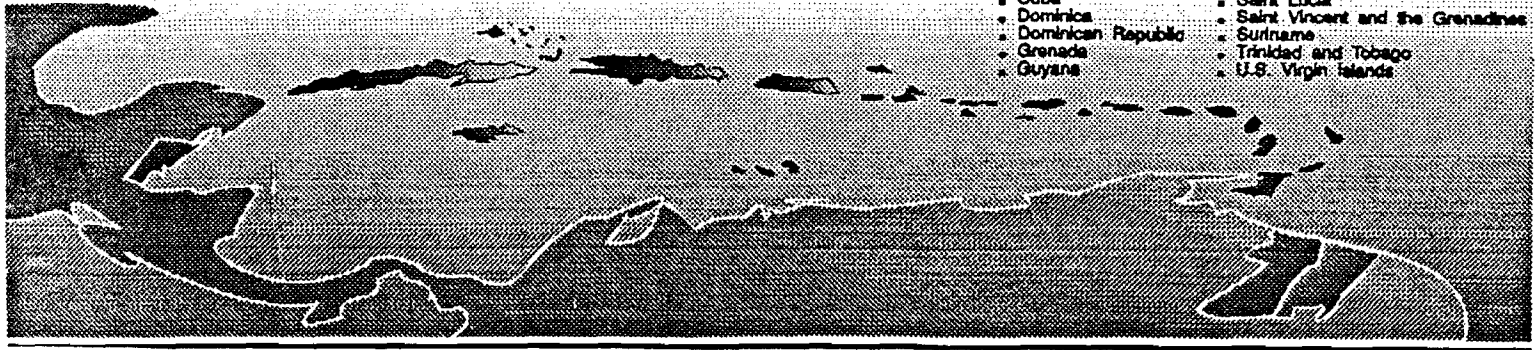


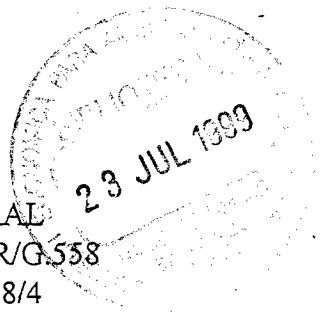
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- Antigua and Barbuda
- Aruba
- Bahamas
- Barbados
- Belize
- Br. Virgin Islands
- Cuba
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Haiti
- Jamaica
- Montserrat
- Netherlands Antilles
- Puerto Rico
- Saint Kitts and Nevis
- Saint Lucia
- Saint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



Sixteenth plenary session of the  
 Caribbean Council for Science and Technology  
 Christ Church, Barbados  
 10-11 December 1998

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**REPORT OF THE SIXTEENTH PLENARY SESSION OF THE  
 CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY (CCST)**



**UNITED NATIONS**  
**ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN**  
 Subregional Headquarters for the Caribbean  
**CARIBBEAN DEVELOPMENT AND COOPERATION COMMITTEE**



**REPORT OF THE SIXTEENTH PLENARY SESSION OF THE  
CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY (CCST)  
*Christ Church, Barbados, 10-11 December 1998***

**I. ORGANIZATION OF THE MEETING**

The sixteenth Plenary Session of the Caribbean Council for Science and Technology (CCST) was convened in Barbados from 10-11 December 1998.

Representatives from the following CCST member countries were present: Antigua and Barbuda, Barbados, Belize, Cuba, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago. Absent were the representatives of Dominica, Haiti, Saint Kitts and Nevis and the United States Virgin Islands (USVI). Also present were representatives from the Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters for the Caribbean. The list of participants is given at Annex 1.

**Opening session**

**Dr. Eslie Alleyne**, Director of the National Council for Science and Technology (NCST), Barbados, chaired the opening ceremony, and welcomed **Mr. Lionel Weekes**, Permanent Secretary in the Ministry of Industry, Commerce and Business Development of Barbados, members of the CCST, special invitees who included **Professor the Honourable Oliver Headley**, Director, Centre for Resource Management and Environmental Studies (CERMES) Unit, University of the West Indies, Cave Hill, **Mr. Wendell Gooding**, Director of the Organization of American States (OAS) Office, Barbados, **Dr. Gene Pollard**, the Food and Agriculture Organization (FAO) of the United Nations representative and members of the media. In his opening address, Dr. Alleyne noted that the meeting was taking place at a time when the Caribbean subregion was undergoing some difficulty due, in part, to measures put into place by the World Trade Organization (WTO) for open markets and free trade among countries. These policies would have their greatest impact on countries with predominantly single product economies. There was hope, however, for the subregion since the CCST recognised the vulnerability of small island States and had, during the last two years, initiated many activities aimed at providing acceptable development alternatives. He cited, as an example, the banana project targeted at the banana growing countries and the prospect of paper production from the banana fibre. Science and technology was an integral part of all major aspects of development, but because of the limited developmental options it was, therefore, critical that care be taken in the selection of research and development capabilities. He reminded the CCST that it had a major role to play in these development processes, since members all shared responsibility for providing advice and, possibly, guidance to governments on developmental and policy matters related to science and technology.

**Mr. Lionel Weekes**, Permanent Secretary in the Ministry of Industry, Commerce and Business Development who represented the Minister welcomed those present, on behalf of the Government and people of Barbados, wishing country representatives a productive and enjoyable stay. Mr. Weekes reported that Barbados was quite pleased with the support received from the



CCST since becoming a member in 1996, particularly in training and retraining of their professional scientists. He recommended that science should focus on determining the potential for fostering indigenous social choices rather than always responding to the technological choices imported from the developed world, starting with a sound education structure. He stressed, however, that a sound educational structure was not simply the creation of a scientific and technological elite, but increasing of public awareness of the implications of development. The CCST should encourage those endogenous activities which would be most likely to result in economic, social, cultural and economic development of the subregion. In closing, Mr. Weekes wished the Council success in its deliberations and declared the plenary session open.

**Ms. Len Ishmael**, Director of the ECLAC Subregional Headquarters for the Caribbean, welcomed all present to the sixteenth Plenary Session of the CCST and mentioned that this year, 1998, the Council was celebrating its eighteenth anniversary. She reminded participants that the CCST was set up in 1980 through the initiative of the Caribbean Development and Cooperation Committee (CDCC) with ECLAC serving as the interim secretariat. During the past 18 years, the Director observed that the CCST had offered technical support to its member countries. In terms of accessing external funding for activities, the year 1998 was particularly successful, the Council having received approximately US\$750,000 from the OAS to undertake two projects which were important to the subregion. A number of activities under the programme for the improvement of teaching science and mathematics and the project on processing and preservation of fresh foods were conducted for member countries. The Director identified the various types of support given to the Council in the execution of project activities and advised members of the Council to seriously consider the options presented by ECLAC in 1997, for administrative arrangements for the secretariat and come to a decision as to the preferred option.

**Mr. Navindranauth Chandarpal**, Chairman of the CCST, noted that it was significant that a meeting of the Association of Caribbean States (ACS) was being held at the same time, in Barbados, as the plenary session and that a Small Island Developing States (SIDS) conference was also scheduled to take place the following week. This was significant because the Council had very close working relationships with both organizations in the development and implementation of projects within the region and the Caribbean subregion. In his report he stated that 1998 was an important year for the Council in that advancements had been made in situations with which it had been grappling for a number of years, at both the political and practical levels. At the policy level, at the Caribbean Community (CARICOM) Heads of Governments meeting which was held in March 1998, science and technology was an agenda item. This inclusion was because of discussions between the CCST and the Prime Minister of Grenada, the Honourable Dr. Keith Mitchell, who was the Minister responsible for science and technology and human resource development. At the meeting in March, CCST was identified and called upon to help the subregion deal with the difficult process of globalisation, liberalisation and tightening of rules and regulations at the WTO and other levels. The meetings and discussions were influential in directing the work of the CCST, giving emphasis to the fact that there was a need to coordinate the Council's activities in science and technology in ways that would improve the socio-economic well-being of Caribbean people. The Chairman added that results would not be immediately forthcoming, but this did not relieve the

CCST of its responsibility and, for this reason, a number of projects were continued from 1997 and new complementary activities commenced during 1998. He then proceeded to give an overview of the projects undertaken by the Council during the year, highlighting those activities that were undertaken at the request of specific governments.

In his address, apart from the work of the Council, Mr. Chandarpal also referred to the interim administrative arrangements between the CCST and ECLAC noting that a formal response from the executive membership of the Council was due, regarding the proposals for the administrative arrangements put forward one year ago. The Chairman acknowledged ECLAC's extensive support during the last 18 years, for which the Council was extremely thankful. He felt, however, that given the increased responsibilities of the Council, these arrangements needed to be reviewed. The major fact was that while there was political support for the CCST, practical considerations were not taken into account at either the national or regional level. There was, therefore, an urgent need for governments to decide on the institutional fate of the Council.

In closing, he issued a challenge to members stating that the Council's mandate should now be to develop itself, its skills, abilities, and means to use its own resources to compete globally and deliver the required goods and services to the Caribbean.

**Mr. Donatus St. Aimee**, Secretary of the CCST, gave the vote of thanks on behalf of the CCST. He indicated that the year to come would bring with it many challenges, not the least of which was the revisiting of the administrative arrangements with ECLAC. Initially interim in nature, these arrangements had been ongoing for 18 years. He expressed the hope that for the coming year, the message of the Council would be spread more widely using the available resources, including the Newsletter and the CCST website, which was currently at a developmental stage. These forums should be a source of information and, therefore, he urged members to continue their support for which he was thankful, by making regular input to both the newsletter and the website. In closing, he thanked all present for attending, including the Minister's representative, Mr. Lionel Weekes, the Director of the ECLAC Subregional Headquarters for the Caribbean, Ms. Len Ishmael, representatives of the various international agencies with offices in Barbados and the media. Special thanks was given to Dr. Eslie Alleyne of the NCST, Barbados, the Council's focal point, for responding to the call to host the session. He then wished all persons present a happy Christmas and a prosperous new year.

## II. SUBSTANTIVE DISCUSSIONS

### Agenda item 1:

#### Consideration of the report of the fifteenth Plenary Session and matters arising

*The Secretary presented the report of the fifteenth plenary session to the meeting (LC/CAR/G.521 CCST/97/9). Only the items on that agenda on which comments were made are reported below.*

In the consideration of the reports of the fourteenth Plenary Session and twentieth Executive Committee Meeting and matters arising, it was noted that with regard to a project proposal on the establishment of a regional network for cooperation in science and technology (CARICYT) in areas of common interest submitted by Cuba to the ACS, the representative of Cuba noted that CARICYT would not only serve as an information dissemination mechanism, as reported in the report of the fifteenth Plenary Session.

A discussion then ensued on the activities of the ACS and the Small Island Developing States Programme of Action (SIDS POA), especially as these related to the activities of the CCST. It was suggested that linkages were needed not only to the ACS and the SIDS POA, but also to all the various agencies and programmes operating in the subregion. Of particular concern was whether issues intrinsic to the Caribbean would be minimised by Latin American concerns. The representative of Trinidad and Tobago informed the meeting that a consultant had been contracted by the ACS to do a survey on science and technology projects within ACS countries. Based on the report, recommendations for a cooperative mechanism was due to be published. It would be useful for the CCST to obtain a copy of these recommendations, which would assist in initializing the collaborative mechanism. Collaboration would only be possible, however, when the legal status of the CCST was ascertained.

The Director of ECLAC reported that the SIDS POA was the framework under which sustainable development activities, including science and technology, were carried out in the region. Two types of meetings were held annually - an agency collaborative group meeting and a SIDS Bureau Meeting. The Chairman of the CCST was a sitting member on the SIDS Bureau and the Secretary of CCST attends every SIDS meeting. Two operational levels were evident:

(a) A representative from member States was invited to attend meetings to inform participants of the respective country's national development plans and, based on these plans, activities were determined. These meetings were however sporadic.

(b) Within the ECLAC programme, a number of activities came out of the SIDS POA. An example was the Integrated Water Resources Management Project which focused on the need to apply a comprehensive strategy for member States.

The SIDS POA was also the basis for sustainable development projects in the Caribbean. In spite of the above, however, there was still no formal link in the coordination of activities between the SIDS POA and the CCST and, therefore, the CCST could not formally report on the SIDS process. It was noted that the development of national sustainable development councils would be a step in the right direction to obtain information on projects being undertaken at the country level. To date, however, six councils had been established with varying degrees of success. The Director revealed that a review of the SIDS POA will be done by the United Nations General Assembly in September 1999. The Secretary of the CCST also observed that there was the perception that SIDS was an environmental work programme as opposed to an integrated approach to development.

With regard to science popularisation, the National Institute for Higher Education, Research, Science and Technology (NIHERST) of Trinidad and Tobago received US\$100,000 from the Caribbean Development Bank (CDB) for the implementation of a regional project on science popularisation. The project so far had taken the YAPOLLO science exhibition to Grenada and Saint Lucia and was scheduled for Jamaica in May 1999. Other countries to which the exhibition was expected to be taken were Saint Vincent and the Grenadines, Guyana and Antigua and Barbuda. The CDB will consider funding to Suriname, Haiti and Belize. In the countries visited, the exhibition was well received and both Grenada and Saint Lucia were considering the possibility of setting up a similar type of exhibition. To this end, Saint Lucia has submitted a project proposal to the Commonwealth Science Council (CSC) for consideration. The CSC as well as the United Nations Educational, Scientific and Cultural Organization (UNESCO) have indicated their interest in assisting in initiatives arising out of the YAPOLLO experience. It was suggested that this project be developed into a long-term programme and be dealt with at the regional level. Inclusion in the five-year programme was therefore recommended. The representative of Trinidad and Tobago informed the meeting that funding was available for the popularisation of science in the subregion as follows:

- (a) US\$200,000 from the OAS, to be implemented by NIHERST. The amount would include funding for exhibits and a regional youth science forum.
- (b) A non-reimbursable technical grant of US\$3.5 million for the Latin American Network (Net Pop).
- (c) An initiative by the Commonwealth Secretariat and the Wales Science Centre to raise approximately £4.5 million from the private sector and the Commonwealth Science Network. Half of this will be used for interactive traveling exhibitions to Commonwealth countries.

With respect to consideration of a proposal for arrangements for the CCST secretariat, since this was an item for the sixteenth Plenary Session, comments and discussions were deferred.

On the topic of the Caribbean Programme for Adaptation to Climate Change (CPACC), the Secretary of the CCST said that this was an ongoing programme on which more information would

be obtained. On a related note he stated that there was no shortage of funds for projects on Coastal Zone Management. For example, money had been made available (US\$1.2 million) from the OAS, to an agency similar to the CCST operating in Panama. The Trinidad and Tobago representative added that the ACS was working on a project on Coastal Zone Management called CARICOMP, which included Martinique and Guadeloupe.

Under the Common Market of Science and Technological Knowledge (MERCOCyt) programme, two project proposals were submitted to member countries. One dealt with information technology and a second involved an exchange among scientists of Latin American and Caribbean countries. With respect to the second proposal, the University of the West Indies, St. Augustine Campus, was represented by Dr. Mootoo, since the eventual aim of this proposal was the exchange of postgraduate students and scientists.

With regard to the development of a policy for sustainable development, the representative of Saint Lucia noted that a project on integrated planning at the national level in Saint Lucia, Antigua and Barbuda, Saint Kitts and Nevis and Dominica was initiated and funding received from the OAS. Unfortunately, the project was not to be extended into 1999 except for those countries which were adversely affected by hurricanes during 1998.

CCST member States were advised that before group membership in the Centre for Science and Technology could be considered, the legal status of the Council needed to be first clarified. The meeting was also informed that the post of UNESCO Adviser in Science and Technology remained vacant. However the UNESCO representative for Trinidad and Tobago and Suriname was acting in that capacity. Also with respect to the Dominican Republic's expressed intentions to join the CCST, a copy of the articles and statutes was forwarded to the science council, but no formal application had yet been received.

#### Agenda item 2

#### Fifteenth annual report on CCST activities

The Secretary noted that a draft of the report had been forwarded to members for comment, but so far none had been received. Discussions on the items in the report then ensued.

#### **1. Renewable energy**

Following discussions on this issue, Saint Lucia is to provide an update on the status of the development of Pilot Wind Farms, in which they had shown an interest.

#### **2. Revision of regional policy for science and technology**

Since no comments were forthcoming from members on the draft Regional Policy for Science and Technology document, this could not be finalised and presented at the CARICOM Heads of Government meeting in 1998. In addition, it was reported that at the end of January 1998, an expert meeting was held to discuss the draft policy document. At that meeting it was decided that



a more practical approach to devising a policy was desirable. Out of this a plan of action could be derived. Four areas were identified for project development and subsequent implementation, not necessarily to be spearheaded by the CCST, but would include other agencies such as the University of the West Indies (UWI) and CARICOM.

The Chairman of CCST requested that the document be finalised for presentation to CARICOM during 1999. In this regard, the draft document would be recirculated to members who were requested to make every effort to submit comments by 31 January 1999. The Chairman also proposed that in the future, the CCST may not necessarily produce policy documents for CARICOM but rather present the results of work done in science and technology relevant to the Caribbean's needs.

The meeting was also informed that the UNESCO office in Uruguay had indicated an intention to assist in the development of a project for the Caribbean within the ambit of science and technology. It was suggested that the policy document be used to develop relevant programmes. In this case, it might be necessary to identify a small group of competent and reputable persons to specify the areas of work to be undertaken.

### **3. Project on the determination of priorities for science and technology**

Workshops for the determination of priorities for science and technology were held in Jamaica and Guyana. The representative for Guyana advised that the focus should be on the productive areas. In that country, a needs assessment was done with good responses from the main productive sectors, but support from agriculture and other small areas was not as forthcoming. Two documents - a needs assessment and a policy document - were put out for public comment. Based on the comments, public discussions will be held depending on the availability of funding. Jamaica indicated that a workshop was held, but the status of follow-up action would have to be determined.

The Secretary of the CCST noted that the methodologies used by the Inter-American Institute for Co-operation in Agriculture (IICA) for agriculture were very similar and suggested that there might be some collaboration to determine priorities.

### **4. Training workshop on project preparation and management**

A workshop was not held since discussions were not held with the CDB in 1998. The project would be included in the work plan for 1999.

### **5. Diversification of the banana industry**

The Secretary of the CCST reported that discussions were held with FYBEX Corporation of Costa Rica which proposed that a study be undertaken. This study could be undertaken in the Caribbean at considerably less cost. In addition, the banana fibre project was submitted to governments for consideration, but no support had been received. Discussions on the financing of this banana fibre project were also held with the Technical Cooperation among Developing Countries (TCDC) Unit. The representative advised that letters from at least five different countries

expressing support for the project were needed before consideration could be given. Members from the Organization of Eastern Caribbean States (OECS) countries, especially, were urged to send letters in support of the project. Members were cautioned, though, that it would not be economically feasible to grow bananas for fibre only, since only the stalk is utilised. Production for bananas would continue to be the main objective.

On the topic of the fibre project, the representative from Saint Lucia reported that his country fully supported the project since it was deemed important to its economy. Economic and technical feasibility studies were done by the Ministry of Planning and a proposal submitted to the Stabex Committee where support was all but guaranteed. Because of the lack of coordination among government ministries, the Ministry of Agriculture also submitted a proposal to the Stabex Committee. Consideration of the project by the Stabex Committee was, therefore, discontinued.

Other sources of funding were currently being sought. The Secretary of the CCST said that funding was available for agricultural development in the Caribbean, from the Japanese, who, despite their focus on marine biotechnology, would consider other areas. Accessing these funds might be difficult since they were administered by the Inter-American Development Bank (IDB), an institution in which not all Caribbean countries had membership.

The representative from Suriname observed that focus seemed to be on alternate uses of the banana plant. He asked that consideration be given to the conduct of a market survey to determine the demand for other species of banana by importing countries. In response to this suggestion, the meeting was informed that the United Nations Conference on Trade and Development (UNCTAD) had done a study on the demand for small fingered bananas, which was available to all interested parties. Any other queries relating to markets and marketing could be made through Brussels, as well. The Secretary also noted that the agronomy of these bananas was different and this would have to be considered in any proposal for diversification. Coming out of the discussion was a reminder of the link between marketing and science and technology.

#### **6. Meeting of ministries on integrated planning and new technologies for sustainable development**

The Secretary outlined the papers to be presented at the meeting scheduled for 1999. Of particular interest was the analysis of sustainable development councils to be done by the Caribbean Centre for Development Administration (CARICAD), based in Barbados. The representative of Saint Lucia voiced some concerns about the analysis being done by CARICAD, since, as far as he was aware, the agency had received funding to develop a model of a sustainable development council as well as determine which countries should establish same. The Secretary of the CCST explained that there should be no conflict of interests since CARICAD developed a model and concept which did not include actual development of a council and its requisite operations. The Director of ECLAC noted that such an analysis, was timely and relevant, since while on paper, sustainable development councils were deemed successful, this was not reflected in reality. She did, however, caution that there may be a conflict of interest in CARICAD assessing the viability of the Councils since it had played the lead role in their establishment.

The representative from Barbados observed that one of the major problems facing most sustainable development councils was a lack of resource allocation since these agencies were not perceived as belonging to any particular ministry. In Barbados, for example, the Council was moved from three different government ministries over a relatively short period of time. The Barbados Government was just beginning to show some interest, especially as it related to science and technology. The representative of Saint Lucia noted that while sustainable development councils usually focused on environmental issues, in his country the priority was on development planning with direct input into the national budget. The Secretary commended that process, adding that one of the problems with sustainable development councils was the fact that all the energies were spent on development planning for specific activities, but no attention was paid to development of work programmes for the councils. Also, in most countries there was no coordinating method at the national level and stakeholder participation was practically non-existent. He added that sustainable development councils would be successful only if they received support from all ministries. In the United States Virgin Islands, he observed, there was no need for a sustainable development council because before any decisions were made (for example, the construction of a new road), public hearings were held. This ensured that all agencies were aware of each others' activities.

#### **7. Establishment of Entrepreneurial Development Centres (EDCs)**

With respect to the establishment of Entrepreneurial Development Centres, the Secretary informed members that a number of institutions in the Caribbean, and more particularly the OECS countries, were receiving individual funding. No coordinating activities were being undertaken, since the necessary collaborative work was not yet on stream.

#### **Other projects implemented by the CCST**

##### ***OAS-funded projects: Teaching of Science and Mathematics/Project on the processing and preservation of fresh foods***

The CCST Secretary noted that the projects funded by the OAS were multi-faceted with the potential for developing into a long-term programme. This held especially true for the Small and Medium Food Enterprises project, which saw persons trained in practical aspects of food processing and in the use of the computer as a tool for accessing and the input of information. A decision was also taken by the OAS to include information on the use of pesticides as part of the information on Simbiosis. An application was made to the OAS for an extension of the Small and Medium Food Enterprises project for 1999. This was approved, but activities would have to be on a smaller scale.

The project on the teaching of science and mathematics was also extremely successful as was attested to by the representatives of Belize and Antigua and Barbuda, who both attended the workshop held in the United States Virgin Islands in July 1998. The representative from Belize said that implementation of the teaching project had already commenced on the national level in that country. Funding was, however, required to continue with the national plans. The Secretary noted that 82 per cent of the funding received from the OAS to undertake this project was utilised, however, some mechanism was now needed to get the balance of funds to the various national institutions to give the project some continuity.

This was similar for the Small and Medium Food Enterprises project, where some mechanism for disbursement of the remaining funds was necessary to continue the projects started at the national level. The Secretary revealed that approximately US\$6000 was available per country to provide assistance to develop the Internet as a tool for the Simbiosis network.

The Secretary said that there was an urgent need to utilise the balance of the money before the end of 1998 after which the unused portion of project funds would have to be returned to the OAS. He envisioned some difficulty since the funds were yet to be utilised at the national level. In some countries, notably the OECS countries, modalities existed where these funds could be utilised at the national level. Agencies, such as the National Development Foundations (NDFs), may be contracted to implement the training programme on behalf of the country but this must be a country decision.

The Trinidad and Tobago representative reminded participants that a special account for the CCST had been set up to specifically deal with problems that were likely to occur in the disbursement of funds under ECLAC guidelines. The establishment of this account, however, seemed to be a source of concern with the Director of ECLAC. The meeting was informed that this decision was an Executive Committee decision, based on Article 28 b) of the CCST Statutes which stated that "The Council may establish a Special Fund for Scientific and Technological Development in the Caribbean, to be used particularly to assist priority R&D projects of an intra-regional nature, within the guidelines set down by the Council. Regulations for the operation of the Special Fund must be laid down by the Council."

On the topic of the establishment of a special account, the Secretary of the Council further stated that such an account was required given the difficulties encountered with respect to the disbursement of funds under the United Nations system. For example, under United Nations rules and regulations, contracts could not be issued to government ministries. In the case of the OAS-funded projects, most of the project implementation was to be done by departments within government ministries. The Secretary added that, in this particular instance, OAS funds were not to be used for payment to government officials, but would be used specifically for the movement of people and the purchase of equipment. The Director of ECLAC reiterated her concern raised in correspondence to the Chairman that, given the existing institutional arrangements, an account could not be opened and held outside of ECLAC until such time as the institutional arrangements were changed. She pointed out further, that the section of the constitution which was being identified to justify the opening of such an account could not be rationally used, since the constitution, formulated over 18 years ago, provided for an entity which was to have been taken over by the governments, but which was, in effect, never established. She reiterated her position that ECLAC could not continue to provide support to the Council — if the account was operationalized, since she would be responsible for an organization over which she had little or no control.

The Director of ECLAC sought to clarify any misconceptions on ECLAC's position on the signing of the OAS contracts. She said that a request was made to her by the Secretary of the CCST to sign an agreement between the OAS and the CCST, on behalf of the Council. There was one clause in the document that was cause for concern, which requested that the OAS funds be held in a special account. This gave the OAS the right to audit the books of ECLAC. The contract and project document were taken to the Programme Unit at ECLAC which made it clear that no other agency had the legal authority to audit the accounts of the United Nations. Accounts could be available but no formal audit might be done.

While the above decision had implications for the future, there still existed a situation where OAS funds for project implementation were only available up to 31 December 1998. National plans for the teaching of science and mathematics were yet to be completed and funds were available for the Small and Medium Food Enterprise Project. The only option available was the issuing of one contract to an agency, for example NIHERST, which would then be responsible for administering and disbursing funds to the other countries. A serious time constraint would however make this option very difficult to pursue. It was also put to the meeting that the United Nations rules had to

be adhered to, given the present administrative arrangements under which the CCST secretariat existed.

### **New initiatives**

#### ***Regulation and enforcement of pesticide tolerance levels of agricultural products***

The Secretary of the CCST explained that the workshop was the Caribbean component of a programme implemented by the OAS, a report on which was presented to the Southward cone of the project in Argentina on 2 December 1998. The next step will be a larger project for the Caribbean and Central America based on the recommendations. This project is to be funded by the OAS.

#### ***Science and technology indicators workshop***

Following a successful Introduction to Science and Technology Indicators Workshop in December 1997 and a follow-up workshop held in Jamaica in November 1998, the Secretary recommended that the next step should be to work towards convincing policy and decision makers of the need for investment in science and technology indicators to drive the development process. Discussions were already held with Red Ibero-americana de Indicadores de Ciencia y Tecnologia (RICYT) which has promised \$20,000 for 1999, with an aim to develop a bigger regional project.

#### ***ECLAC work programme activities***

The Secretary of the CCST explained that every two years ECLAC has to submit to the United Nations budgetary process, its proposed activities on science and technology. Three activities are identified and funded by ECLAC.

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

The Secretary said that mission reports on workshops and meetings attended were submitted to ECLAC. In future, however, copies of these will also be forwarded to the CCST focal points.

#### **Agenda item 3:**

#### **Financial report - January to November 1998**

The Administrative Officer of the ECLAC Subregional Headquarters for the Caribbean presented the financial report and a statement of the Council's income and expenditure for the period January to November 1998. While government contributions for 1998 totaled only US\$14,000, ECLAC's contribution in support of the work of CCST was over US\$263,000. The report was accepted, but members asked that the statement identify activities by name as well as a number. Country representatives were reminded that only four countries make regular contributions.

Although debts spanning several years were outstanding, every effort should be made to, at least, honour commitments for 1999, even as creative ways were sought to offset existing debts.

Agenda item 4:

Evaluation of the OAS-sponsored project on processing and preservation of fresh foods

Mr. Charles Cyrus, Senior Technical Officer in the National Council for Science and Technology (Barbados), gave a brief description on the evolution of Simbiosis in the Caribbean. Most countries, he noted, were already part of the Simbiosis Network, with persons from each member country having undergone training sessions in web page development. A demonstration highlighting those countries which had already established sites was given. During the demonstration, it was suggested that one way of utilising the available funds was for the purchase of hardware under this project, especially for those countries which were not fully equipped to have a functional web page to be linked to the Simbiosis Network.

The question was asked as to the possibility of linking the web pages developed, to the SIDS Network. It was indicated that while such a linkage was possible, it would have to be done via CCST's own website.

Agenda items 5, 6, 7

Administrative support for the CCST

Agenda Items 5, 6 and 7 were discussed under one heading.

The Director of ECLAC reminded participants that a document entitled "Interim report on the administrative support for the CCST" had been presented at the fifteenth Plenary Session of the CCST. Three options for administrative support were outlined, to which some response was expected.

Discussions among the membership ensued, resulting in the consensus that while the most desirable option was for the CCST to function as a completely autonomous body, the Council was not yet in a position to operate independently of ECLAC. Independent operations would be considered, but on a phased basis. It was agreed that the present administrative arrangements would be reviewed and some recommendations made for specific modifications.

The Director of ECLAC asked that the members derive specific recommendations so that the functions and operations of both the CCST and ECLAC would be very clearly specified.

The representative of Grenada observed, however, that while it was commendable that some decision had been taken for the immediate future of the CCST, members needed to be reminded that the Council members were representatives of their respective governments. The problems now

encountered, he said, were mainly due to the fact over the years governments did not pick up their responsibility to the Council. He also reminded that in arriving at modifications to the present arrangements, it would be helpful to remember that the United Nations, under which ECLAC falls, is itself an intergovernmental body. The Director of ECLAC agreed with the statement and reiterated her previous suggestion that there was a need to be very clear about the functions of both the CCST and ECLAC before making recommendations. She again raised the question of the administration of a separate account given the present arrangements or even modifications of same. It was recognized that the Executive of the Council needed to schedule regular meetings with both the Secretary of the CCST as well as ECLAC so that all parties could be kept informed as to each others' activities. The Director of ECLAC indicated that increased involvement of the executive members in the management of the Council's affairs would be welcome, since one of the difficulties faced was the fact that the Secretary of the CCST was placed in an awkward situation by having to report, of necessity, to both the Director of ECLAC and the CCST Executive.

The representative of Grenada, in another attempt at placing all the issues into perspective, noted that it was possible that some of the problems encountered in the implementation of the work programme might lie in the fact that both the Port of Spain and Santiago ECLAC offices were involved in administration. He wanted to find out if part of the work programme involved Latin America and, if that was the case, then it would mean that the Secretary of the CCST, as ECLAC's science and technology officer, was mandated to also include Latin America on the Council's work programme. The Director of ECLAC dispelled the idea, stating that the work of the ECLAC Port of Spain office was confined to the Caribbean. The representative of Jamaica suggested that an external agency, for example NIHERST, manage project funds under the guidance of the Executive Committee, with ECLAC to be kept informed. The Director of ECLAC noted the impracticability of such an arrangement.



With regard to the position of Secretary of the Council, Mr. Donatus St. Aimee, Secretary of CCST, quoted Article 34 of the Statutes which states that "Until such time that the Council is in a position to establish its own Executive Secretariat, as provided under **Article 15**, the CDCC secretariat shall assist in the provision of the secretariat services in collaboration with any government or organization specified in **Article 17 ii, iii, and iv** that the Council may designate. The requirement in **Article 15** that the Executive Secretary shall be the Secretary of the Council and all of its committees, and that in **Article 14** with respect to meetings of the Executive Committee, shall not apply until appointment of the Executive Secretary..." . He observed that the present arrangement was not within the Statutes and that therefore the CCST was not operating according to the Statutes.

It was revealed that the present situation arose mainly to ensure the sustainability of the CCST. Although, he added, ECLAC was providing some level of administrative support, it took a lot of financial ingenuity to continue the operations of the CCST. He cited the example of the sixteenth Plenary Session that was held at a cost of approximately \$12,000 of which \$3,500 came from ECLAC.

The Chairman noted that some clarification was needed on the reality of the CDCC secretariat. The Director of ECLAC stated that the Caribbean Subregional Headquarters of ECLAC was the secretariat of the CDCC. The Statutes applied to an entity that was different from that which evolved over time. It was therefore advisable that the Statutes be revisited.

The representative of Suriname recommended that it would be useful to put a formal organizational structure to the Council and accomplish the following: link all agencies and institutions, develop a management guide, operational, financial, project planning modus operandi to give a clear picture of the functioning of the CCST. Such a document may then be presented to the various governments as a means of garnering the much needed financial support.

Apart from the above, it was also agreed that administrative arrangements for the short, medium and long term would be developed for the CCST. With regard to the issue of a special account, the Trinidad and Tobago representative, with consultation, would spearhead the discussions on management of the account.

In determining any administrative arrangements for the CCST, the Secretary said that members should consider that at the time of establishment of the Council, the OAS indicated their support for at least five years and this included funding for the Council. Assistance was also given by UNESCO and the European Union (EU) could also be approached for assistance. The Director of ECLAC asked that the Council be cautious in expecting full support from these agencies, since it was her experience that there had to be evidence of substantial government support before any assistance in the area of recurring expenditures could be expected.

A meeting of the executive membership of the CCST was called, to be held before the close of the Plenary Session. A programmatic platform to deal with all administrative and

financial arrangements would be presented at the end of this sixteenth Plenary Session. A record of decisions taken at this meeting is attached at Annex 2.

Agenda item 8:  
Proposed work programme for 1999

**Regional science and technology policy**

The Secretary of the CCST emphasized the need to receive comments on the draft policy document by the end of January 1999 in order that a final document be submitted in time for a meeting that is to be held with CARICOM's Trade and Economic Division. He noted that one of the visions of the Council was to encourage the development of science and technology councils in each of the member States. Documents on the structure and functioning of the such councils, with clear specific work programmes, as well as on the organization and management of science and technology councils in the subregion were available and would be useful to countries interested in establishing same. Countries interested in establishing science councils were also advised to seek assistance from Saint Lucia which, after efforts that began eight years ago, recently launched a National Council for Science and Technology, with significant support from both the CCST and the Commonwealth Science Council.

**Renewable energy**

In 1994 a meeting was held in Saint Lucia, with one of the results being a Model Energy Policy. It was brought to the attention of members that the Latin American Energy Organization (OLADE) was also in the process of developing an energy policy for the region but the focus was not solely on renewable energy. A link with CARIFORUM could, however, prove to be beneficial as that agency had renewable energy as its focus. The Commonwealth Science Council (CSC) was also doing some work on renewable energy and it was felt that this link would be beneficial as the CSC also had links to activities in the African continent. It was also noted that apart from energy derived from oil and natural gas, countries without these resources could consider alternate sources of energy. For example, in Germany, a high temperature nuclear reactor using uranium pellets that could be recharged was developed. The Council was reminded that while these sources of energy were considered to be 'clean' in terms of operations, the spectre of accidents was always likely to raise its head. Utilizing these sources of energy could solve a number of problems in the subregion. However, some consistency in policy had to be maintained.

**Science teaching**

The OAS would not be fully funding this project in 1999. Rather a small amount of money might be made available to continue the project. It was more than likely that funding would come from the National Science Foundation of the United States. The project could be resubmitted to the OAS for funding in the year 2000.

The project for 1998 was deemed a success, but the full impact of the programme was not expected until three to five years later. CCST will provide a sharing of the various experiences via its newsletter. Also, although workshops were targeted towards the primary level of education, programmes may be adapted for the secondary teaching level. The only major difference was the fact that at the secondary level, there was heavy emphasis on examinations.

### **Agro-processing**

The OAS approved \$100,000 for the continuation of 'Symbiosis' during 1999 and said that if additional funding was required, proposals requesting same may be submitted.

The representative from Jamaica inquired as to the possibility of recovering money for the publication of "Agro-Link" under the agro-processing project. She was informed that while the publishing of the Newsletter did fall within the ambit of the project, funds could not now be put towards the effort, since no contract was signed between the Scientific Research Council (SRC) of Jamaica and ECLAC to undertake publication. A back-dated contract could not be considered. However, another project being undertaken by the SRC, the technology transfer of mushroom cultivation, could receive funding from the agro-processing project.

### **Determination of priorities for science and technology for development and indicators on science and technology**

It was stated that assistance will be given to member States to conduct priority-setting exercises at the national level. A commitment was needed from countries, that at the end of the workshops, activities would continue at the country level.

The Chairman noted that under the SIDS POA, a workshop on exercises in priority development was held in Barbados. Representatives from a number of member countries participated in this workshop. In some cases, it was ensured that the same person who attended the SIDS workshop attended the workshop hosted by the CCST. It was pointed out, however, that the exercises in the priority development workshop under the auspices of the SIDS POA were for sustainable development which, although containing elements of science and technology, were not the same as science and technology indicators. The process for development of the indicators differed in that sustainable development indicators were aimed at specific sectors, whereas science and technology indicators were all inclusive and should be part of the national strategy for development.

### **CCST Newsletter**

The Secretary of the CCST informed that the Newsletter would be forwarded to members early in 1999.

### **Development of the five-year work programme of the CCST (2000-2004)**

Members requested that projects on renewable energy with emphasis on the agricultural sector and information technology be considered for inclusion in the five-year work programme. Because information technology covered a wide range of study, the representative for Saint Vincent and the Grenadines was asked to define some focus areas for consideration. It was also agreed that members would be requested to submit by the end of the first quarter of 1999, areas of work for possible inclusion in the five-year work programme. By the end of 1999, a final programme will have been planned.

Also suggested for 1999 was the organization of a seminar similar to that which had been held in Turin in October 1998 on "Technology, Innovation and Competitiveness in a Globalizing Economy". This seminar focused on large economies, but could be adapted to reflect the smaller economies. Discussions have already been held with the Resident Representative of the United Nations Development Programme (UNDP) for Trinidad and Tobago and Suriname, on the possibility of holding a regional meeting on the subject. Three papers from the Turin meeting are available. It was also learned that MERCOCYT, under the auspices of the OAS and the National Science Foundation of the United States of America, is planning to host such a meeting in Mexico in 1999.

### **Meeting of ministers responsible for science and technology**

The CCST may lobby for CARICOM and regional governments to ensure that a meeting of ministers responsible for science and technology takes place next year.

### **Resource mobilization**

The Secretary reminded members that resource mobilization hinged on country contributions. He asked that participants note that resource mobilization and technical assistance were not the same.

#### Agenda item 9:

#### Consideration of attendance at UNESCO World Science Conference

Members were informed that a World Science Conference was scheduled to be held in Budapest from 24-26 July 1999. It was suggested that it would be of benefit to the subregion if a Caribbean perspective on science was to be presented. It was agreed that a paper would be prepared reflecting the state of science initiatives in the region for possible presentation at the Conference. Other agencies working in the field of science in the region will also be consulted.

Agenda item 10:Consideration of the preliminary areas of priority for the five-year period (2000-2004)

The development of the five-year work programme will be a part of the activities of 1999. A request was made that biodiversity under Biotechnology and Natural Product Development be included in the next cycle.

Agenda item 11:Any other business

There was no additional business to discuss.

Agenda item 12:Election of Officers

The Chair was vacated and Mr. Donatus St. Aimee, Secretary of the CCST, took up the position of Presiding Officer. Before the election process, the representative from Grenada recommended that Mr. Navindranath Chandarpal retain the position as Chairman and that the post of Honorary Treasurer be filled. Members endorsed this recommendation and added that the present Executive should also be retained, while maintaining the electoral process. In taking this position, the Secretary advised that a situation would be created whereby the Executive would consist of five members, and not four, as is allowed by the statutes (Article 10 refers).

The Executive Members were nominated as follows:

Chairman:	Mr. Navindranath Chandarpal - Guyana
Vice Chairman:	Mr. Bishnu Tulsie – Saint Lucia
Honorary Treasurer:	Mrs. Maureen Manchouk – Trinidad and Tobago

Members

Dr. Dorothy Byfield:	Jamaica
Dr. Eslie Alleyne:	Barbados
Mr. Jesus R. Mas Camacho:	Cuba

The above nominees were elected unopposed and the Executive Committee was welcomed by the Secretary of the Council.

The Chairman accepted the position and thanked the members for giving him the opportunity to once again serve the Council as Chairman. He promised to work together with the membership to achieve those goals set, especially with regard to the administrative arrangements of the Council. The representative from Suriname again reminded the meeting of the need to provide a proper

organizational structure. This was accepted, in principle, and it would form part of the parcel of recommendations coming out of the session.

The first order of business was the establishment of an account in the name of the CCST. It was noted that an account was opened based on a decision made by the then Chairman and some other members. He asked that the newly installed Executive ratify the decision to open the account, which was subsequently done.

Members were reminded that Saint Kitts and Nevis had indicated a desire to host the present session as part of their attempts to boost their own efforts in the area of science and technology. Unfortunately, due to Hurricane Mitch and the resultant landslides, they were unable to do so. A note expressing CCST's sympathy would be forwarded to the Government of Saint Kitts and Nevis. Letters of condolence should also be sent to CARICOM, on the passing of Mr. William Demas and Dr. Kurleigh King.

#### Agenda item 13:

#### Proposed date and venue of the seventeenth Plenary Session

The representative of Suriname was asked that his country host the seventeenth Plenary Session in December 1999. The representative advised that a proposal would be submitted to his Government and an answer returned to the Council as soon as possible.

#### Meeting closure

The Chairman asked that thanks be conveyed to the Government and people of Barbados for their generosity and hospitality and to the staff of the NCST, Barbados, for their efforts, especially at a time when general elections were due to be held shortly. Mr. Donatus St. Aimee and the staff of the CCST secretariat were also thanked for the work done during the year.

The new focal point for Belize, Ms. Margarita Gomez, was welcomed to the Council. Ms. Gomez was assured that Council members were all committed to the development of science and technology in the subregion. Ms. Gomez then expressed her thanks for the welcome and noted that while the sessions were very informative, there was still a lot that she had to learn about its operations if she was to perform effectively.

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**Annex 2****RECORD OF DECISIONS MADE BY THE EXECUTIVE MEMBERS ON THE  
ADMINISTRATIVE AND FINANCIAL ARRANGEMENTS OF THE CCST****Administrative arrangements**

The Caribbean Council for Science and Technology (CCST) is an intergovernmental body established by Statute.

The United Nations Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters for the Caribbean agreed to provide interim secretariat services to the CCST and to meet the costs of these services until the CCST is able to establish its own secretariat. This includes the assignment of a science and technology officer to serve as Executive Secretary to the CCST, a technical cooperation assistant and a secretary.

The objectives of the Council are in accordance with Article 17 of the Statutes.

To achieve these objectives, the Council would:

- (a) Prepare work programmes.
- (b) Provide copies of these documents for the information of the Director of ECLAC.
- (c) The Executive of the CCST and the Director of ECLAC will maintain regular dialogue on the allocation of resources, implementation of the work programme and all other matters pertaining to the smooth implementation of the CCST work programme.
- (d) In the circumstances where actions have to be taken at short notice to facilitate CCST activities, the Executive will so advise.

### **Financial arrangements**

The CCST has opened an account at First Citizen's Bank, Maraval Road, Port-of-Spain, Trinidad and Tobago, in keeping with Article 28 (b) of the Statutes with the following guidelines approved at the sixteenth Plenary Session, held at the Pommarine Hotel, Barbados, on 10-11 December 1998:

Certain project funds will be placed in this account as determined by the Executive. A project implementation schedule with budgets must accompany all in-flows into project funds (accounts).

The Executive will manage the account(s) with respect to:

- (a) Deciding which funds are to be placed into the account.
- (b) Deciding the conditions of release and utilization of these funds in accordance with the rules and regulations of the donors.
- (c) Deciding the measures for accounting and auditing of the accounts.

Signatories will be:

- The Chairman
- The Honorary Treasurer
- One other person to be designated by the Executive Committee

Any two of the above may sign cheques against the account. Disbursement of project funds shall be against the project budget and in accordance with the rules of the donor agency.

However approval for expenditure up to US\$500 would not be required and one signature will be allowed.

Payments and disbursements must be accounted for by adequate documents – receipts, bills, invoices, etc.

The Honorary Treasurer will be responsible for reporting on the use of funds to the Council, but approval for disbursement will be in the hands of the officers of the Council.

Reports on each project must be prepared quarterly. Accounts should be audited annually and the report submitted to the Plenary through the Honorary Treasurer.

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