UNDP Project Document

UNDP-GEF Enabling Activities Project

Government of Trinidad and Tobago

and

United Nations Development programme

Project Title: Initial Assistance to Enable Trinidad and Tobago to Fulfill its Obligations Under the Stockholm Convention on POPS

Starting Date:	**June, 2009**
Expected Ending Date:	**May, 2011**
Total Budget:	**US$825,500**
Executing Agent:	**Ministry of Planning, Housing and the Environment**

Brief Description: The general objective of the project is to assist in the formulation of the National Implementation Plan through the analysis of current sources, existing stocks and use of POPs as well as the legislative and institutional arrangements for chemical management in order to develop sustained capacity to fulfill Trinidad and Tobago's obligations and reporting requirements under the Stockholm Convention.

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

DDT	Dichloro-diphenyl-trichloroethane
EMA	Environmental Management Authority
GEF	Global Environment Facility
GORTT	Government of the Republic of Trinidad and Tobago
IMA	Institute of Marine Affairs
MPHE	Ministry of Planning, Housing and the Environment
NCC	National Coordination Committee
ODS	Ozone-Depleting Substances
PCBs	Poly-chlorinated Biphenyls
PCU	Project Coordination Unit
POPs	Persistent Organic Pollutants
ROAR	Results Oriented Annual Report
SBAA	Standard Basic Assistance Agreement
SRF	Strategic Results Framework
SWMCOL	Solid Waste Management Company Limited
UNDP	United Nations Development Programme

SECTION 1

Part 1.1: Situation Analysis

Although Trinidad and Tobago has never been involved in the manufacture of Persistent Organic Pollutants (POPs), chemicals listed in Annex A and B of the Stockholm Convention (primarily pesticides and two industrial chemicals: Polychlorinated Biphenyls(PCBs) and Hexachlorobenzene,), these chemicals have been imported to Trinidad and Tobago in the past. At present however, POPs pesticides are not registered for use by the Pesticides and Toxic Chemicals Control Board (its registration was voluntarily withdrawn), and since the 1980's their importation is not allowed. Among the previously used POPs pesticides in Trinidad and Tobago are Chlordane, Mirex, Aldrin/Dieldrin, PCDs, and DDT all of which have found applications in the construction and agricultural industries, as well as in electric transformers and in the public health control of diseases.

Over the past years most industries have changed from PCB containing transformers and capacitors to mineral oil containing electrical equipment. Still there remains an accumulated inventory of some POPs chemicals in Trinidad and Tobago. A preliminary survey was conducted in order to determine the existence of stocks of products considered POPs and to quantify the obsolete and unwanted pesticides and toxic chemicals for disposal. The survey involved the gathering of information from the major importers of agricultural and industrial chemicals, Estates, Research Stations, Ports, Agrochemicals Shops and Laboratories. Pictures of the heavily contaminated sites also were obtained. Mirex and DDT were the only POPs pesticides identified during this survey (see Table).

Inventory of obsolete pesticides and toxic chemicals for disposal in Trinidad and Tobago (1999)

Stocks of pesticides	Location	Quantity
Mirex	Caroni (1975) Ltd. Research Station Central Experimental Station, Ministry of Agriculture National Agro	1 kg 5-10 kg 0.35 kg
DDT	Ministry of Health, Nipdec warehouse in Chaguaramas	24,000 kg

In recent years, Trinidad and Tobago has undertaken several initiatives calculated to enhance its national surveillance and control of the use of POPs. These initiatives include monitoring, institutional coordination and development, national environmental policy formulation, legislative reform, and capacity development. Details of these are presented in Annex 2 (the GEF Project Document).

Part 1.2: Strategy

This project represents the GORTT's direct efforts towards the attainment of the Millennium Development Goals by strengthening the institutional frameworks for ensuring environmental sustainability. By striving to minimize the impact of POPs on the natural environment in Trinidad and Tobago, other millennium goals are indirectly addressed, these being reduction of child mortality, improvement of maternal health, and overall improvement of sustainable livelihoods particularly for the poor, who are often most seriously affected by environmental degradation.

The core strategic elements of the project are manifested in the project activities which broadly seek to build public awareness and participation of stakeholders, strengthen institutional and organizational capacity to manage POPs, and organize, assess and report on the status of POPs in Trinidad and Tobago.

The project seeks to build on existing opportunities to create synergies between ongoing related projects that will strengthen capacity and coordination towards the achievement of the above objectives. Details of the project strategy are presented in Annex 2 (GEF Project Document).

At the outset of the project implementation, the work plan for this project will be organized according to the "initial guidelines for Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants (GEF, 2001)" and the "Interim guidance for developing a National Implementation Plan for the Stockholm Convention (SC) (UNEP and World Bank Group, 2004)".

Part 1.3: Management Arrangements

The Executing Agency for this project will be the Environmental Policy and Planning Division of the Ministry of Planning, Housing and the Environment (MPHE). Given the core project objective of formulating a National Implementation Plan (NIP) for the management of POPs, this Division will work closely with the Environmental Management Authority (EMA); the Trinidad and Tobago Solid Waste Management Company Limited (SWMCOL); the Ministry of Agriculture, Lands and Marine Resources, the Ministry of Health, the Ministry of Energy and Energy Industries, the Pesticides and Toxic Chemicals Control Board, the Institute of Marine Affairs (IMA); the University of the West Indies and the University of Trinidad and Tobago towards the achievement of this goal. To this end the MPHE will establish a Project Coordination Unit (PCU) which will be responsible for the project execution and will identify and appoint a National Project Coordinator to the core project team. The Project Coordinator should be appointed by the Executive Agency in according to the Standard Basis Agreement Article III 4. Additionally, a National Coordination Committee (NCC) will be established comprising relevant government agencies and other key stakeholders for the purpose of coordinating the activities of the Project and approving the work plans, budgets and outputs of the Project Manager. (See Annex 2 - Pages 3 and 12 of GEF Project Document).

As the GEF implementation agency, UNDP will provide management and monitoring and evaluation support in order to ensure the attainment of project objectives.

Part 1.4: Monitoring and Evaluation

While the responsibility for the execution of this project is the Executing Agency, the principal responsibility for monitoring and evaluation of the project lies with UNDP. This will be undertaken in consonance with a strengthened NCC, which will supervise the development of the NIP as part of the overall project implementation.

This mechanism will be supported by UNDP procedures for monitoring and evaluation, and in this regard, half yearly meetings of the NCC will be held to discuss all aspects of the project. The outcomes and output of the project will form part of UNDP's corporate programme monitoring, reporting and oversight mechanisms. These will therefore be incorporated into UNDP's Strategic Results Framework (SRF) and its Results Oriented Annual Report (ROAR).

The monitoring process will include the preparation and submission of one annual progress report. Additionally, and in accordance with GEF requirements, quarterly progress reports will also be provided during the course of the project to UNDP. These reports will describe the allocation of fund advances charged to the Project, and show the related budget balances. These reports will be submitted no later than the following dates each year: January 15, April 15, July 15, and October 15. Each report must correspond to the previous quarter or the latest advance of funds received, in the event that more than one advance is requested during a given quarter. The UNDP will not disburse another advance until it receives the aforementioned report and the corresponding balance statement.

The project will be subject to evaluation in accordance with the policies and procedures established by UNDP for this purpose. The project will also be audited in accordance with the provisions of UNDP's internal audit.

In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent -- and separated from the GEF logo if possible, as UN visibility is important for security purposes.

Part 1.5: Legal Context

This Agreement shall be governed by the Laws of the Republic of Trinidad and Tobago.

This Project Document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement (SBAA) between the GORTT and the UNDP, signed on 20 May 1976.

The following type of revisions may be made to this project document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the Project Document have no objections to the proposed changes. In the case of the GORTT, such no-objection should be provided in writing.

a) Revisions in, or addition of any of the Annexes of the Project Document;

b) Revisions that do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the re-arrangement of inputs already agreed to or by cost increases due to inflation;

c) Mandatory annual revisions, which re-phase the delivery of agreed project inputs, or increased expert, or other costs due to inflation, or take into account agency expenditure flexibility.

Also, as stated in the SBAA, the cost of items constituting the GORTT's contribution to the project and any sums payable by the GORTT in pursuance of this article, as detailed in project budgets shall be considered as estimates based on the best information available at the time of preparation of such budgets. Such sums shall be subject to adjustments whenever necessary to reflect the actual cost of any such items purchased thereafter.

Audit Clause:

The GORTT will provide the UNDP Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The audit will be conducted by the legally recognized auditor of the GORTT, or by a commercial auditor engaged by the GORTT.

SECTION II

2.1: Results and Resources Framework

<table>
<tr><td colspan="3">Intended outcomes as stated in Country Results Framework:
▪ Significant reduction in national contribution to environmental hazards
▪ Increased efficiency and effectiveness in conservation of marine and terrestrial biodiversity</td></tr>
<tr><td colspan="3">Outcome Indicators:
• Reduction in ODS/POPS achieved

Baseline: No control in use of ODS/POP's and no phase-out plan
Target: POPS project to elaborate current inventories, strengthen institutional capacity, and assess and report on POPs in Trinidad and Tobago initiated; A national implementation plan for legislative, institutional and reporting mechanisms on POP's in Trinidad and Tobago completed and implemented by 2011.</td></tr>
<tr><td>Intended Outputs
A NIP that meets the obligations of the Stockholm Convention in a manner consistent with the needs and priorities of Trinidad and Tobago, and the resources available.</td><td>Indicative Activities (2 year period)</td><td>Inputs (US$ for a 2 year period)</td></tr>
<tr><td>Refer to GEF Project Document Section: "Project Activities and Expected Outcomes" (Annex A)</td><td>Refer to GEF Project Document Section: "Project Activities and Expected Outcomes" (Annex A)</td><td>Refer to GEF Project Document Section: "Project Budget"</td></tr>
<tr><td>TOTAL</td><td></td><td>$ 825,500 (Exchange Rate of USD1 to TTD6.26 =$TT5,167,630</td></tr>
<tr><td colspan="3">Note:
1. Exchange Rate calculated at rate of US$1.00 = TT$6.26.</td></tr>
</table>

SECTION III

3.1a: Total Work Plan and Budget – GEF Funds

TOTAL PROJECT WORKPLAN AND BUDGET								
1	**Award ID:**	00043187						
	Award Title:	PIMS 3058 POPS EA: POPs EA Trinidad and Tobago						
	Project ID: 00050279							
	Project Title:	PIMS 3058 POPS EA: POPs EA Trinidad and Tobago						
	Executing Agency:	Ministry of Planning, Housing and the Environment						
	GEF Outcome/Atlas Activity	**Responsible Party (Implementing Agent)**	**Source of Funds**	**Atlas Budgetary Account Code**	**ERP/ATLAS Budget Description/Input**	**Amount (USD) Year 1**	**Amount (USD) Year 2**	**Total (USD)**
	OUTCOME 1: ORGANIZATION OF THE PROCESS [Atlas activity 1.1] **Establishment and Strengthening Coordination Mechanism**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultants	$ 19,200	$ 19,200	$38,400
			GEF	71300	Local Consultants	$ 12,000	$ 12,000	$ 24,000
			GEF	72200	Equipment and Furniture	$ 11,000	$ 11,000	$ 22,000
			GEF	72000	General Operating Expenses	$ 14,000	$ 14,000	$ 28,000
			GEF	74500	Miscellaneous Expenses	$ 600	$ 600	$ 1,200
			GEF	71600	Travel	$ 4,000	$ 4,000	$ 8,000
			GEF	74100	Professional Services	$ 3,000	$ 3,000	$ 6,000
			Activity Total			**$ 63,800**	**$ 63,800**	**$ 127,600**
	OUTCOME 1: ORGANIZATION OF	Ministry of Planning,	GEF	72100	Contractual Service Co	$ 4,000		$ 4,000

THE PROCESS [Atlas activity 1.2] **Public Awareness and Participation**	Housing and the Environment	GEF	72100	Contractual Service Co	$ 2,500		$ 2,500
		Activity Total			**$ 6,500**		**$ 6,500**
OUTCOME 2: ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT [Atlas activity 2.1] **Institutional and Legal Framework**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 2,000	$ 2,000	$ 4,000
		GEF	71200	Intl Consultant	$ 4,000	$ 4,000	$ 8,000
		GEF	72100	Contractual Service Co	$ 3,000	$ 3,000	$ 6,000
		GEF	71600	Travel	$ 4,500	$ 4,500	$ 9,000
		GEF	74200	Audio Visual and Print Prod Costs		$ 5,000	$ 5,000
		Activity Total			**$ 13,500**	**$ 18,500**	**$ 32,000**
OUTCOME 2: ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT [Atlas activity 2.2] **Monitoring and assessment of capacity**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 2,000	$ 2,000	$ 4,000
		GEF	71200	Intl Consultant	$ 2,000	$ 2,000	$ 4,000
		GEF	72100	Contractual Service Co	$ 7,500	$ 7,500	$ 15,000
		GEF	71600	Travel	$ 5,500	$ 5,500	$ 11,000
		Activity Total			**$ 17,000**	**$ 17,000**	**$ 34,000**
OUTCOME 2: ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT [Atlas activity 2.3] **Infrastructure capacity**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 1,000	$ 1,000	$ 2,000
		GEF	71200	Intl Consultant	$ 6,000	$ 6,000	$ 12,000
		GEF	72100	Contractual Service Co	$ 4,500	$ 4,500	$ 9,000
		GEF	71600	Travel	$ 4,000	$ 4,000	$ 8,000
		Activity Total			**$ 15,500**	**$ 15,500**	**$ 31,000**
OUTCOME 2: ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT [Atlas activity 2.4] **Integration, endorsement and publication of the National Profile on Chemical Waste Management**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 1,000	$ 1,000	$ 2,000
		GEF	72100	Contractual Service Co	$ 1,500	$ 1,500	$ 3,000
		GEF	74200	Audio Visual and Print Prod Costs	$ 3,000	$ 3,000	$ 6,000
		Activity Total			**$ 5,500**	**$ 5,500**	**$ 11,000**
OUTCOME 3: ELABORATION OF INVENTORIES [Atlas activity 3.1.1]		GEF	71300	Local Consultant	$ 4,000	$ 4,000	$ 8,000
		GEF	71300	Local Consultant	$ 2,000	$ 2,000	$ 4,000
		GEF	72100	Contractual Service Co	$ 2,250	$ 2,250	$ 4,500

Inventory of sources and loads of unintentional POP's	Ministry of Planning, Housing and the Environment	GEF	74100	Professional Services	$ 20,000	$ 20,000	$ 40,000
		GEF	71600	Travel	$ 2,000	$ 2,000	$ 4,000
		GEF	74200	Audio Visual and Print Prod Costs	$ 5,000	$ 5,000	$ 10,000
		Activity Total			**$ 35,250**	**$ 35,250**	**$ 70,500**
OUTCOME 3: ELABORATION OF INVENTORIES [Atlas activity 3.1.2] **Inventory and management of existing stocks of pesticides and PCB's**	Ministry of Planning, Housing and the Environment	GEF	71200	International Consultant	$ 24,000		$ 24,000
		GEF	71300	Local consultant		$ 10,000	$ 10,000
		GEF	71600	Travel	$ 4,500	$ 4,500	$ 9,000
		GEF	72100	Contractual Service Co	$ 4,000	$ 4,000	$ 8,000
		GEF	74200	Audio Visual and Print Prod Costs	$ 8,000	$ 8,000	$ 16,000
		Activity Total			**$ 40,500**	**$ 26,500**	**$ 67,000**
OUTCOME 3: ELABORATION OF INVENTORIES [Atlas activity 3.2] **Assessment of Socio-economic implications**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 2,000		$ 2,000
		GEF	72100	Contractual Service Co	$ 1,500		$ 1,500
		Activity Total			**$ 3,500**		**$ 3,500**
OUTCOME 3: ELABORATION OF INVENTORIES [Atlas activity 3.3] **Identification of financial mechanisms to support the development of the National Implementation Plan**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 4,000	$ 4,000	$ 8,000
		GEF	71300	Local Consultant	$ 2,000		$ 2,000
		Activity Total			**$ 6,000**	**$ 4,000**	**$ 10,000**
OUTCOME 3: ELABORATION OF INVENTORIES [Atlas activity 3.4] **Identification of priorities and objectives of key action plans to address the most important sources and loads of POPs and the implementation of BAT and BEP**	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 4,000	$ 4,000	$ 8,000
		GEF	72100	Contractual Service Co	$ 1,000	$ 1,000	$ 2,000
		GEF	71600	Travel	$ 1,200	$ 1,200	$ 2,400
		GEF	74500	Miscellaneous Expenses	$1,500	$1,500	$ 3,000
		Activity Total			**$ 7,700**	**$ 7,700**	**$ 15,400**
OUTCOME 4: FORMULATION AND ENDORSEMENT BY STAKEHOLDERS OF	Ministry of Planning, Housing and the Environment	GEF	71300	Local Consultant	$ 2,000	$ 4,000	$ 6,000
		GEF	72100	Contractual Service Co		$ 3,000	$ 3,000
		GEF	74200	Audio Visual and Print	$ 4,000	$ 4,000	$ 8,000

THE NATIONAL IMPLEMENTATION PLAN				Prod Costs			
		Activity Total			**$ 6,000**	**$ 11,000**	**$ 17,000**
TOTAL							**$ 425,500**
GRANDTOTAL							**$ 825.500**

Note:

1. The GEF Outcomes should match the logical framework

2. The draft Annual Workplan (AWP) will be generated by the UNDP Country Office upon entry of the Total Budget and Workplan into Atlas and finalized - prior to signature of the project document - after a 5-day no objection review by the GEF Regional Coordinator.

3. In-kind contributions should be included in the *Summary of Funds* only.

4. Do not list AOS as a separate item. AOS should be combined with the respective budget accounts.

Summary of Funds:			
GEF			**$425,500**
GORTT			**$400,000**

3.1b: Total Work Plan and Budget – Government In-Kind contribution

TOTAL PROJECT WORKPLAN AND BUDGET								
1	**Award ID:**							
	Award Title:	PIMS 3058 POPS EA: POPs EA Trinidad and Tobago						
	Project ID:							
	Project Title:	PIMS 3058 POPS EA: POPs EA Trinidad and Tobago						
	Executing Agency:	Ministry of Planning, Housing and the Environment						
	GEF Outcome/Atlas Activity	**Responsible Party (Implementing Agent)**	**Source of Funds**	**Atlas Budgetary Account Code**	**ERP/ATLAS Budget Description/Input**	**Amount (USD) Year 1**	**Amount (USD) Year 2**	**Total (USD)**
			Gov't (In Kind)		Gov't Tech. Support	$36, 000	$36, 000	$72, 000
			Gov't (In Kind)		Equipment and Furniture	$ 5,000	$ 5,000	$ 10,000
			Gov't (In Kind)		Office Rental	$ 48,000	$ 48,000	$ 96,000
			Gov't (In Kind)		Admin. Assistance	$ 12,000	$ 12,000	$ 24,000
			Gov't (In Kind)		General Operating Expenses	$ 6,000	$ 6,000	$ 12,000
			Gov't (In Kind)		Miscellaneous Expenses	$ 600	$ 600	$ 1,200
			Gov't (In Kind)		Travel	$ 2,000	$ 2,000	$ 4,000
					Gov't Sub-total	**$ 109,600**	**$ 109,600**	**$ 219,200**
			Gov't (In Kind)		Technical Assistance	$ 2,000		$ 2,000
			Gov't (In Kind)		Contractual Service Co	$ 3,000	$ 3,000	$ 6,000

			Gov't (In Kind)		Travel (Intl Experts and Tgo participants	$ 2,750	$ 2,750	$ 5,500
			Gov't (In Kind)		Raising awareness materials –repro/disem	$ 7,500	$ 7,500	$ 15,000
					Gov't Sub-total	**$ 15,250**	**$ 13,250**	**$ 28,500**
			Gov't (In Kind)		Contractual Service Co		$ 7,000	$ 7,000
			Gov't (In Kind)		Contractual Service Co	$ 1,500	$ 1,500	$ 3,000
					Travel - Intl/Local Experts	$ 1,250	$ 1,250	$ 2,500
					Audio Visual and Print Prod Costs	$ 1,000	$ 1,000	$ 2,000
					Gov't Sub-total	**$ 3,750**	**$ 10,750**	**$ 14,500**
			Gov't (In Kind)		Contractual Service Co	$ 5,500	$ 5,500	$ 11,000
			Gov't (In Kind)		Contractual Service Co	$ 5,000	$ 5,000	$ 10,000
					Travel	$ 3,500	$ 3,500	$ 7,000
					Gov't Sub-total	**$ 14,000**	**$ 14,000**	**$ 28,000**
			Gov't (In Kind)		Contractual Service Co	$ 6,000	$ 6,000	$ 12,000
			Gov't (In Kind)		Contractual Service Co	$ 2,250	$ 2,250	$ 4,500
			Gov't (In Kind)		Travel	$ 2,000	$ 2,000	$ 4,000
					Gov't Sub-total	**$ 11,250**	**$ 11,250**	**$ 20,500**
			Gov't (In Kind)		Contractual Service Co	$ 3,000	$ 3,000	$ 6,000
			Gov't (In Kind)		Travel	$ 2,750	$ 2,750	$ 5,500
			Gov't (In Kind)		Contractual Service Co	$ 500	$ 500	$ 1,000
			Gov't (In Kind)		Audio Visual and Print Prod Costs	$ 1,500	$ 1,500	$3,000
					Gov't Sub-total	**$ 7,750**	**$ 7,750**	**$ 15,500**
			Gov't (In Kind)		Contractual Service Co	$ 750	$ 750	$ 1,500
			Gov't (In Kind)		Contractual Service Co	$ 2,250	$ 2,250	$ 4,500
			Gov't (In Kind)		Indicative Sampling Analysis	$ 5,000	$ 5,000	$ 10,000
			Gov't (In Kind)		Travel	$ 1,150	$ 1,150	$ 2,300
			Gov't (In Kind)		Information Dissemination	$ 2,500	$ 2,500	$ 5,000
					Gov't Sub-total	**$ 11,650**	**$ 11,650**	**$ 23,300**
			Gov't (In Kind)		Travel	$ 2,000	$ 2,000	$ 4,000
			Gov't (In Kind)		Contractual Service Co/Meetings	$ 1,000	$ 1,000	$ 2,000
			Gov't (In Kind)		Promotional Materials and Campaign	$ 5,000	$ 5,000	$ 10,000
					Gov't Sub-total	**$ 8,000**	**$ 8,000**	**$ 16,000**

		Gov't (In Kind)		Contractual Service Co		$ 1,500	$ 1,500
		Gov't (In Kind)		Contractual Service Co		$ 3,000	$ 3,000
		Gov't (In Kind)		Travel	$ 2,500	$ 2,500	$ 5,000
				Gov't Sub-total	**$ 2,500**	**$ 7,000**	**$ 9,500**
		Gov't (In Kind)		Contractual Service Co	$ 500	$ 500	$ 1,000
		Gov't (In Kind)		Contractual Service Co	$ 1,500	$ 1,000	$ 2,500
		Gov't (In Kind)		Travel	$ 500	$ 500	$ 1,000
				Gov't Sub-total	**$ 2,500**	**$ 2,000**	**$ 4,500**
		Gov't (In Kind)		Contractual Service Co	$ 1,000	$ 1,000	$ 1,000
		Gov't (In Kind)		Contractual Service Co	$ 1,500	$ 1,500	$ 3,000
		Gov't (In Kind)		Travel	$ 2,750	$ 2,750	$ 5,500
		Gov't (In Kind)		Audio Visual and Print Prod Costs	$ 5,000	$ 5,000	$ 10,000
				Gov't Sub-total	**$ 10,250**	**$ 10,250**	**$ 20,500**

GRANDTOTAL	**$ 400,000**

Note:

1. The GEF Outcomes should match the logical framework
2. The draft Annual Workplan (AWP) will be generated by the UNDP Country Office upon entry of the Total Budget and Workplan into Atlas and finalized - prior to signature of the project document - after a 5-day no objection review by the GEF Regional Coordinator.

Summary of Funds:			
GORTT			**$400,000**

Budget

The funding for this initiative will come from the following sources:

Cost sharing from the Government of Trinidad and Tobago:	**US$400,000**
Cost sharing from the UNDP/GEF:	**US$425,500**

On behalf of:	**Signature**	**Date**	**Name/Title**
United Nations Development Programme		29/10/2024	**Dr. Marcia de Castro Resident Representative**
Executing Agency			**Dr. Emily Dick-Forde Minister, Ministry of Planning, Housing and the Environment**

SIGNATURE PAGE

Country: _Trinidad and Tobago

UNDAF Outcome(s)/Indicator(s): _____
(Link to UNDAF outcome., If no UNDAF, leave blank)

Expected Outcome(s)/Indicator (s): _____
(CP outcomes linked t the SRF/MYFF goal and service line) _____

Expected Output(s)/Indicator(s): Increased efficiency and effectiveness in conservation of marine and terrestrial biodiversity
(CP outcomes linked t the SRF/MYFF goal and service line) Significant reduction in national contribution to environmental hazards

Implementing partner: Ministry of Planning, Housing and the Environment
(designated institution/Executing agency)

Other Partners: _____
(formerly implementing agencies)

_____

Programme Period: June, 2009 - May 2011
Programme Component:_____
Project Title: Initial Assistance to enable Trinidad and Tobago to fulfill its obligations under the Stockholm Convention on POPs
Project ID: _00050279
Project Duration: __2 Years_____
Management Arrangement: NEX

Budget	_US$825,500__
General Management Support Fee	_____
Total budget:	_____
Allocated resources:	_____
• Government	_US$400,000_
• Regular	_____
• Other:	
o GEF	_US$ 425.500
o Donor	_____
o Donor	_____
• In kind contributions	_____
Unfunded budget:	_____

Agreed by (Government): _____
Agreed by (Implementing partner/Executing agency): _____
Agreed by (UNDP): _____

ANNEX 1. TERMS OF REFERENCE

Project Manager

Principal responsibilities

The project manager will manage the project on a day-to-day basis and is ultimately responsible for ensuring the achievement of outputs and objectives including the production of a POPs Implementation Plan.

Under the responsibility of the National Project Coordinator the Project Manager has the following principal responsibilities:

1. To lead and coordinate the day-to-day management of the project and the project staff, including administration of the project according to UNDP procedures, accounting for the project, technical management of the project, and the timeliness of project implementation.
2. The PM should lead the development of the detailed project design, in collaboration with the concerned technical advisors and in consultation with the steering committee. This includes the production of a work plan; preparation of the Terms of Reference for international and national experts recruited under the project, preparation of technical specifications for equipment purchased under the project; cost estimation; activity scheduling, and reporting on the forward planning of project activities and budget expenditures.
3. The PM should assist in the selection of consultants and short-term experts recruited under the project, in full accordance with relevant Trinidad and Tobago and UNDP rules, regulations, and procedures.
4. The PM will be responsible for ensuring his full awareness and familiarity with all financial and technical rules, regulations and procedures relevant for the project implementation (both UNDP and national). The PM will also be responsible for ensuring that the project staff (and other relevant staff of participating organizations) is aware and familiar with these rules, regulations and procedures, and with their application.
5. The PM is responsible for ensuring activities stipulated in the work plan, such as workshops, capacity assessments, training, environmental appraisals and inventories, are implemented
6. The project manager should coordinate, monitor, and supervise the activities of consultants and short term experts providing input to the project, including the supervision of the implementation of the activities undertaken by consultants and experts; logistics; the review of technical and progress reports; the achievement of the project outputs and objectives; and cost control.
7. The PM should liaise regularly with the Steering Committee and the Project Team, and should ensure that the decisions and recommendations of the Steering Committee, and the opinions of the Project Team, are fully incorporated within the scope of the project implementation.

8. The project manager should ensure full liaison with the GEF Operational Focal Point the Environmental Management Authority under the Ministry of Planning, Housing and the Environment.

Duration: The appointment of the project manager will be for the full duration of the project, thus 24 months.

Qualifications and experience:

The project manager should possess:

- Masters degree in natural sciences, environmental sciences, engineering or economics
- Minimum of 6 years of professional experience
- Experience with the design and implementation of environmental programs and projects, including the writing of environmental management plans
- Extensive experience of project management and a demonstrated ability to manage complex technical assistance projects
- Good interpersonal and training skills
- PC skills
- Good written and spoken English

Reporting requirements:

- The PM should submit quarterly reports to the National Project Coordinator. These reports should indicate the progress achieved in the implementation of the project in this quarter, and highlight any problems encountered or foreseen, and the proposed solutions to these problems. Deviations from the foreseen timetable for implementation should also be reported.
- The PM will also be responsible for submitting bi-annual progress reports according to UNDP rules and regulations.
- The members of the Steering Committee may also be provided with copies of the progress reports for information (at the discretion of the National Project Coordinator).

Technical Coordinator

Principal responsibilities:

The TC will assist the Project Manager in the management of day-to-day activities and will participate in project implementation.

He/she will have the following responsibilities:

1. TC will cover the following fields of expertise:
    - Sound management of chemicals
    - legislative and international treaties in the field of chemicals management, POPs in particular
    - legislative, regulatory and enforcement tools to achieve POPs compliance
    - monitoring of POPs releases and presence in water, soils and sediments
    - POPs articles in use, obsolete stocks and POPs contaminated sides
    - socio-economic implications of POPs reduction and elimination
    - public involvement
2. TC will perform the project activities in co-operation with other members of the Project Team under the guidance of PM.
3. TC will be responsible for the validity of each written document referring to his/hers field of expertise
4. TC will propose to PM members of the Task Teams to perform the project activities in his/hers field of expertise and prepare the respective Terms of Reference. TC will lead the work of the Task Teams, ensure that they receive relevant training, and is responsible for the technical work done by them.
5. TC will closely cooperate with the International Technical Advisor in his/hers field of expertise and provide the ITA with necessary local support.

Duration: The appointment of the project manager will be for the full duration of the project, thus 24 months.

Qualifications:

- Masters degree in natural sciences, environmental sciences, chemical engineering or related fields

- Minimum 6 years of professional experience, preferably in areas relevant to waste or chemicals management
- Experience in the design and implementation of environmental programs and projects, in particular carrying out environmental appraisals, audits and EIA, preferably in the chemical sector
- Good interpersonal and training skills
- PC skills
- Good written and spoken English

Legal Advisor

Principal responsibilities:

The Legal Advisor (LA) will assist the Project Manager and the Technical Coordinator in the management of day-to-day activities and will participate in project implementation management.

He/she has the following responsibilities:

1. LA will cover the following fields of expertise:
    - establishment and training of a task force entrusted with promoting the creation for inter-sectorial networks and partnerships to participate in implementing the National Implementation Plan for the Convention on POPs.
    - Responsible for the creation and establishment of effective partnerships and networks.
    - legislative and international treaties in the field of health protection in respect to POPs
    - Formulation of a proposal for a strategy to establish partnerships and networks.
2. LA will perform the project activities in co-operation with other members of the Project Team under the guidance of PM
3. LC will be responsible for the validity of each written document referring to his/hers field of expertise.
4. LC will propose to PM members of the Task Teams to perform the project activities in his/hers field of expertise and prepare the respective Terms of Reference. TA-3 will lead the work of the Task Teams, ensure they receive relevant training and is responsible for the technical work done by them.
5. LC will closely cooperate with the International Technical Advisor in his/hers field of expertise and provide the ITA with necessary local support.

Duration: The appointment of Legal Advisor will be for 12 m/m, distributed throughout the second year of the project.

Qualifications:

- A minimum of eight years extensive experience as an attorney-at-law preferably in the public sector.
- Sound knowledge of Civil Law
- Ability to carry out effective legal research and to provide sound legal advice.
- Good research and analytical skills.
- Ability to draft Legal documents.

- Ability to work as part of a project team.
- Knowledge of contract document and specifications.
- Experience working in the Public Sector will be an asset.
- PC skills
- Very good written and spoken English

Project Financial Assistant

Principal Responsibilities:

The Project Assistant will assist the Project Manager in the management of day-to-day activities and financial operations as well as will participate in project implementation.

He/she will have the following responsibilities:

1. PA will participate in day-to day activities relating to project implementation and provide assistance to Project Management.
2. PA will be responsible for daily communication with project partners and for daily tasks that do not require Project Manager participation.
3. PA will be responsible for translation of project documents (minutes, contracts, invoices etc.) from English to Spanish language and vice versa.
4. PA will participate in each Project Team meeting and PSC meeting and prepare the minutes of the meeting, which will then be sent to each member. He/she will be responsible for maintaining the appropriate day-to-day records referring to the project implementation.
5. Timely payment of invoices upon approval of Project Manager.
6. Invoicing the external entities and controlling payments. Financial Assistant will alert Project Manager when problems appear.
7. Preparing financial inputs for the quarterly reports of Project Manager to National Project Coordinator and bi-annual reports to UNDP
8. Preparing invoices for UNDP.
9. Screening and compiling the financial documentation to be submitted on a monthly basis.
10. Technical co-operation with bank (opening accounts, controlling, closing accounts).
11. Managing the cash reserve of the project team.
12. Assisting the Project Manager in the auditing of the project.

Duration: Project Assistant will be recruited for the full duration of the project, thus 24 months.

Qualifications and experience:

- Experience in running financial operations listed in the job description above
- Degree in economics, or equivalent is an advantage
- Familiarity with relevant legal regulations

- Experience in work in international, or foreign assistant programs will be a great advantage
- Familiarity with professional computer programs relevant with the job description above
- Good interpersonal relations
- Demonstrated computer skills
- Good spoken and written English.

Reporting requirements:

The Financial Assistant will report directly to the Project Manager

Duration: The Financial Assistant will be recruited for the full duration of the project.

ANNEX 3. GEF Project Document

GEF

POPS ENABLING ACTIVITY

PROPOSAL FOR GEF FUNDING FOR NATIONAL IMPLEMENTATION PLAN ON PERSISTENT ORGANIC POLLUTANTS (POPS)

FINANCING PLAN (US$)

GEF PROJECT/COMPONENT	
Project	425,500
Sub-Total GEF	425,500
CO-FINANCING	
GEF Agency	
National Contribution	400,000
Others	
Sub-Total Co-financing:	400,000
Total Project Financing:	825,500

AGENCY'S PROJECT ID: 3058
GEFSEC PROJECT ID:
COUNTRY: Trinidad and Tobago
COUNTRY ELIGIBILITY: Trinidad and Tobago acceded to the Stockholm Convention on 13 December 2002.
PROJECT TITLE: Initial assistance to enable Trinidad and Tobago to fulfill its obligations under the Stockholm Convention on POPs
GEF AGENCY: UNDP
OTHER EXECUTING AGENCY(IES):
DURATION: 2 years
GEF FOCAL AREA: Persistent Organic Pollutants
GEF OPERATIONAL PROGRAM: Enabling Activity
GEF STRATEGIC PRIORITY: POP-1
ESTIMATED STARTING DATE: June 2009
IA FEE: US$ 41,580

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

Mr. Earl Nesbitt (Acting) Date: *July 15, 2005*
Permanent Secretary of Ministry of Public Utilities and Environment
Ministry of Public Utilities and the Environment
Sacred Heart Building
16-18 Sackville St
Port-of-Spain - Trinidad
Tel: (868) 625 6083; fax (868) 625 7003

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for POPs Enabling Activity approval.

Implementing Agency: UNDP

Y. Glemarec

Yannick Glemarec
Officer in Charge, and Deputy Executive Coordinator
GEF/UNDP
Date: December 2, 2005

Project Contact Person

Suely Carvalho
Principal Technical Advisor, POPs
UNDP-GEF

SUMMARY OF PROJECT OBJECTIVES, ACTIVITIES, AND EXPECTED OUTCOMES
1. Project objectives: The general objective of the project is to assist in the formulation of the National Implementation Plan through the analysis of current sources, existing stocks and use or POPs as well as the legislative and institutional arrangements for chemical management in order to develop a sustained capacity to fulfill Trinidad and Tobago's obligations and reporting requirements under the Stockholm Convention.
2. Project activities: 1. Organization of the process 2. Elaboration of a National Profile on Chemical and Waste Management to support the implementation of the Stockholm Convention (that will complement and update the National Profile on Chemical Safety Management) 3. Elaboration of inventories of unintentional POPs sources and loads, as well as of existing stocks and management of POPs pesticides and PCBs 4. Formulation and endorsement of stakeholders of the Stockholm Convention on Persistent Organic Pollutants National Implementation Plan 3. Project Duration: 2 years
4. Project expected outcomes: A. A strengthened National Co-coordinating Committee to promote and supervise the development of the project and the formulation of the National Implementation Plan B. Preliminary inventory of unintentional POPs sources and loads. C. An updated inventory and strategy to manage and dispose of POPs stockpiles in a safe, efficient, economically viable and environmentally sound manner. D. Options and strategies to strengthen laboratory capacity to monitor POPs environmental pollution and to assess risks for particular vulnerable human populations and ecosystems. E. Plan to develop and/or strengthen the legislation to support the safe and sound management of hazardous chemicals and wastes, as well as the implementation of the Stockholm Convention provisions. F. Practical and economically viable strategy to prevent and reduce POP's releases to the environment and potential sources of exposure for vulnerable populations and ecosystems. G. Strategies (action plans) to prevent or reduce the liberation of unintentional POP's to the environment and potential sources of exposure of sensitive human populations and ecosystems. H. Strategy to strengthen POPs and hazardous waste management infrastructure. I. Public awareness and social participation strategy (creation of intersectoral networks) to prevent or reduce the risks of POPs and other hazardous chemicals and wastes. J. National Profile of the Infrastructure for the Environmentally Sound Management of Hazardous Chemicals and Wastes. K. National Implementation Plan consistent with the GEF Initial Guidelines for Enabling Activities for the Stockholm Convention on POPs, including strategies required under Articles 5 and 6 of the Convention.

INFORMATION ON INSTITUTION SUBMITTING PROJECT BRIEF
5. Information on the organization in the country submitting the proposal: Ministry of Planning, Housing and the Environment HDC Building 44-46 South Quay Port-of-Spain. Republic of Trinidad and Tobago.
6. Information on the proposed executing organization (if different from above. The grant has to be executed by an organization in the requesting country): The Environmental Policy and Planning Division of the Ministry of Planning, Housing and the Environment has as core activities: • Assist in the formulation of environmental policy, through relevant research and preparation of papers. • Monitor and evaluate the implementation and effectiveness of environmental policy • Promote and facilitate the harmonization of social and economic policies with national environmental policy objectives • Design and implementation of programs and projects pursuant to national environmental policy objectives • Promote and facilitate Government's efforts to promote sustainable development • Act as Political Focal Point for the Multilateral Environmental Agreements (MEAs) to which the Government of the Republic of Trinidad and Tobago is signatory • Work in close collaboration with the key stakeholders in policy implementation • Assist in the identification and mobilization of financial and technical assistance to support Government's efforts to promote sustainable development
7. Date the proposal was submitted to a GEF Implementing/Executing Agency: September 22, 2005 8. Date the proposal was submitted to the GEF Secretariat: October 5, 2005 9. Date the proposal was approved: 10. Date of first Disbursement

PROJECT DESCRIPTION

INITIAL ASSISTANCE TO ENABLE TRINIDAD AND TOBAGO TO FULFIL ITS OBLIGATIONS UNDER THE STOCKHOLM CONVENTION ON POPS

BACKGROUND

As a basis to support the formulation of the project proposal to enable Trinidad and Tobago to fulfill its obligations under the Stockholm Convention on Persistent Organic Pollutants (POPs), to which the country acceded on December 13, 2002, a comprehensive background is presented to define the context in which this project is going to be developed and will lead to the formulation of the corresponding National Implementation Plan. This section includes the situation about Persistent Organic Pollutants, and the response from the Government to the environmental problems faced by the country (existing institutional structure and legal framework). The Annex 1 presents a detailed background of Trinidad and Tobago including socio-demographic context, the state of the environment.

Current situation concerning Persistent Organic Pollutants (POPs)1

Trinidad and Tobago has never been involved in the manufacture of POPs chemicals listed in Annex A and B of the Stockholm Convention (primarily pesticides and two industrial chemicals: Polychlorinated Biphenyls or PCBs and Hexachlorobenzene). In the past these chemicals were imported, but at present POPs pesticides are not registered for use by the Pesticides and Toxic Chemical Control Board (its registration was voluntarily withdrawn), and since the 1980s their importation is not allowed.

Previous uses of POPs pesticides in Trinidad and Tobago

Chlordane	Thermicide use in the construction industry
Mirex	Agricultural control of "bachac"
Aldrin/Dieldrin	Agricultural and thermicide uses
PCBs	Dielectric agent in transformers
DDT	Public health control of mosquitoes to prevent malaria transmission

Trinidad and Tobago's Presentation at the AOSIS Workshop for the Implementation of the Stockholm Convention on Persistent Organic Pollutants

Over the past years most industries have changed from PCB containing transformers and capacitors to mineral oil containing electrical equipments. Companies that still have PCBs are required to ship them back to the manufacturer in France. Caribbean Iron and Steel Company (ISPAT), located in Trinidad, is one of the companies currently known that is still using PCB containing capacitors, but this information requires to be confirmed.

Inventories

A preliminary survey was conducted in order to determine the existence of stocks of products considered persistent organic pollutants and to quantify the obsolete and unwanted pesticides and toxic chemicals for disposal. The survey involved gathering of information from the major importers of agricultural and industrial chemicals, Estates, Research Stations, Ports, Agrochemicals Shops and Laboratories; pictures of the heavily contaminated sites were obtained. [2]

Mirex and DDT were the only POPs pesticides identified during the survey.

[1] Trinidad and Tobago's Presentation at the AOSIS Workshop for the Implementation of the Stockholm Convention on Persistent Organic Pollutants.

[2] Inventory of obsolete pesticides and toxic chemicals for disposal in Trinidad and Tobago (1999).

Stocks of pesticides	Location	Quantity
Mirex	Caroni (1975) Ltd. Research Station	1 kg
	Central Experimental Station, Ministry of Agriculture	5-10 kg
	National Agro	0.35 kg
DDT	Ministry of Health, Nipdec warehouse in Chaguramas	24,000 kg

Inventory of obsolete pesticides and toxic chemicals for disposal in Trinidad and Tobago (1999)

During this study, Powergen Wrightson Road was found to have two transformers and four capacitors containing PCBs and it was recommended that further studies be developed beyond the scope of the survey to identify the existence of other PCBs stored or in use in the country.

Trinidad and Tobago hosted a regional Workshop for English speaking Caribbean countries, on May 2003, to provide training in the use of the instrument (toolkit) developed by the United Nations Environment Programme (UNEP) to serve as a basis to develop the inventories of sources and loads of dioxins and furans.

Monitoring capacity

A Laboratory Improvement Programme (LABQUIP) has been recently launched with the objective to improve the quality and reliability of data generated in private and governmental laboratories. At present, only three laboratories involved in environmental sampling and analysis have been accredited to perform certain tests, Although there exists the basic instrumentation and technical competence to detect and identify many persistent toxic substances (PTSs), specialized training and equipment may be required for the more complex and difficult to measure substances (e.g. dioxins and furans).

The Institute of Marine Affairs (IMA) conducts multidisciplinary research in the marine and coastal environment. Research projects are developed on an annual basis to provide the government and relevant agencies with information on the status of the marine and related environment. The Marine Chemistry Department (MCD) of the IMA is involved in the analytical testing of water, sediment and biota matrices for key pollutants. This Department has three Laboratories, namely, Marine Analytical Laboratory, Microbiology Laboratory and Toxicology Laboratory which provide supportive roles on all the necessary analyses for both the Technical Advisory Services and the multi-disciplinary research projects within the Institute of Marine Affairs.

The MCD also responds to environmental incidents such as 'fish kills' and oil spills and works in conjunction with the Environmental Management Authority (EMA). At present, the IMA has the laboratory facilities, but lacks the human resource skills to conduct such highly specialized tests for key pollutants (POPs) identified in the Stockholm Convention.

The IMA has in the past years done multidisciplinary research projects in the Gulf of Paria and the Godineau Swamp. In both of these projects, the analysis of POPs was not undertaken, mainly because of the lack of expertise in the testing of these pollutants. Thus, there is a huge data gap on the levels and distribution of these pollutants in the marine and related environment.

IMA undertook a project entitled "Land- based sources of pollution in the Caroni Swamp'. In this project, it is imperative that there be a component to establish and monitor the levels of these toxic pollutants and their sources. In this regard, the IMA looks forward for any assistance in developing human resource capabilities in the analysis of these pollutants.

Based on a recent meeting of the academic and research institutions and the fact that there is a lack of training and human resources to undertake specialized tests involving POPs, there was a general agreement on the need for funding and training opportunities to conduct such analyses.

Institutional co-ordination

A Steering Committee to Guide the Implementation Process under the Stockholm Convention on Persistent Organic Pollutants has been formed, for developing:

1. Appropriate strategies to manage chemical stockpiles considered to be persistent organic pollutants in an appropriate, safe, efficient and environmentally sound manner.
2. An implementation plan for the Stockholm Convention.
3. A public education and public awareness programme on the issue of persistent organic pollutants.
4. Measures to reduce or eliminate the unintentional release of persistent organic pollutants.

The unintentional release of persistent organic pollutants by the industrial sector was identified as a particular issue to be considered on the implementation of the Convention.[3]

The Committee upon its establishment was chaired by the former Ministry of Public Utilities and the Environment and consists of representatives from the Ministries of Health, Agriculture, Land and Marine Resources, Environment Management Authority (EMA), Energy and Energy Industries and the Chemistry Department of the University of the West Indies.

Trinidad and Tobago's Response to Environmental Issues including POPs

National Environmental Policy

"As a country, Trinidad & Tobago is currently developing its strategies in the context of a 20/20 Vision, to meet the national objectives, specifically with the aim of taking the country to developed status in this decade.

The National Environmental Policy articulates the goal of the policy as:
"...the conservation and wise use of the environment of Trinidad and Tobago to provide adequately for meeting the needs of present and future generations and enhancing the quality of life ".

The specific objectives of the Policy are to:

a) Prevent, reduce or eliminate various forms of pollution to ensure adequate protection of the environment and consequently the health and well-being of humans.
b) Conserve the biological diversity of the country and the stability and resilience of the ecosystems.
c) Undertake retrospective analyses or evaluations to correct past development decisions that might be inimical to the continued environmental health of the country

Institutional Development

The Ministry of Planning, Housing and Environment (MPH&E) was formed in November 2007. The Ministry has an Environmental Policy and Planning Division, and has among its responsibility the Environmental Management Authority a Statutory Body charged with coordinating environmental management related issues.

Given the vision of the Ministry of Planning, Housing and the Environment to facilitate sustainable development through planning, adequate housing and sound environmental management, the mandate of the Ministry may be defined within the context of the following parameters:[4]

- To develop a coordinated system for social, economic, environmental and physical planning
- To inform policy based on economic, social, and environmental trends
- To facilitate the development of sustainable communities, raising the standards of living nationally, and promoting a culture of responsible citizenship
- To set the policy direction for interface with regional and international organizations and foster global partnerships for development

[3] See reference in note 2.

[4] *MPHE Vision*. 1(1) 7 (2008)

- To manage, evaluate and report on the implementation of Vision 2020 in the public sector

The Ministry of Planning, Housing and the Environment's Goals:[5]

- Effective national strategic planning for sustainable development and improved quality of life
- Institutionalisation of a national development planning framework that is inclusive and reflective of good governance principles
- Development of a service centred organization
- To provide adequate and affordable housing solutions for the citizens of Trinidad and Tobago
- To maintain the existing house stock
- To improve the living conditions of persons squatting prior to the enactment of Act 25 of 1998
- To contain the spread of squatter communities in the country
- To facilitate the sustainable management of the environment
- To reduce greenhouse gas emissions and phase out ozone depleting substances (ODS)
- Implementation of a Green/office culture throughout the Ministry of Planning, Housing and the Environment
- Establishment of a reliable population database which informs the decision-making process of all ministries
- Sound spatial planning that supports modern physical infrastructure and promotes responsible social, economic and environmental planning

The Core Activities of the Environmental Policy and Planning Division of the Ministry of Planning, Housing and the Environment are:

- Assist in the formulation of environmental policy through relevant research and preparation of papers
- Provide technical support to the Permanent Secretary through the preparation of briefs, Notes for Cabinet etc.
- Monitor and evaluate the implementation and effectiveness of environmental policy
- Promote and facilitate the harmonization of social and economic policies with national environmental policy objectives
- Conduct research to inform the formulation of environmental policy
- Support and facilitate the Government's efforts to promote sustainable development
- Act as the national focal point for the Multilateral Environmental Agreements (MEAs) to which the Government of the Republic of Trinidad and Tobago is signatory
- Work in close collaboration with the environmental sector units and divisions in policy implementation
- Assist in the identification and mobilization of financial and technical assistance to support Government's effort to promote sustainable development
- Represent the Ministry on technical committees as well as at regional and international meetings and conferences

Legislation[6]

Health legislation

At present there is no legislation that refers specifically to the direct control of air pollutants emitted by stationary anthropogenic sources and the existing legislation addresses non-specific air pollutants, such as smoke, odors and fumes. The Public Health Ordinance (1950), Section 69, imposes a duty on the part of local authorities to initiate action to abate nuisances. The enforcement agencies for this legislation are: the Municipal Corporations and the Ministry of Health. Provision for the control of air pollution as a nuisance also exists under the Municipal Corporation Act (1990) with penalties of $500.

Pesticide and Toxic Chemical Act

[5] See note 6.
[6] See reference in note 3.

The Pesticide and Toxic Chemical Act (Act No. 42 of 1979) was enacted to regulate the importation, storage, manufacture, sale, use and transportation of pesticides and toxic chemicals and to provide for the establishment of the Pesticides and Toxic Chemicals Control Board. There are three sets of regulations that are enforced under this act:

- Registration and import licensing regulations. 1987
- Importation regulations. 1987
- Licensing of premises regulations. 1987

The Chemistry, Food and Drugs Division is responsible for the administration of this Act and related regulations, through the Registry of Pesticides and Toxic Chemicals and the Pesticides and Toxic Chemicals Inspectorate.

Environmental Management Act (EM ACT)

The general functions of the EM ACT include:

- The development and establishment of national environmental standards and criteria;
- Monitoring compliance with the standards,
- Criteria and programmes for control and conservation of the environment;
- Co-ordination of institutional linkages, locally, regionally and internationally.

Under the EM ACT, the Authority is required to maintain a register of air pollutants which shall contain data identifying the quantity, conditions or concentrations relevant to the identification of each pollutant. Registration of significant sources of air pollutants is also required.

The Act also allows the Authority to require and grant permits to authorize any process releasing air pollutants subject to such terms and conditions as it deems appropriate. Permit conditions may relate to the design, construction, operation, maintenance and monitoring of the facility and processes releasing the air pollutants. The Act also prohibits the release of any air pollutant into the environment which is in violation of any applicable standards, conditions or permit requirements.

Enforcement of legislation

Available data indicate that for the years 1997 and 1998, there were no enforcement proceedings under the Public Health Ordinance for the control of emissions of black smoke and similar nuisances. In general, the factors influencing non-enforcement of environmental laws include:

a) Failure to use regulatory power, such as to create bylaws, rules, etc.
b) Antiquated and outdated regulations.
c) Vagueness or absence of specific standards in the law.
d) Inadequate resources, especially financial resources.
e) Lack of punitive sanctions.

Waste Management Capacity Building

Approximately 1,000 tonnes of solid waste per day are collected in Trinidad and Tobago. In Trinidad, waste collection is the responsibility of the municipal corporations and waste management and land filling is managed by the Trinidad and Tobago Solid Waste Management Company Limited. In Tobago, the Tobago House of Assembly is responsible for the collection and disposal of solid waste.

"In recognition of the need for proactive strategies to address the deterioration of the solid waste management situation in Trinidad and Tobago, the Ministry of Public Utilities and the Environment has initiated steps to have established, a National Solid Waste Management System in Trinidad and Tobago with the following objectives:

- The conservation of energy and natural resources.
- The reduction of waste generated

- An environmentally sound treatment of municipal, commercial, industrial, agricultural and medical wastes, using the best available technologies.
- The development of the most cost-effective systems for disposal of solid waste
- The protection of human health and the environment from the potential hazards of waste disposal

A Technical Committee for the Development of Waste Management Rules for Trinidad and Tobago has been formed and chaired by the Environmental Management Authority. The Committee consists of representatives from PLIPDECO, ATLAS/AMCHAN, TCL Group, Trinidad and Tobago Bureau of Standards, bpTT, Pesticides and Toxic Chemicals Control Board and the Ministry of Public Utilities and the Environment. This Committee is responsible of developing:

1. Definitions of waste and waste generators
2. Categories of waste and waste generators
3. Environmental principles and practices for the handling and transportation, disposal and treatment of waste
4. A system of permits and licenses for waste generators, transporters and disposal facilities.

Trinidad and Tobago acceded to the United Nations Basel Convention to Control Transboundary Movement of Hazardous Wastes and their Disposal on February 18, 1994 and serves as the host country for the Sub-Regional Centre for Training and Technology Transfer for the Caribbean Region. This Centre has been operational since 2001 and has provided support and training in aspects related to the implementation of the Convention.

Obligations under the Basel Convention

1. Development of a National Policy to address the issues of hazardous waste and other wastes and their disposal. This policy should include national objectives to minimize the generation of hazardous waste taking into account social, technical and economic aspects.
2. Formulation of Legislation to address the following issues-definition of the term hazardous waste; transboundary movement of hazardous waste including illegal trafficking; and disposal of hazardous waste.
3. Formulation of guidelines to deal with the storage, transportation and disposal of hazardous and other wastes.
4. Submission of periodic reports to the Convention Secretariat on the status of actions taken.

Relevant activities[7]

National Capacity Self Assessment (NCSA) Project

The Environmental Management Authority received funding under GEF PDF - A grant for a project to develop a "National Capacity Self Assessment of Capacity Building Needs for Global Environmental Management". This project is designed to address capacity needs in, but not limited to, the GEF focal areas of climate change, biodiversity and desertification/land degradation and has among other goals to:

- Catalyze targeted and coordinated action and requests for future external funding and assistance.
- Link country action to the broader national environmental management and sustainable development framework.

Development of Social Indicators to Measure Sustainable Consumption and Production

[7] See reference in note 2.

"In November 1999, the Consumer Affairs Division developed a Model/Report regarding "the Development of Social Indicators to Measure Sustainable Consumption and Production in Trinidad and Tobago". These indicators reflect the aims and objectives of public policy in Trinidad and Tobago for a number of areas such as health, education, living condition, economic activity, human settlement, environment, recreation and leisure, key resources, food security, and international trade. The actual development of the indicators involves several phases: diagnostic assessment, systems design, and implementation/evaluation.

Clean Development Mechanism

Trinidad and Tobago ratified the Kyoto Protocol concerning Climate Change in January 1999, in which no targets have been set for developing country Parties. To assist developed country Parties to achieve the quantitative emissions reduction targets, the Protocol includes a range of "flexibility mechanisms", the most important of which, from the perspective of Trinidad and Tobago, is the Clean Development Mechanism (CDM).

Under the CDM, developed country Parties are allowed to undertake sustainable development (emission reduction) projects in developing country Parties to partially fulfill their "quantified emissions limitation and reduction commitments" under the Convention/Protocol. Benefits, which would accrue to host country Parties, include inflows of foreign investment, employment generation, technology transfer and access to foreign markets.

"Trinidad and Tobago is currently exploring the possibilities of maximizing the benefits which could accrue to the country through the participation in CDM activities. In this regard, the following is noteworthy:

1. Establishment of a Standing Committee appointed to address all CDM matters, particularly evaluation of CDM project proposals. Membership of the Committee would be drawn from the Ministry of Public Utilities and the Environment, the Environmental Management Authority and other key stakeholder Agencies. Thus far the Government of Trinidad and Tobago has received two (2) project proposals.
2. With a view to building human and institutional capacity in the Latin American and Caribbean region to exploit the possibilities under the CDM Manual. Trinidad and Tobago has been chosen as one of the three (3) countries in which the Manual will be "field tested"

Multidisciplinary research

Several multidisciplinary projects have been or are being developed with the support of Government Agencies and Universities to assess the chemical environmental pollution, exposure and potential adverse effects, from a perspective that includes consideration to economic and social aspects.

National Profile on Chemical Safety Management 2001

The "National Profile – Chemical Safety Management in Trinidad and Tobago 2001," represents an update of the original document prepared as a result of a National Tripartite Workshop held in July 25-27, 1995, for the purpose of charting a course and setting priorities in respect of ratification and implementation of the relevant ILO Conventions and Observance of Recommendations (the Chemical Convention, 1990 (No. 170), Chemicals Recommendation, 1990 (No. 177) and the Prevention of Major Industrial Accidents Convention, 1993 (No. 174)).

In this document, the legislative infrastructure is reviewed in respect of pesticides, toxic chemicals and environmental protection against contamination. Components of the institutional existing framework are described, including both state bodies and Non-Governmental Organizations (NGOs). The types of inspection and monitoring services available are made known and the range of risk factors at high density industrial centres are considered as well as aspects related to the proper disposal of hazardous materials. Among the variety of hazardous substances included in the profile are the chlorinated hydrocarbons, the organo-phosphates, the carbamates, pyrethroids, quinones, nitrobenzenes, derivatives of mercury, copper, the triazines, bipyridyl compounds and phenyl-ureas.

Profile Objectives

1. To identify the range of risk factors associated with the handling, use and disposal of dangerous chemicals both in the industrial setting and at domestic premises.
2. To assign duties and responsibilities to government agencies in respect of rules and regulations designed to control dangerous chemicals and to minimize harmful effects to man, animal and the environment.
3. To devise safe systems of work in the use, handling and storage of toxic chemicals in Trinidad and Tobago to ensure safe industrialization and sustainable development and growth.
4. To devise delivery systems for the dissemination of useful information to enable persons to protect themselves against harmful effects of hazardous chemicals.
5. To encourage non-governmental organizations to join in the campaign for the safe storage, handling, use, transportation and disposal of chemicals.
6. To ensure that children are protected from death or illness arising from hazardous chemicals.
7. To allow for the rough estimation of hazards that may arise from proposed installations susceptible to gaseous emissions.

CONCLUSIONS BACKGROUND

Trinidad and Tobago is the most dynamic economy in the Caribbean Region and Human Development Indicators show an important progress in different parameters that are key for sustainable development. Nevertheless, the country still faces great challenges in terms of environmental and health protection from the risks derived from waste and environmental pollution generation and the pressures on natural resources from different productive and social activities.

New institutions have been created recently to address the environmental problems and an environmental legislation has been established in 2001 to support the implementation of the environmental policy, but there is an urgent need for strengthening Government capacity to enforce the law as well as for responding to the demands of services and infrastructure to address waste management (in particular hazardous waste management) and pollution prevention and control needs.

Concerning persistent organic pollutants, the main problems at present are related to the existence of some stocks of pesticides (mainly DDT) and PCBs that require proper inventory and storage, as well as to the lack of economic resources to send them to other countries that have appropriate technologies for their final disposal.

An inventory of point and area sources of unintentional persistent organic pollutants (dioxins, furans, hexaclorobenzene and PCBs) need to be developed, to define the magnitude of the problem as well as to determine the actions to be implemented to eliminate or reduce its liberation to the environment.

Laboratory capacity for environmental and biological monitoring of POPs and other environmental pollutants needs to be strengthened, as well as the capacity to assess, communicate and manage the human and ecosystem risks derived from the exposure to chemical pollutants.

The country has an opportunity to create synergies between ongoing related projects that will strengthen such capacities and effective co-ordination needs to be established to promote those synergies.

PROJECT OBJECTIVES

The general objectives of the project are to analyze current sources, existing stocks and use of POPs as well as the legislative and institutional arrangements for chemical management in order to develop a sustained capacity to fulfill Trinidad and Tobago's obligations and reporting requirements under the Stockholm Convention, as well as to assist on the formulation of the National Implementation Plan.

PROJECT ACTIVITIES AND EXPECTED OUTCOMES

STEP 1 ORGANIZATION OF THE PROCESS

ACTIVITY 1.1. ESTABLISHMENT AND STRENGTHENING COORDINATING MECHANISM

1.1.1. **Coordination Unit**: The Ministry of Planning, Housing and the Environment will establish a Project Coordination Unit (PCU) responsible for the project execution, identify and appoint a National Project Coordinator (NPC) and the core project team.

1.1.2. **Co-ordination Committee**: A National Co-ordination Committee (NCC) will be established comprising relevant government agencies and other key stakeholders for the purpose of coordinating the activities of the Project and approve the work plans, budgets and output of the Project Manager.

1.1.3. **Definition of responsibilities**: The roles and responsibilities of the members of the NCC for the various aspects considered in the Project will be identified, clarified and assigned, and Terms of Reference for the Coordination Unit, Coordination Committee and the Project Manager should be included.

1.1.4. **Capacity strengthening**: Capacities of PCU and NCC as well as country Stockholm Convention Focal Point will be strengthened, and information, equipment and administrative support provided according to their needs.

ACTIVITY 1.2. PUBLIC AWARENESS AND PARTICIPATION

1.2.1. **Development of information activities**: To understand the relevance of the Stockholm Convention on Persistent Organic Pollutants (POPs), and to assure wide support to its implementation, both government officials and members of the different sectors of society (including common citizens) need to have a basic understanding about the difference that exists between the hazards and the risks of chemicals and hazardous wastes, as well as about the different aspects that need to be considered on their integral management to assure safety and the protection of human health and the environment all along their life cycle.

A clear understanding needs to be developed as to the particular characteristics of products and unintentional byproducts that are considered to be persistent organic pollutants, and about the risks derived from the fact that they can remain active in the environment for long periods, accumulate in body tissues and along the food chain, travel long distances and cause different adverse effects in sensitive human populations and organisms from the aquatic and terrestrial biota.

To maintain the process of stakeholders being informed and taking part in the process of formulation and approval of the National Implementation Plan (NIP), they should be updated of the results of different activities, in particular, concerning the National Profile on Chemical and Waste Management and the process of integration of the NIP.

1.2.2. **Development of information tools**: The understanding and the support to the present Project activities and the National Implementation Plan (development of specific action plans), require a sustained effort from government agencies and the public, that could only be obtained by continuous stimulation through educative programmes, information campaigns in the media, dissemination of information brochures, and other related means.

1.2.3. **Development and promotion of network mechanisms**: The weak governmental capacity to enforce the existing environmental and health legislation regarding chemical and waste management, demands public support and the establishment and operation of intersectoral voluntary networks on chemical and waste environmental sound management. Those networks could be a mechanism to obtain public support for the implementation of governmental programmes to protect human health and the environment from the risks of hazardous chemicals and wastes, as well as those associated with persistent organic pollutants.

ACTIVITY 1.3 TRAINING

1.3.1. **Initial training workshop**: An initial training workshop to create the same level of understanding of the Stockholm Convention on Persistent Organic Pollutants (POPs), its objectives and goals, among key stakeholders needs to be undertaken both in Trinidad and Tobago, to facilitate the support of all stakeholders in developing the National Implementation Plan (NIP).

1.3.2. **Successive training workshops**: Along the development of the different activities comprised on this Project, training workshops concerning every subject to be covered will take place before starting them, offering new opportunities to strengthen the capacities of the stakeholders.

According to the subject, those activities and workshops will require the engagement of local or overseas adviser(s) to conduct the training and work alongside local staff until their capacity has been established on a sustainable basis.

ACTIVITY 1.4. SECURING COMMITMENTS OF MAJOR STAKEHOLDERS

1.4.1. **High level inception workshop**: Organization of a high level stakeholder inception workshop to:

- Present the national and international contexts relevant to the Convention and develop the Project and National Implementation Plan (relationship with Agenda 21 chapters 19 and 20, the Intergovernmental Forum on Chemical Safety and with other related International Conventions such as Basel, Rotterdam, Montreal Protocol and Climate Change).
- Present the Project objectives and the anticipated results and outcomes.
- Secure commitments of all stakeholders involved in the management of persistent organic pollutants and clarifying and obtaining agreements regarding their roles and responsibilities, as well as resource commitments (information, technical, human, etcetera).

ACTIVITY 1.5. APPROVAL OF WORK-PLAN AND TIMETABLE

1.5.1. A detailed work-plan and timetable for implementation of the Project will be presented by the Project Coordination Unit and endorsed by the National Co-ordination Committee.

STEP 1: EXPECTED OUTCOMES

1. Establishment and strengthening of the National Co-ordination Committee.
2. Establishment and strengthening of the Project Coordination Unit
3. Commitments of POPs stakeholders to support and execution of the Project.
4. Finalized and endorsed project work-plan and timetable.
5. A strategy and tools to rise awareness about POPs
6. A mechanism to create and operate intersectoral networks to support the development of the Project and the implementation of the National Implementation Plan
7. Training

STEP 2. ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT TO SUPPORT THE IMPLEMENTATION OF THE STOCKHOLM CONVENTION

The project will research and seek information on the previously prepared National Profile. Its findings and data will be considered when relevant during the elaboration of the current profile.

ACTIVITY 2.1. INSTITUTIONAL AND LEGAL FRAMEWORK

2.1.1. **Institutions involved in chemical and waste management**: Elaboration of an inventory of governmental and non governmental institutions/organizations/groups involved in chemical and waste management, or closely related activities, relevant for the implementation of the Stockholm Convention; describing:

- Organizational structure
- Objectives
- Main activities on this field.
- Legal mandate in relation to chemical and waste management related issues

2.1.2. **Legislation**: Inventory and description of relevant laws, regulations and standards (and other types of legal provisions) that support the control of chemical and waste management, relevant for the implementation of the Stockholm Convention.

- Organization of a training workshop to review the key aspects involved on chemical and waste integral and environmentally sound management regulation.
- Assessment of the effectiveness of national legislative, regulatory and enforcement infrastructure to comply with chemical and waste management related International Conventions.
- Description of co-ordination mechanisms among governmental agencies.
- Assessment and dissemination of regulatory instruments (integration of a CD containing the files of the most relevant chemical and waste management regulations).
- Description of public consultation and participation mechanisms established to support the process of development of regulatory instruments.
- Evaluation of needs and definition of strategies to strengthen the legal framework.

ACTIVITY 2.2. MONITORING AND ASSESSMENT CAPACITY

2.2.3. **Monitoring capacity**: Characterization of public and private national capacity to monitor environmental chemical pollution and exposure, in particular concerning persistent organic pollutants, through the:

- Organization of a training workshop to review the needs and means to monitor POPs and other chemical environmental pollution and assess human and ecosystem exposure.
- Elaboration of an inventory of laboratories involved in chemical environmental and biological monitoring.
- Description of mechanisms on place for quality control/quality assurance and accreditation of laboratories and number and types of accredited laboratories.
- Identification of needs to strengthen monitoring and analysis capacity.

2.2.4. **Risk assessment capacity**: Characterization of public and private available capacity to assess the risks for humans and the environment derived from pollution and exposure to persistent organic pollutants and other hazardous chemicals and wastes, through:

- Organization of training workshop(s) to offer training on the methodologies to assess human health and ecotoxicological risks.
- Inventory of institutions/research centers or other groups involved on or aware of risk assessment applied to chemical and hazardous wastes risks evaluation.
- Identification of need to strengthen risk assessment capacity.

ACTIVITY 2.3. INFRASTRUCTURE CAPACITY

2.3.1. **Hazardous waste management**: Obsolete, prohibited, not allowed, and discarded hazardous products or materials (such as persistent organic pollutants) become hazardous wastes and need to be managed safely and properly during its storage, transport, recycling, treatment, co-processing as alternative fuels, or disposed off on landfills. In this particular activity the capacity and needs of Trinidad and Tobago for the environmentally sound management of hazardous wastes is to be determined and assessed, through:

- The organization of a training workshop to review environmentally sound options for the integral management of hazardous wastes along its complete life cycle.
- The gathering of available information about sources and volumes of hazardous wastes generated and stored in the country.
- The inventory of existent infrastructure and capacities (installations, technologies, trained manpower and other relevant aspects).
- The assessment of existing systems in Trinidad & Tobago for managing industrial hazardous wastes.
- The identification of capacity building needs for strengthening the capacity for the local environmental sound management of hazardous wastes.

2.3.2. **Best available techniques (BAT) and Best environmental practices (BEP)**: The elimination or reduction of the liberation into the environment of persistent organic pollutants (and by the same means of other relevant chemical pollutants) require access to BAT and BEP and is one of the main goals of the Stockholm Convention. For this reason the present activity is focused on:

- The organization of a training workshop to review the Stockholm Convention provisions regarding this issue, the work being developed by the Expert Group charged with developing the BAT and BET guidelines concerning the sources of unintentional POPs considered in Annex C Part I and II and other relevant aspect that will help Trinidad and Tobago to fulfill this particular objective.
- The analysis of the results of the preliminary inventory of sources and loads of POPs in Trinidad and Tobago to establish priorities, objectives and goals to be considered in the National Action Plan, in order to reduce or eliminate POPs emissions from these sources.
- The identification of capacity building needs on this area and design of a strategy to satisfy these needs.

2.3.3. **Information systems and access to information**: An essential element to raise awareness, to promote public participation and to assess implementation of the Stockholm Convention, is the access to information through the establishment of an information system on chemical pollutants. This objective will be achieved through:

- The organization of a training workshop to review the key elements to be considered in the development of a chemical safety and environmentally sound management of chemicals information system.
- The inventory of existent capacity and institutional arrangements relating to environmental chemical management, pollution prevention and control, information systems and public dissemination of information.
- The identification of capacity building needs and priorities in this area and design of strategies to satisfy such needs.
- The design and development of a Web page to provide access to information on chemical waste management.

ACTIVITY 2.4. INTEGRATION, ENDORSEMENT AND PUBLICATION OF THE NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT

2.4.1. **Integration of the National Profile**: The National Profile will be integrated using as a basis the diagnoses and conclusions derived from Activities 2.4.1 to 2.4.3.

2.4.2. **Endorsement of the National Profile**: The document concerning the National Profile will be submitted to the consideration of the stakeholders and the National Co-ordination Committee, through its circulation and presentation on a workshop, for their endorsement.

2.4.3. **Publication of the National Profile**: The document will be available on the Stockholm Convention Web site and will be published for its dissemination.

STEP 2: EXPECTED OUTCOMES

1. National Profile on Chemical and Waste Management to support the implementation of the Stockholm Convention on Persistent Organic Pollutants published and accessible through Web site.
2. Training workshops concerning chemical and waste management relevant issues.
3. CD with files of key regulations concerning chemical and waste management.
4. Web site to give public access to information regarding the Stockholm Convention on Persistent Organic Pollutants.
5. Diagnose and strategies to strengthen national capacities regarding chemical and waste management.
6. Assist in capacity development for reporting under Article 15 of the Convention.

STEP 3. ELABORATION OF INVENTORIES OF UNINTENTIONAL POP's SOURCES AND LOADS, AS WELL AS OF EXISTING STOCKS OF POPs PESTICIDES AND PCBs

ACTIVITY 3.1. IDENTIFICATION OF SOURCES AND LOADS OF UNINTENTIONAL POPs AND EXISTING STOCKS OF POPs PESTICIDES AND PCBs

3.1.1. **Inventory of sources and loads of unintentional POPs**: According to the objectives of the Stockholm Convention every Party needs to identify the main sources of POPs in order to establish priority action plans to reduce or eliminate such emissions. In this regard the present activity is focused on:

- The organization of a training workshop on the application of UNEPs Toolkit to elaborate the preliminary inventory of unintentional POPs sources and loads.
- The development of the preliminary inventory.
- The establishment of a data base that could be updated periodically.
- The identification of needs and strategies to strengthen national capacities to build and update inventories on unintentional POPs.

3.1.2. **Inventory of existing stocks of pesticides and Polychlorinated Biphenyls (PCBs)**: Preliminary inventories of stocks of discarded POPs pesticides and PCBs confirmed and updated and a strategy needs to be developed to address management related issues through:

- A survey and inspections or visits to installations where these materials are stored.
- Assessment of their actual means of containment and storage.
- Design and implementation of a strategy to improve containment and storage conditions.
- Formulation and implementation of a mechanism to dispose of DDT and other POPs pesticides stocks.

ACTIVITY 3.2. ASSESSMENT OF SOCIO-ECONOMIC IMPLICATIONS OF POPs MANAGEMENT

3.2.1. Training on cost-benefit analysis of the various options for POPs management
3.2.2. Evaluation of the socio-economic implications of POPs management

ACTIVITY 3.3. FINANCIAL MECHANISMS TO SUPPORT THE DEVELOPMENT OF THE NATIONAL IMPLEMENTATION PLAN

3.3.1. Identification of national sources of funding
3.3.2. Identification of international sources of funding

ACTIVITY 3.4 IDENTIFICATION OF PRIORITIES AND OBJECTIVES OF KEY ACTION PLANS TO ADDRESS THE MOST IMPORTANT SOURCES AND LOADS OF POPS AND THE IMPLEMENTATION OF BAT AND BEP

3.4.1 Workshop to facilitate identification of priorities and objectives
3.4.2 Identification of priorities and objectives that would inform the NIP

STEP 3: EXPECTED OUTCOMES

1. Training on the use of the UNEP toolkit to elaborate inventories of unintentional POPs sources and loads.
2. Preliminary inventory of unintentional POPs sources and loads.
3. Confirmation of preliminary inventories of POPs pesticides stocks and existing volumes of PCBs.
4. Improvement of containment and storage conditions of existent POPs stocks.
5. Management and disposal of DDT and other POPs pesticides stocks
6. Socio-economic implications of POPs management assessment.
7. Identification of priorities and objectives of key action plans to address the most important sources and loads of POPs and the implementation of BAT and BEP
8. Sources of funding identified;
9. Identification of priorities and objectives of key action plans to address the most important sources and loads of POPs and the implementation of BAT and BEP

STEP 4. FORMULATION AND ENDORSEMENT OF STAKEHOLDERS OF THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS NATIONAL IMPLEMENTATION PLAN

ACTIVITY 4.1 FORMULATION OF THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS NATIONAL IMPLEMENTATION PLAN

4.1.1. Integration of the Action Plans: Based on the results from activities developed on steps 1 to 3, a series of action plans will be formulated to address particular critical issues in order to fulfill the obligations under the Stockholm Convention, strengthen national capacities and eliminate or reduce POPs releases to the environment, as well as to protect human populations and ecosystems from exposures and risks from POPs.

4.1.2. Endorsement of the Action Plans: The proposed action plans will be submitted for the endorsement of stakeholders and the National Co-ordination Committee, through their distribution at a presentation and discussion Workshop.

4.1.3. Publication and dissemination of the National Implementation Plan: The National Implementation Plan of the Stockholm Convention on Persistent Organic Pollutants will be published and made publicly available through the Web site.

STEP 4: EXPECTED OUTCOMES

1. National Implementation Plan of the Stockholm Convention on Persistent Organic Pollutants formulated and publicly available.

Project Implementation Plan

DURATION OF PROJECT (IN MONTHS)																								
ACTIVITIES	**PROJECT-MONTHS**																							
Number of Activity corresponds to that of each activity in Description of proposed enabling activities.	6						12						18						24					
1 ORGANIZATION OF THE PROCESS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Activity 1.1. Establishment and strengthening coordinating mechanism	X	X	X	X																				
Activity 1.2. Public awareness and participation and follow up of key outputs		X	X	X							X												X	
Activity 1.3 Training		X	X																					
Activity 1.4. Securing commitments of major stakeholders		X	X																					
Activity 1.5. Approval of work plan and timetable			X																					
2. ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT TO SUPPORT THE IMPLEMENTATION OF THE STOCKHOLM CONVENTION			X	X	X	X	X																	
Activity 2.1. Institutional and legal framework		X	X	X																				
Activity 2.2. Monitoring and assessment capacity		X	X																					
Activity 2.3. Infrastructure capacity				X	X	X																		
Activity 2.4. Integration, endorsement and publication of the National Profile on Chemical and Waste Management							X																	
3. ELABORATION OF INVENTORIES OF UNINTENTIONAL POP's SOURCES AND LOADS, AS WELL AS OF EXISTING STOCKS OF POPs PESTICIDES AND PCBs										X	X	X	X											
Activity 3.1. Identification of sources and loads of unintentional POPs, as well as of existing stocks										X	X	X	X											

DURATION OF PROJECT (IN MONTHS)																										
ACTIVITIES	**PROJECT-MONTHS**																									
Number of Activity corresponds to that of each activity in Description of proposed enabling activities.	6						12						18						24							
of POPs pesticides and PCBs																										
Activity 3.1.1 Inventory of sources and loads of unintentional POPs										X	X	X	X													
Activity 3.1.2. Inventory and management of existing stocks of pesticides and PCBs										X	X	X														
Activity 3.2. Assessment of socio-economic implications of POPs management																										
3.2.1. Training on cost-benefit analysis of the various options for POPs management										X																
3.2.2 Evaluation of socio-economic implications of POPs management options											X															
3.3. Identification of financial mechanisms to support the development of the National Implementation Plan											X															
3.4 Identification of priorities and objectives of key action plans to address the most important sources and loads of pops and the implementation of BAT and BEP											X	X	X	X	X											
4. FORMULATION AND ENDORSEMENT OF STAKEHOLDERS OF THE STOCKHOLM CONVENTION NATIONAL IMPLEMENTATION PLAN																										
Activity 4.1 Formulation of the Stockholm Convention National Implementation Plan								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

NUMBER OF WORKSHOPS AND TIMETABLE

No	TYPE	TOPIC	DELIVERY (Month)
1	Initial awareness raising and follow up of key outputs	Stockholm Convention obligations/health and environmental risks of POPs	02, 11 and 23
2	High level inception workshop	Presentation and endorsement of Project objectives, anticipated outcomes, work-plan and timetable.	03
3	Training workshop	Integral and environmentally sound management of hazardous chemicals legislation	06
4	Training workshop	Integral and environmentally sound management of wastes (including hazardous wastes) legislation	07
5	Training workshop	Needs and means for the environmental and biological monitoring of POPs to assess human and ecosystem exposure	05
6	Training workshop	Methodologies to assess human and ecosystem POPs related risks	06
7	Training workshop	Environmentally sound options for the integral management of wastes	07
8	Training workshop	Best available techniques and best available practices to eliminate or reduce unintentional emissions of POPs	08
9	Training workshop	Chemical Information Systems to support risk assessment and management	09
10	Training workshop	Inventories of sources and loads of unintentional emissions of POPs	04
11	Training workshop	Cost-benefit analysis	11
12	Identification workshop	Establish priorities	15
13	Review and endorsement of outcomes	National Profile on Chemical and Waste Management	12
14	Integration, review and endorsement	Stockholm Convention National Implementation Plan	08 to 24

TECHNICAL REPORTS/PRODUCTS

No	TOPIC	END RESULT
1	Persistent Organic Pollutants and Stockholm Convention (Awareness raising)	Brochures
2	Strategy to establish and operate intersectoral networks to support the application of the National Implementation Plan	Report Document and Electronic File
3	National chemical and waste regulations	Compact Disc
4	Strategy to strengthen national chemical and waste regulations	Report Document and Electronic File
5	National analytical laboratory/risk assessment capacity and needs	Report Document and Electronic File
6	Inventory of national waste management capacity and needs	Report Document and Electronic File
7	Inventory of sources and loads of unintentional emissions of POPs	Report Document and Electronic File
8	Inventory of existing stockpiles of POPs pesticides and PCBs	Report Document and Electronic File
9	Chemical Information System	Report Document, Electronic File and Design of Web Page
10	National Profile on Chemical and Waste Management	Report Document, Electronic File, Publication
11	Stockholm Convention National Implementation Plan	Report Document, Electronic File, Publication
12	Financial mechanisms to support the development of the National Implementation Plan	Report Document and Electronic File

Project Budget

Component	Unit Cost (US$) GEF	Total (US$) GEF	Unit Cost Gov't (In-kind)	Total Cost Gov't (In-kind)	Total Project Costs
ORGANIZATION OF THE PROCESS					
Activity 1.1. Establishment and strengthening coordinating mechanism					
Project Manager (24 person months)	1,600	38,400			38,400
Technical Assistance (24 person months)	1,000	24,000			24,000
Gov't technical support (2 Persons)			1,500	72,000	72,000
Office Equipment		22,000		10,000	32,000
Office Rental			4,000	96,000	96,000
Administrative Assistance (2 persons)			500	24,000	24,000
Operating cost throughout the project - Stationary , Office Supplies, Communication (24 months)	1,200	28,000	500	12,000	40,000
Coordinating Committee meetings(24)	100	1,200	100	1,200	2,400
Travel (2 international, 4 national)		8,000		4,000	12,000
Audits		6,000			6,000
Sub-total		**127,600**		**219,200**	**346,800**
Activity 1.2. Public awareness and participation					
Broad-based Stakeholder inception training workshop (50 participants, 1 day) (2 workshops, one in Trinidad and one in Tobago)	2,000	4,000			4,000
High level inception workshop (30 participants)(2 workshops, one in Trinidad and one in Tobago)	1,500	2,500			2,500
Technical assistance (one person/month)(1 month)			2,000	2,000	2,000
Administrative (Conference Management)			3,000	6,000	6,000
Travel (international experts and Tobago participants)				5,500	5,500
Raising awareness materials reproduction and dissemination				15,000	15,000
Sub-total		**6,500**		**28,500**	**35,000**
ELABORATION OF A NATIONAL PROFILE ON CHEMICAL AND WASTE MANAGEMENT					
Activity 2.1. Institutional and legal framework					

Technical Assistance (local)(one person/month)(2 months)	2,500	5,000			5,000
Technical Assistance (international)(2 persons/2 weeks)	400	8,000			8,000
Training workshops (30 participants, 2 days) (2 workshops)	3,000	6,000	1,500	3,000	9,000
Administrative (Conference Management)			3,500	7,000	7,000
Travel (international experts and Tobago participants)		9,000		2,500	11,500
Compact disc on national chemical and waste regulations dissemination		5,000		2,000	7,000
Sub-total		**33,000**		**14,500**	**47,500**
Activity 2.2. Monitoring and assessment capacity					
Technical Assistance (local) (one person/month)(2 months)	2,000	4,000			4,000
Technical Assistance (international) (two persons)(one week)	400	4,000			4,000
Training workshops (30 participants, 5 days) (two workshops)	1,500	15,000	1,000	10,000	25,000
Administrative (Conference Management)			5,500	11,000	11,000
Travel (international experts and Tobago participants)		11,000		7,000	18,000
Sub-total		**34,000**		**28,000**	**62,000**
Activity 2.3 Infrastructure capacity					
Technical Assistance (local) (one person/month)(1 months)	2,000	2,000			2,000
Technical Assistance (international)(3 persons)(one week)	400	12,000			12,000
Training workshops (30 participants, two days)(3 workshop)	3,000	9,000	1,500	4,500	13,500
Administrative (Conference Management)			4,000	12,000	12,000
Travel (international expert and Tobago participants)		8,000		4,000	12,000
Sub-total		**31,000**		**20,500**	**51,500**
Activity 2.4. Integration, endorsement and publication of the National Profile on Chemical and Waste Management					
Technical Assistance (one person/month)(1 month)	2,000	2,000			2,000

Workshops (30 participants, one day)(2 workshops, one in Trinidad and one in Tobago)	2,500	5,000	500	1,000	6,000
Publication and dissemination of the Profile		6,000		3,000	9,000
Administrative (Conference Management)			3,000	6,000	6,000
Travel (international expert and Tobago participants)				5,500	5,500
Sub-total		**13,000**		**15,500**	**28,500**
ELABORATION OF INVENTORIES					
Activity 3.1.1. Inventory of sources and loads of unintentional POPs					
Technical Assistance (local) (one person/month) (4 months)	2,000	8,000			8,000
Technical Assistance (international) (one person) (one week)	400	4,000			4,000
Workshop (30 participants, 3 days) (1 workshop)	1,500	4,500	500	1,500	6,000
Administrative (Conference Management)			4,000	4,000	4,000
Indicative sampling and analysis (50 samples)	800	40,000	200	10,000	50,000
Travel (international expert and Tobago participants)		4,000		2,300	6,300
Information dissemination		10,000		5,000	15,000
Sub-total		**70,500**		**22,800**	**93,300**
Activity 3.1.2. Inventory and management of existing stocks of pesticides and PCBs					
International Consultant (8000/month) (3 months)	8,000	24,000			24,000
Local consultant (2,000/5months)		10,000			10,000
Travel		9,000		4,000	13,000
Workshops/Meetings		8,000		2,000	10,000
Promotional Materials and Campaign		19,000		10,000	29,000
Sub-total		**70,000**		**16,000**	**86,000**
Activity 3.2 Assessment of socio-economic implications					
Technical Assistance (one month/person)(one month)	2,000	2,000			2,000
Workshop (30 persons, one day)(one workshop)	1,500	1,500	1,500	1,500	3,000
Administrative (Conference Management)			3,000	3,000	3,000

Travel (international expert and Tobago participants)				4,500	4,500
Sub-total		**3,500**		**9,000**	**12,500**
Activity 3.3 Identification of financial mechanisms to support the development of the National Implementation Plan					
Technical Assistance (one month/person)(one month)	2,000	2,000			2,000
Sub-total		**2,000**			**2,000**
Activity 3.4 Identification of priorities and objectives of key action plans to address the most important sources and loads of pops and the implementation of BAT and BEP					
Local consultant (5 months)	2,000	10,000			10,000
Workshops/Meetings (30 persons, one day)	2,000	2,000	1,000	1,000	3,000
Administrative (Conference Management)			3,000	3,000	3,000
Travel	2,400	2,400	1,000	1,000	3,400
Miscellaneous	1,500	1,500			1,500
Sub-total		**15,900**		**5,000**	**20,900**
FORMULATION AND ENDORSEMENT BY STAKEHOLDERS OF THE NATIONAL IMPLEMENTATION PLAN					
Technical assistance (one month/person) (two months)	2,000	4,500			4,500
Workshop (50 participants, one day) (two workshops, one in Trinidad and one in Tobago)	2,000	4,000	1,000	2,000	6,000
Administrative (Conference Management)			3,000	3,000	3,000
Travel (international expert and Tobago participants)				6,000	6,000
Publication and dissemination		10,000		10,000	20,000
Sub-total		**18,500**		**21,000**	**39,500**
GRAND TOTAL		**425,500**		**400,000**	**825,500.00**

ANNEX 1

Detailed Country Background

The information considered in this document has been obtained from documents provided by the United Nations Development Program (UNDP), the former Ministry of Public Utilities and the Environment, the Environmental Management Authority, the Ministry of Agriculture, Land and Marine Resources and the Ministry of Health, quoted in the text, or gathered during the interviews held with interested parties.

Trinidad & Tobago Directory of Interviewed Persons

NAMES	INSTITUTIONS/ORGANIZATIONS	E-MAIL ADDRESS
Wayne Rajkumar	Environmental Management Authority	wrajkumar@ema.co.tt
Gail Kowlessar-George	Ministry of Energy and Energy Industries	gkgeorge@energy.gov.tt
Lilory D. Mc Comie	Ministry of Agriculture, Land and Marine Resources	lilory@tstt.net.tt
Michelle Clarke-Stanislaus	Tobago House of Assembly	mgclarke1@yahoo.co.uk
Neila Bobb-Prescott	Tobago House of Assembly	dnre_tha@tstt.net.tt
Charmaine Gomes	UNDP	charmaine.gomes@undp.org
David Persaud	Ministry of Planning, Housing and the Environment	david.persaud@phe.gov.tt
Joseph Seales	Ministry of Agriculture, Land and Marine Resources	joeseales@tstt.net.tt
Kenneth Kerr	Ministry of Health (Pesticides & Toxic Chemicals Control Board)	cfdd@carib-link.net
Darry Banjoo	Institute of Marine Affairs www.ima.gov.tt	dbanjoo@ima.gov.tt
Heather-Ann Okuns	Caribbean Industrial Research Institute Basel Convention Regional Center	hokuns@carib-link.net
Angelus C. Pilgrim	Dept. of Chemistry Engineering The University of West Indies	apilgrim@eng.uwi.tt
Denise Beckles	Dept. of Chemistry The University of West Indies	dbeckles@fans.uwi.tt
James Allan Goodridge	Institute of Marine Affairs	jgoodridge@ima.gov.tt
Hamid Farabi	The University of West Indies	
Azad Mohammed	The University of West Indies	mohc0134@trini.com

The structure of the document includes a brief description of the socio-demographic context, as well as of some elements that can give an idea of the environmental pressures, the state of the environment, the environmental impacts, the situation about persistent organic pollutants, and the response from Government to the environmental problems faced by the country. When possible, human development indicators (HDI) had been included to provide elements that help to put into perspective the situation of Trinidad and Tobago concerning those indicators.

SOCIO-DEMOGRAPHIC CONTEXT

The Republic of Trinidad and Tobago is located on the Caribbean Sea, approximately seven miles off the Venezuelan coast. Trinidad is the southernmost island in the Caribbean island chain and Tobago is situated 33 km to the north-east of Trinidad.

Physical and Demographic Context

A.	Size of the Country (area in km2) : 4828 (Trinidad); 302 (Tobago)
B.	Form of Government: Parliamentary Democracy
C.	Official Language: English
D.	Local Languages: Hindi, Patois (French)
E.	Total Population: 1.214 million (1990 Census)
F.	Urban Population: 10.5% (urban high population density and non-agricultural)
G.	Rural Population: 89.5% (rural ~ low population density and agricultural)
H.	Average Age of Population: 34 years
I.	Population of Working Age: 558,700 (1998)
J.	Birth Rate: 13.9 (1998)
K.	Life Expectancy: 70.66
L.	Literacy Rate: 78% (functional)
M.	Average Education Level of Population: Secondary Education
N.	Unemployment Rate: 12.5%
O.	Number of Women Employed Outside the Home: 214,100

The first settlers of the islands were two Amerindian tribes, the Arawaks and the Caribs. After Christopher Colombus landed on Trinidad in 1498, Trinidad became a Spanish colony. For several centuries Trinidad was fought by British, Dutch, French and Spanish, during a period were laborers were introduced from several parts of the world, mainly from Africa and India. After 1762 Trinidad was mainly controlled by the British, in 1888 both islands became a single political entity; in 1962 they obtained their independence and in 1976 formed a democratic Republic within the Commonwealth.

During the last thirty years the country has undergone significant growth with the expansion of the industrial (in particular the oil and petrochemical sector that contributes with 27% of the Gross Domestic Product), commercial, services and agricultural sectors. This economical development has resulted in an increased use of pesticides and raising environmental pollution.

To monitor progress in human development in Member countries, the United Nations Organization has established the Human Development Index (HDI), that "reflects achievements in the most basic human capabilities, leading a long life, being knowledgeable and enjoying a decent standard of living. Three variables have been chosen to represent these dimensions –life expectancy, educational attainment and income".[8]

According to this ranking system, Trinidad and Tobago occupies the level 50 in the list of 174 countries which HDI has been established. The following tables give an idea of the situation prevailing in the country concerning key indicators, as well as some of the progress made in improving their performance.

Demographic Trends

Total Population	Millions
1975	1.0
1998	1.3
2015	1.4
Annual population growth rate	%
1975-1998	1.1
1998-2015	0.6
Urban population	As % of total
1975	63.0

[8] UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

1998	72.7
2015	79.3
Dependency ratio	%
1998	58.3
2015	41.4
Population aged 65 and above	As % of total
1998	6.4
2015	9.5
Total fertility rate	%
1970-1975	3.4
1995-2000	1.7
Contraceptive prevalence rate	%
1990-1999	53

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Economic Performance

Growth National Product (GNP)	US$ billions
1998	5.8
GNP annual growth ratio	%
1975-1995	1.8
1990-1998	2.8
GNP per capita	US $
1998	4,520
GNP per capita annual growth	%
1975-1990	0.6
1990-1998	2.1
Average annual rate of inflation	%
1990-1998	6.9
1998	6.7

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Resource Flows

Exports of goods and services	As % of GDP
1990	43.7
1998	41.3
Imports of goods and services	As % of GDP
1990	27.2
1998	56.4
Net foreign direct investment flows	US $ millions annual average
1987-1992	117
1998	800

GDP = Gross Domestic Product 6.4 US $ billion in 1998
Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Resource Use

Public expenditures on education	As % of GNP
1990	4.0
1995-1997	4.4
Public expenditures on health	As % of GNP
1990	2.8
1995-1998	2.8

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Progress in survival

Life expectancy at birth 1970-1975 1995-2000	Years 65.9 73.8
Infant mortality rate 1970 1998	Per 1,000 live births 49 16
Under-five mortality rate 1970 1998	Per 1,000 live births) 57 18
People expected to survive to age 60 1995-2000	% 15.0

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Health Profile

Infants with low birth weight 1990-1997	% 10
One year old fully immunized against measles 1995-1998	% 90
Doctors 1992-1995	Per 100,000 people 90
Nurses 1992-1995	Per 100,000 people 168

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Education Profile

Adult literaciy rate 1998	% age 15 and above 95.3
Youth literacy rate 1998	% age 15-24 98.2
Age group enrolment ratios 1997 Primary age group 1997 Secondary age group	Adjusted, % of relevant age group 99.9 71.5
Public education expenditures 1995-1997	As % of GNP 4.4

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Energy use

Electricity consumption	Total Millions of kilowatt-hours 1996	Index (1980= 100) 1996	Per capita Kilowatt-hours 1980	Per capita Kilowatt-hours 1996
	4,541	221	1,990	3,501
Traditional fuel consumption	As % of total			
1980	2			
1995	1			

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

ENVIRONMENTAL PRESSURES AND STATE OF THE ENVIRONMENT

The main industrial activities in Trinidad and Tobago that constitute potential sources of environmental pressures are described in the following table.

Industrial Employment by Major Economic Sectors

		1	2	3
ISIC	Description	No. of Facilities	No. with Emp. Figure	No. of Persons Employed as Per Column (2)
31	**FOOD INDUSTRY**	**445**	**212**	**9661**
32	**TEXTILE/CLOTHING AND LEATHER GOODS**	**190**	**109**	**2457**
33	**WOOD AND WOOD PRODUCTS**	**350**	**230**	**1844**
34	**PAPER AND PAPER PRODUCTS**	**257**	**151**	**3527**
35	**CHEMICAL/PETRO/PLASTICS**	**208**	**115**	**3779**
36	**NON-METALLIC**	**110**	**64**	**2578**
37	**BASIC METALS INDUSTRY**	**21**	**16**	**1511**
38	**FABRICATION OF MACHINERY AND EQUIPMENT**	**309**	**205**	**3999**
39	**OTHER MANUFACTURING INDUSTRIES**	**60**	**31**	**442**
	MINING AND EXTRACTION (OIL/NATURAL GAS/MINERALS/METALS)	**217**	**122**	**8467**

Some of the more tangible pressures from different sector activities on the environment of Trinidad and Tobago are summarized in the following table.

Profile of Environmental Degradation

Internal renewable water resources per capita	m^3/year 1998 3,869		
Annual fresh water withdrawals	As % of water resources 1987-1995 2.9	Per capita m^3 1987-1995 148	
Average annual rate of deforestation	% 1980-1990 1.6	% 1990-1995 1.6	
Printing and writing paper consumed	Metric tons per 1,000 people 1996 7.5		
CO_2 emissions	Total Millions metric tons	Share of world total %	Per capita Metric tons

	1996 22.3	1996 0.1	1996 17.2

Source: UNDP. Human Development Indicators. http://www.undp.org/hdr2003/indicator/index.html

Waste generation

According to the former Ministry of Public Utilities and the Environment, Trinidad and Tobago currently generates 0.75 kg per capita of solid waste per day and approximately 420,000 tons per year. [9]

Distribution of waste generators

Sources of generation	% of total wastes generated
Domestic (household)	55
Industry	15
Commercial (business)	15
Others (bulk and yard waste)	15

Report for the Honourable Minister of Public Utilities and the Environment on Policy and Planning Division (Environment)

Sources of air pollution

Several studies have been carried out recently to develop inventories to identify and characterize air pollution sources, as well as to estimate their loads. In addition, an investigation and complaints desk has been operating since 1995 where data have been compiled about the most relevant sectors involved on public complaints associated with air emissions. As described in the following table, the autobody repair and mechanics, as well as woodworking, are among the sectors more often involved on those complaints. [10]

Sectors involved on public complaints related to air emissions

Sector	% of complaints
Autobody Repair and Mechanics	33
Woodworking	27
Ceramic and Brick Making	10
Metalworking	6
Agricultural chemicals	6
Construction	5
Aggregate Handling and Storage	4
Open Burning	3
Vehicle Storage Depots	3
Miscellaneous	3

Environment Authority. Trinidad and Tobago State of the Environment Report. 2000.

Air pollution loads by source

Sector	% of load
Manufacturing: • Milling • Urea • Cement	 18 9 6
Quarrying	40

[9] Report for the Honorable Minister of Public Utilities and the Environment on Policy and Planning Division (Environment)
[10] Environment Authority. Trinidad and Tobago State of the Environment Report. 2000. Page 35.

Transportation	10
Agriculture	6

Environment Authority. Trinidad and Tobago State of the Environment Report. 2000.

Main point sources of air pollution

Source	Observations
Manufacturing Sector	Related to the processing of raw materials, intermediate and final products from various commodities e.g. ammonia, methanol, chlorine, urea, paints, petroleum hydrocarbons, beer, glass, clay, asphalt, sand and gravel, lead-acid batteries, cement and lime, iron and steel, and sugar, milling.
Electrical power generation	As a result of firing gaseous and liquid fuels
Wholesale and retail trade of fuel	During storage, filling and refueling
Transportation	Fossil fuel combustion from all modes of transport

Environment Authority. Trinidad and Tobago State of the Environment Report. 2000.

Non-point sources of air pollution

Sector	Observations
Mining & Quarrying	From blasting, loading, unloading and crushing
Construction	Site preparation and complete construction
Agriculture	Slash-and-burn, burning of agricultural fields, aerial crop spraying
Community, Social & Personal Services	Malodors from sewage treatment plants, dumps, landfills, burning of landfills and dumps
Wholesale & Trade	Automotive body repair and retail maintenance shops

Environment Authority. Trinidad and Tobago State of the Environment Report. 2000.

Use of pesticides

To have an idea of the amounts of pesticides being used in Trinidad and Tobago the following table summarizes the importation of these agrochemicals in the period 1995-1998.

Importation of Pesticides into Trinidad and Tobago (1995-1998)

Imported Products	1995	1996	1997	1998
Imports (kg)	1,1109,826	1,684,588	3,002,477	3,361,084
% Insecticides	46.48	67.18	45.55	74.26
% Herbicides	42.71	20.54	48.13	20.65
% Fungicides	6.86	8.14	5.3	3.88
% Growth Regulators		1.58	0.2	0.02
% Rodenticides	1.97	1.21		0.63
% Other Pesticides	1.98	1.35	0.82	0.56

Inventory of obsolete pesticides and toxic chemicals for disposal in Trinidad and Tobago (1999)

ENVIRONMENTAL IMPACTS

In the opinion of the Environmental Policy and Planning Division,[2] "recent FAO estimates suggest that forest cover in Trinidad and Tobago stands at 31.8 percent with an annual rate of habitat destruction of approximately 1 percent. These figures imply that the window of opportunity for establishing national parks and other protected areas, which will maintain a "representative" vignette of pre-Columbian Trinidad and Tobago, is rapidly closing".

In addition to the previous problem, "Severe stress is being placed on the capacity of the landfill sites in the country, which are at a point of saturation. This has resulted in the reversion of the official landfills (Forres Park, Guanapo,

Beetham and Studley Park) to virtual open dumps, and the increase in the volume of waste improperly disposed of in the natural environment (watercourses, the verges of the roadways and vacant lots). These developments have created additional environmental and public health risks, and point to an urgent need for commensurate investment in the expansion and modernization of existing infrastructure and exploitation of new and innovative approaches to deal with the increased waste disposal demand."[2]

As an example of the problems associated with air emissions in the opinion of the Environment Authority: "Two complaints in the category of non-point sources are worthy of mention. The first is associated with noxious fumes and gases from an oil-producing field in south-western Trinidad, which left parents, teachers and children in the area with runny noses and eyes, vomiting, itching skin, rashes, headaches and dizziness. An extensive investigation was conducted which led to the closure of the oil production facility and relocation of the school, away from the source of pollution.

In the second case, residents, motorists and other users along the Beetham to the Audrey Jeffers Highway complained that smog; dust and objectionable odors from the burning of the Beetham Landfill resulted in runny noses and eyes, and sore throats. At the time of the incident the haze in the atmosphere was exacerbated by the presence of Sahara dust which further reduced visibility along the highway corridor".[3]

Fish kills in coastal waters and inland surface water over the period 1976-1990, has been associated to pollution caused by industrial effluents, disposal/use of pesticides, oil spills, as well as oxygen depletion from algal blooms.[11]

A problem of great concern is the raising of the sea level that is causing the invasion of coastal lands by marine waters and could be associated with the climate change.

Current situation concerning Persistent Organic Pollutants (POPs)[12]

Detailed situation of Trinidad and Tobago towards POPs and its response is part of the Section Background in the document.

CONCLUSIONS

Trinidad and Tobago is the most dynamic economy in the Caribbean Region and Human Development Indicators show an important progress in different parameters that are key for sustainable development. Nevertheless, the country still faces great challenges in terms of environmental and health protection from the risks derived from waste and environmental pollution generation and the pressures on natural resources from different productive and social activities.

New institutions have been created recently to address the environmental problems and an environmental legislation has been established in 2000 to support the implementation of the environmental policy, but there is an urgent need for strengthening Government capacity to enforce the law as well as for responding to the demands of services and infrastructure to address waste management (in particular hazardous waste management) and pollution prevention and control needs.

Concerning persistent organic pollutants, the main problems at present are related to the existence of some stocks of pesticides (mainly DDT) and PCBs that are required to be properly inventoried and stored, as well as to the lack of economic resources to send them to other countries that have appropriate technologies for their final disposal.

An inventory of point and area sources of unintentional persistent organic pollutants (dioxins, furans, hexaclorobenzene and PCBs) need to be developed, to define the magnitude of the problem as well as to determine the actions to be implemented to eliminate or reduce its liberation to the environment.

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[11] W. S. Rajkumar. Trinidad and Tobago Report on Sources and Environmental Levels of PTSs. Environmental Management Authority.
[12] Trinidad and Tobago's Presentation at the AOSIS Workshop for the Implementation of the Stockholm Convention on Persistent Organic Pollutants.

Laboratory capacity for environmental and biological monitoring of POPs and other environmental pollutants needs to be strengthened, as well as the capacity to assess, communicate and manage the human and ecosystem risks derived from the exposure to chemical pollutants.

The country has an opportunity to create synergies between ongoing related projects that will strengthen such capacities and effective co-ordination needs to be established to promote those synergies.

Government Letter of Endorsement

MINISTRY OF PUBLIC UTILITIES AND THE ENVIRONMENT

Sacred Heart Building, 16-18 Sackville Street, Port of Spain
Phone: (868) 623-4853 Fax: (868)-623-7005

MPUE: 14/1/16

July 15, 2005

Dr. Iyang Ebong-Harstrup
Resident Representative
United Nations Development Programme
UN House
3A Chancery Lane
P.O. Box 812
Port-of-Spain

Dear Dr. Ebong-Harstrup,

Re: Project Proposal for GEF Funding for the National Implementation Plan on Persistent Organic Pollutants

The captioned subject refers.

The Ministry of Public Utilities and the Environment endorses the project proposal aimed at analyzing current sources, existing stocks and use of Persistent Organic Pollutants as well as the legislative institutional arrangements for chemical management in Trinidad and Tobago.

I take this opportunity to thank GEF and UNDP for assisting to sustain the capacity of Trinidad and Tobago to fulfill its obligations and reporting requirements under the Stockholm Convention as well as in the formulation of a National Implementation Plan

on Persistent Organic Pollutants.

Sincerely,

.....

Earl Nesbitt
Permanent Secretary (Ag.)
Ministry of Public Utilities and the Environment