

Fourteenth Plenary Session of the CCST 16-18 December 1996 St. George's, Grenada GENERAL LC/CAR/G.495 CCST/96/6 30 December 1996 ORIGINAL: ENGLISH

REPORT OF THE FOURTEENTH 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 FOURTEENTH PLENARY SESSION OF THE CARIBBEAN COUNCIL FOR SCIENCE AND TECHNOLOGY (CCST) St. George's, Grenada, 16-18 December 1996

I. ORGANIZATION OF THE MEETING

The fourteenth Plenary Session of the Caribbean Council for Science and Technology (CCST) was convened in St. George's, Grenada, from 16 to 18 December 1996.

Opening session

The Chairman of the Council, Mr. Navindranauth Chandarpal of Guyana, welcomed the Prime Minister of Grenada, the Honourable Dr. Keith Mitchell, members of the executive of the CCST, participants and special invitees. Noting the increasing importance of science and technology to the development effort, he identified two main factors which had served to direct the work of the CCST. - recognition of science and technology as a means of social progress, and the recognition that small States cannot individually develop the necessary capacity for maximizing the promotion of science and technology for development. Taking a historical perspective, he identified the industrial revolution and subsequent advances in science and technology as being responsible for the widening gap between developed and developing countries. Several international developments which should be noted by member countries were highlighted, including the increasing importance of competitiveness, the various institutional linkages and cooperation frameworks for science and technology, and the recognition that the science and technology pathway is a sine qua non for development. He noted that in some forums there may be efforts to divide developing countries on science and technology issues. These included the Bolivia Summit, at which he perceived movement of the developed countries away from commitments made at the Rio Summit on the Environment. and away from social and economic aspects of sustainable development, concentrating on environmental aspects. This would require technological solutions and consultancies driven by the North. Other major challenges to the work of the CCST lay in the areas of the education system and human resource development, and the need to update technologies, particularly as they related to the productive sectors. Concluding his address, he challenged participants to work towards mobilizing all possible resources for making science and technology a viable vehicle for social progress and economic development in the Caribbean.

In welcoming participants, Mr. Carlton Frederick, Chairman of the National Science and Technology Council of Grenada, noted the presence of the Honourable Dr. Keith Mitchell, Prime Minister and Head of Government for Grenada, Carriacou and Petite Martinique, and that of Senator Lawrence Joseph, Minister of Education, Labour, Science and Technology. He gave special recognition to Dr. Mitchell's cancellation of an important regional engagement to be present at the CCST plenary session. Members of the diplomatic corps, representatives from member countries and colleagues of Grenada were also welcomed. He expressed his hope for a successful meeting, and that the participants would enjoy a pleasant stay in Grenada.

The Minister responsible for Science and Technology in Grenada, Senator the Honourable Lawrence A. Joseph, also welcomed those present at the meeting. Noting the important role played by science and technology, he defined science, and looked at various approaches to the study of science derived from early philosophical schools of thought. These approaches, and their failure to provide a method by which scientific theory would be infallible, highlighted the important role that regular meetings of the CCST could play by facilitating a more methodical approach to development, therefore enabling Caribbean countries to better face global challenges. Outlining some of the activities relating to science and technology being undertaken in Grenada, including biological control of the pink mealy bug, he anticipated that these activities would be enhanced by the present meeting.

The Prime Minister and Head of Government, the Honourable Dr. Keith Mitchell, addressed the meeting. Dr. Mitchell emphasized the need to utilize the resources of the Caribbean and at the same time conserve them. Dr. Mitchell went on to state that it was necessary to incorporate science and technology into all sectors of society. He suggested that in doing so, greater use ought to be made of the institutions, universities and technical colleges as a means of ensuring that science and technology led the way. As the CARICOM Minister responsible for Science and Technology, Dr. Mitchell informed the meeting of a round of consultations, which had commenced in Trinidad, to be held involving the University of the West Indies (UWI). The consultations were intended to revisit the CARICOM science policy as it related to the present situation in the Caribbean. Dr. Mitchell recognized the importance of the work of the CCST, and looked forward to very useful suggestions coming out of the meeting which could be applied to CARICOM and the wider Caribbean. He also welcomed the participants in the meeting of the Caribbean Community Ocean Sciences Network (CCOSNET).

Secretary of the CCST, Mr. Donatus St. Aimée, welcomed the Prime Minister of Grenada, and other specially invited participants. Speaking on behalf of the Director of the Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters for the Caribbean, who was not able to be present at the opening session, he thanked members of the Council who had worked hard to bring the Council to its much-improved status. Special mention was made of Dr. Gladstone Taylor, former focal point for Jamaica, and former Chairman of the CCST. Noting the presence of the Prime Minister, he assured that the CCST would take up the challenge issued, and provide him with a substantial document on science and technology policy for presentation to the CARICOM Heads of Government. Noting the linkages between CARICOM and the CCST, he expressed the hope that these would be translated into improved linkages between national development, human resources, trade and science and technology issues. He noted the particular problems plaguing the banana industry of the Windward Islands, and suggested that a good science and technology policy could go a long way in assisting to identify workable solutions.

Attendance

Representatives from the following CCST member countries were present: Barbados, Cuba, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago and the United States Virgin Islands.

Absent were the representatives for Antigua and Barbuda, Belize, Dominica, Haiti, Saint Kitts and Nevis and Suriname.

Attending as observers were representatives of the Caribbean Community (CARICOM), the Caribbean Environmental Health Institute (CEHI), the Caribbean Fisheries Resource Assessment and Management Programme (CFRAMP), the Institute for Managing Development (IMD), the Institute of Marine Affairs (IMA), the Inter-American Institute for Cooperation on Agriculture (IICA), the Organization of American States (OAS), the United Nations Development Programme (UNDP) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

In addition, representatives from GRENTEL, the Grenada Co-operative Nutmeg Association and the Ministry of Education of Grenada were present at the meeting.

The list of participants is annexed.

II. SUBSTANTIVE DISCUSSIONS

Agenda item 1: Presentation of the thirteenth annual report of the secretariat

The secretariat presented the document entitled "Thirteenth Annual Report on CCST Activities" (LC/CAR/G.488;CCST/96/5) which had previously been distributed to member countries. The report described the activities of the Council during the period October 1995 to November 1996.

The Secretary briefly outlined the projects presently undertaken by the Council and requested that support be provided, wherever possible. The Secretary went on to inform the meeting of the progress made on ongoing or completed projects. Special mention was made of the workshop entitled "Investment Funding for Renewable Energy and Energy Efficiency Projects", which was held in collaboration with UNESCO and the University of the West Indies Centre for Environment and Development (UWICED). The workshop suggested that a meeting of ministers with responsibility for science and technology was critical to obtain political support for science and technology initiatives and should be arranged as soon as possible.

The Secretary informed the meeting that the project document on the Technology Extension Service (TES) was being finalized and would be submitted to identified donors for funding. The representative of Barbados volunteered to provide information on projects similar to the TES that had been undertaken in Barbados. The representative of Cuba requested a copy of the revised project.

The CCST member countries were urged to continue to send representatives to meetings that were important to the promotion of science and technology in the region, as a means of keeping abreast of international developments.

The CARICOM Secretariat invited the CCST to join a technical working group formed to assist industries throughout the Caribbean, especially in the less-developed countries (LDCs). This invitation would be mentioned in the annual report of the CARICOM Secretariat.

Member countries agreed that language barriers must be overcome if regional and international cooperation were to improve. In that respect, participants were urged to improve their understanding of other languages in the region and to communicate and collaborate with each other as often as possible.

It was suggested that in order to link the work of the CCST to that of the Caribbean Development and Cooperation Committee (CDCC), both CDCC and CCST should assist in developing the national work programmes.

The meeting recognized the need to create a science and technology culture in the region, and suggested that a series of lectures, seminars and similar activities at community centres, schools and the workplace should be held to bring science and technology to the non-scientific sectors.

Recognizing the progress made by the efforts at diversification of the banana industry in Saint Lucia, the meeting recommended that the other three Windward Islands that produced bananas be encouraged to participate in the banana technology project, and especially in the application of the Enterprise Support System software tools being employed in enterprise development.

It was suggested that future financial reports reflecting all costs of running the CCST could inform decision-making regarding the location and modality of operation of the secretariat.

The meeting emphasized the need to take full advantage of Dr. Mitchell's position in CARICOM to bring science and technology matters to the forefront of the CARICOM agenda, and to obtain the highest political support for science and technology, and projects to be funded.

Agenda item 2: Presentation of report of the eighteenth Executive Committee Meeting

The secretariat presented the document entitled "Report of the Eighteenth Executive Committee Meeting of the CCST" (LC/CAR/G.482; CCST/96/4) which had previously been circulated to member countries. The Executive Committee had met on 9 June 1996 in Kingston, Jamaica.

The Report of the Executive Committee stated that there was an extreme weakness of Caribbean delegations at international forums and that this could be partly attributed to insufficient

interministerial/departmental communication. At this point the need to convene a meeting of ministers with responsibility for science and technology was re-emphasized.

Member countries agreed that preparatory meetings for international and regional meetings be organized as far as possible, in order to decide on major points of discussion and to coordinate approaches and strategies.

The meeting endorsed the idea of employing Sixth Form students to perform research under the project on the History of Science and Technology.

Agenda item 3: Presentation of report of the thirteenth Plenary Session of the Council

The Secretariat presented the report entitled "Report of the thirteenth Plenary Session of the Caribbean Council for Science and Technology" (LC/CAR/G.455; CCST/95/3).

In commending the project on the training of scientists and technologists in project writing skills, the meeting suggested that a similar activity be carried out to train persons in senior management. Focal points were requested to identify various institutions/persons to participate in this type of activity.

Member countries were requested to inform the secretariat of their work programmes for the coming year as a means of assisting in developing its technical cooperation functions and capabilities and to enhance collaboration among the member countries.

The secretariat was requested to circulate information on the regional project proposal on science popularization which had been submitted for funding under the Lomé Convention by the National Institute for Higher Education, Research, Science and Technology (NIHERST).

Agenda item 4: Consideration of regional/national institutions with respect to science and technology

The Secretary informed the meeting that having recognized the number of institutions/councils operating in the Caribbean and becoming aware of governments' intentions to abolish a number of those institutions, it seemed appropriate to undertake a review of their roles and functions. On this basis, Dr. Gladstone Van Taylor was employed to undertake such an examination and an outline of his major findings was presented at the meeting. It was pointed out that having fully completed the exercise, the study would be published for the benefit of countries to help determine their own institutional needs. Comments of the meeting would be incorporated in the report, and a copy of the draft report sent to member States.

Commenting on the presentation, the Chairman suggested that the region needed to recognize science and technology as a tool and not a sector, partly on the basis that governments were biased to funding projects that were directly related to industry.

The Secretary pointed out that before looking towards the larger countries of the hemisphere for examples of improving science and technology in the Caribbean, consideration ought to be given to the examples that existed in the region. The United States Virgin Islands was given as an example in such areas as water resources management, aquaculture and energy conservation, as well as the policy-making processes that facilitated such progress.

As a follow-up exercise, the meeting suggested that an assessment of the science and technology infrastructure in the Caribbean be undertaken and that a Canadian International Development Agency (CIDA) consultant, who would be undertaking some work in Trinidad and Tobago, be made available to the Caribbean region. This would also serve to engage decision makers in dialogue on how science and technology affected other sectors of society.

A virtual regional science and technology council should be established by linking focal points via the Internet, and as a means of improving their capacity to respond to and forecast international changes of significance to the region.

Agenda item 5: Regional/international initiatives

Drawing attention to the information paper entitled "Regional and International Initiatives relating to Science and Technology", the Secretary indicated that the present agenda item was intended to alert member countries to opportunities arising in a number of regional and international initiatives. Benefits from these initiatives could be maximized by coherent approaches by member countries.

Summit of the Americas

The Summit of the Americas had placed substantial emphasis on the role of science and technology in the development process. In light of the fact that the Government of Jamaica had a major role in the process leading up to the Cartagena Declaration and Action Plan on Science and Technology, representatives were invited to ensure that information on follow-up would be circulated to member countries and to the CCST secretariat. The key role of the OAS in the implementation of the science and technology aspects of the Summit processes was noted.

World Solar Summit

Regional preparations for the World Solar Summit had been facilitated by the CCST's organization of meetings which had identified priority projects. These meetings had also resulted in changing attitudes of utilities to the use of alternative energy sources, and demand-side management.

The representative of Trinidad and Tobago at the World Solar Summit, held in Zimbabwe in September 1996, had indicated that the proposed Caribbean projects had been referred to the Latin American Energy Organization (OLADE). The Secretary noted that this constituted an ideal opportunity to operationalize the recently concluded Memorandum of Understanding between OLADE and the CCST, in which the CCST was recognized as the agency for implementation of OLADE energy projects in the Caribbean.

Water resources

Noting that the many meetings in the area of water resources in the past had been topic-specific, participants called for integrated approaches to water resource management. The aim of the proposed CCST activity, therefore, was to bring all stakeholders together to explore the issues related to implementation of integrated approaches. Indications of interest had been received from the UNDP, the World Bank and the Commonwealth Secretariat.

Inter-American Institute for Global Change Research

The Inter-American Institute for Global Change Research presented major opportunities in the form of funding support to member countries for the preparation of project and programme proposals in areas related to global change. While membership of the countries separately could impose a heavy financial burden, a collective approach to membership could be explored. The representative of Jamaica noted that her country had declined membership because of concern with the financial burden and in the interest of rationalizing membership in such organizations, but would endorse a collective approach.

Agenda item 6: Strengthening of collaboration between institutions and agencies in the promotion of science and technology in the Caribbean

Commenting on the role of the OAS in these and other initiatives, the representative of the OAS noted the concurrence of the CCST work programme with several areas of the OAS work programme in science and technology, which had been designed with the assistance of a Caribbean consultant present at the meeting.

OAS programmes and activities in science and technology included the CETACAP and the Common Market of Scientific and Technological Knowledge (MERCOCYT) programmes for strengthening technical capabilities and projects in the region, projects for the consolidation of the Inter-American Meteorological System and accreditation of quality control facilities and laboratories, and a programme for improving the environmental protection performance of industry. The long-term goal was regional capacity building through institutional strengthening and human resource development.

Other areas of interest included the productive use of environmentally friendly technologies, technology transfer and technological cooperation, with the aim of creating a south-south system of cooperation in the use of technology.

Activities which the OAS would be willing to support in the future included training in the use of diagnostic tools for Small and Medium-Sized Enterprises (SMEs), agro-processing (ideally linked to the tourism industry), and the use of biotechnology for increasing food production and utilization of the region's biodiversity.

Special mention was made of the OAS REDUCYT programme, which assisted countries to obtain or enhance connections to the Internet via telecommunications infrastructure, and the SYMBIOSIS project which helped establish the biotechnology network in Latin America.

A key role in the coordination and monitoring of activities in science and technology was identified for the CCST by the representative of IICA. For the information of the meeting, he noted the OAS origins of IICA, and the similar emphases of the programmes. A brief on the role of IICA in promoting appropriate technology and technology transfer had been circulated for the information of the meeting. However, he stated that the principal objectives and modalities of operation could be summed up by inter-institutional cooperation, multidisciplinary approaches and the establishment of strategic alliances. Strategic priority areas of IICA's work for the 1994-1998 period were socioeconomic policy, trade and investment, science and technology, natural resources and agricultural production, agricultural health and sustainable rural development.

Making some general comments on possible directions for the Caribbean, the representative of the UNDP Global Technology Group advocated a higher profile of the Caribbean in international systems, including the United Nations. This profile would necessarily be reflected in the levels of financial allocations to Caribbean projects and programmes. In addition, emphasis on remedial activities should be replaced by emphasis on productive activities which reflected the unique human resource capacities, local situation and cultures of the Caribbean, and which ultimately empowered people. The Internet and other telecommunications technologies were identified as serving vital purposes for small island States, and required access to the best, state of the art technologies. Two factors, he felt, were key to successful development - a strong will to address problems, and the institutional capacity to help these efforts.

The representative of UNESCO highlighted several past activities including a document on information needs of SMEs, which could be widely distributed through the CCST; the Caribbean Sea Project, which focused on environmental education through the Associated Schools Project; a Coastal Zone Management Project; and support to a University of the West Indies research group which had resulted in successful application of biotechnology to agricultural problems. The experiences of the latter activity would be documented to provide models for the application of biotechnology in

developing countries and could, therefore, be utilized by all Caribbean countries. In the area of disaster preparedness, UNESCO had commissioned a study by the Caribbean Emergency and Disaster Relief Agency (CDERA) to deal with enhancing systems for broadcasting of hurricane advisories in schools.

Recognition was given to Cuba's protest on the long-standing issue of their inability to receive funding from United States-based donors, or participate in any initiatives under the Summit of the Americas. While recognizing the need to benefit from all possible funding support, based on the United States intentional exclusion of Cuba from the Summit of the Americas, the representative of Cuba stated that Cuba could not subscribe to references to the Summit of the Americas, and suggested that other sources of funding be pursued which would allow for the sharing of Cuban science and technology expertise.

In addition, he proposed the inclusion in the CCST work programme of three projects approved by the Association of Caribbean States (ACS) in Havana. The project documents would be sent to the CCST secretariat for circulation.

The representative of Trinidad and Tobago suggested that there was possible need to extend the traditional length of the plenary to facilitate discussions along the present lines. MERCOCYT, she said, presented several modalities for collaboration, and that member States should indicate their intention to participate in the various committees of MERCOCYT.

Current efforts by the IDB to prepare a new strategy document for science and technology funding which would address problems of the smaller countries in accessing funding for science and technology were brought to the attention of the meeting.

Written comments were requested from member countries on possible regional and national approaches to the initiatives outlined in the document and arising from the discussions. These would be considered at the next meeting of the Executive Committee.

Agenda item 7: Work programme 1997

The Secretary presented the information paper entitled "Proposed CCST activities for 1997" noting that it contained an outline of proposed activities for 1997, as well as an indication of activities relating to science and technology on the ECLAC work programme for 1998. Since a number of the projects were carried forward from the previous year, the discussion centred on the following projects and activities:

Ministerial meeting to review the SIDS Programme of Action

Informing the meeting about the SIDS ministerial meeting to be held in early 1997, which would examine progress in implementing the SIDS Programme of Action, the Director of the ECLAC

Subregional Headquarters for the Caribbean indicated that the CCST secretariat would be involved, and that this should be reflected in the list of proposed activities. He also suggested that a follow-up study to the recently concluded study of science and technology - promoting organizations, leading to policy guidelines, would be supported by ECLAC.

Virtual Teachers Centre Project and use of the Internet as a teaching tool

The representative of Saint Lucia expressed his country's support for the Virtual Teachers Centre Project, and suggested that as an extension, there was need to teach teacher trainers how to develop teaching material to be placed on the Internet. The UNDP was thanked for its role in facilitating the project's activities. In response, the representatives of the UNDP and UNESCO suggested that a concrete proposal increasing the outreach of the project would enable both organizations to provide funding for extension of the project's activities. It was also suggested that the Centre could be linked with SIDSNET initiatives, as it was oriented towards development of science and technology on small islands. The REDUCYT project of the OAS and the UNESCO project for access to telematics were identified as other possible funding mechanisms which could allow for the purchase of equipment to enable access to the INTERNET.

The representative of Saint Vincent and the Grenadines informed the meeting of an initiative of the Ministry of Education which had enabled the provision of free Internet access to all schools on the island.

Popularization of science and technology

The representative of Saint Vincent and the Grenadines informed the meeting of efforts in his country to implement several activities relating to popularization of science and technology which required funding. Making special mention of the project proposal prepared by NIHERST which had not yet been funded, member countries were reminded of the need to support regional project proposals in the appropriate forums, to ensure that such funding could be made available at the national level. A plea was made to donor agencies present for support to the regional project. The possibility of accessing funding up to the level of US\$25,000 per biennium by each country was identified by the UNESCO Subregional Representative. This required submission of a proposal by the national UNESCO Commissions.

The active role of the network for science popularization in the Latin America, REDPOP, was highlighted and UNESCO, which had taken the lead in supporting it, was urged to consider a similar initiative in the Caribbean.

Meeting on construction materials

Participants were informed of ongoing work in Guyana by the CARICOM Secretariat with timber, ceramic materials and other construction material. It was suggested that the meeting could be oriented to the use of indigenous materials and for increasing efficiency of resource use. CARICOM was invited to make any information available to the secretariat.

Energy

The representative of Cuba suggested that Cuba be identified as a centre for research and technology transfer for the Caribbean, as regards the use of alternative energy sources.

WAITTRO Best Practices and the use of diagnostic tools for SMEs

The representative of the Institute for Managing Development and the representative of Trinidad and Tobago reminded the meeting of the WAITTRO Best Practices, and the tools for diagnosing and analyzing the competitiveness of SMEs. Both represented ideal opportunities for assisting the development of competitive SMEs.

Programme coordinating work of foreign graduate students

The representative of the Institute for Managing Development informed the meeting of an initiative which, through various contacts including diplomatic missions, facilitated foreign graduate-level students work in specific areas relating to Caribbean development, and which could be made available to member countries at their request.

Meeting of ministries on integrated planning for sustainable development and science and technology

The representative of Trinidad and Tobago recommended that the meeting should not be subsumed under the meeting planned by ECLAC to review the progress in the implementation of the Programme of Action for Small Island Developing States, and should be held as soon as possible in 1997.

Indicators of science and technology

Referring to the publication of science and technology indicators by NIHERST, the representative of Trinidad and Tobago urged member countries to become involved in the production and utilization of their own indicators. These efforts could benefit from the activities under the CYTED Network, an Inter-American network concerned with the use and production of indicators. The meeting noted that indicators of impacts of science and technology activities and policies were specially important to assist policy development and science and technology application and planning.

Agenda item 8: Consideration of structures and financial arrangements for implementing the work programme of the CCST

The Secretary presented the information paper entitled "Structure and Functioning of the Caribbean Council for Science and Technology" outlining past efforts of the secretariat and member countries to put CCST on its originally intended, independent footing, and describing some aspects of the current operating environment which constrained the extent to which the CCST could achieve

its objectives. He reiterated that autonomy was both necessary and possible, citing several institutional examples throughout the United Nations system and that the issue was long-standing and required speedy, but careful, resolution.

The Director of the ECLAC Subregional Headquarters for the Caribbean outlined his concerns with the accuracy of the document and its failure to give due credit to the substantial support provided by ECLAC to CCST. In addition, he stated that what were perceived as operating constraints represented compliance with United Nations regulations and with resolution 42(XV) of the CDCC requesting monitoring of the CCST's work. Emphasizing the importance of the work of the CCST to the office, he gave examples of support extended to the secretariat. He informed the meeting that the secretariat could only be relocated to established duty stations of the United Nations.

The representative of Saint Lucia requested that a full and complete financial report on CCST be circulated to include support provided by ECLAC.

The Chair urged participants to focus on the role of the CCST in the development of the Caribbean, and the most effective arrangements for facilitating its role. This would necessarily include removal of all operating constraints. Since the expressed will of the governments was critical to the success of these efforts, focal points were urged to demonstrate the necessary levels of commitment and coordination at the national and regional levels. In addition the representative of the United States Virgin Islands emphasized the need for balanced information for good decision-making, and careful analysis to determine whether any solutions proposed could solve the current problems.

The representative of Cuba stated that his country could not support any proposal which did not include the financial support of the United Nations, and proposed the possibility of removing or reducing some of the operating constraints of the secretariat through discussions with ECLAC.

The meeting agreed that issues raised by all parties would be discussed at a meeting of the Secretary, the Director of the ECLAC Subregional Headquarters for the Caribbean and the Chairman, and the results of this discussion circulated to member countries.

Agenda item 9: Any other matters

Coordination of science and technology activity in the Caribbean

Member countries expressed concern at the large number of organizations and programmes dealing with science and technology in the region. The expressed support of the Prime Minister of Grenada for the CCST and for the use of science and technology as development tools were seen as ideal opportunities to obtain the necessary political support for an enhanced role for the CCST in coordinating these activities. An agreed framework of institutional relationships, and therefore approaches to programmes and initiatives, recognized at the highest political levels, was proposed as one way of reducing duplication of effort, and maximizing available benefits.

In the interim, it was suggested that a CCST-CARICOM agreement would foster a closer working relationship, leading to greater levels of coordination. In addition it was suggested that consultation with the secretariat by CARICOM, prior to entering into new institutional arrangements regarding science and technology could be useful.

A document reflecting these concerns and proposing a framework of institutional relationships along the lines suggested would be prepared by the CCST secretariat for circulation and final communication to the Prime Minister of Grenada for support at the CARICOM ministerial level.

Science and technology policy

Participants identified various weaknesses, omissions and opportunities for strengthening of the existing regional science and technology policy, including aspects relating to ocean science, the environment, institutional arrangements, approaches to the productive sector, and need to combine responsibility in ministries for both tertiary education and science and technology. It was agreed that there was need to revisit the policy. Member countries were requested to submit proposals and suggestions to the secretariat by the end of January, to inform the preparation of a draft of a revised science and technology policy for the Caribbean. The Secretary suggested that particular attention should be paid to the strategies for implementation of the policy.

Relationship between CCOSNET and CCST

While member countries did not support a suggestion that the secretariat indicate its interest in acting as coordinator for CCOSNET, closer working links were seen as beneficial to both organizations.

Agenda item 10: Closure of the meeting

In closing the meeting, the focal point for Grenada, Dr. De Vere Pitt, thanked those present for their participation and expressed his renewed hope that future action was imminent and decisive, based on the discussions at the meeting.

The Secretary thanked Dr. Pitt and the Government of Grenada for their assistance in hosting the meeting, and in particular, for ensuring a high level of local participation. He also expressed his gratitude to representatives of the UNDP and UNESCO, and although not present, the Technical Cooperation among Developing Countries (TCDC) Unit of the UNDP, which had been instrumental in CCST initiatives, and with which the CCST envisaged a continued strong working relationship in the future. On the basis of the presentation of the OAS representative, he anticipated similar institutional linkages with the OAS. He thanked all member countries for their support at the national level.

The Director of the ECLAC Subregional Headquarters for the Caribbean expressed his wishes for future success of the CCST, and assured the meeting of the continued support of ECLAC.

The representative of UNESCO stated his intention of continued support to the CCST and congratulated the secretariat on the work undertaken.

The representative of Trinidad and Tobago thanked the Government of Grenada and the CCST for the work undertaken in organizing and hosting the meeting.

The representative of the IMD thanked the seceretariat for accommodating the fifth meeting of CCOSNET during the plenary session of the CCST and, as the only representative of the private sector present, urged the secretariat to continue this at future sessions.

The representative of the UNDP commended the joint consideration of the draft strategy for the management of the Caribbean Sea at the CCOSNET meeting, and urged continued application of this approach to the consideration of other regional developments

The representative of the OAS commended the work of the secretariat and stated that the discussions at the meeting would positively affect OAS institutional collaboration and activities in the Caribbean.

In closing the meeting, the Chairman of the CCST expressed his deep gratitude to the people of Grenada, and especially the focal point, for assisting the CCST to move its concerns to the highest political levels. He thanked member countries and organizations for a very productive meeting, and hoped for a solution to logistical probelms of the CCST's functioning in the near future. Thanking the secretariat for its work in moving the CCST in a positive direction, he urged member countries to assist the process and initiate some of the steps necessary to solve current problems.

Annex

LIST OF PARTICIPANTS

Countries

BARBADOS Dr Eslie Alleyne

Director

National Council for Science and Technology

Reef Road, Fontabelle

St. Michael

Tel (246) 427-5270/1820; Fax 431-0056

CUBA Sr José Ramiro Más Camacho

Director

Coordination Programmes Division Agencia de Ciencia y Tecnología

Calle 20 esq., 18 Playa Ciudad Habana

Tel (537) 22-7009/7095; Fax 33-9460/9664

GRENADA Dr James S. De Vere Pitt

Director

National Science and Technology Council (NSTC)

St. George's

Tel (809) 440-3118; Fax 440-9292

Peter A. Thomas

Administrative Assistant Director

Mr Carlton Frederick

(Chairman, National Science and Technology Council)

Ministry of Finance Physical Planning Unit Carenage, St. George's

Tel (809) 440-2471; Fax 440-0775

Dr Guido Marcel

Chief Analytical Chemist

Ministry of Agriculture, Forestry, Lands and Fisheries

Produce Chemist Laboratory

Tanteen, St. George's

Tel (809) 440-3272/0105; Fax 440-4191

Mr Martin Baptiste
Acting Senior Education Officer
Ministry of Education
Policy and Planning Division
Young Street, St. George's
Tel (809) 440-2737-8/3162; Fax 440-6650

Ms Elizabeth Greenidge Science Education Officer

Mr Selby DaBreo Chief Environmental Health Officer Ministry of Health Carenage, St. George's Tel (809) 440-2269/2846; Fax 440-4127

Ms Pat Phillips
Assistant Secretary
Office of the Prime Minister
Carenage, St. George's

GUYANA

Mr Navindranauth Chandarpal
Advisor to the President on Science, Technology, Energy, Natural
Resources and the Environment
Office of the President
Vlissengen Road
Georgetown
Tel 01 (5922) 66453; Fax 73849

JAMAICA

Dr Dorothy Byfield Scientific Research Council P.O. Box 350 Kingston 6 Tel (809) 927-1912; Fax 927-1990

Dr Gladstone Taylor c/o Mr William Taylor 3 Graham Heights Kingston 8 Tel (809) 927-1771/4; Fax 927-1990

Ms Vilma McNish Ministry of Foreign Affairs and Foreign Trade 21 Dominica Drive, Kingston 5 Tel (809) 926-4220/9; Fax 929-6733 SAINT LUCIA

Mr Bishnunarine Tulsie

Environment, Science and Technology Officer

Ministry of Planning, Development and Environment,

P.O. Box 709, Castries

Tel (758) 451-8746; Fax 452-2506 E-mail: est mpde@candw.lc

SAINT VINCENT AND THE GRENADINES

Mr Alston Stoddard

Coordinator, Science and Technology

Ministry of Trade, Industry and Consumer Affairs

Kingstown

Tel (809) 456-1223; Fax 457-2880

TRINIDAD AND TOBAGO

Mrs Maureen Manchouck

President NIHERST

20 Victoria Avenue Port Of Spain

Tel (809) 625-4169; Fax 625-4161 E-mail: president@niherst.gov.tt

UNITED STATES VIRGIN ISLANDS

Dr Henry Smith, Director

Water Resources Research Institute University of the Virgin Islands

#2 John Brewers Bay St. Thomas 00802-9990

Tel (809) 693-1064; Fax 693-1074

E-mail: hsmith@uvi.edu

Organizations

CARIBBEAN COMMUNITY (CARICOM) SECRETARIAT

Mr Ivor Carryl

Programme Manager

CARICOM Single Market and Economy

Bank of Guyana Building, Avenue of the Republic P.O. Box 10827, Georgetown

GUYANA

Tel 01 (5922) 69281/9;

Fax 01 (5922) 67816/57341/58039

CARIBBEAN ENVIRONMENTAL

HEALTH INSTITUTE (CEHI)

Ms Francine Clouden Sanitary Engineer P.O. Box 1111, Castries SAINT LUCIA

Tel (758) 452-2501; Fax 453-2721

E-mail: cehi@candw.lc

CARICOM Fisheries Resource Assessment and Management Programme (CFRAMP)

Mr Milton Haughton Scientific Director

P.O. Box 642, Princess Margaret Drive

Belize City BELIZE

Tel (01501) 2-34.443; Fax 2-34.446

E-mail: HAUGHTON@CFRAMP.GOV.BZ

INSTITUTE FOR MANAGING DEVELOPMENT (IMD)

Mr Hollis Charles
Chief Executive Officer

19 Stanmore Avenue, Port Of Spain TRINIDAD AND TOBAGO Tel (809) 623-2280; Fax 625-5201

E-mail: imd@wow.net

INSTITUTE OF MARINE AFFAIRS (IMA)

Mr Alan Duncan

Chief Information Officer/Coordinator CCOSNET

Carenage Post Office, P.O. Box 3160

Carenage

TRINIDAD AND TOBAGO

Tel (809) 634-4291/4; Fax 634-4433

E-mail: aduncan@ima.gov.tt

INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE (IICA)

Mr Cosmos Joseph

Coordinator-Grenada Office Campbell's Building, The Villa

St. George's GRENADA

Tel (809) 444-5547; Fax 440-4186

ORGANIZATION OF AMERICAN

STATES (OAS)

Dr Hector Herrera 1889 F Street, N.W. Washington, D.C. 20006

UNITED STATES OF AMERICA

Tel (202) 458-3384

E-mail: Herrera_Hector@OAS.org

UNITED NATIONS DEVELOPMENT

PROGRAMME (UNDP)

Dr Joseph Ben-Dak Chief Principal Adviser Technology Group 1 United Nations Plaza New York, NY 10017

UNITED STATES OF AMERICA *Tel (212) 906-5027/8; Fax 906-6350*

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)

Dr Winthrop W. Wiltshire

UNESCO Representative and Science and Technology Adviser

for the Caribbean 8 Elizabeth Street Port of Spain

TRINIDAD AND TOBAGO Tel (809) 622-0536; Fax: 628-4827

E-mail: winthrop@wow.net

Observers

GRENTEL

Mr Brian Steele

Information Services manager P. O. Box 119, St. George's

GRENADA

Tel (809) 440-1000; Fax 440-0025 E-mail: BRIAN@CARIBSURF.COM

GRENADA CO-OPERATIVE NUTMEG

ASSOCIATION

Mr Martin J. Williams Manager/Engineer Nutmeg Oil Distillery Marli, St. Patrick's

GRENADA

Tel (809) 440-2117/2217/2714; Fax 440-6602

ECLAC

Mr Daniel Blanchard
Director
ECLAC Subregional Headquarters for the Caribbean
P.O. Box 1113, Port-of-Spain
TRINIDAD AND TOBAGO
Tel (809) 623-5428/1969;
Fax 623-8485

Mr Donatus St. Aimée
Economic Affairs Officer (Science and Technology)
Secretary - Caribbean Council for Science and Technology (CCST)
E-mail: ccst@eclaps.undp.org

Ms Nohoalani H. Rankine Technical Cooperation Assistant - CCST

Ms Ramona Harbajan Research Assistant

Mr Paul J. Peters Secretary •

.

.

•

•