

---

## medio ambiente y desarrollo

# **E**xpenditures, Investment and Financing for Sustainable Development in Trinidad and Tobago

Desmond Dougall

Wayne Huggins



UNITED NATIONS



**Sustainable Development and Human  
Settlements Division**

ECLAC/UNDP Project RLA/01/001  
“Financing for Environmentally Sustainable  
Development in Latin America and the Caribbean”

Santiago, Chile, November 2002



This document was prepared as part of the joint ECLAC/UNDP project “Financing for Environmentally Sustainable Development in Latin America and the Caribbean” (RLA/01/00) within the framework of the World Summit on Sustainable Development, Johannesburg, 2002. The substantive aspects of this project were coordinated by Alicia Bárcena and Carlos J. de Miguel, from ECLAC, and Michael Gucovsky and Cielo Morales, from UNDP.

The views expressed herein are those of the authors and do not necessarily reflect the views of the Organization. This document has been reproduced without formal editing.

---

United Nations Publications

LC/L.1795-P

ISBN: 92-1-121371-1

ISSN printed version: 1564-4189

ISSN online version: 1680-8886

Copyright © United Nations, November 2002. All rights reserved

Sales number: E.02.II.G.107

Printed in United Nations, Santiago, Chile

---

Applications to the right to reproduce this work are welcome and should be sent to the Secretary of the Publication Board, United Nations Headquarters, New York, N.Y. 1007, USA. Member States and their Governmental Institutions may reproduce this work without prior authorization, but are requested to mention the source and inform the United Nations of such reproduction.

## Index

---

<b>Abstract</b> .....	5
<b>I. Background</b> .....	9
1. Data Collection Efforts.....	9
2. The Agenda for Environmental Expenditure.....	10
a) Ministry of the Environment.....	11
b) The Environmental Management Authority .....	11
<b>II. Allocation of Financing for the Environment</b> .....	19
1. Public Financing .....	19
a) Outstanding Information .....	26
2. Private Financing.....	26
a) Survey Responses .....	28
<b>III. Sources of Financing</b> .....	35
1. Public Organizations.....	35
2. Private Organizations .....	37
3. Additional Information on External Funding .....	38
<b>IV. Conclusions &amp; Recommendations</b> .....	39
<b>References</b> .....	41
<b>Appendixes</b> .....	43
<b>Serie Medio ambiente y desarrollo: issues published</b> .....	51

## Index of Tables

Table A Public Environmental Expenditure (Capital + Recurrent) as percentage of the Gross Domestic Product .....	7
Table B Public environmental expenditure (Capital + Recurrent) as percentage of the Total Government Budget .....	8

Table C	Capital portion of Public Environmental Expenditure as percentage of the Total Public Environmental Expenditure .....	8
Table D	EMA Financing as percentage of the Total Government Budget .....	8
Table E	EMA Financing as percentage of the Gross Domestic Product .....	8
Table 1	Allocation of Environmental Financing – by sector Environmental Management Authority .....	13
Table 2	Allocation of Environmental Financing – by type of expenditure Environmental Management Authority.....	16
Table 3	Sources of Environmental Financing Environmental Management Authority .....	17
Table 4	Gross Domestic Product.....	19
Table 5	Government Budgetary Expenditure (Total).....	20
Table 6	Allocation of Environmental Financing – by sector for Public Organizations .....	22
Table 7	Allocation of Environmental Financing – by type of Expenditure for Public Organizations.....	25
Table 8	Allocation of Environmental Financing – by sector for Private Organizations .....	29
Table 9	Allocation of Environmental Financing – by type of Expenditure for Private Organizations.....	32
Table 10	Sources of Environmental Financing for Public Organizations .....	36
Table 11	Sources of Environmental Financing for Private Organizations.....	37
Table 12	Externally Funded Environmental Projects – T & T and as part of Caribbean .....	38
Table 13	Current prices, where relevant .....	45
Table 14	Recurrent expenditure of environmental related project form consolidated fund .....	45
Table 15	Development expenditure of environmental related projects from consolidated fund.....	45
Table 16	Details of development expenditure of environmental related projects from consolidated fund .....	46
Table 17	Details of recurrent expenditure of environmental related projects form consolidated fund .....	47
Table 18	Summary of the main externally funded projects in the Matura to Matelot region 1994 to 1997 .....	48

---

## Abstract

---

### 1. Main Statistical Points

- GEF funding has proceeded in recent years primarily via the World Bank, UNDP and UNEP. It has provided approximately US\$5m in funding for projects totaling approximately US\$18m in value (therefore over 70% locally cofinanced).
- Total public expenditure (capital and recurrent) on environmental projects (as identified herein) has ranged between 0.15% to 0.21% of GDP over the period or approximately between US\$2 to US\$3 per capita.
  - The capital (development) portion of this environmental expenditure has been increasing sharply over the decade, ranging from approximately 4% to 47% over the last seven years of the decade. The major portion of this increase is attributable to the increasing EMA financial capabilities.
- The Ministry of Environment, which was formed in 1999, has no actual budgetary allocation. It provides policy direction to the Environmental Management Authority (EMA) and an administrative function for the Green Fund.
- The financial capability of the Environmental Management Authority (EMA) (including government budgetary allocations as well as other loan and grant funds) has more than doubled over the last half of the decade relative to

government's total (capital and recurrent) budget, reaching 0.12% of this figure. The EMA's financial capability has also quadrupled relative to GDP over the same period reaching approximately 0.04% of GDP. The EMA was formed in 1995 to undertake all environmental management and monitoring functions nationally.

- Private sector environmental expenditure is primarily in the petrochemical companies and via the environmental NGO's.
  - Environmental data from these sources is not easily obtained.

## 2. Operations

The Green Fund was introduced in September 2000 as a means of raising money for undertaking various environmental projects. It is raised by a tax of 0.05% on the gross revenue of all companies operating in Trinidad and Tobago. Information available to the Consultants indicate that, up to the present, the fund has raised under TT\$50 million. No indication is immediately available of the potential value of the fund but the Consultant's estimates are that the Fund could raise between TT\$150 million –TT\$250 million annually. Information on the Fund is sketchy– the following being the only information known at present:

- No present mechanism for disbursement of the funds.
- The funds are to be disbursed and managed by a Board of Directors, which has not been set up as yet. They will take policy guidance from the MOE.
- The funds are administered by the Ministry of the Environment from a special fund set aside by the Ministry of Finance.
- No project priorities have been identified by the MOE for the disbursement of the funds.
- The Fund is primarily designed to support NGO environmental operations.
- The intention of the Green Fund is to allow the Government to remove itself from implementation of environmental projects –deferring to NGO's and helping by providing finance–.

The Environmental Management Authority (EMA) is a statutory body established by the government of Trinidad & Tobago to address the country's environmental problems. The EMA was established in June 1995 under the Environmental Management Act, No. 3 of 1995.

Under the Environmental Management Act, the EMA is mandated to:

- Write and enforce laws and regulations for environmental management.
- Educate the public about the nation's environmental issues through awareness programmes.
- Issue Certificates of Environmental Clearance to new development projects that may impact the environment; in some cases an Environmental Impact Assessment (EIA) may be a requirement to the developer.
- Co-ordinate environmental functions performed by organizations and persons in Trinidad and Tobago.
- Provide for the designation and protection of environmentally sensitive areas and species.
- Develop and establish environmental standards and criteria.
- Ensure the effective enforcement of environmental laws, for example, through the use of fines.

## 3. Main Conclusions

- While many environmental initiatives may be being undertaken within both the Public and Private sector in Trinidad and Tobago, there is at present very little necessity for

accounting of these initiatives. These generally become aggregated with other operational areas and lose their particular “environmental” identity. It is, therefore, very difficult for organizations to identify their “environmental” expenditures.

- The continuous growth in scope and capability of the EMA may cause a more dedicated approach to maintain specific “environment” accounts as organizations –both Public and Private– may be subject to environmental monitoring activities from the EMA. By these organizations maintaining specific accounts on expenditures on environmental activities, they may be more able to cope with this new regulatory mechanism.
- The Governmental accounting system does not allow for desegregation of the Audited Accounts. It is likely that this will not change. It is expected that based on the points above, better environmental accounting will become more standardized within the organizations and this data will be better sourced at the individual organisation level rather than at the level of the Ministry of Finance’s audited statements. The major drawbacks of this are that there will be no standardization in reporting, no central repository of information and the monetary information will be unaudited, and therefore, not official government accounts.
- Institutional strengthening activities may need to be implemented within both Public and Private sector organizations to provide for environmental accounting capabilities. This is especially so in light of the EMA’s expected active role in monitoring environmental compliance.
- Rules for administration of and access to the Green Fund need to be quickly developed and enacted.
- Implementation of the Green Fund will require institutional strengthening within NGO’s to allow them to have the technical capability to write proper project documents.
- The roles to be maintained by the various players in the environmental financing and project development structure are evolving in the right direction and should be maintained, as follows:
  - a. Ministry of Environment should remain in policy formulation and facilitation –not getting directly involved but providing guidance and maintenance and distribution of the Green– Fund. The Ministry should have oversight in strategic planning, looking at wider issues and be ultimately accountable to the Ministry of Finance
  - b. EMA remain as the managing (policing, enforcement of the EM Act) arm of the Ministry of Environment.
  - c. State organizations and Private companies maintain their environmental operations –with an obvious need for expansion thereof due to the enforcement threat of the EMA–.
  - d. NGO’s remain as the facilitating agencies to actually do the work on environmental conservation/preservation –active in the field or in doing research and other studies–.

## 4. Summary Tables

The following are based on the information available and represented within this report.

**Table A**

**PUBLIC ENVIRONMENTAL EXPENDITURE (CAPITAL + RECURRENT)  
AS PERCENTAGE OF THE GROSS DOMESTIC PRODUCT**

Year	1993	1994	1995	1996	1997	1998	1999
% of GDP	0.16	0.15	0.15	0.21	0.21	0.17	0.20

Source: Author's calculations.

Table B

**PUBLIC ENVIRONMENTAL EXPENDITURE (CAPITAL + RECURRENT)  
AS PERCENTAGE OF THE TOTAL GOVERNMENT BUDGET**

Year	1993	1994	1995	1996	1997	1998	1999
% of Budget	0.48	0.44	0.46	0.65	0.59	0.75	0.67

Source: Author's calculations.

Table C

**CAPITAL PORTION OF PUBLIC ENVIRONMENTAL EXPENDITURE  
AS PERCENTAGE OF THE TOTAL PUBLIC ENVIRONMENTAL EXPENDITURE**

Year	1994	1995	1996	1997	1998	1999	2000
% of Total Public Environmental Expenditure	3.62	6.32	8.70	13.72	36.24	41.93	47.68

Source: Author's calculations.

Table D

**EMA FINANCING AS PERCENTAGE OF THE TOTAL GOVERNMENT BUDGET**

Year	1995	1996	1997	1998	1999
% of Budget	0.05	0.09	0.08	0.10	0.12

Source: Author's calculations.

Table E

**EMA FINANCING AS PERCENTAGE OF THE GROSS DOMESTIC PRODUCT**

Year	1995	1996	1997	1998	1999
% of GDP	0.01	0.03	0.03	0.02	0.04

Source: Author's calculations.



## **I. Background**

---

The original intention of this study was to examine the financing for environmental projects and programs in Trinidad and Tobago over the last decade. It was anticipated that both Government and the Non-Governmental sources (locally and internationally) would be examined. In real terms, it was intended to examine the efficiency of the financing whether there was value for money under these projects and programs. However, information of this nature was difficult to obtain given the short time frame, the bureaucratic governmental procedures and the reluctance to share this data. This dilemma continues to exist despite the recent enactment of the Freedom of Information Act in Trinidad and Tobago.

This report attempts to meet these objectives using the limited available data and the Consultant's knowledge of the local social, cultural and development environment.

Monetary values are expressed in the local currency, the Trinidad and Tobago Dollar (TT\$) except in the cases where data from multiple sources are being collated for analysis and comparison purposes. In all cases, the monetary value used is explicitly stated. The exchange rate to the United States Dollar (US\$) is approximately US\$1 = TT\$6.3. This exchange rate has been relatively stable over the past seven years.

### **1. Data Collection Efforts**

Two essential sources of data were tapped for the production of this report, official government documentation and direct questionnaire responses.

The major documentary information contained in this report emanated from the annual Audited Accounts of the Government of Trinidad and Tobago, issued by the Auditor General. This was supplemented, with a limited availability, by the Draft Estimates of Expenditure –Recurrent and Development, from the Ministry of Finance–. The Audited Accounts give a true picture of the expenditure of the various government Ministries and Departments over the preceding year. However, the structure of the financial reporting causes major difficulties for trend comparison over multiple years as the items of expenditure are not standardized over that time. The lack of detail contained in these documents, particularly with regards to financial allocations by sector, also limits the interpretations possible from the document.

Using the UN's *Classification of Environmental Protection Activities and Expenditure (CEPA 2000)* as a guide, a survey form was used which queried three components of an agency's environmental expenditure; expenditure by sector (nature of the expenditure), by type (capital or recurrent) and by the source of the funds (local or foreign). These survey forms were sent to nineteen Organizations throughout the country that represented a mix of public and private Organizations that it was assumed would have a role in environmental works and, consequently, expenditure. Multiple attempts to obtain the survey data were made, primarily via telephone. The limited success of this methodology is elaborated in the later sections.

Additional information on the operation of the private sector NGO's and their modes of funding was sourced from a study that was done in 1997 looking at financing for NGO's over 1994-1997 in the Northeast of Trinidad. This was a UNDP funded project. To the consultant's knowledge, no further reports exist that document private sector NGO funding for environmental projects over the last decade.

Other qualitative data was gained through discussions with numerous persons operating in the environmental field, as well as the Consultant's significant knowledge of the field.

## **2. The Agenda for Environmental Expenditure**

Even before one should attempt to examine "Financing for the Environment" one has to have a context for this financing in the wider National Development. Moreover, there is much confusion as to what truly is environmental expenditure and what are environmental programmes and projects. In terms of Government financed projects, the focus has been on addressing public health issues, basic needs of the citizenry and on maintaining and modifying policies which may best be described as relics of the colonial past. While many may equate environmental programmes with externally led, private sector (NGO) activities aimed at protecting endangered species or community mobilisation for some like purpose.

Notwithstanding this, a substantial portfolio of environmental programmes undertaken by government in the post-colonial era transcends many government departments and Ministries. Evidence of this can be seen in the activities of the recently formed (in 1995) Environmental Management Authority and sub programmes under the Ministries of Planning and Development, Housing and Settlements, Agriculture and Marine Resources and, most recently, Ministry of Environment (newly formed in 1999). These environmental programmes are more focused on reversing the problems of a colonial development and as such geared towards improving the lives of a people who have been denied essential services and access to resources. The ethos that underscores the philosophy of caring for the environment is driven by the need to manage the environment for conservation and exploitation to result in real and tangible benefits.

In the last 5 years with the formulation and passage in Parliament of the Environmental Management Act, the country is now in the embryonic stages of developing environmental policy

and practices, which are consistent with wider national objectives. This is a welcome sign and marks a significant milestone, as the country becomes more urbanized and more competing demands are made on the environment.

In this context, it is useful to elaborate on the major factors behind the government's role in environmental management. While the energy-based and petrochemical industries do also have a significant environmental impact, their management and financing mechanisms are not as readily available for scrutiny as the government's.

### **a) Ministry of the Environment**

The MOE is a recent creation –since 1998– within the government of Trinidad and Tobago. Previously environmental matters were handled by the Ministry of Agriculture and/or the Ministry of Planning and Development (via the Town and Country Planning Division).

The main roles of the MOE, as far as the Consultants can ascertain, are:

- To provide policy overview and guidance to the EMA;
- As an administrative role, to provide funds to the EMA –and also to account for those funds to the Ministry of Finance–;
- To administer the Green Fund.

#### **The Green Fund**

The Green Fund was introduced in September 2000 as a means of raising money for undertaking various environmental projects. It is raised by a tax of 0.05% on the gross revenue of all companies operating in Trinidad and Tobago. Information available to the Consultants indicate that, up to the present, the fund has raised under TT\$50 million. No indication is immediately available of the potential value of the fund but the Consultant's estimates are that the Fund could raise between TT\$150 million –TT\$250 million annually. Information on the Fund is sketchy– the following being the only information known at present:

- No present mechanism for disbursement of the funds.
- The funds are to be disbursed and managed by a Board of Directors, which has not been set up as yet. They will take policy guidance from the MOE.
- The funds are administered by the Ministry of the Environment from a special fund set aside by the Ministry of Finance.
- No project priorities have been identified by the MOE for the disbursement of the funds.
- The Fund is primarily designed to support NGO environmental operations. The process proposed for NGO's gaining access to the fund is that the NGO's submit proposals (clearly articulated and following a certain format determined by the MOE) and the Green Fund Board of Directors (with policy guidance from the MOE) will determine the priorities for disbursement based on relevance and need.
- The intention of the Green Fund is to allow the Government to remove itself from implementation of environmental projects –deferring to NGO's and helping by providing finance–.

### **b) The Environmental Management Authority**

The EMA was formed by Act no. 3 of 1995 as the major government body to provide monitoring of the environment and enforcement of environmental protection, preservation and conservation rules and regulations. The EMA operates at present as an agency within the Ministry of the Environment and is funded via that Ministry from the Central Government (Consolidated

Fund). The Environmental Commission, when it is enacted, will operate as an environmental “court” trying cases of infringement of the EM Act.

Under the Environmental Management Act, the EMA is mandated to:

- Write and enforce laws and regulations for environmental management.
- Educate the public about the nation's environmental issues through awareness programmes.
- Issue Certificates of Environmental Clearance to new development projects that may impact the environment; in some cases an Environmental Impact Assessment (EIA) may be a requirement of the developer.
- Co-ordinate environmental functions performed by organizations and persons in Trinidad and Tobago.
- Provide for the designation and protection of environmentally sensitive areas and species.
- Develop and establish environmental standards and criteria.
- Ensure the effective enforcement of environmental laws, for example, by the use of fines.

Detailed financing and expenditure information was provided by the EMA in response to a survey which was solicited from many agencies involved in environmental-related operation in Trinidad and Tobago. This data on expenditure and sources of funding is provided below.

**Table 1**  
**ALLOCATION OF ENVIRONMENTAL FINANCING – BY SECTOR ENVIRONMENTAL MANAGEMENT AUTHORITY**  
*(In Current TT\$)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Type of expenditure</b>									
<b>1 PROTECTION OF AMBIENT AIR AND CLIMATE</b>									
1.1 Prevention of pollution through in-process modifications									
1.1.1 for the protection of ambient air									
1.1.2 for the protection of climate and ozone layer									
1.2 Treatment of exhaust gases and ventilation air									
1.2.1 for the protection of ambient air									
1.2.2 for the protection of climate and ozone layer						\$59,000	\$202,000	\$518,000	\$759,000
1.3 Measurement, control, laboratories and the like						\$56,000	\$102,000	\$7,000	\$104,000
1.4 Other activities									
<b>2 WASTEWATER MANAGEMENT</b>									
2.1 Prevention of pollution through in-process modifications									
2.2 Sewerage networks									
2.3 Wastewater treatment									
2.4 Treatment of cooling water									
2.5 Measurement, control, laboratories and the like						\$683,000	\$52,000		\$128,000
2.6 Other activities									
<b>3 WASTE MANAGEMENT</b>									
3.1 Prevention of pollution through in-process modifications									
3.2 Collection and transport									
3.3 Treatment and disposal of hazardous waste								\$177,000	\$1,832,000
3.3.1 Thermal treatment									
3.3.2 Landfill									
3.3.3 Other treatment and disposal									
3.4 Treatment and disposal of non-hazardous waste									

Table 1 (Continuation)

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Type of expenditure</b>									
3.4.1 Incineration									
3.4.2 Landfill									
3.4.3 Other treatment and disposal									
3.5 Measurement, control, laboratories and the like						\$7,500	\$103,000		\$379,000
3.6 Other activities									
<b>4 PROTECTION AND REMEDIATION OF SOIL, GROUNDWATER AND SURFACE WATER</b>									
4.1 Prevention of pollutant infiltration									
4.2 Cleaning up of soil and water bodies									
4.3 Protection of soil from erosion and other physical degradation									
4.4 Prevention and remediation of soil salinity									
4.5 Measurement, control, laboratories and the like								\$66,000	\$163,000
4.6 Other activities									
<b>5 NOISE AND VIBRATION ABATEMENT (excluding workplace protection)</b>									
5.1 Preventive in-process modifications at the source									
5.1.1 Road and rail traffic									
5.1.2 Air traffic									
5.1.3 Industrial and other noise									
5.2 Construction of anti noise/vibration facilities									
5.2.1 Road and rail traffic									
5.2.2 Air traffic									
5.2.3 Industrial and other noise									
5.3 Measurement, control, laboratories and the like						\$7,500	\$33,000	\$37,000	\$4,000
5.4 Other activities									
<b>6 PROTECTION OF BIODIVERSITY AND LANDSCAPES</b>									

Table 1 (Continuation)

Type of expenditure	Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
6.1 Protection and rehabilitation of species and habitats										\$410,000
6.2 Protection of natural and semi-natural landscapes										
6.3 Measurement, control, laboratories and the like										
6.4 Other activities								\$177,000	\$321,000	\$61,000
<b>7 PROTECTION AGAINST RADIATION</b> (excluding external safety)										
7.1 Protection of ambient media										
7.2 Transport and treatment of high level radioactive waste										
7.3 Measurement, control, laboratories and the like										
7.4 Other activities										
<b>8 RESEARCH AND DEVELOPMENT</b>										
8.1 Protection of ambient air and climate										
8.1.1 Protection of ambient air										
8.1.2 Protection of atmosphere and climate										
8.2 Protection of water										
8.3 Waste										
8.4 Protection of soil and groundwater										
8.5 Abatement of noise and vibration										
8.6 Protection of species and habitats										
8.7 Protection against radiation										
8.8 Other research on the environment										
<b>9 Other ENVIRONMENTAL protection activities</b>										
9.1 General environmental administration and management					\$1,881,000	\$1,565,000	\$1,369,000	\$21,000		
9.1.1 General administration, regulation and the like					\$296,000	\$627,000	\$306,000	\$603,000	\$1,304,000	\$1,508,000
9.1.2 Environmental management						\$242,000	\$2,758,000	\$748,000	\$1,538,000	\$1,678,000
9.2 Education, training and information					\$604,000	\$693,000	\$755,000	\$440,000	\$585,000	\$635,000
9.3 Activities leading to indivisible expenditure										

Table 1 (Conclusion)

Type of expenditure \ Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
9.4 Activities not elsewhere classified				\$439,000	\$406,000				
9.4.1 Recruitment Costs					\$3,533,000	\$6,001,000	\$2,481,000	\$4,553,000	
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,220,000</b>	<b>\$7,066,000</b>	<b>\$12,002,000</b>	<b>\$4,962,000</b>	<b>\$9,106,000</b>	<b>\$7,661,000</b>

Source: Author's calculations.

**Table 2**  
**ALLOCATION OF ENVIRONMENTAL FINANCING – BY TYPE OF EXPENDITURE ENVIRONMENTAL MANAGEMENT AUTHORITY**  
*(In Current TT\$)*

Type of expenditure \ Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>1 RECURRENT EXPENDITURE</b>									
1.1 Materials and Supplies				\$83,000	\$155,000	\$176,000	\$92,000	\$125,000	\$149,000
1.2. Goods and Services				\$55,000	\$17,000	\$104,000	\$92,000	\$134,000	\$160,000
1.2.1 Rental of goods and chattel				\$156,000	\$388,000	\$447,000	\$499,000	\$614,000	\$681,000
1.2.2 Transportation					\$24,000	\$129,000	\$81,000		\$7,000
1.2.3 Repairs and Maintenance				\$12,000	\$48,000	\$64,000	\$95,000	\$121,000	\$152,000
1.2.4 Utilities and Communication				\$28,000	\$233,000	\$186,000	\$189,000	\$198,000	\$239,000
1.2.5 Miscellaneous				\$59,000	\$367,000	\$92,000	\$88,000	\$112,000	\$106,000
1.3 Gross salaries and remuneration					\$2,448,000	\$2,620,000	\$3,153,000	\$3,179,000	\$3,956,000
1.4 Recurrent Transfers									
1.5 Depreciation				\$68,000	\$233,000	\$245,000	\$383,000	\$518,000	\$783,000
1.6 Other				\$83,000	\$157,000	\$154,000	\$143,000	\$141,000	\$117,000
<b>2 CAPITAL EXPENDITURE</b>									
2.1 Machinery and Equipment				\$773,000	\$567,000	\$613,000	\$982,000	\$1,706,000	\$2,230,000
2.2 Construction and Renovations									\$6,183
2.3 Acquisition of Land and Buildings								\$3,230	
2.4 Capital Transfers									
2.5 Other									
<b>3 LOAN SERVICING</b>									
3.1 External Debt									
3.2 Internal (Domestic) Debt									
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,317,000</b>	<b>\$4,637,000</b>	<b>\$4,830,000</b>	<b>\$5,797,000</b>	<b>\$6,851,230</b>	<b>\$8,586,183</b>

Source: Author's calculations.



**Table 3**  
**SOURCES OF ENVIRONMENTAL FINANCING ENVIRONMENTAL MANAGEMENT AUTHORITY**  
*(In Current TT\$)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Source</b>									
<b>1 EXTERNAL RESOURCES</b>									
1.1 Loan funds				\$1,417,000	\$7,629,000	\$4,352,000	\$3,814,000	\$4,219,000	\$9,717,000
1.2. Debt Relief									
1.3 Grant Funds				\$2,284,000	\$411,000	\$494,000	\$906,000	\$866,000	\$1,309,000
1.4 Direct Foreign Investment									
1.5 Other External					\$46,000	\$30,000	\$159,000	\$125,000	\$52,000
<b>2 DOMESTIC RESOURCES</b>									
2.1 Tax Collection, Fines, Subsidies and Transfers									
2.2 Budgetary Allocations				\$900,000	\$2,135,000	\$4,931,000	\$3,955,000	\$9,988,000	\$9,674,000
2.3 Green Fund									
2.4 Collection of user fees for national parks, permits for resource exploitation, ecotourism devt., licenses, etc.									
2.5 Other Domestic				\$15,000	\$13,000	\$148,000	\$81,000	\$181,000	\$306,000
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,616,000</b>	<b>\$10,234,000</b>	<b>\$9,955,000</b>	<b>\$8,915,000</b>	<b>\$15,379,000</b>	<b>\$21,058,000</b>

**Source:** Author's calculations.



## II. Allocation of Financing for the Environment

The following quantitative information was derived from the available sources, as described previously.

### 1. Public Financing

Some general indicators of the national economy are as follows:

**Table 4**  
**GROSS DOMESTIC PRODUCT**  
(In TT\$Mn)

Year	GDP (Current Prices)	GDP (Constant Prices 2000)
1992		
1993	24,490.50	32,425.42
1994	29,311.70	35,633.07
1995	31,665.00	36,643.03
1996	34,648.00	38,753.44
1997	36,969.70	39,726.10
1998	41,180.00	43,897.88
1999	43,470.00	44,469.81
2000	44,730.00	44,730.00

Source: Author's calculations.

And the total government budgetary allocations over the past decade are as follows:

**Table 5**  
**GOVERNMENT BUDGETARY EXPENDITURE (TOTAL)**  
*(In TT\$Mn)*

Year	Total Expenditure (Current Prices)	Total Expenditure (Constant Prices 2000)
1992		
1993	8,287	10,972
1994	9,913	12,051
1995	10,045	11,624
1996	11,010	12,315
1997	13,069	14,043
1998	9,325	9,941
1999	13,145	13,447
2000		

**Source:** Author's calculations.

The Audited Accounts of the Ministry of Finance were investigated for the preceding decade to determine the required information on public environmental expenditure. It was realised that determination of environmental expenditure was a subjective exercise specified by the researcher.

The audited accounts provided the only means of obtaining information on public expenditure. These expenditure items are reported in a fairly generalized manner, at a high level of aggregation. In this way, it is, therefore, extremely difficult to exactly disaggregate expenditures for environmental purposes.

After studying the audited accounts, the researchers identified several common items of expenditure that existed across all the years in questions and which, to the researchers, were indicative of a significant level of activity in the sphere of environmental management, monitoring or remediation. Information pertaining to the following government agencies were, therefore, extracted from the accounts and used as the basis of public environmental expenditure:

- Solid Waste Management Company;
- Meteorological Services;
- Forestry Division (Ministry of Agriculture, Land and Marine Resources).

Incorporation of any further data from these audited accounts into the estimation of public environmental expenditure was largely impossible without introducing large components of attached non-environmental expenditures. For example the Water and Sewerage Company of Trinidad and Tobago (WASA) manages both the potable water supply as well as the sewage collection and treatment systems for the entire country. While it would have been appropriate and desirable to include the sewage treatment and disposal component in the environmental expenditures, these figures are combined with the water supply and distribution operations of WASA and given as one figure for all of WASA's operations in the Audited Accounts. Incorporating that figure into the estimates for public environmental expenditure would have heavily influenced the figure and made it completely unrealistic. It was also not deemed appropriate to estimate any proportionate amounts of these aggregated figures to include in the environmental calculations without extensive knowledge of the industries from whence they were derived.

Some additional detail was available from the Draft Estimates of Expenditure –the estimates of expenditure from which are the precursor to the Audited Accounts– however, upon investigation, such significant discrepancies existed between the two sets of accounts –pre and post audit– that it was deemed best to remain with the official figures of the Audited Accounts. A sample of the data from the Draft Estimates is included in Appendix B for reference only. It can be

seen, that even with item descriptions at this more disaggregated level, a high degree of subjective choice must still be made to determine which items are actually environmental-related and which are not.

Another issue of the Accounts that had to be overcome was the fact that the reporting structure was heavily directed towards classifying expenditures into capital and recurrent items rather than into classifications that were descriptive of the actual item (product, service, project) on which the expenditure was made. Because of this, it was infinitely simpler to allocate the expenditures based on expenditure type (capital vs recurrent) rather than by environmental sector. It must be noted, therefore, that while the best attempts were made at allocating the expenditures, the totals of expenditure for the tables representing Allocation of Financing by Type (Capital vs Recurrent) will have more complete financial data than any other, for public expenditure.

In addition to the information gleaned from the Audited Accounts, excellent and very detailed data was forthcoming from both the Environmental Management Authority (EMA) and the Petroleum Company of Trinidad and Tobago Limited (PETROTRIN) as responses to the survey questionnaire. This information was combined with that obtained from the Audited Accounts to attempt a picture, though incomplete, of Public expenditure on the environment.

In the context of the above mentioned data constraints, even with the apparent steady increase in expenditure evident from the table on Allocation by Type, it is difficult to create much conclusions on the attention being given to the environment via the public purse. One encouraging aspect is that the majority of the steady rise in expenditure in the latter part of the decade relates to the introduction and increasingly expanding disbursements to the EMA (refer to the expenditure sheets for the EMA).

Table 6  
**ALLOCATION OF ENVIRONMENTAL FINANCING – BY SECTOR FOR PUBLIC ORGANIZATIONS**  
*(In Current \$US)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Type of expenditure</b>									
<b>1 PROTECTION OF AMBIENT AIR AND CLIMATE</b>	-	-	-	-	-	-	-	-	-
1.1 Prevention of pollution through in-process modifications	-	-	-	-	-	-	-	-	-
1.1.1 for the protection of ambient air	-	-	-	-	-	-	-	-	-
1.1.2 for the protection of climate and ozone layer	-	-	-	-	-	-	-	-	-
1.2 Treatment of exhaust gases and ventilation air	-	-	-	-	-	-	-	-	-
1.2.1 for the protection of ambient air	-	-	-	-	-	-	-	-	47,619
1.2.2 for the protection of climate and ozone layer	-	-	-	-	-	9,365	32,063	82,222	120,476
1.3 Measurement, control, laboratories and the like	-	-	-	-	-	8,889	16,190	1,111	16,508
1.4 Other activities	-	-	-	-	-	-	218,900	-	-
<b>2 WASTEWATER MANAGEMENT</b>	-	-	-	-	-	-	-	-	-
2.1 Prevention of pollution through in-process modifications	-	-	-	-	-	-	-	-	-
2.2 Sewerage networks	-	-	-	-	-	-	-	-	-
2.3 Wastewater treatment	-	-	-	-	1,567,742	-	-	-	-
2.4 Treatment of cooling water	-	-	-	-	-	-	-	-	-
2.5 Measurement, control, laboratories and the like	-	35,088	33,898	66,667	-	179,841	83,651	79,365	99,683
2.6 Other activities	-	-	-	-	-	-	-	-	-
<b>3 WASTE MANAGEMENT</b>	-	-	-	-	-	-	-	-	-
3.1 Prevention of pollution through in-process modifications	-	-	-	-	-	-	-	-	-
3.2 Collection and transport	-	-	-	-	-	-	-	-	-
3.3 Treatment and disposal of hazardous waste	-	-	-	-	-	-	-	28,095	290,794
3.3.1 Thermal treatment	-	-	-	-	-	-	-	-	-
3.3.2 Landfill	-	-	-	-	-	-	-	-	-
3.3.3 Other treatment and disposal	-	-	-	-	-	-	-	-	-

Table 6 (Continuation)

Type of expenditure	Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
3.4 Treatment and disposal of non-hazardous waste		-	-	-	-	-	-	-	-	-
3.4.1 Incineration		-	-	-	-	-	-	-	-	-
3.4.2 Landfill		-	-	-	15,972	581,347	317,460	581,721	-	-
3.4.3 Other treatment and disposal		-	-	-	-	193,548	-	253,968	-	-
3.5 Measurement, control, laboratories and the like		-	-	-	-	-	1,190	16,349	-	60,159
3.6 Other activities		-	-	-	-	-	-	-	-	-
<b>4 PROTECTION AND REMEDIATION OF SOIL, GROUNDWATER AND SURFACE WATER</b>		-	-	-	-	-	-	-	-	-
4.1 Prevention of pollutant infiltration		-	-	-	-	-	-	-	-	-
4.2 Cleaning up of soil and water bodies		-	-	-	-	-	-	-	126,984	190,476
4.3 Protection of soil from erosion and other physical degradation		-	-	-	-	-	-	-	-	-
4.4 Prevention and remediation of soil salinity		-	-	-	-	-	-	-	-	-
4.5 Measurement, control, laboratories and the like		-	-	-	-	-	-	47,619	18,413	48,889
4.6 Other activities		-	-	-	-	-	-	-	-	-
<b>5 NOISE AND VIBRATION ABATEMENT (excluding workplace protection)</b>		-	-	-	-	-	-	-	-	-
5.1 Preventive in-process modifications at the source		-	-	-	-	-	-	-	-	-
5.1.1 Road and rail traffic		-	-	-	-	-	-	-	-	-
5.1.2 Air traffic		-	-	-	-	-	-	-	-	-
5.1.3 Industrial and other noise		-	-	-	-	-	-	-	-	-
5.2 Construction of anti noise/vibration facilities		-	-	-	-	-	-	-	-	-
5.2.1 Road and rail traffic		-	-	-	-	-	-	-	-	-
5.2.2 Air traffic		-	-	-	-	-	-	-	-	-
5.2.3 Industrial and other noise		-	-	-	-	-	-	-	-	-
5.3 Measurement, control, laboratories and the like		-	-	-	-	-	1,190	5,238	5,873	32,381
5.4 Other activities		-	-	-	-	-	-	-	-	-
<b>6 PROTECTION OF BIODIVERSITY AND LANDSCAPES</b>		-	-	-	-	-	-	-	-	-
6.1 Protection and rehabilitation of species and habitats		-	-	-	-	-	-	-	-	65,079

Table 6 (Conclusion)

Type of expenditure \ Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
6.2 Protection of natural and semi-natural landscapes	-	-	-	-	-	-	15,873	15,873	31,746
6.3 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
6.4 Other activities	-	94,553	-	-	-	127,000	28,095	50,952	209,683
<b>7 PROTECTION AGAINST RADIATION</b> (excluding external safety)	-	-	-	-	-	-	-	-	-
7.1 Protection of ambient media	-	-	-	-	-	-	-	-	-
7.2 Transport and treatment of high level radioactive waste	-	-	-	-	-	-	-	-	-
7.3 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
7.4 Other activities	-	-	-	-	-	-	-	-	-
<b>8 RESEARCH AND DEVELOPMENT</b>	-	-	-	-	-	-	-	-	-
8.1 Protection of ambient air and climate	-	-	-	-	-	-	-	-	-
8.1.1 Protection of ambient air	-	-	-	-	-	-	-	1,905	2,381
8.1.2 Protection of atmosphere and climate	-	-	-	-	-	-	-	31,746	39,683
8.2 Protection of water	-	-	-	-	-	-	-	-	-
8.3 Waste	-	-	-	-	-	-	-	-	-
8.4 Protection of soil and groundwater	-	-	-	-	-	-	-	-	-
8.5 Abatement of noise and vibration	-	-	-	-	-	-	-	-	-
8.6 Protection of species and habitats	-	-	-	-	-	-	-	-	15,873
8.7 Protection against radiation	-	-	-	-	-	-	-	-	-
8.8 Other research on the environment	-	128,604	-	-	-	-	-	-	-
<b>9 Other ENVIRONMENTAL protection activities</b>	-	-	-	-	-	-	-	-	-
9.1 General environmental administration and management	-	-	-	313,500	252,419	217,302	3,333	-	-
9.1.1 General administration, regulation and the like	-	-	-	49,333	101,129	48,571	95,714	206,984	239,365
9.1.2 Environmental management	-	-	-	-	39,032	437,778	118,730	244,127	266,349
9.2 Education, training and information	-	-	-	100,667	182,500	210,746	301,603	407,238	571,270
9.3 Activities leading to indivisible expenditure	-	-	-	-	-	-	-	-	-
9.4 Activities not elsewhere classified	-	-	-	73,167	65,484	-	-	-	3,968
9.4.1 SEE EMA	-	-	-	-	569,839	952,540	393,810	722,698	-
<b>Total</b>	-	<b>258,245</b>	<b>33,898</b>	<b>619,306</b>	<b>3,617,556</b>	<b>2,511,873</b>	<b>2,212,859</b>	<b>2,023,587</b>	<b>6,352,381</b>

Source: Author's calculations.



Table 7  
**ALLOCATION OF ENVIRONMENTAL FINANCING – BY TYPE OF EXPENDITURE FOR PUBLIC ORGANIZATIONS**  
*(In Current \$US)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Type of expenditure</b>									
<b>1 RECURRENT EXPENDITURE</b>	-	-	-	-	-	-	-	-	-
1.1 <i>Materials and Supplies</i>	-	4,385	14,129	28,862	122,176	119,361	64,307	58,059	-
1.2. <i>Goods and Services</i>	-	283,199	345,315	440,218	575,552	623,645	476,539	633,030	-
1.2.1 <i>Rental of goods and chattel</i>	-	-	-	26,000	130,403	73,016	80,524	98,571	-
1.2.2 <i>Transportation</i>	-	-	-	-	75,339	96,381	67,365	36,413	-
1.2.3 <i>Repairs and Maintenance</i>	-	3,600	8,069	8,659	27,761	48,257	25,972	44,136	-
1.2.4 <i>Utilities and Communication</i>	-	-	-	4,667	37,581	29,524	30,000	31,429	-
1.2.5 <i>Miscellaneous</i>	-	-	38,136	134,833	703,469	711,402	716,251	303,405	-
1.3 <i>Gross salaries and remuneration</i>	-	5,050,057	4,754,228	4,498,236	6,252,415	5,826,886	4,956,584	5,904,789	-
1.4 <i>Recurrent Transfers</i>	-	1,391,112	1,628,162	1,821,187	2,099,275	472,836	312,079	347,986	-
1.5 <i>Depreciation</i>	-	-	-	11,333	37,581	38,889	60,794	82,222	-
1.6 <i>Other</i>	-	52,026	85,908	100,709	110,565	104,954	71,005	97,207	-
<b>2 CAPITAL EXPENDITURE</b>	-	31,887	140,678	20,093	-	2,664	8,817	66,661	-
2.1 <i>Machinery and Equipment</i>	-	-	-	128,833	117,435	116,667	214,444	339,205	-
2.2 <i>Construction and Renovations</i>	-	-	-	-	-	-	63,492	-	-
2.3 <i>Acquisition of Land and Buildings</i>	-	-	-	-	-	-	-	513	-
2.4 <i>Capital Transfers</i>	-	223,157	323,002	508,961	717,343	953,861	492,223	574,193	-
2.5 <i>Other</i>	-	-	-	15,972	583,251	2,966,567	3,393,470	5,276,245	-
<b>3 LOAN SERVICING</b>	-	-	-	-	-	-	-	-	-
3.1 <i>External Debt</i>	-	-	-	-	-	-	-	-	-
3.2 <i>Internal (Domestic) Debt</i>	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	<b>7,039,423</b>	<b>7,337,628</b>	<b>7,748,563</b>	<b>11,590,145</b>	<b>12,184,910</b>	<b>11,033,867</b>	<b>13,894,062</b>	-

Source: Author's calculations.

## a) Outstanding Information

The data survey forms used in the tables above were also sent to several other state agencies and ministries in an attempt to solicit further information that could not be gleaned from the Audited Accounts. Discussions have been held with all of the relevant staff at each of these organizations and additional information (eg. the CEPA 2000 document) has been provided where thought useful. In each case, the consultants have interacted with those personnel in the organizations that appear to be best suited to undertake the survey response.

The State organizations to which multiple approaches were made but from which no response was forthcoming are:

- Ministry of Environment;
  - Contact is Senior Planning Officer,
  - Promised to provide data.
- Ministry of Agriculture;
  - Contact is the Manager of the Project Coordinating Unit,
  - Indicated that no readily available environmental data,
  - Also indicated that any data will be scattered throughout Ministry's various divisions – no central reporting capability for such data–,
  - Little indication that data could be provided.
- Ministry of Energy and Energy Industries;
  - Contact is Chief Technical Officer,
  - No readily available data,
  - Promised to compile from various sources and provide.

## 2. Private Financing

Information on environmental expenditure and the sources of funds for environmental projects in the private sector were almost non-existent. There were no documents found that contained that information, so while this was largely to be an exercise to collect information from available literature, such documents did not exist and quickly proved a futile exercise. The survey form based upon the CEPA information, as well as others related to expenditure type (capital vs recurrent) and sources of funding (internal vs external) was developed and several private organizations were invited to participate in the survey.

The organizations that were invited to participate, with an indication of their status re: their response to the survey document, is listed below:

- National Gas Company of T&T;
  - Executive state organisation –will be treated as a private company–,
  - Contact was the Manager, Environment, Safety and Security Division,
  - Responded with useful information.
- Atlantic LNG (liquefied natural gas);
  - Contact was the Manager, Health, Safety and Environment,
  - Responded –no specific environmental information that could be used–.

- BP Amoco Energy Company;
  - Contact was the Environment Manager,
  - No response to survey –indicated that they did not have this data readily available–.
- British Gas;
  - Contact was the Loss Prevention Manager,
  - No response to survey –indicated that they may have some useful data–.
- Texaco Trinidad Limited;
  - Contact was the Marketing Manager,
  - Indicated that this survey was not applicable to their organisation (?) and as such could not respond,
  - No further information provided.
- Point Lisas Industrial Port Development Company (PLIPDECO);
  - Executive state organisation –will be treated as a private company–,
  - Contact was the Chief Executive Officer,
  - No response to survey.
- ARCO Trinidad Exploration and Production Company;
  - No contact made even after repeated telephone calls and messages.
- ELF Petroleum Company;
  - Contact was with company “Advisor”,
  - Indicated that as they are not in exploration or production mode as yet, no useful information would be available.
- Shell Trinidad Limited;
  - Contact was Operations Manager,
  - No contact made even after repeated telephone calls and messages.

Further, information was sought from several of the major non-governmental organizations involved in environmental endeavours of some sort. The response was similarly discouraging. The organizations that were invited to participate, with an indication of their status re: their response to the survey document, is listed below:

- Nature Seekers Incorporated;
  - Responded to survey,
  - Information included below.
- Caribbean Forest Conservation Association;
  - Indicated they may have some information.
- Fishermen and Friends of the Sea;
  - Indicated they may have some very limited information.
- Pointe-a-Pierre Wildfowl Trust;
  - Indicated they may have some information.
- Field Naturalist Club;
  - Indicated they may have some information.

### **a) Survey Responses**

The quantitative information below was, therefore, as a result of the lack of forthcoming from the Private Sector, based upon only two sources –the National Gas Company and Nature Seekers Incorporated–.

**Table 8**  
**ALLOCATION OF ENVIRONMENTAL FINANCING – BY SECTOR FOR PRIVATE ORGANIZATIONS**  
*(In Current US\$)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Type of expenditure</b>									
<b>1 PROTECTION OF AMBIENT AIR AND CLIMATE</b>	-	-	-	-	-	-	-	-	-
1.1 Prevention of pollution through in-process modifications	-	-	-	-	-	-	-	-	-
1.1.1 for the protection of ambient air	-	-	-	-	-	-	-	-	-
1.1.2 for the protection of climate and ozone layer	-	-	-	-	-	-	-	-	-
1.2 Treatment of exhaust gases and ventilation air	-	-	-	-	-	-	-	-	-
1.2.1 for the protection of ambient air	-	-	-	-	-	-	-	-	-
1.2.2 for the protection of climate and ozone layer	-	-	-	-	-	-	-	-	-
1.3 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
1.4 Other activities	-	-	-	-	-	-	-	-	-
<b>2 WASTEWATER MANAGEMENT</b>	-	-	-	-	-	-	-	-	-
2.1 Prevention of pollution through in-process modifications	-	-	-	-	-	-	-	-	-
2.2 Sewerage networks	-	-	-	-	-	-	-	-	-
2.3 Wastewater treatment	10,526	10,526	10,169	10,000	9,677	9,524	9,524	9,524	9,524
2.4 Treatment of cooling water	-	-	-	-	-	-	-	13,651	24,762
2.5 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
2.6 Other activities	-	-	-	-	-	-	-	-	-
<b>3 WASTE MANAGEMENT</b>	-	-	-	-	-	-	-	-	-
3.1 Prevention of pollution through in-process modifications	-	-	-	-	-	-	-	-	-
3.2 Collection and transport	8,772	8,772	8,475	8,333	8,065	7,937	7,937	7,937	7,937
3.3 Treatment and disposal of hazardous waste	-	-	-	-	-	-	-	-	-
3.3.1 Thermal treatment	-	-	-	-	-	-	-	-	-
3.3.2 Landfill	-	-	-	-	-	-	-	-	-
3.3.3 Other treatment and disposal	-	-	-	-	-	-	-	-	-
3.4 Treatment and disposal of non-hazardous waste	-	-	-	-	-	-	-	-	-
3.4.1 Incineration	-	-	-	-	-	-	-	-	-
3.4.2 Landfill	-	-	-	-	-	-	-	-	-
3.4.3 Other treatment and disposal	-	-	-	-	-	-	-	-	-
3.5 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
3.6 Other activities	-	-	-	-	-	-	-	-	-

Table 8 (Continuation)

Type of expenditure	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>4 PROTECTION AND REMEDIATION OF SOIL, GROUNDWATER AND SURFACE WATER</b>	-	-	-	-	-	-	-	-	-
4.1 Prevention of pollutant infiltration	-	-	-	-	-	-	-	-	-
4.2 Cleaning up of soil and water bodies	-	-	-	-	-	-	79,365	79,365	79,365
4.3 Protection of soil from erosion and other physical degradation	-	-	-	-	-	-	-	-	-
4.4 Prevention and remediation of soil salinity	-	-	-	-	-	-	-	-	-
4.5 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
4.6 Other activities	-	-	-	-	-	-	-	-	-
<b>5 NOISE AND VIBRATION ABATEMENT (excluding workplace protection)</b>	-	-	-	-	-	-	-	-	-
5.1 Preventive in-process modifications at the source	-	-	-	-	-	-	-	-	-
5.1.1 Road and rail traffic	-	-	-	-	-	-	-	-	-
5.1.2 Air traffic	-	-	-	-	-	-	-	-	-
5.1.3 Industrial and other noise	-	-	-	-	-	-	-	-	-
5.2 Construction of anti noise/vibration facilities	-	-	-	-	-	-	-	-	-
5.2.1 Road and rail traffic	-	-	-	-	-	-	-	-	-
5.2.2 Air traffic	-	-	-	-	-	-	-	-	-
5.2.3 Industrial and other noise	-	-	-	-	-	-	-	-	-
5.3 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
5.4 Other activities	-	-	-	-	-	-	-	-	-
<b>6 PROTECTION OF BIODIVERSITY AND LANDSCAPES</b>	-	-	-	-	-	-	-	-	-
6.1 Protection and rehabilitation of species and habitats	9,825	9,825	9,492	9,333	9,032	8,889	8,889	48,413	5,556
6.2 Protection of natural and semi-natural landscapes	-	-	-	-	-	-	-	-	-
6.3 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
6.4 Other activities	-	-	-	-	-	-	-	-	-
<b>7 PROTECTION AGAINST RADIATION (excluding external safety)</b>	-	-	-	-	-	-	-	-	-
7.1 Protection of ambient media	-	-	-	-	-	-	-	-	-
7.2 Transport and treatment of high level radioactive waste	-	-	-	-	-	-	-	-	-
7.3 Measurement, control, laboratories and the like	-	-	-	-	-	-	-	-	-
7.4 Other activities	-	-	-	-	-	-	-	-	-

Table 8 (Conclusion)

Type of expenditure	Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>8 RESEARCH AND DEVELOPMENT</b>		-	-	-	-	-	-	-	-	-
8.1 Protection of ambient air and climate		-	-	-	-	-	-	-	-	-
8.1.1 Protection of ambient air		-	-	-	-	-	-	-	-	-
8.1.2 Protection of atmosphere and climate		-	-	-	-	-	-	-	-	-
8.2 Protection of water		-	-	-	-	-	-	-	-	-
8.3 Waste		-	-	-	-	-	-	-	-	-
8.4 Protection of soil and groundwater		-	-	-	-	-	-	-	-	-
8.5 Abatement of noise and vibration		-	-	-	-	-	-	-	-	-
8.6 Protection of species and habitats		-	-	-	-	-	-	-	-	-
8.7 Protection against radiation		-	-	-	-	-	-	-	-	-
8.8 Other research on the environment		-	-	-	-	-	-	-	-	-
<b>9 Other ENVIRONMENTAL protection activities</b>		-	-	-	-	-	-	-	-	-
9.1 General environmental administration and management		-	-	-	-	-	23,810	27,778	31,746	34,921
9.1.1 General administration, regulation and the like		-	-	-	-	-	-	-	-	-
9.1.2 Environmental management		-	-	-	-	-	-	-	-	-
9.2 Education, training and information		-	-	-	-	-	-	-	-	-
9.3 Activities leading to indivisible expenditure		-	-	-	-	-	-	-	-	-
9.4 Activities not elsewhere classified		-	-	-	33,333	-	-	23,810-	39,841	55,556
<b>Total</b>		<b>29,123</b>	<b>29,123</b>	<b>28,136</b>	<b>61,000</b>	<b>26,774</b>	<b>50,159</b>	<b>157,302</b>	<b>230,476</b>	<b>217,619</b>

Source: Author's calculations.

**Table 9**  
**ALLOCATION OF ENVIRONMENTAL FINANCING – BY TYPE OF EXPENDITURE FOR PRIVATE ORGANIZATIONSS**  
*(In Current US\$)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Type of expenditure</b>									
<b>1 RECURRENT EXPENDITURE</b>	19,298	19,298	18,644	51,667	17,742	41,270	148,413	182,063	212,063
1.1 Materials and Supplies	-	-	-	-	-	-	-	-	-
1.2. Goods and Services	-	-	-	-	-	-	-	-	-
1.2.1 Rental of goods and chattel	-	-	-	-	-	-	-	-	-
1.2.2 Transportation	-	-	-	-	-	-	-	-	-
1.2.3 Repairs and Maintenance	-	-	-	-	-	-	-	-	-
1.2.4 Utilities and Communication	-	-	-	-	-	-	-	-	-
1.2.5 Miscellaneous	-	-	-	-	-	-	-	-	-
1.3 Gross salaries and remuneration	9,825	9,825	9,492	9,333	9,032	8,889	8,889	8,889	5,556
1.4 Recurrent Transfers	-	-	-	-	-	-	-	-	-
1.5 Depreciation	-	-	-	-	-	-	-	-	-
1.6 Other	-	-	-	-	-	-	-	-	-
<b>2 CAPITAL EXPENDITURE</b>	-	-	-	-	-	-	-	-	-
2.1 Machinery and Equipment	-	-	-	-	-	-	-	39,524	-
2.2 Construction and Renovations	-	-	-	-	-	-	-	-	-
2.3 Acquisition of Land and Buildings	-	-	-	-	-	-	-	-	-
2.4 Capital Transfers	-	-	-	-	-	-	-	-	-
2.5 Other	-	-	-	-	-	-	-	-	-
<b>3 LOAN SERVICING</b>	-	-	-	-	-	-	-	-	-
3.1 External Debt	-	-	-	-	-	-	-	-	-
3.2 Internal (Domestic) Debt	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>29,123</b>	<b>29,123</b>	<b>28,136</b>	<b>61,000</b>	<b>26,774</b>	<b>50,159</b>	<b>157,302</b>	<b>230,476</b>	<b>217,619</b>

Source: Author's calculations.



Given the limited response set, little intelligent inferences can be drawn from the above data. It is hoped that (and being worked on) retrieval of additional survey information will enhance this collection of information.

### **NGO projects**

It is known that numerous, generally small scale, activities undertaken by NGO's are funded from a variety of sources. A recent study (July 1997) on the evaluation of externally financed projects on sustainable human development in the North-East of Trinidad, with particular attention to the Toco Foundation (NGO) revealed many diverse sources of funding and projects. This is contained in Appendix C.

A significant source of funding for NGO environmental projects is via foreign embassies and consulates in the country. Enquiries at several of these embassies and consulates obviated that they were not prepared to divulge the quantum and recipients of their funding.



### **III. Sources of Financing**

---

#### **1. Public ORGANIZATIONs**

The following represents the data supplied by the same public companies identified in the tables in Section 1 of Chapter III. It should be noted, therefore, that most of the accounts outside of the “Budgetary Allocations” component represent the accounts of the EMA. It is known that several projects being undertaken by the State organizations and Ministries identified in Section 1 of Chapter III are funded via GORTT by external aid agencies –the IADB, World Bank, etc. Information on the exact nature of these funding arrangements was unavailable to the Consultants–.

**Table 10**  
**SOURCES OF ENVIRONMENTAL FINANCING FOR PUBLIC ORGANIZATIONSS**  
*(In Current \$US)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Source</b>									
<b>1 EXTERNAL RESOURCES</b>	-	-	-	-	-	-	-	-	-
1.1 Loan funds	-	-	-	236,167	1,230,484	690,794	605,397	669,683	1,542,381
1.2. Debt Relief	-	-	-	-	-	-	-	-	-
1.3 Grant Funds	-	-	-	380,667	66,290	78,413	143,810	137,460	207,778
1.4 Direct Foreign Investment	-	-	-	-	-	-	-	-	-
1.5 Other External	-	-	-	-	7,419	4,762	25,238	19,841	8,254
<b>2 DOMESTIC RESOURCES</b>	-	-	-	-	-	-	-	-	-
2.1 Tax Collection, Fines, Subsidies and Transfers	-	-	-	-	-	-	-	-	-
2.2 Budgetary Allocations	-	7,039,423	7,337,628	7,679,063	9,932,338	11,162,767	9,658,613	13,619,359	1,535,556
2.3 Green Fund	-	-	-	-	-	-	-	-	-
2.4 Collection of user fees for national parks, permits for resource exploitation, ecotourism devt., licenses, etc.	-	-	-	-	-	-	-	-	-
2.5 Other Domestic	-	-	-	15,000	13,000	148,000	81,000	181,000	306,000
<b>Total</b>	-	<b>7,039,423</b>	<b>7,337,628</b>	<b>8,310,896</b>	<b>11,249,532</b>	<b>12,084,735</b>	<b>10,514,057</b>	<b>14,627,343</b>	<b>3,599,968</b>

Source: Author's calculations.

## 2. Private ORGANIZATIONSS

The following represents the data supplied by the same public companies identified in the tables in Section 2.2. It is, therefore, very limited in its scope.

**Table 11**  
**SOURCES OF ENVIRONMENTAL FINANCING FOR PRIVATE ORGANIZATIONSS**  
*(In Current US\$)*

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Source</b>									
<b>1 EXTERNAL RESOURCES</b>									
1.1 Loan funds	-	-	-	-	-	-	-	-	-
1.2. Debt Relief	-	-	-	-	-	-	-	-	-
1.3 Grant Funds	-	-	-	-	-	-	-	39,524	5,556
1.4 Foreign Direct Investment	-	-	-	-	-	-	-	-	-
1.5 Other External	-	-	-	-	-	-	-	-	-
<b>2 DOMESTIC RESOURCES</b>									
2.1 Tax Collection, Fines, Subsidies and Transfers	-	-	-	-	-	-	-	-	-
2.2 Budgetary Allocations	29,123	29,123	28,136	61,000	26,774	50,159	157,302	190,952	212,063
2.3 Green Fund	-	-	-	-	-	-	-	-	-
2.4 Collection of user fees for national parks, permits for resource exploitation, ecotourism devt., licenses, etc.	-	-	-	-	-	-	-	-	-
2.5 Other Domestic	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>29,123</b>	<b>29,123</b>	<b>28,136</b>	<b>61,000</b>	<b>26,774</b>	<b>50,159</b>	<b>157,302</b>	<b>230,476</b>	<b>217,619</b>

**Source:** Author's calculations.

### 3. Additional Information on External Funding

Some additional information on external funding for government projects was available through UN and World Bank sources. However, further information was not available to allocate this information to particular years or funding subcomponents. It is, therefore, included here for reference to illustrate the nature of this type of funding.

**Table 12**  
**EXTERNALLY FUNDED ENVIRONMENTAL PROJECTS – T&T AND AS PART OF CARIBBEAN**

Project Name	Project Type	Focal Area	Country	Sub-group	Entry into WB	Implementing Agency	Status	GEF Allocation (USMn)	Cofinancing (USMn)	Total Costs (USMn)	Executing Agency	Approval Date	Duration	Program Type
Protected Areas and Wildlife Management Project	Full Size Project	Biodiversity	Trinidad and Tobago		2/1/00	World Bank	Under Implementation	4.2	12.6	16.8				GEF
Biodiversity Enabling Activity	Enabling Activities	Biodiversity	Trinidad and Tobago		5/1/97	UNDP	Under Implementation	0.127		0.127	Ministry of Agriculture, Land and Marine Resources		1.16	GEF
Climate Change Enabling Activity	Enabling Activities	Climate Change	Trinidad and Tobago		1/1/98	UNDP	Under Implementation	0.2189		0.2189	Government of Trinidad and Tobago	5/18/98	1.5	GEF
A Participatory Approach to Managing the Environment: An Input to the Inter-American Strategy for Participation (ISP)	Medium Size Project	Multiple Focal Areas	Latin America/Caribbean		8/1/97	UNEP	Under Implementation	0.72	0.84	1.56	Organization of American States (OAS)	11/1/97		GEF
Wider Caribbean Initiative for Ship-Generated Waste	Full Size Project	International Waters	Latin America/Caribbean	(Caribbean countries)	5/1/93	World Bank	Under Implementation	5.5		5.5	International Maritime Organization (IMO)	6/20/94		Pilot Phase
Caribbean Renewable Energy Development Programme	fp	Climate Change	Regional	(Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cuba, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos)	7/1/00	UNDP	Under Implementation	4.426	12.45	16.876				GEF
Building Capacity for Conducting Vulnerability and Adaptation Assessments in the Caribbean Region	Enabling Activities	Climate Change	Regional	(Antigua and Barbuda, Barbados, Belize, Grenada, Guyana, Jamaica, St. Lucia, Suriname, Trinidad and Tobago)	12/1/99	UNDP	Under Implementation	0.1177		0.1177	UNOPS		0.25	GEF

Source: Author's calculations.

## **IV. Conclusions & Recommendations**

---

The following are the main conclusions and recommendations that will enhance financing for environmental projects in Trinidad and Tobago

1. While many environmental initiatives may be being undertaken within both the Public and Private sector in Trinidad and Tobago, there is at present very little necessity for accounting of these initiatives. These generally become aggregated with other operational areas and lose their particular “environmental” identity. It is, therefore, very difficult for organizations to identify their “environmental” expenditures.
2. The continuous growth in scope and capability of the EMA may cause a more dedicated approach to maintain specific “environment” accounts as organizations –both Public and Private– may be subject to environmental monitoring activities from the EMA. By these organizations maintaining specific accounts on expenditures on environmental activities, they may be more able to cope with this new regulatory mechanism.
3. The Governmental accounting system does not allow for disaggregation of the Audited Accounts. It is likely that this will not change. It is expected that based on the points above, better environmental accounting will become more standardized within the organizations and this data will be better sourced at the individual organization level rather

than at the level of the Ministry of Finance's audited statements. The major drawbacks of this are that there will be no standardisation in reporting, no central repository of information and the monetary information will be unaudited, and therefore, not official government accounts.

4. Institutional strengthening activities may need to be implemented within both Public and Private sector organizations to provide for environmental accounting capabilities. This is especially so in light of the EMA's expected active role in monitoring environmental compliance.
5. Rules for administration of and access to the Green Fund need to be quickly developed and enacted.
6. NGO Recommendations:
  - a. Implementation of the Green Fund will require institutional strengthening within NGO's to allow them to have the technical capability to write proper project documents. Training in the following skills areas will be required:
    - i. Definition of logical frameworks, project cycles, evaluation methodologies
    - ii. Accounting and feedback reporting skills will be required
  - b. NGO's need to have access to internet and become web-enabled to source additional funding and promote international recognition of their work.
  - c. Government is a partner in the environmental thrust –NGO's need to work closely with government to establish the context for many of the projects. Government support can be forthcoming through counterpart funding–.
  - d. More networking between NGO's should be promoted so that they cooperate more – avoid secrecy and share information–.
  - e. Accountability and transparency must be inherent in the NGO's. This will enhance their ability to attract funding for their projects.
  - f. Should ensure that any environmental project that is undertaken locally by an international NGO should have a local "understudy" (counterpart) to ensure sustainability of the project –technology/knowledge transfer–.
  - g. A certain percentage of buy-in by the local communities for projects in their region is a definite prerequisite for any project to succeed. This requirement will force the environmental implementation agency to ensure that what they are attempting to do is of importance to the community –local, regional or national community, depending on the scope and location of the project–.
7. The roles to be maintained by the various players in the environmental financing and project development structure are evolving in the right direction and should be maintained, as follows:
  - a. Ministry of Environment should remain in policy formulation and facilitation –not getting directly involved but providing guidance and maintenance and distribution of the Green Fund–. The Ministry should have oversight in strategic planning, looking at wider issues and be ultimately accountable to the Ministry of Finance.
  - b. EMA remain as the managing (policing, enforcement of the EM Act) arm of the Ministry of Environment.
  - c. State organizations and Private companies maintain their environmental operations – with an obvious need for expansion thereof due to the enforcement threat of the EMA–.
  - d. NGO's remain as the facilitating agencies to actually do the work on environmental conservation/preservation –active in the field or in doing research and other studies–.



## References

---

- Atlantic LNG Company of Trinidad and Tobago (2001), ALNG Response to the ECLAC Survey on Environmental Financing, Trinidad and Tobago.
- Ernst and Young Chartered Accountants (1998), "Report of the Auditors to the Environmental Management Authority (for 1997)", Port of Spain, Trinidad and Tobago.
- \_\_\_\_ (1997), "Report of the Auditors to the Environmental Management Authority (for 1996)", Port of Spain, Trinidad and Tobago.
- \_\_\_\_ (1996), "Report of the Auditors to the Environmental Management Authority (for 1995)", Port of Spain, Trinidad and Tobago.
- Environmental Management Authority (2001), EMA Response to the ECLAC Survey on Environmental Financing, Trinidad and Tobago.
- Government of the Republic of Trinidad and Tobago (1994), "Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Year ended 31<sup>st</sup> December 1993 and other selected audit activities conducted during the year". Government Printery, Port of Spain, Trinidad and Tobago.
- \_\_\_\_ (1995), "Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Year ended 31<sup>st</sup> December 1994 and other selected audit activities conducted during the year". Government Printery, Port of Spain, Trinidad and Tobago.
- \_\_\_\_ (1996), "Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Year ended 31<sup>st</sup> December 1995 and other selected audit activities conducted during the year". Government Printery, Port of Spain, Trinidad and Tobago.
- \_\_\_\_ (1997), "Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Year ended 31<sup>st</sup> December 1996 and other selected audit activities conducted during the year". Government Printery, Port of Spain, Trinidad and Tobago.
- \_\_\_\_ (1998), "Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Year ended 31<sup>st</sup> December 1997

and other selected audit activities conducted during the year”. Government Printery, Port of Spain, Trinidad and Tobago.

\_\_\_\_ (1999), “Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Year ended 31st December 1998 and other selected audit activities conducted during the year”. Government Printery, Port of Spain, Trinidad and Tobago.

Huggins, Wayne et al (1998), “The Sources of Funding and Expenditure for Selected Environmental NGO’s in Northeast Trinidad”, Port of Spain, Trinidad and Tobago.

KPMG Chartered Accountants (2001), “Auditors Report to the International Bank for Reconstruction and Development (for 2000 on the Environmental Management Authority)”, Port of Spain, Trinidad and Tobago.

\_\_\_\_ (2000), “Auditors Report to the International Bank for Reconstruction and Development (for 1999 on the Environmental Management Authority)”, Port of Spain, Trinidad and Tobago.

\_\_\_\_ (1999), “Auditors Report to the International Bank for Reconstruction and Development (for 1998 on the Environmental Management Authority)”, Port of Spain, Trinidad and Tobago.

Ministry of Finance, Government of the Republic of Trinidad and Tobago (1999). “Details of Estimates of Recurrent Expenditure for the Financial Year 1998/1999”. Government Printery, Port of Spain, Trinidad and Tobago.

\_\_\_\_ (2000). “Details of Estimates of Recurrent Expenditure for the Financial Year 1999/2000”. Government Printery, Port of Spain, Trinidad and Tobago.

National Gas Company of Trinidad and Tobago (2001), NGC Response to the ECLAC Survey on Environmental Financing, Trinidad and Tobago.

Nature Seekers Incorporated (2001), NSI Response to the ECLAC Survey on Environmental Financing, Trinidad and Tobago.

Petroleum Company of Trinidad and Tobago Limited (PETROTRIN) (2001), PETROTRIN Response to the ECLAC Survey on Environmental Financing, Trinidad and Tobago.

United Nations (2001), “Classification of Environmental Protection Activities and Expenditure (CEPA 2000) with explanatory notes”, Department of Economic and Social Affairs, Statistics Division, Meeting of the Expert Group on International Economic and Social Classifications New York, 18-20 June 2001.

## **Appendixes**

---



## Appendix A: Trinidad & Tobago - Tables with some fundamental Economic Indicators

Table 13  
CURRENT PRICES, WHERE RELEVANT

	1993	1994	1995	1996	1997	1998	1999	2000
Real Growth (%)		5.0	3.2	2.9	3.0	4.0	5.2	4.0
Inflation (%)		8.8	5.3	3.3	3.7	5.6	3.4	3.6
Unemployment Rate (%)		18.4	17.2	16.3	15.0	14.2	13.1	12.5
Internal Debt/GDP (%)		19.3	20.8	20.3	22.1	22.8	21.5	24.2
External Debt/GDP (%)		41.3	35.4	32.6	27.1	24.1	23.4	21.1
Exports (US\$Mn)		1972	2477	2506	2542	2265	2816	4724
Imports (US\$Mn)		1374	1885	2159	3036	3008	2752	3556
Foreign Direct Investment/GDP (%)		11.2	5.9	6.2	17.0	12.0	6.0	6.1
Exchange Rate (TT\$/US\$)	5.7	5.9	6.0	6.2	6.3	6.3	6.3	6.3

Source: Author's calculations.

## Appendix B: Examples of expanded government expenditure that could be considered as Environmental Projects

Table 14  
RECURRENT EXPENDITURE OF ENVIRONMENTAL RELATED  
PROJECTS FROM CONSOLIDATED FUND  
(In TT\$)

Ministry	1998/1999	1999/2000
OPM	5,373,268	-
Planning and Development	16,602,700	19,538,700
Agriculture Land and Marine Resources	66,405,948	61,674,100
Housing and Settlements	18,189,857	30,327,295
Local Government	10,168,680	11,300,000
Works and Transport	38,700,500	41,248,000
<b>Total Recurrent Expenditure</b>	<b>155,440,953</b>	<b>164,088,095</b>

Source: ibid.

On the recurrent side this is even greater. Funding as seen above is well over TT150Mn annually. The combined total means that well over TT250Mn is expended on development initiatives that are directly related to the environment.

Table 15  
DEVELOPMENT EXPENDITURE OF ENVIRONMENTAL RELATED  
PROJECTS FROM CONSOLIDATED FUND  
(In TT\$)

Ministry	1998/1999	1999/2000
Tobago House of Assembly	19,596,000	37,455,000
Planning and Development	10,643,806	16,194,277
Legal Affairs	6,446,617	8,700,000
Agriculture Land and Marine Resources	13,899,035	25,075,000
Housing and Settlements	11,523,513	25,080,000
Local Government	5,671,406	11,800,000
Public Utilities	6,678,495	-
<b>Total Development Expenditure</b>	<b>74,458,872</b>	<b>124,304,277</b>

Source: ibid.

The details of which are listed in the table below.

**Table 16**

**DETAILS OF DEVELOPMENT EXPENDITURE OF ENVIRONMENTAL RELATED  
PROJECTS FROM CONSOLIDATED FUND**  
(In TT\$)

Ministry	Project	1998/1999	1999/2000
<b>THA</b>	Fishing	200,000	
	Forestry	100,000	
	Land Management Services	100,000	
	Research and Development	250,000	
	Fuel and Energy	400,000	
	Drainage & Irrigation	3,000,000	4,310,000
	Tourism	2,556,000	2,000,000
	Business Services	600,000	
	Roads and Bridges	4,000,000	23,145,000
	Sea Transport	390,000	
	Water and Sewerage	8,000,000	8,000,000
<b>Planning and Development</b>	Forestry	830,000	214,277
	Facilities at Caroni Swamp National Park	3,949,910	
	Physical Planning Studies and Designs	273,015	
	IMA	2,103,000	3,920,000
	T&CPD/EIA Review Capacity	63,350	3,765,000
	Environmental Protection and Rehabilitation	3,424,531	8,295,000
<b>Legal Affairs</b>	Land Tenure Rationalization	6,446,617	8,700,000
<b>Agriculture, Land and Marine Resources</b>	Natural Resources and Environment Management Programme	443,150	2,000,000
	Fishing	805,124	1,000,000
	Forestry	2,166,500	2,145,000
	Land Management Services	2,331,228	5,400,000
	Research and Development	4,079,000	5,750,000
	Tick Control	21,000	50,000
	Queens park Savannah	10,000	200,000
	Drainage & Irrigation	3,793,033	7,000,000
	Land Acquisition	250,000	1,000,000
	Botanic Gardens		530,000
<b>Housing and Settlements</b>	Land Acquisition	7,090,881	8,000,000
	Roads and Bridges		500,000
	Squatter Regularization	1,818,178	7,240,000
	Physical Planning Studies and Designs	152,779	1,090,000
	Lands & Surveys	798,088	1,250,000
	Strengthening of Land Administration	1,663,587	7,000,000
<b>Local Government</b>	Roads and Bridges	2,215,795	
	Drainage & Irrigation	2,560,000	3,300,000
	Drainage & Irrigation	895,611	8,500,000
<b>Public Utilities</b>	Drainage & Irrigation	6,325,023	
	Electricity (rural)	353,472	
<b>Totals</b>		<b>74,458,872</b>	<b>124,304,277</b>

Source: *ibid.*

**Table 17**  
**DETAILS OF RECURRENT EXPENDITURE OF ENVIRONMENTAL**  
**RELATED PROJECTS FROM CONSOLIDATED FUND**  
*(In TT\$)*

<b>Ministry</b>	<b>Project</b>	<b>1998/1999</b>	<b>1999/2000</b>
<b>OPM</b>	Herbarium	320,768	
	IMA	5,052,500	
<b>Planning &amp; Development</b>	Environmental Division	1,220,000	1,273,000
	Environmental Commission		1,250,000
	United Nations Environment programme	63,000	63,000
	UNDP	900,000	900,000
	UN Framework Convention on Climate Change	14,700	14,700
	Caribbean Conservation Association	50,000	50,000
	Trust Fund of the Caribbean environmental Programme/Recreational Co-ordinating Unit	65,000	65,000
	Herbarium	425,000	427,000
	Convention on Biodiversity	29,000	29,000
	EMA	4,785,000	4,815,000
	IMA	9,051,000	10,652,000
<b>Agriculture, Land and Marine Resources</b>	Fisheries	2,994,300	3,122,000
	Animal Production & Health	16,122,000	17,100,000
	Lands & Surveys	9,808,448	
	Horticulture	6,680,000	7,360,000
	Forestry	28,537,600	31,580,000
	Convention on Wetlands of International Importance especially as water fowl habitat (RAMSAR)	5,300	5,300
	International Commission for Conservation of Atlantic Tunas (ICCAT)	6,300	6,300
	International Organization of Epizootics (OIE)	60,000	63,500
	Zoological Society of Trinidad and Tobago	2,192,000	2,437,000
<b>Housing &amp; Settlements</b>	Urban & Regional Planning Division	4,676,788	4,956,400
	Lands & Surveys	13,039,114	13,828,600
	HABITAT	6,295	6,295
	Land Surveyor Board	364,660	453,000
	International Hydrographic Organization (IHO)	103,000	83,000
	LSA		11,000,000
<b>Local Government</b>	Solid Waste Management Co. Ltd	10,168,680	11,300,000
<b>Works &amp; Transport</b>	Drainage	36,975,500	39,383,000
	Maritime Services	1,725,000	1,865,000
<b>Total Recurrent</b>		<b>155,440,953</b>	<b>164,088,095</b>

Source: *ibid.*

## Appendix C: Non-Governmental ORGANIZATIONSs – Funding for Projects

Table 18  
SUMMARY OF THE MAIN EXTERNALLY FUNDED PROJECTS IN THE  
MATURA TO MATELOT REGION 1994 TO 1997

Funding institution	Partners	Amount (TT\$)
Federal Republic of Germany	Toco Action in Development	Not stated
	Sister Rosario Hackshaw	11,540.76
High Commission of Canada	Women Action and Development Project	47,948
	St.Helena/ Matelot Women's Group	22,990.48
	St. David Handicraft Association	32,842.43
	Matura Women's Group	43,034.95
British High Commission	Initiated by Ministry of Agriculture	5,000
	Toco Foundation	25,000
Embassy of the Kingdom of the Netherlands	Toco Foundation	50,500
	Toco Foundation	75,000
Ministry of Community Development, Culture and Women's Affairs	Village Councils, Women's Groups, Handicraft Association, Farmer's Association, St. David Fishermen Association	50,000 per community centre
National Commission for Self Help	Toco Foundation	240,000
Ministry of Agriculture (Wildlife Division)	Nature Seekers	60,000
	Fishing Pond Environmental and Community Corporation	30,000
	GREAT	Not stated
YTEPP	Matura Women's Group;	Not stated
	Rampanalgas Village Cooperative	Not stated
	Toco Foundation	Not stated
	Grand Riviere Women's Group	Not stated
UNDP Global Environmental Facility (GEF) Small Grants Programme	Grand Riviere Environmental Awareness Trust (GREAT);	Not stated
	Toco Foundation	Not stated
Fundaid	19 projects in Matelot - Matura	Not stated

Source: Evaluation of Externally Financed Projects on Sustainable Human Development in the North-East of Trinidad, with particular attention to the Toco Foundation.

Further investigation also revealed that several NGO's have extensive networks throughout the Government and private sector that they rely on for funding and other support.

Focusing on three (3) NGOs in the North-East of the country:

- i. Nature Seekers,
- ii. GREAT; and,
- iii. Toco Foundation.

The following agencies were found to be associated in funding and other related activities.

### Nature Seekers

- (a) SHELL;
- (b) CYEN;
- (c) Auduborn Society;
- (d) Widecast;
- (e) Hubb Sea World;



- (f) AMOCO;
- (g) Caribbean Forestry Conservation Association (CFCA);
- (h) Asa Wright Nature Centre;
- (i) Tourism and Industrial Development Corporation (TIDCO), GORTT;
- (j) Wild Life Section, Ministry of Agriculture, GORTT;
- (k) Aleong & Agostini; and
- (l) Institute of Marine Affairs, GORTT.

### **Grand Riviere Environmental Awareness Trust (GREAT)**

- (a) Toco Foundation;
- (b) Nature Seekers Incorporated;
- (c) EMA, GORTT;
- (d) Field Naturalist Club;
- (e) CFCA;
- (f) Caribbean Life Insurance Company Ltd (CLICO);
- (g) Guardian Life;
- (h) Fire Service, GORTT;
- (i) First Citizens Bank;
- (j) Republic Bank;
- (k) Peakes Industries;
- (l) UNDP;
- (m) Trinidad and Tobago Television, GORTT;
- (n) Water shed Management, GORTT;
- (o) Wild Fowl Trust;
- (p) US Fish & Wildlife service;
- (q) Widecast;
- (r) Wild life Section, Ministry of Agriculture, GORTT;

### **Toco Foundation**

- (a) Red Cross;
  - (b) High Commission of Canada;
  - (c) High Commission of the Federal Republic of Germany;
  - (d) The Dutch Consulate;
  - (e) UNESCO;
  - (f) UNDP;
  - (g) The British High Commission;
  - (h) Ministry of Works, GORTT;
  - (i) Unemployment Relief Programme, GORTT;
  - (j) TIDCO, GORTT;
  - (k) Foundation for Enhancement & Enrichment of Life;
  - (l) National Self Help Commission, GORTT;
  - (m) Citizens Agenda Network; and
  - (n) Wild Life Section, Ministry of Agriculture, GORTT.
- (GORTT = Government of the Republic of Trinidad and Tobago)**





NACIONES UNIDAS



Serie

medio ambiente y desarrollo


## Issues published

1. Las reformas del sector energético en América Latina y el Caribe (LC/L.1020), abril de 1997. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl) - [haltomonte@eclac.cl](mailto:haltomonte@eclac.cl)
2. Private participation in the provision of water services. Alternative means for private participation in the provision of water services (LC/L.1024), mayo de 1997. E-mail: [ajouravlev@eclac.cl](mailto:ajouravlev@eclac.cl)
3. Management procedures for sustainable development (applicable to municipalities, micro-regions and river basins) (LC/L.1053), agosto de 1997. E-mail: [adourojeanni@eclac.cl](mailto:adourojeanni@eclac.cl), [rsalgado@eclac.cl](mailto:rsalgado@eclac.cl)
4. El Acuerdo de las Naciones Unidas sobre pesca en alta mar: una perspectiva regional a dos años de su firma (LC/L.1069), septiembre de 1997. E-mail: [rsalgado@eclac.cl](mailto:rsalgado@eclac.cl)
5. Litigios pesqueros en América Latina (LC/L.1094), febrero de 1998. E-mail: [rsalgado@eclac.cl](mailto:rsalgado@eclac.cl)
6. Prices, property and markets in water allocation (LC/L.1097), febrero de 1998. E-mail: [tle@eclac.cl](mailto:tle@eclac.cl) - [ajouravlev@eclac.cl](mailto:ajouravlev@eclac.cl) [www](#)  
Los precios, la propiedad y los mercados en la asignación del agua (LC/L.1097), octubre de 1998. E-mail: [tle@eclac.cl](mailto:tle@eclac.cl) - [ajouravlev@eclac.cl](mailto:ajouravlev@eclac.cl) [www](#)
7. Sustainable development of human settlements: Achievements and challenges in housing and urban policy in Latin America and the Caribbean (LC/L.1106), March 1998. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)  
Desarrollo sustentable de los asentamientos humanos: Logros y desafíos de las políticas habitacionales y urbanas de América Latina y el Caribe (LC/L.1106), octubre de 1998. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
8. Hacia un cambio de los patrones de producción: Segunda Reunión Regional para la Aplicación del Convenio de Basilea en América Latina y el Caribe (LC/L.1116 y LC/L.1116 Add/1), vols. I y II, en edición. E-mail: [cartigas@eclac.cl](mailto:cartigas@eclac.cl) - [rsalgado@eclac.cl](mailto:rsalgado@eclac.cl)
9. La industria del gas natural y las modalidades de regulación en América Latina, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1121), abril de 1998. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl) [www](#)
10. Guía para la formulación de los marcos regulatorios, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1142), agosto de 1998. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl)
11. Panorama minero de América Latina: la inversión en la década de los noventa, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1148), octubre de 1998. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl) [www](#)
12. Las reformas energéticas y el uso eficiente de la energía en el Perú, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1159), noviembre de 1998. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl)
13. Financiamiento y regulación de las fuentes de energía nuevas y renovables: el caso de la geotermia (LC/L.1162), diciembre de 1998. E-mail: [mcoviello@eclac.cl](mailto:mcoviello@eclac.cl)
14. Las debilidades del marco regulatorio eléctrico en materia de los derechos del consumidor. Identificación de problemas y recomendaciones de política, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1164), enero de 1999. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl) [www](#)
15. Primer Diálogo Europa-América Latina para la Promoción del Uso Eficiente de la Energía, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1187), marzo de 1999. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl)
16. Lineamientos para la regulación del uso eficiente de la energía en Argentina, Proyecto CEPAL/Comisión Europea "Promoción del uso eficiente de la energía en América Latina" (LC/L.1189), marzo de 1999. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl)

17. Marco legal e institucional para promover el uso eficiente de la energía en Venezuela, Proyecto CEPAL/Comisión Europea “Promoción del uso eficiente de la energía en América Latina” (LC/L.1202), abril de 1999. E-mail: [fsanchez@eclac.cl](mailto:fsanchez@eclac.cl)
18. Políticas e instituciones para el desarrollo sostenible en América Latina y el Caribe, José Antonio Ocampo (LC/L.1260-P), N° de venta: S.99.II.G.37 (US\$ 10.00), septiembre de 1999. E-mail: [jocampo@eclac.cl](mailto:jocampo@eclac.cl) [www](#)
19. Impactos ambientales de los cambios en la estructura exportadora en nueve países de América Latina y el Caribe: 1980-1995, Marianne Schaper (LC/L.1241/Rev1-P), N° de venta: S.99.II.G.44 (US\$ 10.00), octubre de 2000. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](#)
20. Marcos regulatorios e institucionales ambientales de América Latina y el Caribe en el contexto del proceso de reformas macroeconómicas: 1980-1990, Guillermo Acuña (LC/L.1311-P), N° de venta: S.99.II.G.26 (US\$ 10.00), diciembre de 1999. E-mail: [gacuna@eclac.cl](mailto:gacuna@eclac.cl) [www](#)
21. Consensos urbanos. Aportes del Plan de Acción Regional de América Latina y el Caribe sobre Asentamientos Humanos, Joan MacDonald y Daniela Simioni (LC/L.1330-P), N° de venta: S.00.II.G.38 (US\$ 10.00), diciembre de 1999. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)  
 Urban consensus. Contributions from the Latin American and the Caribbean Regional Plan of Action on Human Settlements, Joan MacDonald y Daniela Simioni (LC/L.1330-P), Sales N°: E.00.II.G.38 (US\$ 10.00), June 2000. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
22. Contaminación industrial en los países latinoamericanos pre y post reformas económicas, Claudia Schatan (LC/L.1331-P), N° de venta: S.00.II.G.46 (US\$ 10.00), diciembre de 1999. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](#)
23. Trade liberalization and industrial pollution in Brazil, Claudio Ferraz and Carlos E.F. Young (LC/L.1332-P), Sales N°: E.00.II.G.47 (US\$ 10.00), diciembre de 1999. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](#)  
 Reformas estructurales y composición de las emisiones contaminantes industriales. Resultados para México, Fidel Aroche Reyes (LC/L.1333-P), N° de venta: S.00.II.G.42 (US\$ 10.00), mayo de 2000. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](#)
25. El impacto del programa de estabilización y las reformas estructurales sobre el desempeño ambiental de la minería de cobre en el Perú: 1990-1997, Alberto Pascó-Font (LC/L.1334-P), N° de venta: S.00.II.G.43 (US\$ 10.00), mayo de 2000. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](#)
26. Servicios urbanos y equidad en América Latina. Un panorama con base en algunos casos, Pedro Pérez (LC/L.1320-P), N° de venta: S.00.II.G.95 (US\$ 10.00), septiembre de 2000. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
27. Pobreza en América Latina: Nuevos escenarios y desafíos de políticas para el hábitat urbano, Camilo Arriagada (LC/L.1429-P), N° de venta: S.00.II.G.107 (US\$ 10.00), octubre de 2000. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
28. Informalidad y segregación urbana en América Latina. Una aproximación, Nora Clichevsky (LC/L.1430-P), N° de venta: S.99.II.G.109 (US\$ 10.00), octubre de 2000. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
29. Lugares o flujos centrales: los centros históricos urbanos, Fernando Carrión (LC/L.1465-P), N° de venta: S.01.II.G.6 (US\$ 10.00), diciembre de 2000. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](#)
30. Indicadores de gestión urbana. Los observatorios urbano-territoriales para el desarrollo sostenible. Manizales, Colombia, Luz Stella Velásquez (LC/L.1483-P), N° de venta: S.01.II.G.24 (US\$ 10.00), enero de 2001. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](#)
31. Aplicación de instrumentos económicos en la gestión ambiental en América Latina y el Caribe: desafíos y factores condicionantes, Jean Acquatella (LC/L.1488-P), N° de venta: S.01.II.G.28 (US\$ 10.00), enero de 2001. E-mail: [jacquatella@eclac.cl](mailto:jacquatella@eclac.cl) [www](#)
32. Contaminación atmosférica y conciencia ciudadana. El caso de la ciudad de Santiago, Cecilia Dooner, Constanza Parra y Cecilia Montero (LC/L.1532-P), N° de venta: S.01.II.G.77 (US\$ 10.00), abril de 2001. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
33. Gestión urbana: plan de descentralización del municipio de Quilmes, Buenos Aires, Argentina, Eduardo Reese (LC/L.1533-P), N° de venta: S.01.II.G.78 (US\$ 10.00), abril de 2001. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](#)
34. Gestión urbana y gobierno de áreas metropolitanas, Alfredo Rodríguez y Enrique Oviedo (LC/L.1534-P), N° de venta: S.01.II.G.79 (US\$ 10.00), mayo de 2001. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](#)
35. Gestión urbana: recuperación del centro de San Salvador, El Salvador. Proyecto Calle Arce, Jaime Barba y Alma Córdoba (LC/L.1537-P), N° de venta: S.01.II.G.81 (US\$ 10.00), mayo de 2001. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](#)
36. Consciência dos cidadãos e poluição atmosférica na região metropolitana de São Paulo – RMSP, Pedro Roberto Jacobi y Laura Valente de Macedo (LC/L.1543-P), N° de venta: S.01.II.G.84 (US\$ 10.00), mayo de 2001. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)
37. Environmental values, valuation methods, and natural disaster damage assessment, Cesare Dosi (LC/L.1552-P), Sales N°: E.01.II.G.93 (US\$ 10.00), June 2001. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](#)

38. Fundamentos económicos de mecanismos de flexibilidad para la reducción internacional de emisiones en el marco de la Convención de Cambio Climático (UNFCCC), Jean Acquatella (LC/L..1556-P), N° de venta: S.01.II.G.101 (US\$ 10.00), julio de 2001. E-mail: [jacquatella@eclac.cl](mailto:jacquatella@eclac.cl) [www](http://www)
39. Fundamentos territoriales y biorregionales de la planificación, Roberto Guimarães (LC/L.1562-P), N° de venta: S.01.II.G.108 (US\$ 10.00), julio de 2001. E-mail: [rguimaraes@eclac.cl](mailto:rguimaraes@eclac.cl) [www](http://www)
40. La gestión local, su administración, desafíos y opciones para el fortalecimiento productivo municipal en Caranavi, Departamento de La Paz, Bolivia, Jorge Salinas (LC/L.1577-P), N° de venta: S.01.II.G.119 (US\$ 10.00), agosto de 2001. E-mail: [jsalinas@eclac.cl](mailto:jsalinas@eclac.cl) [www](http://www)
41. Evaluación ambiental de los acuerdos comerciales: un análisis necesario, Carlos de Miguel y Georgina Nuñez (LC/L.1580-P), N° de venta: S.01.II.G.123 (US\$ 10.00), agosto de 2001. E-mail: [cdemiguel@eclac.cl](mailto:cdemiguel@eclac.cl) y [gnunez@eclac.cl](mailto:gnunez@eclac.cl) [www](http://www)
42. Nuevas experiencias de concertación público-privada: las corporaciones para el desarrollo local, Constanza Parra y Cecilia Dooner (LC/L..1581-P), N° de venta: S.01.II.G.124 (US\$ 10.00), agosto de 2001. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](http://www)
43. Organismos genéticamente modificados: su impacto socioeconómico en la agricultura de los países de la Comunidad Andina, Mercosur y Chile, Marianne Schaper y Soledad Parada (LC/ 1638-P), N° de venta: S.01.II.G.176 (US\$ 10.00), noviembre de 2001. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](http://www)
44. Dinámica de valorización del suelo en el área metropolitana del Gran Santiago y desafíos del financiamiento urbano, Camilo Arriagada Luco y Daniela Simioni (LC/L.1646-P), N° de venta: S.01.II.G.185 (US\$ 10.00), noviembre de 2001. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](http://www)
45. El ordenamiento territorial como opción de políticas urbanas y regionales en América Latina y el Caribe, Pedro Felipe Montes Lira (LC/L.1647-P), N° de venta: S.01.II.G.186 (US\$ 10.00), diciembre de 2001. E-mail: [rjordan@eclac.cl](mailto:rjordan@eclac.cl) [www](http://www)
46. Evolución del comercio y de las inversiones extranjeras en industrias ambientalmente sensibles: Comunidad Andina, Mercosur y Chile (1990-1999), Marianne Schaper y Valerie Onffroy de Vèréz (LC/L.1676-P), N° de venta: S.01.II.G.212 (US\$ 10.00), diciembre de 2001. E-mail: [mschaper@eclac.cl](mailto:mschaper@eclac.cl) [www](http://www)
47. Aplicación del principio contaminador-pagador en América Latina. Evaluación de la efectividad ambiental y eficiencia económica de la tasa por contaminación hídrica en el sector industrial colombiano, Luis Fernando Castro, Juan Carlos Caycedo, Andrea Jaramillo y Liana Morera (LC/L.1691-P), N° de venta: S.02.II.G.15 (US\$ 10.00), febrero de 2002. E-mail: [jacquatella@eclac.cl](mailto:jacquatella@eclac.cl) [www](http://www)
48. Las nuevas funciones urbanas: gestión para la ciudad sostenible, (varios autores) (LC/L.1692-P), N° de venta: S.02.II.G.32 (US\$ 10.00), abril de 2002. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](http://www)
49. Pobreza y políticas urbano-ambientales en Argentina, Nora Clichevsky (LC/L.1720-P), N° de venta: S.02.II.G.31 (US\$ 10.00), abril de 2002. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](http://www)
50. Políticas públicas para la reducción de la vulnerabilidad frente a los desastres naturales, Jorge Enrique Vargas (LC/L.1723-P), N° de venta: S.01.II.G.34 (US\$ 10.00), abril de 2002. E-mail: [dsimioni@eclac.cl](mailto:dsimioni@eclac.cl) [www](http://www)
51. Uso de instrumentos económicos para la gestión ambiental en Costa Rica, Jeffrey Orozco B. y Keynor Ruíz M. (LC/L.1735-P), N° de venta: S.02.II.G.45 (US\$ 10.00), octubre de 2002. E-mail: [jacquatella@eclac.cl](mailto:jacquatella@eclac.cl) [www](http://www)
52. Gasto, inversión y financiamiento para el desarrollo sostenible en Argentina, Daniel Chudnovsky y Andrés López (LC/L.1758-P), N° de venta: S.02.II.G.70 (US\$ 10.00), octubre de 2002. E-mail: [cdemiguel@eclac.cl](mailto:cdemiguel@eclac.cl) [www](http://www)
53. Gasto, inversión y financiamiento para el desarrollo sostenible en Costa Rica, Gerardo Barrantes (LC/L.1760-P), N° de venta: S.02.II.G.74 (US\$ 10.00), octubre de 2002. E-mail: [cdemiguel@eclac.cl](mailto:cdemiguel@eclac.cl) [www](http://www)
54. Gasto, inversión y financiamiento para el desarrollo sostenible en Colombia, Francisco Alberto Galán y Francisco Javier Canal (LC/L.1788-P), N° de venta: S.02.II.G.102 (US\$ 10.00), octubre de 2002. E-mail: [cdemiguel@eclac.cl](mailto:cdemiguel@eclac.cl) [www](http://www)
55. Gasto, inversión y financiamiento para el desarrollo sostenible en México, Gustavo Merino y Ramiro Tovar (LC/L.), N° de venta: S.02.II.G.119 (US\$ 10.00), octubre, 2002. E-mail: [cdemiguel@eclac.cl](mailto:cdemiguel@eclac.cl) [www](http://www)
56. Expenditures, Investment and Financing for Sustainable Development in Trinidad and Tobago, Desmond Dougall and Wayne Huggins (LC/L.1795-P), Sales N°: E.02.II.G.107 (US\$ 10.00), November, 2002. E-mail: [cdemiguel@eclac.cl](mailto:cdemiguel@eclac.cl) [www](http://www)

- Readers wishing to obtain the above publications can do so by writing to the following address: ECLAC, Sustainable Development and Human Settlements Division, Distribution Unit, Casilla 179-D, Santiago, Chile.
- Publications available for sale should be ordered from the Distribution Unit, ECLAC, Casilla 179-D, Santiago, Chile, Fax (562) 210-2069, [publications@eclac.cl](mailto:publications@eclac.cl).

 These publications are also available on the internet: <http://www.eclac.cl>

Name:.....
Activity: .....
Address: .....
Postal, code, city, country:.....
Tel.:.....Fax: ..... E.mail address:.....