UNCCD National Focal Point to ensure timely and successful implementation of the NAP
- Development of projects, for funding, which are consistent with the national policy framework for combatting land degradation and the National Action Plan
- Promotion of traditional knowledge as a strategy to combat land degradation
- Promotion of the development of benchmarks and indicators to assist in the monitoring of progress in combatting land degradation and also in evaluating participatory processes.

**PRESENTATION OF WORKING GROUP REPORTS
CHAired BY DR. LLOYD RANKINE, DIRECTOR, CNIRD**

The participants were divided into five groups:

1. Human settlement and land use
2. Agriculture and Forestry
3. Water Resources and Coastal Degradation
4. Solid Waste Management
5. Quarrying

GROUP 1: HUMAN SETTLEMENT AND LAND USE

Affected Areas

1. Windy Hill – Arouca, Bon Air North
 - Squatting, slash and burn, deforested
 - Existing approximately 10 yrs
 - No utilities
 - More than 50% non-nationals; 2000 sf population
2. Laventille West
 - Squatting – hillside; landslides
 - Utilities existing
3. Datsunville, Enterprise Chaguanas
 - Social Problems, crime
4. Trincity
 - Agricultural lands converted to residential
 - Increased surface runoff, i.e., Trincity Mall, rain results in flooding
5. Carli Bay
 - Squatting; loss of wetlands
6. High income residential development
 - Maraval, Champ Fleurs

7. Aranguez
 - Use of fertilizers
8. Cashew Gardens, Carsen Field
 - Squatting
 - Illegal dumping and quarrying
9. Caparo
 - Removal of pipe (deforestation)
 - Flooding
10. Sealots
 - Squatting
 - Landfill
 - Industrial developments -- pollution (air and water)
11. Caroni
 - Illegal dumping
12. Proliferation of small non-functional and abandoned private sewer plants, e.g., La Florissant, Paradise Gardens (Tacarigua). Plants are located on river banks. Effluent often ends up in watercourses.
13. Light industrial activities (e.g., garages, poultry depot, electrical/fabricator – effluent in drains and solid waste dumping)
14. Guanapo
 - Location of landfill sites near to aquifers

Proposed Action

1. Education Programmes
 - Use of the media to give direct messages that are applicable.
 - Public notification of waste disposal systems, i.e., white waste, garbage waste
 - Set standards of different types of waste disposal while monitoring and enforcing.
2. Incentive Programme
 - Warrant to pay
 - Holding bay for bulky waste to reduce illegal dumping

3. Corporate involvement
4. Enforcements
5. Proper and accessible housing to reduce squatting
 - Introduce housing tax/credit to ensure sustainable housing (employed persons pay for NHA houses through salary deductions)

Civil Society

1. Encourage formation of community groups and empowering them to find solutions
2. Involvement of CBOs at the Regional Corporation Level.

National Coordinating Body

1. Regional Corporation
2. MPUE
3. MPD
4. EMA
5. WASA
6. SWMCOL
7. NHA
8. MWT
9. CBOs
10. NGOs

Strategies

1. Empowerment of communities for development on a local level.
2. Consultations must begin within community to get solutions relevant to region – community groups, church groups, rum shops, music/steel pan bands, in keeping with bottom-up approach.
3. Provide incentives for community involvement.

Financing

1. Corporate citizens
2. Green Fund
3. Tax credits for corporate citizens
4. International funding

GROUP 2: AGRICULTURE AND FORESTRY

1. Situational Analysis -- Deforestation

Existing Problems

Fires – forest, bush, grasslands, cane, roadside, etc.

Who is responsible?

Hunters, smokers, slash and burn farmers, outdoor cooking, cane farmers, careless burning for example, garbage, malicious burning, and pyromaniacs

Affected areas

Northern range, Brickfield, Central Range, Aripo and Erin Savannahs, Nariva Swamp

Who are affected?

National Community, Wildlife, Cane Farmers, agriculturalist, motorists, business, for example, sawmillers, etc.

Effects of Deforestation

Flooding, landslides, erosion, silting of water courses, destruction of watersheds, associated health and economic problems, the increase in prices of food and loss of biodiversity

Proposed Action

1. Enforcement of existing legislation, e.g., Agricultural Fires Act
2. Amendments to laws – increase in fines for contravention
3. Public education programme
4. Reforestation – to include feed trees for wildlife, timber

5. Designate of some affected area as environmentally sensitive areas, for example, wildlife sanctuaries

2. Situational Analysis -- Pollution

Pollution in terms of agriculture – pesticide, industrial waste, household waste, faecal wastes, garages and gas stations waste, oilspills (burst oil pipelines).

Who will be affected?

National community – Farmers, fisherfolks, consumers, etc.

Proposed action

Education, legislation, enforcement of laws

Affected areas

Agricultural communities and Industrial estates

3. Poor Agricultural Practices

Lack of crop rotation

Monoculture

Crop suitability – matching crops to soil

Over tillage – mechanical operations

Over fertilization

Who is responsible?

The farmers

Who are to be affected?

Consumer and farmers themselves

Proposed action

Proper land use practices – terracing, contour farming, crop rotation, suitability of crops.

Education

Role of government

Enforcement of legislation

Amendments and improvement of laws

Providing education programme

Increase personnel – staff and staff training, and equipment

In the provision of co-management opportunities (Participatory natural resource management)

Role of civil society

Community empowerment

Education/public awareness

National Coordinating Body

1. Farmers' association
2. Private sector
3. Consumer Affairs
4. Regional Corporation
5. CNIRD
6. Field Naturalists clubs
7. Representative of the Environmental Commission
8. MPUE
9. Forestry Division
10. MET
11. IMA
12. EMA
13. NGOs – nature seekers
14. Town and Country

Strategies to ensure implementation of plans/programmes/legislation

1. National Level – MPUE line Ministry for environment
2. Community level – co-managers of projects

Finance of Plans and Programmes

1. National budget
2. International agencies (environmental facilities) – UNCCD, UNEP, FAO, UNDP, IADB, etc.
3. Local Private Sector
4. Fund raising – community groups

Strategy to Access Finance

Preparation of suitable project proposal and funding request

Capacity building needs

Government

1. Increased number of personnel
2. Improve training
3. Increased authority

Civil Society

1. Skills need assessment
2. Identify gaps and provide human and technical resources to carry out plans and programmes

GROUP 3: WATER RESOURCES AND COASTAL DEGRADATION

Areas of Concern

Water resources

Sources of water, runoff, storage, pollution, water quality, sea level rise, change in rainfall patterns

Coastal Degradation

Erosion/accretion, wetland destruction, land reclamation, pollution – dumping of waste in waterways, coastal and hillside development, ports/harbours, hotels, housing, sand mining, wind and wave action

Affected Areas

Northern and Central Range
Southwest areas
Catchment areas of the above

Areas Affected

Water Resources

North and Central Ranges and adjoining catchment areas, East Coast storm surges)

Coastal Degradation

Trinidad: East, West and South Coast, Balandara to Guayaguare. Erosion at Kernaham, South Guayaguare to Icosos and Icosos to Port of Spain

Tobago: Cano Bay and Lowlands (Hilton Hotel), Pigeon Point, Goldsborough, Kingsbay

Areas Under Threat

Speyside (Beach Resort), Delaford (Landslides), and Kilgun (build development)

Who is Responsible?

Successive government and their agencies
Citizens of Trinidad and Tobago

Who Will Be Affected?

Citizens of Trinidad and Tobago

Proposed Action*Water Resources*

Assessment of problems before action
Responsible agencies and equipment in place
Public education

Coastal Degradation

Take action to rebuild retaining walls, Piles, Wave Breakers, Coastal Retention (Tetrapods)

Role of Government

Study, Fund and Implementation
Policing, managing and enforcing rules and regulations

Role of Civil Society

Residential merging into effective groups
Monitor and report to relevant authority

National Coordinating Body

Representatives from relevant agencies with different background pertaining to combating land degradation (coastal degradation and water resources)
Government's in-depth studies, e.g., of Haiti, Dominica, Panama and Venezuela

Role and Responsibility

To impart their areas of expertise on the citizens of Trinidad and Tobago

Strategies to ensure implementation of plans/programmes and legislation

National level

Signature to convention such as UNCCD
Government enforcement and sustainability

Community level

Effective community groups

Sources of Finance

World Bank
IMF
Regional Government

Strategies to Access Finance

International loans and grants

Capacity building needs

Sustainable planning and development at the national level

Civil Society Organization

Education and skill training

GROUP 4: SOLID WASTE MANAGEMENT/POLLUTION

1. Situational Analysis

Industrial Estates, for example, Point Fortin, Grand Bazaar (never got TCP Approval), EIAs, CECs needed, need for clearly defined buffer zones

- Location/siting
- Generating waste (solid, liquid, gaseous)

Squatting (both by poor and rich)

1. Inaccessibility
2. Forced illegal dumping, health issues, disposal mechanism used not in keeping with creating healthy environment
3. Causes landslides

E-waste

1. Develop national plan for e-waste especially in light of trade liberalization

2. PCs, cell phones and their components – percentage of cost of item should go towards disposal arrangements

Swamps and Other Wetlands

1. Problems with carrying capacity and tolerance levels
2. Need to be investigated

Areas Under Threat

1. Gulf of Paria
2. Watersheds
3. Chaguaramas
4. Civil Society

Proposed Action

1. Legislative and policy formulation and implementation
2. Empowerment of civil society

Potential Problem

Export Capacity

National Coordinating Body

1. Youth – JETT, IGL
2. NGOs and CBOs
3. Private and Public Sectors
4. Regional Corporation (Local Authority), Regional Bodies
5. THA
6. Civil Society
7. UNCCD

Strategies to Ensure Implementation of Plans/Programmes/Legislation

National Level

1. Litter wardens/environmental police
2. Proposed a separate Ministry of the Environment
3. Environmental Tax – individual and private sector
4. Life cycle tax
5. Revision of legislation and enforcement
6. Lobby for greater political will

Community Level

Community to buy into programme – CEIDs

Lobbying for change

Financing of Plan/Programmes

Sources of Finance

1. Green Fund
2. Deposit tax
3. International funding

Strategies to Access Finance

1. Legislative, regulatory mechanism
2. Project proposals and life cycles
3. Proper fund allocation and replenishment
4. Ministry of Planning and Development responsible, but saddled with work
5. Go to international funding agencies with what we have and leverage to get/borrow more

Capacity Building Needs

Government Agencies

1. Tendering process needs to be re-vamped
2. Attitudinal changes
3. Re-educate and retool

Civil Society

1. Attitudinal changes
2. Reeducate and retool

GROUP 5: QUARRYING

Areas Affected

1. Maracas Valley
2. Arima Valley
3. Valencia
4. Mayo
5. Santa Cruz
6. Claxton Bay – Cedar Hill Road

Existing Problems in these Areas

1. No rehabilitation of quarry areas after activities
2. Practices/Methods used – poor management and operations at quarries
3. Enforcement of legislation (compliance)

Impacts

1. Sedimentation/siltation of rivers
2. Affecting aquatic organisms
3. Sedimentation raises river beds, reducing river flow
4. Noise and air pollution
5. Respiratory illnesses
6. Reduced soil fertility
7. Reduced aesthetics
8. Loss of biodiversity and endemic species
9. Loss of habitat

Who are or Will Be Affected

1. Community residents
2. Upstream impacts – landslides, aesthetics and air pollution
3. Downstream impacts – siltation of drains/watercourses, flooding and waterborne and other diseases

Potential Problems

Oil boom – increased construction

Recommendations

1. Education and awareness (government and civil society)
2. Branding of quarrying companies (Government)
3. Stiffer penalties (Government)
4. More resources, e.g., staff (Government and civil society)
5. Follow through from authorities (Government)
6. Watchdog programmes, e.g., “Eyes on You”
7. Incentive for compliance (Government and Civil society)
8. Government to serve as exemplars with national quarries

National Coordinating Bodies

1. MPUE – Forestry, EMA, SWMCOL, Water Resources
2. Town and Country Planning, Development
3. MOALMR

4. Ministry of Works and Transport
5. Ministry of Energy and Energy Industries
6. Research Institutes
7. Ministry of Local Government
8. Umbrella of NGOs
9. Media

Strategies to Ensure Implementation of Plans/Programmes/Legislation

1. Revision of existing laws
2. Lobbying by environmental organizations and concerned citizens
3. Regional implementation
4. Use of media as a fourth arm
5. Integration as part of National Plan

Financing of Plans/Programmes

1. Green Fund
2. United Nations
3. Polluters Pay
4. Government in keeping with 2020 vision

Capacity Building Needs

Government

1. Awareness/training
2. Technical staff
3. Resources

Civil Society

1. Taking Ownership/National Consciousness
2. Training and Awareness
3. Resources