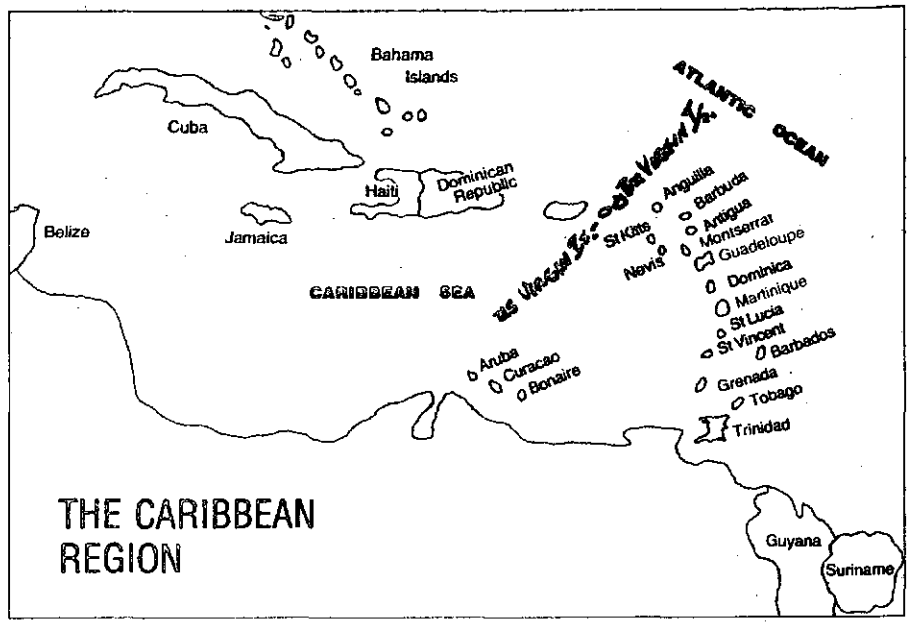
CARIBBEAN DEVELOPMENT AND CO-OPERATION COMMITTEE



GENERAL

LC/CAR/G.171(SEM.5/8)
CDCC/CCST/86/1

20 January 1986

ORIGINAL: ENGLISH

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

CARIBBEAN DEVELOPMENT AND CO-OPERATION COMMITTEE

CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY

Fifth Plenary Session
Roseau, Dominica
27-29 November 1985

MINUTES OF THE FIFTH PLENARY SESSION OF THE CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY

UNITED NATIONS

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

MINUTES OF THE FIFTH PLENARY SESSION OF THE CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY

Roseau, Dominica - 27-29 November 1985

I. ORGANIZATION OF THE MEETING

The Fifth Plenary Session of the Caribbean Council for Science and Technology (CCST) was convened in Roseau, Dominica from 27-29 November, 1985. The meeting was hosted by the Government of the Commonwealth of Dominica in collaboration with the Economic Commission for Latin America and the Caribbean (ECLAC).

Opening Session

The meeting was declared open by the Honourable Henry George, Minister of Education. (See Annex I). This was preceded by an address by the Permanent Secretary in the Ministry of Education, Mr. Hubert Charles. The meeting was also addressed by the Chairman of the CCST and a vote of thanks was given by the UNESCO representative.

Attendance

Representatives from the following CCST member countries were present: Antigua and Barbuda, Dominica, Grenada, Jamaica, Saint Lucia and Suriname.

The following Caribbean Development and Co-operation Committee (CDCC) members and associate members were also present as observers: Saint Christopher/Nevis and the Netherlands Antilles.

The following institutions and organizations with interest in science and technology activities also attended as observers: the Caribbean Association of Industry and Commerce (CAIC), the Inter-American Institute for Co-operation on Agriculture (IICA), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the University of the West Indies (UWI).

The United Nations ECLAC Subregional Headquarters for the Caribbean, which serves as the Secretariat for the CCST, provided secretariat services for the session. The list of participants is given at Annex II.

II. SUBSTANTIVE DISCUSSIONS

Adoption of the Agenda (Agenda Item 1)

The agenda proposed in document LC/CAR/G.159(SEM.5/1)/CDCC/CCST/85/3/ was amended and adopted. The agenda is given at Annex III.

Chairman's Report (Agenda Item 2)

The Chairman presented his report which was subsequently circulated. (See Annex IV).

Minutes of the Fourth Plenary Session (Agenda Item 3)

The Minutes of the Fourth Plenary Session which had been circulated previously to all member countries were formally adopted after discussion. These discussions are pertinent to other agenda items and are contained in the reporting of those agenda items.

Minutes of the Seventh Executive Committee Meeting (Agenda Item 4)

The Minutes of the Seventh Executive Committee Meeting were presented and noted by the Plenary.

Matters Arising (Agenda Item 5)

With respect to the logo for the CCST, the Council agreed with the proposals presented in the Minutes of the Seventh Executive Committee Meeting, but expanded the competition to the general public. It charged

the Secretariat with the responsibility to complete its undertaking not later than end December 1985. The Secretariat would submit its guidelines for the competition to the national focal points, who would conduct the competition in their respective countries. The winning entrant in each country would be submitted to the Secretariat not later than the end of February 1986 for the selection of a winner by the Executive Committee.

Should the Executive Committee not select a winner, the Secretariat would be empowered to contract suitable persons to present designs for a logo.

Annual Report and Balance Sheet for 1984-85 (Agenda Item 6)

The work of the Secretariat as presented in document LC/CAR/G.161 (SEM.5/3)/CDCC/CCST/85/5/ was discussed. Most of the activities contained in the report were items to be followed up in the context of the 1985-86 Work Programme. Pertinent recommendations were therefore contained in the report under that agenda item (Item 7).

The film "Agro-Industry: Our Business Now" was well received by the meeting. Recommendations on it are as follows:

(a) The individual sequences need to be shortened.

(b) The technical content with respect to food processing should be checked.

(c) Reference to "nitrites" removed.

(d) The incorporation of whole advertisements was undesirable.

(e) More visibility for CCST in film.

CCST Work Programme and Budget (Agenda Item 7)

In considering this item, it was felt that the future work programme of CCST should reflect the changed realities and developments since the formation of the Council. It was, therefore, necessary to examine the role of the Council in light of these developments and to define areas within which CCST would focus its attention.

In that respect, it was felt that CCST should undertake activities such as:

(a) Serving as a focal point for TCDC activities in science and technology, given its affiliation to a wider United Nations organisation.

(b) The identification of critical issues in science and technology in the Caribbean and the formulation of programmes from which projects can be developed, to be implemented by existing regional institutions.

(c) Serve as a mechanism for coupling science and technology with industry and a forum for bringing regional scientists together.

Recognising that development takes place at a national level and that the effectiveness of regional institutions are dependent on the proper functioning of national units, the Council agreed that the principal function of CCST should be to assist in strengthening and/or establishing national science councils in member countries.

To that effect, a sub-committee was appointed to develop a paper on guidelines for the setting up of National Science Councils to be presented to member countries.

Although this paper appears as Annex V, it is to be circulated as a separate document with an appropriate covering letter.

Further to the above, it was decided that at future Plenary Sessions, individual country representatives would make a short report on activities and/or problems on science and technology in their countries and that the meeting would identify one critical issue for in-depth discussion.

The proposed work programme was then considered and amended accordingly and now appears as document LC/CAR/G.162(SEM.5/4)/Rev.1.

Application of the U.S. Virgin Islands for Membership to the CCST (Agenda Item 8)

The application of the U.S. Virgin Islands was considered and the Council felt that the matter could be decided on the same basis as the application of the Netherlands Antilles.

The Delegate of the Netherlands Antilles stated that the resolution adopted at the Fourth Plenary Session did not provide sufficient legal basis

After much discussion, the Council agreed that since there was, in principle, a decision to accept the Netherlands Antilles and the U.S. Virgin Islands as members, the Secretariat should seek legal advice on the formulation of an appropriate amendment for their admission as full members.

Application of Martinique for Membership to the CCST (Agenda Item 9)

The meeting ruled that under the present Statutes of the CCST, Martinique was not eligible for membership.

(Nevertheless, it was felt that more information should be gathered as to the state of science and technology in Martinique and the basis for their application. It was agreed, therefore, that the Secretariat and a member of the Executive visit Martinique to discuss these matters with the appropriate persons or agencies).*

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* The two sentences in brackets appear as per decision of Council, notwithstanding the definitive ruling on the question.

Election of Officers
(Agenda Item 10)

The following Officers were elected for 1985-1986:

Chairman:	Suriname	Dr. Ernie Brunings
Vice-Chairman:	Antigua and Barbuda	Dr. Hayden Thomas
Honorary Treasurer:	Grenada	Mr. K.U. Buckmire
Member:	Jamaica	Dr. Gladstone V. Taylor

Any Other Business
(Agenda Item 11)

Financial Status of the CCST

The proposals contained in document LC/CAR/G.166(SEM.5/7) /CDCC/CCST/85/9/ were discussed at length. It was decided that Proposal 2 would be recommended to governments, to be effective from 1986, and that every effort should be made to pay outstanding contributions to the Council.

The proposal stated that member countries pay 50 per cent of their contribution in foreign currency (US dollars) and that the remaining 50 per cent be put in a local account to be used to pay for travel, hotel or any other local costs which could be met by member states.

As regards the future activities and orientation of CCST and its ability to carry out these activities, it was agreed that the Secretariat should prepare a document outlining the present arrangement whereby ECLAC provides interim secretariat services to CCST; how this arrangement had worked; how it could be improved with proposals for possible alternative arrangements for a permanent secretariat.

Annex I

ADDRESS OF HONOURABLE MINISTER OF EDUCATION
AT THE OPENING OF THE FIFTH PLENARY SESSION
OF THE CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY

Mr. Chairman, Participants to this Fifth Plenary Session of the Caribbean Council for Science and Technology, Invited guests, Ladies and Gentlemen, for me, as Minister of Education with the responsibility for science and technology matters, it is a signal honour to address the opening session of this conference. My Government is grateful for the opportunity to host this session.

I want, on behalf of my Government and on my own behalf, to welcome you to Dominica. A look at your agenda indicates that during the next few days you will be engaged in serious discussions of a number of items. I hope, however, that you will find time to visit some of the beauty spots around the island: the Trafalgar Falls, the Wotton Waven Sulphur Springs, the Boiling Lake, one of the few in the world, will require a special visit. You simply will have to return to Dominica for that treat. You can't afford to miss a fifteen minute walk through virgin forest to the Emerald Pool. Yes, the organizers must allow you some time to sample natural beauty at its best. Dominicans are a warm, charming and spontaneous people. I hope that during your short stay here you'll have an opportunity to meet them and share their hospitality.

My Government sees science and technology as playing a fundamental role in the development of the Caribbean region and indeed, in the growth of the wider third world. We are convinced that science and technology can be effective in this developmental process only if there exists a spirit of co-operation. There is no organization that understands this better than the Caribbean Council for Science and Technology, whose very existence is predicated upon the co-operative spirit. The sustenance

of the developmental thrust will require fuel: information exchange, provision of resources in finance, in personnel and otherwise, adaptation of technology.

We, in the region, through science and technology, will have to find innovative ways of dealing with our problems without having to invent the wheel. We must find ways of reducing our food import bills. Our products must be more competitive. Our packaging must not only be more attractive, but it must also be more effective in maintaining the quality of the product.

With all that, developing countries such as ours face a dilemma. According to the preamble to the Vienna Programme of Action the goal of science and technology is to serve national development and to improve the well-being of humanity. However, modern technology does not automatically benefit all groups of society equally. Often, it seems, it is the most advanced group that derives most of the benefit. The biblical saying: "For to everyone who has will more be given, and he will have abundance; but from him who has not, even what he has will be taken away" sounds so true. The more impoverished the country, the greater is the need for investment in science and technology, yet the scarcer the financial and human resources. The North accounts for about 96 per cent of the world's spending on research and development. The scientists and engineers, the advanced institutions of education and research and the finance are found predominantly in the richest countries. We in this country are faced with the situation where a number of our scientists and technologists are lured to the developed countries which can offer much higher wages and better working conditions. Sometimes we have to say to them that they are too qualified for the available jobs. Salaries and wages to government workers take up 58 per cent of the revenue. Yet in spite of such an extremely high percentage of revenue to meet personal emoluments, our salaries cannot attract scientists and technologists. The few who remain often lack the supportive resources, but they have to grapple with the problems in an attempt to find solutions.

The pursuit of knowledge for its own sake is one of the most creative motivations of scientists throughout history. The conquest of the moon and the planets are economically unproductive. However, resources have been found to enter the space age because astronautics has a value of its own: it provides mankind with an opportunity and a challenge. I urge you, in the peculiar position in which you, as a third world scientist find yourself, to see the financial and material constraints within which you operate as an opportunity and a challenge.

Science nowadays appears as a means to be used in the pursuit of definite goals. The industrialist learned long ago how to make use of scientific discoveries and technical inventions. Nations and industrial enterprises which conduct large and well-organized research and experimental development operations can bank on decisive results. Besides, the probability of success increases with the size of the research effort.

If science is thus harnessed for competitive rivalries between firms and between nations, it can be used to overcome the natural barriers which obstruct the path of social groups to prosperity and development. The reclamation of deserts, the curing of illnesses, the reduction of pollutents in the air are today the subject of major co-operative plans of action. During the past few years our research unit in the Division of Agriculture has been engaged in work on sorrel production. As a result of that work, sorrel is now available, not only during harvest season of November to April, but throughout the year.

Over the past few years the Caribbean Agricultural Research and Development Institute (CARDI) has been conducting research with a view to finding a solution to the problem of black spot spoilage in our tannias.

These are but two areas where our scientists and their Caribbean counterparts have engaged and impact on the social and economic life of the farmer.

My Government recognizes that the strengthening of indigenous technological and scientific capability requires a more scientific bias in education, increased emphasis on appropriate technology and an increase in the sharing of experiences. This is why a year ago we assigned to one of our teachers the responsibility of science co-ordinator.

During the past year, there has been much emphasis on science education. A new science curriculum was introduced into our primary schools; some 30 orientation workshops in primary science were held for our teachers who had to implement the new curriculum. Three secondary schools which previously had no science facilities are now having laboratories installed, with assistance from the Local Government Department. Recently, too, we have received assistance from the Government of the Republic of China to upgrade laboratory facilities in our secondary schools. Early next year we shall be hosting a workshop for our science teachers on "the popularization of science". This workshop as a follow-up to the regional seminar on science writing and communication held in Trinidad in October this year. In April 1986 we shall be hosting a regional workshop for teachers of primary science.

My Government has been concerned too, with food production and food processing. We believe that we need to produce more of what we eat. While we already produce much of what we eat, there is room for significant decrease of our food import bill (statistics). In this country, with an export value of products of about $60 million, one in which two-thirds of the workers are engaged in agriculture, a food import bill of $32.4 million is unacceptably too high. Presently experiments are being carried out on the production of hillside rice. The results so far are encouraging. We are also going into the business of prawn-farming. We have had some setbacks in this area, but we believe we are now getting on top of the problem.

In the area of housing, we appreciate the need to provide more hurricane-resistant houses, to minimize the kind of devastation our country suffered in 1979 and 1980 by the likes of hurricanes David and Allen. To this end, workshops have been held in Saint Vincent and the Grenadines and Dominica.

During your week's deliberations, or part thereof, you will be examining some of the problems facing the region and you will be attempting to find solutions to them. You will, unfortunately, in your planning sessions, not have the millions of research dollars that your colleagues in the developed world will have available to them. I want to reiterate that you should see your position as one of challenge. If you do, you will have the will to action and that will spur you on.

I know that it is not your intention to re-invent the wheel, nor is there any virtue in so doing. You will instead be engaged in a more fruitful exercise, if you share information and try to find ways and means of strengthening your information network system.

Since our Caribbean territories cannot afford the millions of dollars for pure scientific research, we need to rely very heavily on an information exchange network. Indeed even pure research workers depend on an information system. I urge you, not to underestimate the value and importance of an information exchange network. In economic terms, such a network can literally save millions of dollars. In terms of pursuit of knowledge it can provide our scientists and technologists with the kind of information that will lead to effective action that will in turn feed and nourish the thirst for knowledge.

Because it has become obvious that science and technology is the key to prosperity, there is the temptation to call on science for solutions to economic problems when other ways and means would be more appropriate. We must guard against seeing science and technology as a panacea for all ills.

Having said this, I hope that during your deliberations you will focus on some of the problems facing us here in Dominica and in some of our sister territories. I refer to:

(a) Lack of adequate systems for standardization and quality control of products.

(b) Lack of attractive markets.

(c) Scarcity of high-level human resources in strategic sectors.

(d) Scarcity of financial resources.

(e) Low level of industrialization.

(f) Low level of science and technology organization.

If you can address some of these problems, or shall I say challenges, during the next few days, then you will have achieved one of the functions for which your organization, the Caribbean Council for Science and Technology was instituted.

May you have a most fruitful and exciting meeting.

Thank you very much.

Annex II

LIST OF PARTICIPANTS

1. CCST Member Countries

ANTIGUA AND BARBUDA

Hayden Thomas
Chief Chemist/Food Technologist
Chemistry and Food Technology Division
Ministry of Agriculture, Lands and Fisheries
Dunbars

Tel: 24502

Eustace Hill
Science Co-ordinator
Ministry of Education
St. Johns

Tel: 20192

DOMINICA

James Farrell
Lecturer/Mechanical Engineer
Clifton Dupigny Community College
Technical Studies Division
Stock Farm
Roseau

Tel: 2624

Rupert Lance
Science Co-ordinator
Clifton Dupigny College
Roseau

Tel: 3363, 2952

Milton Lawrence
Food Scientist
Produce Chemist's Laboratory
Ministry of Agriculture
Roseau

Tel: 2731

Tyrone Norville
Principal and President
Dominica Science Association
Dominica Grammar School
St. Joseph Campus
St. Joseph

Tel: 6386

Michael Ratcliffe
Regional Science Education Adviser
British Development Division (BDD)
c/o Ministry of Education
Roseau

Tel: 3363

GRENADA

K.U. Buckmire
Chairman, Agricultural Scientist
Grenada National Science and
Technology Council
CARDI, P.O Box 431
St. Georges

JAMAICA

Gladstone Van Taylor
Executive Director/Administrator
of the Council
Scientific Research Council
P.O Box 350
Hope Gardens
Kingston 6

Tel: 927-0682, 927-4471-4

SAINT LUCIA

C.A. Philogene
Energy, Science and Technology Adviser
Ministry of Finance and Planning
Central Planning Unit
Government Buildings
P.O Box 709
Castries

Tel: 23688

SURINAME

Ernie A. Brunings
Chairman of the Board of the
Anton de Kom University of Suriname
Biologist
Anton de Kom University
P.O Box 9232
Paramaribo

Tel: 60200, 62291

2. Observer Countries

NETHERLANDS ANTILLES	Niovis Winklaar Head of Treaty Division Bureau for External Relations 4 Fort Amsterdam Willemstad Curaçao Tel: 613933
SAINT CHRISTOPHER/NEVIS	Milton Whittaker Co-ordinator Science and Technology Council St. Kitts/Nevis Teachers College P.O Box 268 Basseterre Tel: 2508

3. United Nations System

UNESCO	Dennis H. Irvine Subregional Adviser in Science and Technology c/o UNDP 19 Keate Street Port-of-Spain TRINIDAD Tel: 622-6270

4. Others

CARIBBEAN ASSOCIATION OF INDUSTRY AND COMMERCE (CAIC)	Omar Rahaman Industrial Engineer Barclays Bank Building Wildey St. Michael BARBADOS Tel: 436-6385-6

INTER-AMERICAN INSTITUTE FOR CO-OPERATION ON AGRICULTURE (IICA)

Urban Martin
Co-ordinator
IICA Office
Botanical Gardens
Roseau
DOMINICA

Tel: 2731-3, 4402

UNIVERSITY OF THE WEST INDIES (UWI)

Lawrence A. Wilson
Professor of Crop Science
Department of Crop Science
St. Augustine Campus
TRINIDAD

Tel: 662-4996

5. ECLAC

Donatus St. Aimée
Economic Affairs Officer
Science and Technology a.i.

Pedro Herrera Molina
Consultant

Christine David
Research Assistant

Maureen Afoon
Secretary

Tel: 623-5595, 623-5428

Annex III

AGENDA

1. Adoption of the Agenda
2. Chairman's Report 1984-1985
3. Report of the Fourth Plenary Session
4. Minutes of the Seventh Executive Committee Meeting
5. Matters arising
6. Annual Report and Balance Sheet for 1984-1985
7. CCST Work Programme and Budget
8. Application of the U.S. Virgin Islands for membership to the CCST
9. Application of Martinique for membership to the CCST
10. Election of Officers
11. Any other business

Annex IV

CHAIRMAN'S REPORT

The Fourth CCST Annual Report outlines the progress made in executing the Council's 1984-85 Work Programme. Therefore, this review will only consider areas of activity where the most attention was given during the last year.

The preparation of the two video films, one on Food Technology and the other on Information and Communication was one such activity.

In order to keep costs to a minimum, the approach taken was to use video equipment that was available in the countries where the filming took place. This had the effect not only of reducing the amount of equipment that had to be transported from country to country, but the size of the film crew was also reduced to a film director, an interviewer and a co-ordinator from the Secretariat.

This not only had the advantage of minimizing costs, but more importantly it was enhancing the indigenous capability in film production. But, as it is well known, there is a cost to pay doing and learning, hence one of the problems faced by the film producers was that of inconsistent quality.

It is in this light that one of the new activities that is being proposed at this session is for a workshop to provide training in audio-visual film production techniques and in the repair and maintenance of the equipment.

This session may also wish to consider the commissioning of a training film in the above area. This exercise may well form part of the above workshop.

The other area of activity where a significant amount of energy was expended was in producing the first copy of CCST's Newsletter. This session may wish to review the Newsletter, particularly taking into account its target audience, difficulties in obtaining relevant information and then to give guidance to the Secretariat for the production of future issues.

During the past year the emphasis of CCST's activities was in the general area of science and technology awareness of popularisation, so it was only fitting that the Council co-hosted the Workshop on Problems of Science Popularisation, the recommendations of which should be noted by this Council, which should also consider using it as a guide to its future work in this important area.

This review of last year's work programme would not be complete if it did not note the amount of effort that went into trying to get participation to the proposed Workshop on the Pharmaceutical Sector in the Caribbean. Given the interest being shown in this general area, particularly in the field of medicinal plants by the Commonwealth Science Council (CSC) and the Organization of American States (OAS), the Council may wish to discuss the possibility of duplication of effort in this area, and to consider what can be done to integrate all the efforts in this area.

The Council is at a stage of development where it has now survived the most critical phase of its existence, yet it seems to be at a point where it needs to make the right decisions about the purpose, path and direction along which it must now travel. In this regard, this Plenary Session is perhaps one of the most important.

We are at a stage now where we must not simply take stock of our accomplishments, but we must critically review those achievements in the light of what they were intended to achieve vis-à-vis what was actually achieved. What seems to be important is the relevance of of the achievements. Put very simply, at the end of the day, someone somewhere must benefit from our actions.

Without pre-empting some of the discussions and actions that will take place at this meeting concerning the future directions of this body, the easiest but perhaps the most important decision that this Plenary Session will make is that of endorsing that CCST consultations be urgently undertaken by the incoming Executive Committee and the Secretariat.

Although it is very important that these consultations seek the views of the national policy-makers, particularly as they could indicate national priorities as far as science and technology development is concerned, yet the views of the private sector, educational establishment, science teachers and national science and technology councils should also be sought.

Though it may not be necessary to remind members that ECLAC continues to provide the Council with secretariat services, it is important to remind ourselves that though CCST is an autonomous inter-governmental body, yet, external agencies may still perceive the Council as being tied to a larger agency. Indeed our deliberations this week in considering the applications of the U.S. Virgin Islands and Martinique, may simply be reinforcing that perspective. Therefore, this meeting may also wish to consider what actions are necessary or what decisions should be taken to ensure both the autonomy and longevity of this Council.

There is much recognition of a role which CCST can and in fact plays, that is, in ensuring that there is not undue duplication of effort in the general field of science and technology. As a result of this, I was asked by the organising committee of a Coastal Zone Management Project for the Lesser Antilles to bring to the attention of this Council, the fact that this project which was initiated by the Commonwealth Science Council is now operational and that the organising committee would welcome any suggestion as to how its project could be integrated with any other related activity in the region.

I will conclude by saying that I hope that some of the suggestions made will be considered, refined and incorporated into the many other points that will be made by members, and that these in turn would give the Council the stimulus and direction, to ensure that it meaningfully contributes to the development of our individual countries.

Annex V

GUIDELINES FOR THE SETTING UP OF NATIONAL SCIENCE COUNCILS

I. PREAMBLE

It was anticipated when the Caribbean Council for Science and Technology (CCST) was established that one of its main thrusts would be to encourage the setting up of National Councils where they did not already exist.

It is now well recognised that a National Science and Technology Policy is crucial to the application of science and technology to development and that as a corollary, there is need for a Body with ability to articulate, monitor and evaluate such a policy. Examples of this need are illustrated in the following:

(i) There are current concerns as to the implications of new technologies in development for countries in the Caribbean and how small countries might benefit from these developments or be protected from consequences of adverse developments. For example, there is a dilemma between production and productivity, on the one hand, and employment on the other.

(ii) What type of science and technology education is appropriate for the preparation of our children for the next two decades?

(iii) The Council should advise as to how to mobilise scientists of the countries of the region. For example, in many countries there is a pool of scientists who are under-utilised.

II. SUGGESTED PROCEDURE FOR ESTABLISHING NATIONAL COUNCILS

In recognition of the importance that CCST places on the setting up of National Councils, it puts forward the following guidelines for their establishment:

1. Establishment

National Councils should be incorporated by an Act of Parliament in order to give them full legal status and recognition.

2. Inter-Ministerial Committee

Ideally, since science and technology cuts across the boundaries of several ministries, this subject should be the responsibility of the Cabinet as a whole. Responsibility may be delegated to an inter-ministerial committee and a Minister Responsible for Science and Technology. It is recognised that various countries will have different emphases, but it is felt that the critical areas are:

- Agriculture
- Education
- Tourism and Environment
- Industry and Trade
- Economic Development
- Finance and Planning
- External Affairs

Terms of Reference of the Inter-Ministerial Committee

(a) To seek advice of Council on development matters which contain elements of science and technology;

(b) To receive programmes and budgets of Council and submit with recommendations to Cabinet;

(c) To ensure the integration of science and technology into the development process.

3. Composition of Council

The Council which should consist of not more than 20 members, including the Chairman, should be appointed by Cabinet on the recommendations of the Minister Responsible for Science and Technology through the Inter-Ministerial Committee. The members should include:

(a) The Ministers or representatives of the Inter-Ministerial Committee;

(b) Representative of the Ministry of Health;

(c) Representative of the Ministry of Works and Communications;

(d) Representative of the Ministry of Labour;

(e) Representative of the Ministry of Natural Resources and Energy;

(f) Representative of the Ministry of Housing;

(g) Four practising scientists representing the areas of science and technology which are critical to the country's development, e.g. Agriculture;

(h) Representative of Higher Education;

(i) Representatives of professional associations, e.g. scientists, engineers and architects;

(j) One representative of Research Institutions;

(k) Representative of Bureau of Standards.

4. Objectives

The stated objectives of the Council may be:

(a) To advise the government on the establishment and implementation of National Science and Technology Policies, to periodically evaluate and monitor such policies and to recommend changes as considered necessary from time to time;

(b) To assist in ensuring that science and technology is integrated in the development process.

(c) To co-ordinate science and technology activities, so as to ensure maximum use of human and financial resources as well as institutional facilities;

(d) To create the environment which will enhance the development of an indigenous scientific capability.

In pursuing these objectives the Council, for example, may establish projects, engage contractors and establish committees.

5. Functions

Among functions to be considered we recommend the following:

(a) To maintain a register of scientific personnel (both national and non-national), scientific institutions, research and development institutional resources and to point out to governments wherever gaps exist;

(b) To establish priorities in science and technology in respect of education, training and research and development;

(c) To advise on the financing of science and technology activities in the country;

(d) To establish linkages between Research and Development Institutions and the productive sector and to monitor the effectiveness of these linkages;

(e) To organise training courses, seminars, workshops, etc.;

(f) To accord recognition and award prizes for achievement in science and technology for development;

(g) To promote greater understanding and appreciation of science and technology by the general public and for such purposes to organise science fairs, exhibitions, scientific competitions, etc.;

(h) To assist in ensuring that all students receive an adequate exposure to science and technology relevant to national development;

(i) To establish and monitor informational and other mechanisms employed in the transfer of appropriate technology;

(j) To establish linkages with regional and international organisations and agencies, so as to secure participation in the activities and support for national programmes of science and technology for development;

(k) To serve as a focal point for science and technology activities within and without.

6. Accountability

The Council should present to the Cabinet, through the Minister Responsible for Science and Technology, an annual report of the activities of the Council, as well as an audited statement of account and the programmes and budget for the ensuing year.

7. Structure

The Council should be served by a full-time Secretariat consisting of a Director/Executive Secretary, Project Officer and a Secretary. It should have an annual budget based on recommendations of the Council to the Cabinet.

8. Finances

The funds of Council will consist of government subventions, private donations, grants, income derived from services, grants from government and public sector organisations, non-governmental agencies and organisations as well as international agencies.

III. CONCLUSIONS

It should be pointed out that the above is only one possible model presented as a guideline. There are alternative models or modifications which each country may wish to consider, bearing in mind its own particular circumstances. For example, should the Chairman be appointed by the Cabinet or be elected by the Council as is done in some countries? Some countries may also wish to keep a register of scientists in their subregion.

The position with regards Councils already existing, but which are non-functional, will have to be addressed. There may well be problems with financing, lack of full-time staff and the lack of an Inter-Ministerial Committee which we feel is vital, bearing in mind the multi-sectoral nature of science and technology. It is also important to note that the model presented may be used by countries who may wish to start their National Councils immediately. In the longer term, it is recommended that a study be made of Science and Technology Councils now operating successfully, as well as those which are either non-functional or performing poorly. It will then be possible for the Caribbean Council for Science and Technology to issue a report with additional recommendations for the successful operation of National Councils. This, it is hoped, can be done as part of the work programme of the Caribbean Council for Science and Technology during the ensuing year.