



**SUMMARY REPORT OF THE NATIONAL
CONSULTATIONS ON THE CONVENTION TO
COMBAT DESERTIFICATION**



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Trinidad and Tobago became a signatory to the United Nations Convention to Combat Desertification on 2000, August 06, and as such, is required to take the actions outlined in that Treaty to combat desertification and its consequences. Consistent with the requirements of the Treaty, the Ministry of Public Utilities and the Environment (MPUE) established a National Coordinating Body and organised and executed four national consultations.

The MPUE, as the National Focal Point for the implementation of the Treaty, established a Coordinating Committee on October 2004 which currently acts as the National Coordinating Body. This coordinating body comprise representatives of some 14 agencies/ministries to assist it in executing its mandate. There is, thus, representation from CNIRD which is the RIOD Caribbean sub-regional focal point since May 2001; Ministry of Agriculture, Land and Marine Resources; Forestry Division, MPUE; Ministry of Community Development, Culture and Gender Affairs; Town and Country Planning Division of the Ministry of Planning and Development (TCPD); Environment Unit of the Ministry of Works and Transport; Ministry of Local Government; Tobago House of Assembly; Meteorology Services Division, MPUE; Trinidad and Tobago Solid Waste Management Company (SWMCOL), Institute of Marine Affairs (IMA) and Environmental Management Authority (EMA).

Four public consultations were conducted between November 17 and December 14, 2004 with three held in Trinidad and one in Tobago. Those held in Trinidad were at the Arima Town Hall, Arima, City Hall, San Fernando, and the Caroni Visitor Centre, Caroni. The consultation in Tobago was held at St. Nicholas Private Primary School, Scarborough.

The consultations were one-day programmes which generally began at 9:30 am and ended by 4:30 pm. The objectives were: 1) to create national awareness of Trinidad and Tobago's accession to the international treaty on the Convention to Combat Desertification; 2) to identify and review the national experiences with land degradation/desertification issues; 3) to establish partnerships with the stakeholders whose collaborative efforts will inform the preparation of the National Action Plan; and 4) to encourage participation of the widest possible cross section of concerned individuals, non-governmental organisations (NGOs) and government institutions in the identification of problems and the development of strategies to combat the effects of land degradation/desertification.

Each national consultation was organised around an official opening, presentations by a panel comprising four to six panelists and a break out session based on five or six groups of participants addressing one or two issues of land degradation. In the case of Tobago, only a single group was organised and its members dealt with all of the issues of degradation. The number of participants in each group as well as the number of groups also varied, based on participants' interests as well as on the total number of participants. Finally, each group presented its findings to the plenary and fielded

questions on its presentation. A final summation was generally done by a representative of the CNIRD. These are detailed below.

Official Opening

The official opening generally consisted of a prayer, welcome remarks, the keynote address and a statement of the problem. This session was done by representatives of the Ministry of Public Utilities and the Environment.

Ms. Penelope Beckles, Minister of Public Utilities and the Environment gave the keynote address at each of the official opening of the consultations and placed the international treaty within the context of the country's national development and the responsibility of the nation as a signatory of the treaty. The rationale for the consultations was clearly spelt out as well as the active role the Ministry expects of the NGO's. The Minister noted that the concept of desertification was expanded to embrace land degradation regardless of its origin and as such became more relevant to all of those nations that suffered from decreasing land productivity. Thus the treaty is of relevance to small island states like Trinidad and Tobago.

She further indicated some of the land degradation problems which currently beset Trinidad and Tobago including deforestation due to over exploitation of forest resources, forest fires, slash and burn agricultural practices, quarrying, squatting, inappropriate irrigation and land use practices and deficiencies in coastal zone management and pointed out some of the consequences of these practices such as annual flooding of low lying areas, reduction of ground water recharge areas, increase in land erosion, pervasive siltation of water ways and decrease in productive land.

Some of the actions being undertaken to combat these negative consequences were also listed by the Minister. These included strengthening of the capability of the Forestry Division and the Institute of Marine Affairs. The former is intended to protect more successfully the forested areas and to engage in reforestation programs and management of watersheds. The latter is expected to engage in coastal management research programs. In addition, the Environmental Management Authority was established to protect the natural environment and had already designated one area, Matura, as an environmentally sensitive area with at least two others to follow, namely the Aripo Savannah and Buccoo Reef.

The Minister concluded her remarks by noting the importance of the consultations in arriving at solutions to the problem of land degradation. Since the treaty called for a bottom up approach to planning and implementation, she exhorted participation by local and national non-governmental organizations as well community based groups and local populations in finding and applying solutions to the problems of land degradation throughout the nation.

Panel Presentation

Four to six panelists comprising a single panel each addressed one of the issues of land degradation, the orientation of the implementation mechanism with its bottom up approach to planning and project implementation, the relationship between this Convention and the National Development Plan, Vision 2020 and the synergies between this Convention and others such as the Convention on Biological Diversity and the Convention on Climate Change, signed by the Government of Trinidad and Tobago.

Panelists generally comprised of selected members of the National Coordinating Body along with specially invited presenters. The panelists made presentations of 10 to 15 minutes each and then fielded questions from the floor. The specially invited guest in Tobago was a representative from Environment Tobago while in Trinidad, she was a representative from the Vision 2020 Secretariat.

Breakout Groups

As part of the registration procedure, participants were asked to register in one of the six workshop groups for the break out sessions. Thus participants were organized in 4 to 6 workshop groups in Trinidad and which consisted of Agriculture/ Forestry, Quarrying, Solid Waste Management/ Pollution, Human Settlement/ Land Use, Water Resources (Availability/ Water Quality) and Coastal Erosion. In the case of Tobago, there was one workshop group.

Where the number of participants was insufficient, two groups were consolidated and dealt with both issues. Thus in the case of the consultation in Arima, the few participants in the group on Quarrying were placed with the Human Settlements and Land Use group, while in Tobago, the single group addressed most of the issues.

Participants were directed by representatives of Kairi, the consultants for the Ministry of Public Utilities and the Environment on this project, to address the issues in land degradation based on the group in which they were registered. They were directed to identify the locations of the problems, the perpetrators of the actions, the effects of the action, possible solutions and the role to be played by civil society and the state. Participants were requested to discuss and record their proposals on flip charts with magic markers both of which were made available to each group at the venue. The consultants also responded to queries and concerns raised by participants during the breakout session as well as at the presentations of findings of each group.

Members of the panel acted as facilitators to the break out groups during their deliberations. They clarified issues, provided additional information on the issue, guided the discourse and generally kept the discussion and recording of the decisions moving.

Workshop Presentations

Representatives from CNIRD chaired the presentations which were made by each group and commented on the approaches, the quality of the presentation and the proposals offered.

The groups generally responded to the exercise of identifying the problems and issues, locating the problems in space, determining the main actors in the land degradation process and suggesting solutions which were both issues specific as well as cross cutting.

Some of the participants were generally amazed at the range of action that the state has brought to bear on the problems of land degradation. Legislation alone in the last decade consists of the Environmental Management Act and its battery of rules, the Minerals Act, a series of acts about land including Registration of Title to Land Act, Land Tribunal Act, Land Adjudication Act and the State Lands Act. There are also a number of policy papers on Forestry, the Environment, Wetland Conservation, and Food Production and Marine Resources. That notwithstanding, participants were of generally of the view that much more needed to be done in legislation, in institution capacity building and law enforcement.

There was the general proposal of offering incentives in a range of areas to encourage appropriate behaviour. These included creation of a national waste disposal system, a three R's approach to waste reduction and consistent national clean up campaigns.

Involvement of the civil society organizations in the implementation of solutions was generally felt to be among the most effective solutions for issues such as forest fires, slash and burn agriculture and squatting. Several of the participants pointed to control of the state land or co-management of state land in the community by community groups will change residents' attitude and thus the nature of the relationship.

Indeed, many of the groups believed that public education is an essential aspect of any solution and suggested a development of education and awareness programs aimed at residents of the communities in which some of the problems are occurring. The accompanying appendix provides a summary of the outcome of the consultations.

Expenditure

The total cost for hosting the four consultations was **\$63, 810.00 TT (\$10, 128.57 US)**.
Details are outlined below.

EXPENDITURE FOR THE FOUR CONSULTATIONS

	ITEM	CARONI		SAN FERNANDO		ARIMA		SCARBOROUGH	
		\$ TT	\$ US	\$ TT	\$ US	\$ TT	\$ US	\$ TT	\$ US
1	Catering for (lunches, snacks, tea, coffee, juice)	5,500.00	873.02	4,000.00	634.92	7,590.00	1,204.76	9,000.00	1,428.57
	PA System	800.00	126.98	800.00	126.98	1,200.00	190.48	0.00	0.00
2	Rental of Chairs and Tables	1,000.00	158.73	600.00	95.24	1,360.00	215.87	375.00	59.52
3	Conference Packages (booklets, brochures, conference materials, pens, note pads)	6,000.00	952.38	6,000.00	952.38	0.00	0.00	5,705.00	905.56
4	Table cloths	0.00	0.00	0.00	0.00	415.00	65.87	615.00	97.62
5	Administrative Fees	0.00	0.00	0.00	0.00	0.00	0.00	2,500.00	396.83
6	Tents	0.00	0.00	0.00	0.00	175.00	27.78	0.00	0.00
7	Transport	0.00	0.00	0.00	0.00	175.00	27.78	0.00	0.00
8	Rapporteur	2,500.00	396.83	2,500.00	396.83	2,500.00	396.83	2,500.00	396.83
	TOTAL	15,800.00	2,507.94	13,900.00	2,206.35	13,415.00	2,129.37	20,695.00	3,284.92

AGRICULTURE AND FORESTRY

Issues	Affected Areas	Effects	Recommendations
Northern Trinidad			
<ol style="list-style-type: none"> 1) Over use of agrochemicals 2) Oily runoff from gas stations 3) People's lack of awareness of the management of the natural environment 4) Absentee land owners leading to squatting 	<ol style="list-style-type: none"> 1) Southern Slopes of the Northern Range 2) Aripo Savannah 3) Valencia Forest Reserve 4) Matura Western Extension Reserve 5) Bush Bush Nariva Swamp 6) Trinity Hills 7) Oropouche Lagoon 		<ul style="list-style-type: none"> - Encourage use of bio-fertilisers - Use of natural insecticides - Application of biological control - Public Education – - Facilitate networking among NGOs - Conduct research including piggybacking on research in similar countries - Media blitz - Involvement of schools - Legislation
Central Trinidad			
<ol style="list-style-type: none"> 1) Deliberate and accidental setting of fires – forest, bush, grasslands, sugar cane, roadside, etc. 2) Pollution - pesticide, industrial waste, household waste, faecal wastes, garages and gas stations waste, oil spills (burst oil pipelines) 3) Poor Agricultural Practices due to: Lack of crop rotation; Monoculture; Crop suitability – matching crops to soil; Over tillage – mechanical operations; Over fertilisation, etc. 	<p>Fires: Northern Range, Brickfield, Central Range, Aripo and Erin Savannahs, Nariva Swamp</p>	<ol style="list-style-type: none"> 1) Flooding, landslides, erosion, silting of water courses, destruction of watersheds, associated health and economic problems, increase in prices in food, loss of biodiversity 	<ul style="list-style-type: none"> - Enforcement of existing legislation, e.g., Agricultural Fires Act - Amendments to laws – increase in fines for contravention - Public education programme - Reforestation – to include feed trees for wildlife, timber - Designate of some affected area as environmentally sensitive areas, for example, wildlife sanctuaries - Proper land use practices – terracing, contour farming, crop rotation, suitability of crops.

AGRICULTURE AND FORESTRY

Issues	Affected Areas	Effects	Recommendations
Southern Trinidad			
<ol style="list-style-type: none"> 1) Deforestation to carry out agriculture, 2) Practice of slash and burn land clearing 3) Oil pollution affecting farming and natural forest 4) Illegal logging 5) Excessive use of chemicals in agriculture 6) Improper dumping of construction waste in rivers 7) Farming on hillsides/steep slopes 8) Hunting activities 9) Improper disposal of dead animals 		<ol style="list-style-type: none"> 1) Felling of trees and slash and burn in forested areas lead to soil erosion 2) Chemical in runoff which eventually drains into rivers and streams 	<ul style="list-style-type: none"> - Enforcement of laws - Public awareness – educating the public about the adverse effects on the environment (educate children, employ district wardens - police involvement, create a mascot) - Introduce recycling - Population (civil society) must take responsibility for their waste and actions - No dumping signs - Reforestation projects - Litter wardens - Civil society to be the watch dog of the environment (e.g. Fishermen and friends of the Sea) - Control chemical use in farming (Ministry of Health) - Community clean ups - Hold school competitions

AGRICULTURE AND FORESTRY

Issues	Affected Areas	Effects	Recommendations
Tobago			
1) Incidence of slash and burn 2) Inability of fire wardens/ guardians to charge people for lighting fires (not authorised to charge citizens – need to precept wardens) 3) Illegal logging activities on government reserves		1) Poor drainage 2) Flooding 3) Loss of livestock	<ul style="list-style-type: none"> - State to enable those in its employ to proper carry out the function for which they were hired - Public education about the importance of forest - Programmes focusing on attitude and behavioural change - Approach logging in a holistic manner - State agencies should partner with CBOs in education their communities - Get more young people involved in activities which raising their awareness of the importance of forest and the environment

HUMAN SETTLEMENTS AND LAND USE

Issues	Affected Areas	Effects	Recommendations
Northern Trinidad			
<ol style="list-style-type: none"> 1) Establishment of unauthorised structures 2) Improper guttering and drainage structures, particularly in hillside communities 3) Limited enforcement of laws <ul style="list-style-type: none"> - insufficient personnel to undertake enforcement - outdated laws and regulations - lack of coordination among state agencies 4) Movement away from our cultural traditions of extended families where such families shared residence to the single family model – led to increased demand for land and housing 5) Unplanned land reclamation 6) Loss of traditional access to the sea 		<ol style="list-style-type: none"> 1) Flooding 2) Loss of livelihoods due to flooding 3) Health hazards due to operations of quarries 4) Contamination of waterways and groundwater supplies 5) Dust and noise pollution 6) Destruction of roads and drains during construction of houses 7) Compaction of soil 8) Sedimentation of rivers and streams 	<ul style="list-style-type: none"> - Public participation in planning for and implementing solutions to the country's land degradation problems - Development and implementation of a public education and awareness programme - Implement proper infrastructural development in squatter communities - Succession planning????

HUMAN SETTLEMENTS AND LAND USE

Issues	Affected Areas	Effects	Recommendations
Central Trinidad			
<ol style="list-style-type: none"> 1) Squatting 2) Slash and burn 3) Conversion of agricultural lands into housing development 4) Illegal dumping 5) Quarrying 6) Pollution from industrial developments 7) Proliferation of small non-functional and abandoned private sewer plants 8) High incidence of light industrial activities (garages, poultry depots, electrical/fabricators, resulting in effluent in drains and indiscriminate dumping of solid waste 9) Location of landfill near an aquifer 	<p>Squatting: Windy Hill/Arouca, Bon Air North, Laventille West, Datsunville, Enterprise Chaguanas</p> <p>Planned development: Trincity, Maraval, Champ Fleurs, Aranguez</p> <p>Illegal dumping: Caroni, Carsen Field</p> <p>Sewer plants:</p>	<ol style="list-style-type: none"> 1) Increased surface runoff 2) Loss of wetlands 3) Flooding 4) Deforestation 	<ul style="list-style-type: none"> - Public education - Set standards for different types of waste disposal while monitoring and enforcing - Incentive programmes for waste disposal - Corporate involvement - Enforcement of laws and policies - Proper and accessible housing to reduce squatting - Encourage/facilitate formation of CBOs and empowering them to find solutions and development at the local level - Involvement of CBOs at the municipality level - Hold consultations at the community level to formulate solutions relevant to region - Provide incentive for community involvement

HUMAN SETTLEMENTS AND LAND USE

Issues	Affected Areas	Effects	Recommendations
Southern Trinidad			
<p>1) Different groups have different perspective on land use and therefore different impacts. These groups refer to the society (high income, middle income and low/no income groups) and the State</p> <p>2) Disregard for laws and regulations by developers – “they can thwart the intent of the law”</p> <p>3) Middle income group unknowingly buy into poorly planned developments of unscrupulous developers</p> <p>4) Incidence and expansion of unapproved/squatting areas by members of the low income group on wastelands (ecologically vulnerable lands)</p> <p>5) Breaking of building</p> <p>6) The State policies facilitate and encourage improper land use and resulting land degradation</p>	<p>High income: Vistabella, Rustville/Mayaro</p> <p>Middle income: Palmiste, Gopaul lands</p> <p>Low/no income: Buen Intento, Princes Town, Train Lane, Marabella</p> <p>Occupation of Nariva swamp by rice farmers</p>	<p>1) Silting of rivers</p> <p>2) Blocked waterways – drainage problems</p> <p>3) Structural undermining and earth movements</p> <p>4) Cross country pipelines are causing erosion and siltation of waterways</p> <p>5) High incidence of pit latrines, improper garbage disposal, no access roads leading to indiscriminate dumping of waste and pollution of water table</p>	<p>High income group:</p> <ul style="list-style-type: none"> - increased enforcement of laws - Education about the environment - Tax incentive for complying with environmental codes - Develop appropriate building codes - Employ proper land clearing practices when preparing lands for development <p>Middle Income group:</p> <ul style="list-style-type: none"> - Education (for land owners and home owners, proper land use, land clearance techniques and practices, importance of maintaining vegetative cover, etc.) <p>Low/no income group:</p> <ul style="list-style-type: none"> - Designate areas for squatting regulated by guidelines - Government to establish adequate and appropriate infrastructure in squatting areas - Recognise and address the link between poverty and squatting - Provide squatters with jobs and incentives to move from the squatting areas

HUMAN SETTLEMENTS AND LAND USE

Issues	Affected Areas	Effects	Recommendations
Tobago			
<ol style="list-style-type: none"> 1) Lack of a systematic system of planning 2) Lack of information/ knowledge about the roles and responsibilities of various State agencies – population don't know where to direct their specific complains, while the agencies tend to focus on their narrow areas of responsibility 3) Lack of adequate response from State agencies 4) Lack of accountability of public agencies to the public 5) Conflict in responsibility at the local level (THA) and central government (wrt to obtaining permission from Trinidad for housing and development without proper notification of THA) 		<ol style="list-style-type: none"> 1) Drains are old undersized and filled with silt 	<ul style="list-style-type: none"> - Institute an effective systems where agencies could be made accountable for their action/or lack of action - Law enforcement (e.g. demolition of illegally constructed building) - Revision of dated legislation - Culture, attitude and behaviour change - Community involvement in solutions - Need for proper design and planning of development - Upgrading of old infrastructure - Expansion of forest cover in denuded areas

SOLID AND LIQUID WASTE MANAGEMENT AND POLLUTION

Issues	Affected Areas	Effects	Recommendations
Northern Trinidad			
<ol style="list-style-type: none"> 1) Inadequate waste disposal (sites and habits) 2) We have a limited view of waste – 3) Irregular transportation cycle (problems of management at the local government level) 4) Lack of predictable schedule (problems of management at the local government level) 5) Poor attitudes and habits with respect to waste disposal 6) Lack of continuity 			<ul style="list-style-type: none"> - Public awareness of the transportation schedule - Population has to reduce the amount of waste currently generated - Change in behaviour and attitudes towards waste itself, the dumping of waste, - Public awareness - Develop solutions to deal with toxic waste material (use in incinerators, proper sewage disposal systems, proper disposal of agricultural toxic chemical containers) - Streamline local dump sites - Introduce pay as you throw away systems - Government to offer incentives for recycling

SOLID AND LIQUID WASTE MANAGEMENT AND POLLUTION

Issues	Affected Areas	Effects	Recommendations
Central Trinidad			
<ol style="list-style-type: none"> 1) Operation of industrial estates 2) Squatting (both by poor and rich) 3) Generation of e-waste 4) Swamps and Other Wetlands: Problems with carrying capacity and tolerance levels to waste 	<ol style="list-style-type: none"> 1. Gulf of Paria 2. Watersheds??? 3. Chaguaramas 4. Civil Society 	<ol style="list-style-type: none"> 1) Generation of waste <p>Squatting:</p> <ol style="list-style-type: none"> 1) Inaccessibility 2) Forced illegal dumping, health issues, disposal mechanism used not in keeping with creating healthy environment <ul style="list-style-type: none"> - Landslides 	<ul style="list-style-type: none"> - EIAs & CECs need to be conducted to clearly defining buffer zones - location/siting and for generating waste (solid, liquid, gaseous) - Develop national plan for e-waste especially in light of trade liberalization - PCs, cell phones and their components – percentage of cost of item should go towards disposal arrangements - Wetlands should be investigated - Legislative and policy formulation and implementation - Empowerment of civil society
Southern Trinidad			
<ol style="list-style-type: none"> 1) Lack of cohesiveness in the community 2) Lack of law enforcement 3) Improper legislation 4) Some people are able to circumvent the legal system (bribery, etc) 5) Incidence of leaking pipelines 6) Hazardous waste (incidence of oil leakages) 7) Improper disposal of dead animal through burning 8) Human behaviour 			<ul style="list-style-type: none"> - Community involvement - Community cohesiveness - Petitioning – signatures - Advocate - Educate and empower all the residents in this country about the 3 Rs (reduce, reuse and recycle) - Proper legislation - Enforcement of laws

WATER RESOURCES AND COASTAL EROSION

Issues	Affected Areas	Effects	Recommendations
Northern Trinidad			
<ol style="list-style-type: none"> 1) Increase in construction activities leading to deforestation and improper construction techniques 2) Slash and burn 3) Incidence of landslides (natural and human-induced) 4) Improper disposal of construction and landslide material 5) Erosion on the northeast coast, southeast coast and southwest coast 6) Reclamation works along the west coast (central and northern section of Trinidad) 7) Improper solid waste disposal – particularly disposal of PET and other plastic bottles 	<p>North Coast Road</p>	<ol style="list-style-type: none"> 1) Inland deforestation leading to a chain of reactions which is negatively affecting coastal areas 	<ul style="list-style-type: none"> - Public education (education of the entire population) - Public participation in the clean up efforts - Legal enforcement - Make the manufacturers or/and users be responsible for disposal of the bottles - Retention of water upstream to reduce its effect downstream - Zoning of coastal activities

Issues	Affected Areas	Effects	Recommendations
Central Trinidad			
1) Erosion/accretion 2) Wetland destruction 3) Land reclamation 4) Pollution – dumping of waste in waterways 5) Coastal and hillside development 6) Ports/ harbours 7) Hotels, housing 8) Sand mining 9) Natural - wind and wave action	<p>Water Resources: North and Central Ranges and adjoining catchment areas, East Coast storm surges</p> <p>Coastal Degradation Trinidad: East, West and South Coast, Balandara to Guayaguayare. Erosion at Kernaham, South Guayaguayare to Icacos and Icacos to Port of Spain</p> <p>Tobago: Cano Bay and Lowlands (Hilton Hotel), Pigeon Point, Goldsborough, Kingsbay</p> <p>Areas Under Threat Speyside (Beach Resort), Delaford (Landslides), and Kilgun (build development)</p>		<p>Water Resources</p> <ul style="list-style-type: none"> - Assessment of problems before action - Responsible agencies and equipment in place - Public education <p>Coastal Degradation</p> <ul style="list-style-type: none"> - Take action to rebuild retaining walls, piles, wave breakers, coastal retention (Tetropods) - Communities monitoring and reporting problems to relevant authority

Issues	Affected Areas	Effects	Recommendations
Southern Trinidad			
<ol style="list-style-type: none"> 1) Deforestation 2) Pollution from landfills 3) Inappropriate behaviours and practices during recreational activities 4) Inappropriate agricultural practices associated with animal farming, pesticide use, 'slash and burn' land clearing 5) Loss of water through the pipe borne water distribution system (50% of water lost through burst lines) 6) Industrial activities – release of effluent discharges 7) Residential activities – 	<p>Deforestation: Northern Range, Southern Range, Caroni River Basin</p> <p>Flooding: Penal, Barrackpore, Central (Caroni Plains)</p> <p>Water Quality: Recreational Rivers - Caura, Shark River Aquifer – Guanapo Beaches – Maracas, Cedros Industrial activities – Point Lisas Agriculture – Aranguez, Central, Barrackpore</p>	<ol style="list-style-type: none"> 1) Reduction in water availability and water storage capacity 2) Increase runoff rates leading to accelerated land erosion and land slippage 3) Reduce water quality 4) Incidence of flooding 	<ul style="list-style-type: none"> - Reforestation - Proper agricultural and soil management - Proper land use policies – don't take agricultural lands for housing - Control building development - Dredge water courses - Regular maintenance of beaches - Public education and awareness (throughout the society – from school upwards) - Coastal engineering - Wetland preservation

Issues	Affected Areas	Effects	Recommendations
Tobago			
<ol style="list-style-type: none"> 1) Inappropriate land and housing development practices by both private citizens and the State 2) Questionable road construction practices 3) Incidence of landslides 4) Improper removal and storage of material after landslides 5) Lack of consultation with residents prior to conduct of development 6) Inadequate drainage systems – unable to cater for increased runoff volumes and loads 7) Incidence of unplanned development – people build without approval of TCPD 8) Inappropriate building techniques/practices for hillside development 9) Removal of coastal vegetation during construction activities 	<ol style="list-style-type: none"> 1) John Dial, Hope, Speyside, 	<ol style="list-style-type: none"> 1) Erosion 2) Siltation of rivers 3) Loss of animal life due to siltation of river – absence of caiman 4) Clogging of drains 5) Destruction of wetlands 6) Damage of infrastructure 	<ul style="list-style-type: none"> - Enforcement with respect to development and enforcement of building codes - Restoration of coastal vegetation - Public education which links people’s actions with degradation being experienced. -

QUARRYING

Issues	Affected Areas	Effects	Recommendations
Central Trinidad			
1) No rehabilitation of quarry areas after activities 2) Practices/Methods used – poor management and operations at quarries 3) Enforcement of legislation (compliance)	1) Maracas Valley 2) Arima Valley 3) Valencia 4) Mayo 5) Santa Cruz 6) Claxton Bay – Cedar Hill Road	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 hectares	<ul style="list-style-type: none"> - Education and awareness (government and civil society) - Branding of quarrying companies (Government) - Stiffer penalties (Government) - More resources, e.g., staff (Government and civil society) - Follow through from authorities (Government) - Watchdog programmes, e.g., “Eyes on You” - Incentive for compliance (Government and Civil society) - Government to serve as exemplars with national quarries