

CDCC/WP/78/2

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SECTION 1: A PROJECT FOR THE ESTABLISHMENT OF A PERSONNEL TRAINING CENTRE FOR THE DEVELOPMENT OF COASTAL

RESOURCES

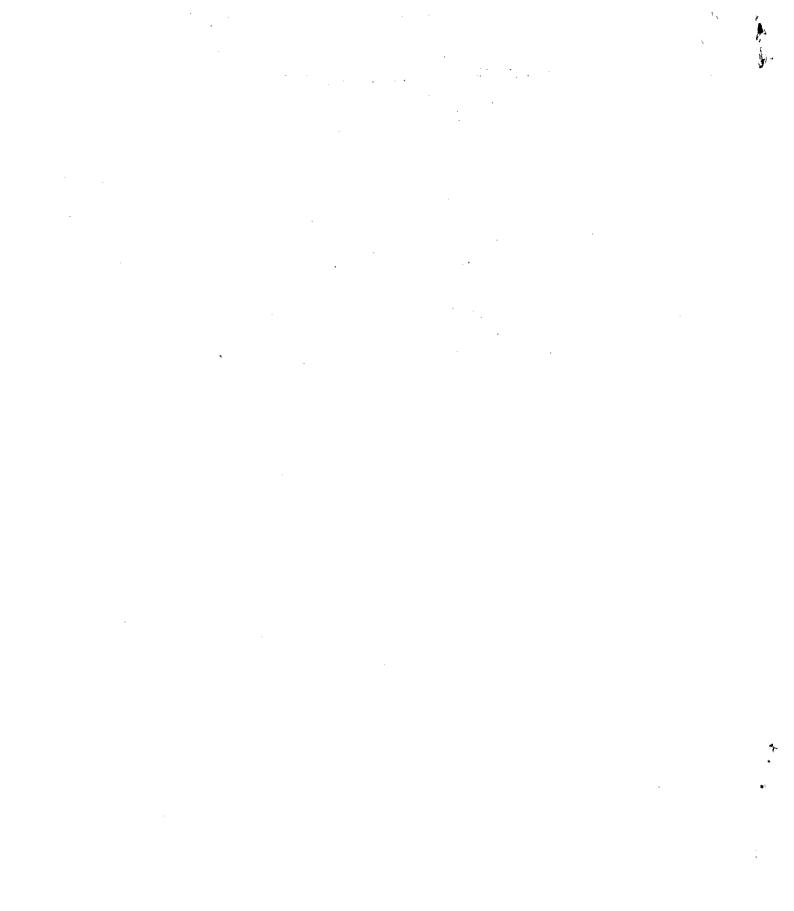
Submitted by the Dominican Republic Delegation to the Second Session of the CDCC, Santo Domingo, 16 - 22 March, 1977

SECTION 2: NOTE BY CDCC SECRETARIAT ON THE PROPOSAL



UNITED NATIONS

ECONOMIC COMMISSION FOR LATIN AMERICA Office for the Caribbean



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## BACKGROUND TO THE PROJECT

The development of marine resources is currently an important objective of the economic planning of many countries. Although in this respect the importance of the method of deep-sea fishing is unquestioned, there is increasing interest in the development of coastal resources. This is explained by the fact that the natural breeding grounds of shrimps, lobsters, etc. are the lakes, estuaries, mangrove swamps and reefs of the coastal cross where adult fish species of commercial value also abound. Furthermore, there are extensive areas of marine pasture on the coasts where tortoises, mammals and many edible species arrive in search of food and this makes special protection of these areas necessary. Imphasis needs to be laid on the importance of the coastal lagoons and swamps for mari-culture, a practice which has so far been developed only to a limited extent in the Caribbean area.

Some of the coastal areas attract tourism because of the characteristics of their flore and faure. A good example of this are the underwater coral gardens which can be regarded as an international heritage which need to be protected by establishment as parks, sanctuaries or reserves.

The pollution to which the coastal areas are exposed as a result of the action of a wide variety of products and wastes abould be considered as the common concern of all our countries. These conteminants, which not only affect the mearby coastlines, endangering the agreementy ecological balance, but are also transported by currents and, because of the circulation of water masses, cause damage in very distant areas within and outside the region.

In order to convert fisheries development into an important and permanent course of support to general economic development, a very

carefully engineered balance is required between the development of the resources and their conservation, that is to say their rational use. Thus in order to eliminate the risks of destroying or exhausting them it will be necessary to adopt a conservationist policy applicable to the entire region.

As will be appreciated, the development of coastal resources has very varied aspects, so that the complexity of the tasks to be carried out for the efficient administration and development of these resources requires well trained personnel. We recognise that there are institutions in the region which carry out training programmes at the local and international level; however, we believe that it would be highly beneficial to the countries of the area to integrate criteria, methodology, teaching resources and human and technical resources by establishing a Regional Centre of Research and Training of Management Personnel for Coastal Matters for which the Dominican Republic offers to be the headquarters.

It would evidently be advantageous, in technical and economic terms, to develop multinational programmes whose results could be used to devise development models of marine resources. This concept is particularly valid in our area, in which the countries have very long coastlines and the Caribbean Sea is a biologically common area.

The Dominican Republic combines ecological and geographic conditions with facilities of an administrative nature suitable for the establishment and operation of a Centre such as that proposed. Some of these characteristics are as follows:

- 1. An extensive coastline with very varied environments, such as barrier reefs, mangroves, swamps and coastal lagoons.
- 2. Extensive virgin areas whose flora and fauna is of high scientific value and great tourist interest.
- 3. Lago Enriquillo, some 30 kilometres long and 12 kilometres wide, with hypersaline water, indigenous birdlife, and reptiles such as crocodiles and unusual kinds of iguanas.
- 4. Islands close to the mainland with marine environments of scientific and economic interest.

5. Forests and areas of karstic formation such as Los Haitises which are suitable for studies on the conservation and storage of water.

From the geographical point of view the Dominican Republic is easily accessible to all the countries of the region. The country has a number of institutions at the scientific-administrative level which could provide support to the Centre and thus facilitate the implementation of the teaching and research programmes.

The institutions concerned are the following:

CENTRE FOR RESEARCH ON MARINE BIOLOGY (CIBIMA) - AUTONOMOUS

UNIVERSITY OF SANTO DOMINGO: A research body attached to the Faculty
of Science. Its main purposes are to develop the marine sciences and
evaluate resources for the country's fisheries development. It has
laboratorical for Fibh Biology, Ecology and Limnology, Marine Chemistry,
Marine Botany and Microbiology. Its scientific staff includes eight (8)
full-time research workers who do research and teaching work. CIBIMA
participates in international programmes for the evaluation of coastal
resources sponsored by the Organization of American States (OAS) and
it offers regular courses on marine sciences with national and foreign
professors.

NATIONAL PARKS ADMINISTRATION: An autonomous official body responsible for the development, administration, organization and upkeep of recreational, historical, natural and indigenous areas. Since its establishment the Parks Administration has been managing national parks which include marine areas. It plans to carry out a study in collaboration with the Centre for Research on Marine Biology (CIBIMA) to prospect the entire Deminican coast in order to select the most suitable areas for parks, reservations and marine sanctuaries.

NATIONAL ZOOLOGICAL GARDENS: The zoo is directed and administered by the National University of Pedro Henriquez Ureña (UNPHU). It operates as a centre for the promotion of education, research and culture in respect of the biological sciences in general and the preservation of national fauna in particular. It has an area of 1,250,000 square metres and is situated in the city of Santo Domingo. Its technical staff is

distributed among the departments of Education, Zoology, Veterinary Science, Nutrition and Research. These zoological gardens have been described as the most modern in Latin America.

DEPARTMENT OF HYDROGRAPHY: The function of this Department is to carry out a hydrographic study of the ports, coasts and navigable areas of the rivers for the purpose of producing navigation charts and any other type of information needed to assist shipping. It is also concerned with the correct positioning of buoys in ports and along coasts.

The Rafael Moscoso Botanical Garden and the National Museum of Natural History are also of great scientific importance.

# CENTRE FOR RESEARCH AND TRAINING OF PERSONNEL FOR THE DEVELOPMENT OF COASTAL RESOURCES

#### **OBJECTIVES**

## General

- 1. To carry out basic research on the development and management of coastal resources.
- 2. To train personnel for the fisheries development programmes of the countries of the region.

## Specific

- 1. To conserve and protect areas and animal and plant species which because of their scientific and economic value form part of the national heritage of each country.
- 2. To contribute to protecting the Caribbean Sca from the problems of pollution.
- 3. To advise the bodies responsible for tourism in each country on the planning of tourist activities in coastal areas.
- 4. To advise official bodies on projects for the development of fishing areas.

## FINANCING

Precise details on financing would be the subject of collective discussion and the application of the norms prevailing in the operation of ECLA.

## STRUCTURE

# Administrative Council

This would consist of a fixed number of technicians representing each member country who would be replaced every two (2) years on a rotating basis in order to guarantee the participation of all the countries in this body. It would meet once a year to study and approve the programmes of work submitted to it and to approve the annual budget.

The Director of the Centre would be elected from among the candidates proposed by the member countries on the basis of one candidate for each country.

The Administrative Council would recruit and appoint the technical teaching personnel without regard to their nationality, preferably from the region.

## Director

The Director would be responsible for the implementation of the programmes. His specific functions and responsibilities would be determined by the internal regulations. He would be an ex officion with administrative Council.

# Administrative Assistant

The Administrative Assistant would be responsible to the Director of the Centre for the administration of resources. His specific functions would be determined by the internal regulations.

# Department Chiefs

The Department Chiefs would be selected by the Administrative Council and would correspond in number to the number of departments.

## Auxiliary Personnel

The auxiliary personnel would perform the functions required by the organization of the Centre.

## DURATION OF THE PROJECT

The Centre should plan its development by stages. During the first four (4) years of work it would devote the first year to planning, establishment and organization. The following three (3) years would be devoted to research and personnel training as parallel activities. The characteristics of the next stage would be determined by the experience accumulated and the needs of the countries of the area.

Once it had fulfilled its initial objectives, the Centre could be converted into the Oceanographic Institute of the Caribbean, a body in which all our countries would be bound to show an interest.

#### OPERATIONAL MECHANISMS

The work required for the establishment of the Centre would be entrusted to a Committee which would be responsible for its structuring and organization for a period of one (1) year.

The candidates for training at the Centre would be proposed by the member countries in accordance with the prevailing international norms.

The training periods would be of short or medium duration depending on the objective sought.

The teaching activities would be carried out at the headquarters of the Centre, but the assistance of institutions of the member countries could be sought for specific aspects.

The research projects could involve various countried.

## RESEARCH AND TRAINING PROJECT

TITLE: Fisheries Resources in Coastal Lagoons and Mangrove Areas of the Caribbean.

## NATURE OF THE PROBLEM

The coastal lagoons and mangrove areas represent resources of multiple use and of great economic importance. This is particularly true of the Caribbean area where their area and fisheries potential in significant and their development leaves much to be desired.

#### ORDEC FIVES

This project aims to carry out a comparative study of coastal lagoons and mangrove areas of the Caribbean with a view to establishing a fisheries development model for this type of ecosystem. Emphasis would be laid on the possibilities of developing the cultivation of certain species.

## BENEFITS

The benefits of the project would be as follows:

l. It would augment the fisheries production of the region and raise the socio-economic level of the countries.

- 2. It would contribute to the evaluation of the biotic resources of the region.
- 3. It would contribute to the training of technical personnel through the direct participation of research workers, technicians and students in the solution of specific problems.

## METHODOLOGY

The research would include basic studies of the environment, including the physical-chemical factors which influence fisheries production (currents, salinity, nutrients, etc.); studies of sediments, and the prospecting of biotic resources, principally those of commercial interest; and studies oriented towards establishing bases for the cultivation of fish species.

## OPERATIONAL MECHANISMS

Each country would determine the area of study in accordance with its interests. The research would be carried out on a simultaneous basis.

Each country would appoint an overall co-ordinator, and there would be a meeting of co-ordinators to establish the programme of methodology. The Centre would co-ordinate the programme.

#### DURATION

The basic prospecting studies would last for two (2) years, followed by the stage of experimentation. The characteristics of the lagoons would determine the evolution of the project.

## SECTION 2

# NOTE BY CDCC SECRETARIAT

While there is certainly a need for skilled personnel in all . fields of coastal development, the training centre, as set out in the proposal, may not completely fill this need in the regional context. There are two basic reasons: First, there are already institutions in the Caribbean which, to different degrees, aim at the same objective. IOCARIBE has a wide responsibility for training of personnel, through the IOC sub-programme on Training, Education and Mutual Assistance (TEMA); both IOCARIBE and the Institute of Marine Affairs (Trinidad and Tobago) have research interests which overlap some of the themes in the proposal. Secondly, the proposed research and training project on fishery resources in lagoons and mangroves raises some questions. It seems doubtful that such a project could be implemented within what appears to be an essentially administrative structure as the one proposed for the personnel training centre. Also, a number of existing programmes within FAO (WECAFC), UNESCO and IOCARIBE are relevant to the substance of the proposed research project. Certainly, more investigation is needed to give a definite opinion, but on the face of it, there are these two types of difficulties with the current proposal.

The underlying concept of training resource specialists in coastal development is extremely worthwhile, and we would welcome any practical steps in this direction. Accordingly, should the Government of the Dominican Republic wish to effectively pursue such a project, it is suggested that a co-ordinated approach, using the expertise of various agencies, be applied. This could be achieved by calling a meeting of UNESCO/IOC, FAO and OETO, which are essentially the relevant agencies, under the auspices of ECLA.

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