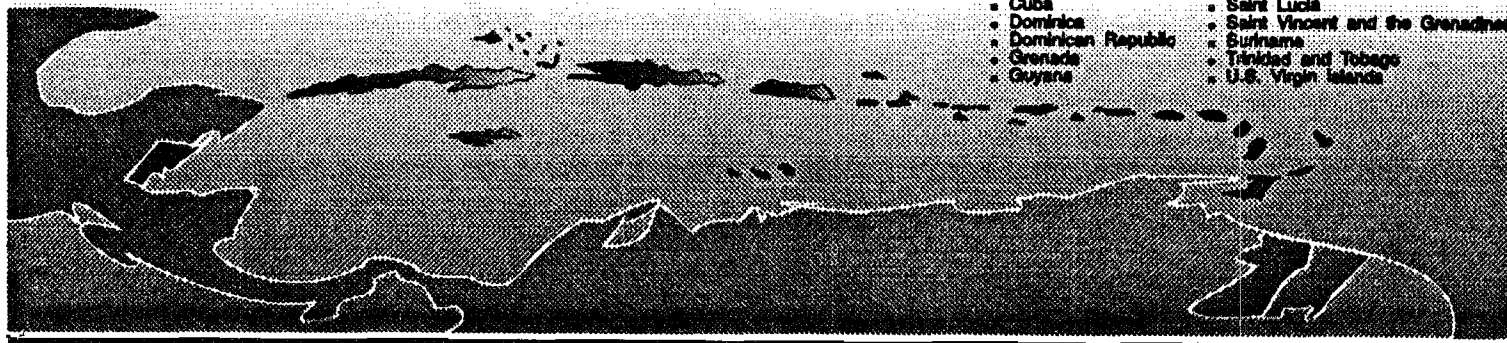




**UN ECLAC/CDCC**

e2



- Antigua and Barbuda
- Aruba
- Bahamas
- Barbados
- Belize
- Br. Virgin Islands
- Cuba
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Haiti
- Jamaica
- Montserrat
- Netherlands Antilles
- Puerto Rico
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- U.S. Virgin Islands

## CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY

Eighteenth Executive Committee Meeting  
Kingston, Jamaica  
9 June 1996

GENERAL  
LC/CAR/G.480  
CCST/96/3  
4 June 1996  
ORIGINAL: ENGLISH

### REPORT TO THE EIGHTEENTH EXECUTIVE COMMITTEE MEETING ON CCST ACTIVITIES SINCE THE THIRTEENTH PLENARY SESSION October 1995 to May 1996



**UNITED NATIONS**

**ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN**  
Subregional Headquarters for the Caribbean

**CARIBBEAN DEVELOPMENT AND COOPERATION COMMITTEE**

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters.

2. The second part outlines the various methods and tools used to collect and analyze data. It mentions the use of surveys, interviews, and statistical software to gather information and draw meaningful conclusions from the data.

3. The third part focuses on the ethical considerations surrounding data collection and analysis. It highlights the need to protect individual privacy and ensure that data is used responsibly and for its intended purpose.

4. The fourth part discusses the challenges and limitations of data analysis. It acknowledges that while data provides valuable insights, it is not infallible and can be subject to various biases and errors. It also mentions the importance of interpreting the results in context and considering other factors that may influence the findings.

5. The fifth part concludes the document by summarizing the key points and emphasizing the overall importance of data in decision-making and research. It encourages continued learning and improvement in data handling practices.

6. The sixth part provides a detailed overview of the data collection process, including the selection of appropriate methods and the implementation of data gathering strategies. It also discusses the importance of ensuring the reliability and validity of the collected data.

7. The seventh part delves into the analysis of the collected data, focusing on the use of statistical techniques to identify patterns and trends. It mentions the importance of choosing the right statistical tests and interpreting the results correctly.

8. The eighth part discusses the ethical implications of data analysis, particularly in relation to the use of personal data. It emphasizes the need for informed consent and the protection of data from unauthorized access or misuse.

9. The ninth part provides a comprehensive summary of the entire document, reiterating the key findings and conclusions. It also offers some final thoughts on the future of data analysis and the role of technology in this field.

10. The tenth part serves as an appendix, containing additional information and resources related to the topics discussed in the main body of the document. This includes references to relevant literature and further reading materials.

**REPORT TO THE EIGHTEENTH EXECUTIVE COMMITTEE MEETING  
ON CCST ACTIVITIES SINCE THE ELEVENTH PLENARY SESSION  
October 1995 to May 1996**

The thirteenth Plenary Session of the Caribbean Council for Science and Technology (CCST) was held in Havana, Cuba, from 23-27 September 1995. This report describes the activities of the CCST during the period October 1995 to May 1996.

**Officers of the Committee**

At the thirteenth Plenary Session, the officers elected to serve the next three-year term on the Executive Committee were :

Chairman :	Guyana
Vice-Chairman :	Saint Lucia
Members-at-large :	Cuba, Jamaica, Trinidad and Tobago and the United States Virgin Islands.

**Membership of the Council**

The Secretariat has received Barbados's letter of accession to the CCST, bringing the membership of the Council to 15.

**Report of the activities of the Council in implementing its work programme**

*Technology Extension Service*

This project has received renewed attention from the United Nations Industrial Development Organization (UNIDO), and on its advice, has been re-formulated to include the increasingly important concept of competitiveness, and to focus exclusively on the countries of the Organization of Eastern Caribbean States (OECS). The project document has been finalized, and is expected to be signed shortly by the Secretariat of the CCST and UNIDO. The project combines the concepts of an extension service with business incubation and a technology adaptation and transfer centre.

*Assisting CCST focal points to develop individual science and technology work programmes*

Government representatives, including CCST focal points, benefited from a three-day workshop on priority setting in science and technology, held in Port of Spain, Trinidad and Tobago, on 29 April - 1 May 1996. Organized in conjunction with the National Institute for Higher Education

(Research, Science and Technology) (NIHERST), and the Organization of American States (OAS), the workshop sought to teach and demonstrate a software-based methodology in priority setting in science and technology policy-making. This was immediately followed by two one-day workshops which applied the methodology in the areas of environment and agriculture. Approximately 35 persons from 10 CCST member countries were trained. The objective was to assist policy makers and planners, including focal points, in developing relevant work programmes and assist their respective governments in setting priorities in science and technology with a limited budget scenario.

*Programme to improve the teaching of science and mathematics*

Efforts at securing funding for this project continue. In February and May 1996, meetings were held with representatives of the Rockefeller Foundation and the Technology for All Americans Project, which resulted in slight changes to the original project, based on a regional project being implemented by the National Science Foundation (NSF). This was to facilitate the funding requirements of the Rockefeller Foundation and other agencies.

The next step will be to resubmit the project with the understanding that the University of the Virgin Islands (UVI) is still the CCST focal point for this project.

*CCST programme for science popularization*

While support was expressed by all countries present at the thirteenth Plenary Session for the project proposal developed by Trinidad and Tobago, response to a request for comments was very poor. The secretariat is, however, currently working with Eureka, a Venezuelan organization with experience in such activities, on including a segment on the Caribbean in a documentary being produced for a popular North American cable television channel focusing on science and technology, the Discovery Channel.

*Regional database of technology services*

The document presented at the thirteenth Plenary Session "Approaches to implementation of the plan of action for science and technology for the Caribbean: Information aspects of technology transfer, adaptation and innovation" identified a number of approaches for implementing this aspect of the work programme. Member countries were requested to forward recommendations and comments by the end of 1995, to facilitate the development of a project proposal. However, none were forthcoming. Despite this, the project proposal is expected to be completed by the end of 1996.

## *Energy*

The secretariat continued to follow up from the December 1994 workshop, organizing and co-sponsoring with the University of the West Indies Centre for Environment and Development (UWICED) and the United Nations Education, Scientific and Cultural Organization (UNESCO), a workshop on Investment Funding for Renewable Energy and Energy Efficiency Projects. Held in Kingston, Jamaica, on 17-19 January 1996, the workshop sought to identify and clarify various options for funding these projects, and possibly come up with a proposal for a regional funding mechanism. The workshop identified over 20 projects in renewable energy and energy efficiency, and further explored the obstacles to renewable energy use. Some of these project proposals have been presented by the CCST in cooperation with various Caribbean governments for inclusion in the World Solar Summit Action Plan. The CCST has been charged with the responsibility of identifying appropriate funding mechanisms for these projects, and with coordinating renewable energy development in the Caribbean.

The CCST is also cooperating with the World Bank and the UWICED in an exercise intended to formulate a regional energy project for funding under the Global Environment Fund (GEF). The projects identified built on discussions at the Kingston workshop.

The upgrading of skills in energy management was undertaken through the Caribbean Energy Information System (CEIS) Regional Workshop on Energy Management and Decision Modeling and Exhibition, held on 4-15 March 1996. This was co-sponsored by the CCST and the International Development Research Center (IDRC). Twenty-eight policy makers and planners from 13 Caribbean countries were trained in various aspects of energy management, and in the use of the Caribbean Reference Energy System Spreadsheet Model (CRESS), a tool originally designed for technology assessment in the United States, but adapted for use in developing countries (for energy assessments and energy policy and planning studies).

## *Environment*

Having decided to focus its efforts in the area of integrated water resource management, the CCST has received indications of interest from the World Meteorological Organization (WMO) and the United Nations Development Programme (UNDP) in its proposal for a survey and seminar to be held in March 1996. The secretariat is developing the proposal and will circulate same to member countries for their comments.

## *Publications*

The CCST continued to publish its newsletter on a quarterly basis. The efforts of the Scientific Research Council (SRC) in Jamaica, and the National Council for Science and Technology in Barbados in keeping the secretariat abreast of its publications and activities for inclusion are to be

commended. Other countries are encouraged to do the same. The Council is considering providing support to member countries for accepting responsibility for the publication of sectoral issues such as agriculture, science popularization, etcetera.

**Other publications include:**

**Report of the seventeenth executive committee meeting of the Caribbean Council for Science and Technology (CCST) (CCST/95/2)**

**Report of the thirteenth plenary session of the Caribbean Council for Science and Technology (CCST), 24-26 September 1996 (CCST/95/3)**

**Report of the CCST/CARICOM meeting preparatory to the Hemispheric Meeting of Ministers Responsible for Science and Technology (CCST/96/1)**

**Report of the workshop on investment funding for renewable energy and energy efficiency technologies. (CCST/96/2)**

**Other activities**

***Workshop on New Technologies***

The CCST is collaborating with UWICED in organizing and sponsoring a workshop and exhibition on new technologies, from 7-12 June 1996. Two representatives responsible for policy and planning from each member country have been invited. Funding has been obtained from the UNDP/TCDC Unit. This workshop is a prelude to the proposed joint ministerial meeting on science and technology and development, and its results will be used to plan the ministerial meeting in 1997.

***Competitiveness of SMEs***

Competitiveness of small and medium-size enterprises (SMEs) has come to the secretariat's attention as an area in which Caribbean countries need assistance. The CCST assisted ECLAC in organizing a seminar on the promotion of competitiveness in Saint Lucia on 28 November 1996. The seminar was intended to assist the private sector in examining policy measures which should be implemented at the national level to assist local business in improving the efficiency of their operations via technological solutions.

A project has also been designed in conjunction with UNDP, New York, to assist in the development of competitive SMEs for the diversification of the banana industry in the four windward islands - Dominica, Grenada, Saint Lucia and Saint Vincent and the Grenadines. After a round of

extensive discussions with country representatives, the project activities were initiated at a workshop in Saint Lucia on 30 May to 4 June, with the development of a framework strategic plan for the banana sector in these islands. The plan was developed with the assistance of a software package designed for these types of analyses. The project is being implemented with funds from UNDP, New York.

### *Strengthening of the Caribbean position at regional conferences and forums*

The CCST secretariat was instrumental in organizing the inclusion of Small Island Developing States (SIDS) issues in the Cartagena Declaration and Action Plan adopted at the Meeting of Ministers Responsible for Science and Technology of the Hemisphere, held under the auspices of the Summit of the Americas in Cartagena, Colombia, 27-29 March 1996. The CCST secretariat assisted the Government of Saint Lucia and the OAS in the organization of a meeting to determine the priority projects for the Caribbean, and held a second preparatory meeting jointly with CARICOM in Georgetown, Guyana, on 11-12 March 1996. It was attended by representatives of six member countries, and identified relevant text for inclusion in the Plan, and strategies for ensuring their inclusion and implementation.

The secretariat would like to thank the governments which participated in the meeting and made the outcome so successful. It is hoped that wider involvement from members can be secured for future efforts.

### *Draft Agreement with concluded*

Discussions on an agreement with the Latin American Commission of Science and Technology (COLCYT) were concluded with the signing of the agreement. The agreement is intended to broaden the scope of work of the CCST and to draw on the experiences of the Latin American countries in their science and technology efforts. The Council also concluded an agreement with the Latin American Energy Organization (OLADE) aimed at undertaking joint activities in energy-related programmes in the Caribbean, with the CCST serving as an implementing agency for OLADE in the region.

### **CCST resolution**

The Council has received no information on a resolution that was to have been tabled at the twenty-sixth session of ECLAC held in Costa Rica in April 1996. Member countries having information on same are requested to communicate with the Council on the matter.

### **Meetings at which the Council was represented**

8-10 October 1995 - Seminar on Cost Benefit Analysis of Energy Efficiency Programmes. Organized by the Association of Energy Engineers (AEE), Atlanta, Georgia (funded by the AEE)

16-18 October 1995 - Seminar on the promotion of competitiveness in the small and medium-size enterprises, St. Anns, Trinidad and Tobago

26-27 October 1995 - Workshop on the need for meteorological and hydrological data for the insurance industry, Port of Spain, Trinidad and Tobago

13-14 November 1995 - FAO/ECLAC/Government of Trinidad and Tobago National Seminar on agro-industry and small-scale agriculture. Port of Spain, Trinidad and Tobago

9-14 February 1996 - Annual Meeting of the Association of Science, Technology and Society, Virginia, USA

26-29 March 1996 - USECRE meeting on renewables - Saint Vincent and the Grenadines

17-23 April 1996 - UWICED meeting on renewable energy and energy efficiency projects for the Global Environment Fund (GEF) - Jamaica

5-9 May 1996 - American and Caribbean Solar Summit, Costa Rica

### **Finance**

The financial statement for the period January to December 1995 is given in Appendix 1. The secretariat would like to thank the Government of Trinidad and Tobago for its recent efforts in payment of a substantial portion of its arrears (not reflected in the statement), and urges other countries to follow suit.

### **Date and venue of the fourteenth Plenary Session**

The next plenary of the CCST is proposed to be held at the end of November. Grenada suggested the possibility of hosting the meeting. In the coming months the secretariat will discuss the matter further to ascertain the venue.



**Activities planned to the end of 1996**

1. Continued publication of the newsletter
2. Continued collaboration with UWICED and the World Bank in the development of a regional project in renewable energy and energy efficiency for funding under the GEF
3. Preparation of project proposal on technological information for the Caribbean
4. Preparation of a document analysing the experiences of the Caribbean countries in organization of science and technology councils
5. Preparation of a detailed proposal for a water resources management survey and seminar (seminar to be held in 1997)
6. Organization of the fourteenth Plenary Session of the CCST
7. Preparations for a joint Caribbean Hotel Association/CCST/AEE workshop on renewable energy, energy efficiency and environmentally friendly technologies for the hotel industry
8. Continued discussions on, and negotiations for, funding for project proposals - History of scientific and technological development in the Caribbean, Community development and improvement through the application of science and technology, Facilitating the professional development of scientific personnel via : exchange of scientific personnel and foreign language training



**APPENDIX 1**  
**CCST INCOME AND EXPENDITURE - 1995**

	INCOME	EXPENDITURE
<b>Country contributions</b>		
JAMAICA	7,997.28	
BELIZE	2,000.00	
ST. LUCIA	2,000.00	
TRINIDAD AND TOBAGO	10,256.41	
ST KITTS	2,000.00	
	<u>\$24,253.69</u>	
<b>Renewable Energy and Energy efficiency</b>		
Caribbean High Level Workshop on renewable energy technologies - 5-9 December 1994		
Participation, expenses (expenditure in 1995)		11,895.59
ticket cost refund	864.60	
Contributions (UNESCO&UWICED)	29,966.58	
Association of Energy Engineers (AEE) Meeting (Atlanta)		
Attendance (speaking engagement)		791.86
ticket refund from AEE	535.24	
	<u>\$31,366.42</u>	<u>\$12,687.45</u>
<b>Water resources</b>		
Attendance at regional water resources meeting, Barbados		1,007.72
		<u>\$1,007.72</u>
<b>CDB/CCST S&amp;T Project management workshop</b>		
Organization and case study preparation		2,762.88
Country and Secretariat participation		5,870.59
Other expenses		2,103.18
Contribution from UNDP/TCDC	9,910.00	
	<u>\$9,910.00</u>	<u>\$10,736.65</u>
<b>S&amp;T Popularization</b>		
Attendance at S&T Popularization meeting		\$2,856.95
<b>Priority Setting Workshop</b>		
Project concept development		\$250.00



**Technical Assistance**

St. Kitts and St. Lucia	\$1,294.05
-------------------------	------------

**Regional collaboration and coordination**

Mercocyt Caribbean meeting	610.13
COLCYT meeting (travel)	175.96
Speaking engagements (CAST and S&T project workshop)	718.73
CARICOM/CCST planning meeting for Summit of the Americas S&T me	600.00
METEP/NIHERST/CCST Meeting	2,298.05
	<hr/>
	\$4,402.87

**Miscellaneous**

Faxes, phone calls, postage and subscriptions	493.74
Gateway colour monitor	433.16
Stationery	111.44
	<hr/>
	\$1,038.34

<b>TOTALS</b>	<hr/>	\$65,530.11	\$34,274.03
---------------	-------	-------------	-------------

Balance b.f.	28,290.90
--------------	-----------

<hr/>
\$62,564.93

Balance at end 1995	\$2,965.18
---------------------	------------

