

Report of the second session of the

**WESTERN CENTRAL ATLANTIC
FISHERY COMMISSION**

Panama, 22-26 May 1978



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

REPORT
of the
SECOND SESSION OF THE
WESTERN CENTRAL ATLANTIC FISHERY COMMISSION
Panama, Panama, 22-26 May 1978

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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OPENING OF THE SESSION

1. The Western Central Atlantic Fishery Commission (WECAFC) held its Second Session from 22 to 26 May 1978 at the Palacio Justo Arosemena in Panama. The session was attended by the representatives of 15 members of the Commission, by an observer from one other Member Nation of FAO, by representatives of the United Nations Development Programme, the IOC Association for the Caribbean and Adjacent Regions (IOCARIBE), the European Economic Community and by an observer from the Latin American Economic System. A list of delegates and observers is given in Appendix A of this report.

2. The representative of the European Economic Community said that as a result of the adoption of a common fishery policy by the EEC, the views of Community Member States, which were also members of WECAFC, as matters of fishery policy would be presented by the representative of the EEC.

3. After a statement by the Chairman, His Excellency the Minister of Commerce and Industry of Panama, Lic. Julio E. Sosa, formally opened the session in an address which is reproduced in Appendix B. The Assistant Director-General, Fisheries Department, Mr. H. Watzinger, representing the Director-General of FAO, replied to the Minister in an address which is reproduced in Appendix C.

ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION

4. The Commission adopted the agenda reproduced in Appendix D and decided to take the items in the order shown in the revised timetable (WECAFC/78/3, Rev.1). The documents before the Commission are listed in Appendix E. At the suggestion of the Chairman, the Commission appointed a Nominations Committee consisting of the representatives of Colombia, Cuba, Jamaica, Mexico, the United States of America and Venezuela to facilitate the election of officers to serve during the inter-sessional period and at the third session of the Commission and to propose up to four additional members of the Executive Committee for the Implementation of the FAO/UNDP Inter-regional Project for the Development of Fisheries in the Western Central Atlantic.

STATE OF STOCKS

(a) General

5. The Working Party on Stock Assessment of Shrimp and Lobster Resources and the Working Party on Assessment of Fish Resources, set up during the first session of the Commission, had held a joint meeting at Cartagena, Colombia from 18 to 23 November 1977. Matters involving all resources had been discussed at joint sessions, while each working party had met separately to discuss its own specific subjects. The Commission reviewed the report of the Joint Meeting (document WECAFC/78/6) and a short summary of its main conclusions (document WECAFC/78/5).

6. The Commission recognized the need for training and for the dissemination of scientific results in the WECAFC area. It therefore supported, with some amendments (as shown below), the following recommendations:

- (a) that FAO should provide regional training courses in fish stock assessment
- (b) that the Commission should arrange for the publication of a newsletter to keep scientists and managers of the member countries informed of national and regional developments in fisheries and resource research and of the progress made by the WECAF Project

- (c) that the Commission should encourage the publication of scientific papers of regional interest, assist scientists in the member countries in finding channels for the publication of these papers and assist in the distribution of such papers to scientists in member countries
- (d) that the Commission should arrange for the preparation of a new regional fisheries bibliography.

7. The Commission also supported a recommendation that an annual bulletin of regional fishing statistics should be published.

8. The Commission noted that implementation of these recommendations would require expenditure and requested the Project to assist in their implementation within its means and priorities.

9. The Commission noted that the recommendation of the Joint Meeting not listed above for the preparation of a manual on the assessment of stocks of short-lived species, was already being acted upon as part of the Regular Programme activities of FAO.

10. The Commission agreed with the observations of the Cartagena meeting on the need for standardization of the species names used by WECAFC and endorsed its recommendation that countries should for their international statistics adopt the scientific and common names that would appear in the FAO Species Identification Sheets for the region to be published in 1978.

11. The Commission discussed the need for follow-up of the several recommendations of the Cartagena meeting, and for arrangements for the preparation of national information as contributions to the forthcoming meetings of the Working Parties. It concluded that national scientific correspondents should be the contact point for the Secretariat on these matters, and endorsed the recommendation of the Joint Meeting that the member countries of the Commission should appoint national scientific correspondents for WECAFC to coordinate national research activities within regional programmes. It was suggested that these national correspondents could also be useful contacts for the scientific activities of the WECAF Project.

12. The representative of IOCARIBE drew attention to the activities of his organization in information exchange and bibliography. The Commission agreed that cooperation with IOCARIBE in these matters was desirable.

(b) Shrimp and lobster

13. The Commission reviewed the report of the Working Party on Stock Assessment of Shrimp and Lobster Resources, contained in document WECAFC/78/6. Attention was drawn to the considerable advances made in the understanding of the shrimp resources since previous meetings on the shrimp fisheries and resources in the region organized by FAO in 1972 and by CICAR in 1976. There appeared to be good general knowledge of the main shrimp species caught in the fisheries, but detailed understanding was still lacking. There was little knowledge of the distribution of stocks, of the relation between the shrimp in the nursery areas and offshore, and of growth and mortality rates, information essential for detailed stock assessments.

14. The Working Party had been able to carry out stock evaluations for nine out of 21 identified unit fisheries in the region, on the basis of available catch statistics. These nine fisheries were to be found throughout the region. The results indicate that in general the shrimp stocks are exploited at the level or approaching the level of full utilization. There is no evidence of decline in the total catches as a consequence of overexploitation. However, the results indicate that an increase in the level of exploitation of the stocks studied so far will not result in a significant increase in the total catch and may lead to a decrease in this catch, and will lead to a further decline in the catches per unit of effort. There would thus appear to be a possible need for regulation of the shrimp fisheries. Such regulations might include:

- (a) protection of the coastal nursery areas
- (b) regulations to increase the minimum size of the shrimp caught, in order to catch them at the sizes giving optimum weight of the catch
- (c) regulation of total fishing effort.

15. The available statistical and biological data were less than those required to give very specific advice. Better statistical reporting and special studies were required before further progress could be made. Cooperative studies were needed as was communication between scientists through means such as newsletters and occasional meetings. There was in particular a need for cooperative investigations on stocks which extended across national borders. Examples of such stocks were to be found near the U.S.A.-Mexico border, across the Colombia-Venezuela border and in the Guianas-Brazil area.

16. While the shrimp fisheries were mainly industrial, the lobster fisheries were less industrialized and used fairly traditional gear. The lobster stocks were in some areas heavily and in other areas only relatively lightly exploited. A characteristic of the lobster species was that the larvae had a long pelagic life and as a result could be carried away great distances from spawning areas by the currents. This raised the question whether the recruits in a given area were derived from the parent stocks in the same or in other areas. If the latter was the case, management of the lobster might be required for the Caribbean as a whole.

17. The Commission noted that there already were national regulations in quite a number of countries in the area governing the lobster fisheries. These were often quite similar in different countries but were not always based on scientific information. The lack of specific information on the lobster fisheries was rather greater than in the shrimp fisheries. Cooperative research was required.

18. In discussing these matters, the Commission supported the view that further meetings of the Working Party were required and that the scientific activity should continue on a regular basis. The Commission strongly supported the plans for a meeting of a special working group to analyse and discuss the shrimp resources and fisheries in the Guianas-Brazil area. It noted with appreciation that the WECAF Project was already making preparations for organizing this meeting, and that special attention would be paid at this meeting to developing a cooperative research programme in this area, including international shrimp tagging experiments.

19. The Commission accepted the report of the Working Party and endorsed its recommendations, drawing particular attention to the recommendations contained in section 4.6 of the report under the heading "Research needs". The Commission emphasized that in order to improve the information referred to in that section, the Member Governments would have to make a special effort to provide all relevant data available from their countries and to take measures to improve their data collection.

20. The attention of the Commission was drawn to the fact that, in addition to the shrimp resources discussed in the report, there might also exist in parts of the area substantial resources of deep-water shrimp which were at present not or only lightly exploited. These stocks, which could materially contribute to the total shrimp production needed to be explored as a basis for the possible development of a specialized fishery.

(c) Other stocks

21. The Working Party on Assessment of Fish Resources reported (document WECAF/78/6) that, with the exception of very few countries, statistics on fisheries other than shrimp fisheries were poor throughout the region. The Working Party had demonstrated how rough and inadequate most of the estimates of the resources in the area were. The estimate showed, however, that whereas most stocks in the region had biologically, but not necessarily economically, considerable potential for increased exploitation, others were already

heavily exploited. Thus, development should not be directed indiscriminately to all resources. The Working Party made a number of recommendations for improving resource information, including a recommendation for special fishing trials on specific species or species groups to confirm or contradict estimates of abundance and availability and to determine the catchability and marketability of these resources.

22. In considering this report, the Commission discussed the possibility of the use of the mid-water trawl for experimental fishing in the area. The problem with this gear appeared to be that the continental shelf area in the region did not, in general, have large masses of schooling fish. The pelagic trawls usually catch a mix of a large number of species, which makes their marketing as fresh fish difficult; in addition the catch is usually too small to be used economically for fish meal production. In some areas, however, such as the Campeche Bank, mid-water trawling was reported to be profitable for some countries though less so than in areas outside the WECAFC region. The same problem of a large species mix was encountered in the shrimp by-catch. The problem might require the development of selective fishing techniques for particular species or the provision of vessels which could handle mixed species economically.

23. In view of the lack of data for most resources it was suggested that the Commission should define priorities to direct the research effort to the most important species to determine their abundance and value and their present level of exploitation.

24. The Commission noted that a large data base of exploratory fishing data existed in the U.S.A. and that a manual was being prepared in that country for potential users from all countries in the region describing the structure and contents of the files, the kinds of tabulation that could be produced and the procedures for specifying a particular tabulation. Mr. Bullis reported that the work was progressing slowly, in view of the enormous data base, but that FAO was expected to provide assistance.

25. Some countries reported the availability of more data than had been submitted at Cartagena; they also reported on research work to be undertaken. It was agreed that this information should be submitted to the next meeting of the Working Party.

26. The Commission supported the recommendations and suggestions contained in sections 3.3-3.5 of the Working Parties' report, and put specific emphasis on the recommendation that the Working Party should meet again in 1979.

FISHERY STATISTICS

27. The Commission noted that the report of the Working Party on Fishery Statistics (WECAFC/78/4) dealt with three major items. First it considered the introduction into the Commission's area of existing Atlantic-wide fishery statistical standards and other related matters for the improvement and dissemination of statistics; it then discussed the boundaries of the major statistical fishing area 31 (Western Central Atlantic) and its subdivisions; it finally considered the extension of the WECAFC area to 135°W in the Pacific.

28. The Commission emphasized the urgent need for improvement of the fishery statistics submitted by the member countries and approved the various instructions and recommendations on statistical matters given in the report of the Working Party. A proposal was made to set up a small statistical bureau as part of the Commission's Secretariat. It was agreed that this proposal would be discussed under item 7 of the agenda, "Future arrangements for the Secretariat of WECAFC".

29. The Commission noted that southward extension of the major fishing area 31 was desirable because the present division cuts through the distribution of some important resources. It unanimously accepted the Working Party's recommendation that this area should be extended southward to 10° S to include the section of the present major FAO statistical area 41 north of that latitude. Thus, the new statistical area would coincide with the area covered by the WECAF Project. The Commission also agreed to recommend to the Director-General of FAO for transmission to the FAO Council an amendment to the Statutes so that the Commission's area of responsibility should cover the whole new area 31 and should accordingly extend south to 10° latitude South with the boundaries specified in paragraph 7 of the Working Party's report.

30. Thus, the section to be deleted from major fishing area 41 and added to major fishing area 31 and to the Commission's area of responsibility would be the sea area enclosed by a line along the parallel of 5° North latitude from the coast of South America east to 30° West longitude, then due south to the equator, then due east to 20° West longitude, then due south to 10° South latitude and then due west to the South American coast.

31. The Commission accepted, with some slight corrections, the proposals of the Working Party for the statistical subdivisions of area 31. The details appear as Appendix 5 to the Working Party's report.

32. The Commission discussed a proposal made by Cuba to extend the WECAFC area westward into the Pacific to 135° West longitude with the northern and southern limits of the area to be established later. The reasons for this proposal were not biological as was the proposal for southward extension of area 31, but rather to help resolve administrative and technical problems related to the better use of resources and to the fishery development and management problems of the countries with coasts on both the Atlantic and Pacific oceans. The reasons given by the Cuban delegation for their proposal appear in Appendix 7.

33. There was wide appreciation of the possible advantages of the proposal for the countries with coasts on both oceans. Many countries expressed the view that this was a complicated question that needed careful consideration. The advantages might well outweigh the disadvantages and additional cost to the Commission or to the Project would be likely to be less than the expenditure needed to establish and run a separate Project or Commission for the eastern Central Pacific, an area where there was no regional fishery body except for tuna.

34. A number of delegates expressed concern about the far-reaching implications of the proposal for the Commission and the Project, stating that the matter needed careful and detailed study as no notice of the proposal had reached member countries before the session. One delegation made a reservation that the extension might result in spreading scarce financial resources too thinly over too wide an area and might lead to the possible neglect of priority activities in the WECAFC area itself. The same delegation stated that the array of species and fishery problems in the Pacific were quite different, thereby complicating the regional cooperation needed to deal with them.

35. The representative of UNDP, felt that the plans of UNDP for future activities in association with FAO in the Eastern Pacific were relevant. The proposal would have a bearing on UNDP plans in the Pacific. After some discussion the Commission reached the conclusion that the proposal had many aspects which could not be studied thoroughly on such short notice. It decided that a serious study of the advantages, disadvantages and the financial and other implications of the proposal was required and requested the FAO Secretariat to undertake such a study, which could be based on replies by members to a questionnaire to be sent out to member countries of the Commission. The study should be available at least six months before the next regular meeting of the Commission.

WESTERN CENTRAL ATLANTIC FISHERY PROJECT (REPORT OF THE EXECUTIVE COMMITTEE)

36. The Commission considered document WECAFC/78/7 (report of the First Session of the Executive Committee for the Implementation of the WECAF Project). The Committee had examined the report of the Project's activities since its initiation on 1 January 1977 and, more specifically, since it had established its Headquarters in Panama on 1 September 1977. The Committee had also studied the reports of the First Sessions of the WECAFC Working Party on Stock Assessment on Shrimp and Lobster Resources and the WECAFC Working Party on Assessment of Fish Resources, the results of the IOCARIBE Inter-disciplinary Workshop and the report of the First Session of the WECAFC Working Party on Fishery Statistics. An examination had been made of documents reviewing the existing data on pelagic resources and the status of fishery statistics and fishery research capability in a number of countries in the WECAF Project area. The Executive Committee had also been informed about the sub-project for the development of artisanal fisheries.

37. The Committee had studied the Project's programme of work for 1978, taking account also of the various recommendations made in the reports and documents referred to above. The Committee had felt that the Project was perhaps attempting to do too much and should rather strive to concentrate its efforts on a smaller number of activities which would have a significant and fairly rapid impact on fisheries development in the region.

38. The Committee had considered that, in planning its future programme of work, the Project should give priority to the following areas:

- (a) development of small-scale fisheries
- (b) training
- (c) fishery statistics, stock assessment and resource surveys
- (d) better utilization of fishery products
- (e) fishery development planning.

39. The Executive Committee had approved and recommended the programme of work presented by the WECAF Project but had requested that it should be carried out in accordance with the main priorities that had been identified.

40. For it to perform its work satisfactorily, the Executive Committee had felt that it should meet more frequently than every two years, which was the present arrangement. It had considered that ways should be found for it to meet at least annually.

41. The Committee had also discussed a proposal to extend the Project, which was due to terminate at the end of 1979. There had been strong support for a continuation and the Committee had recommended that a request should be submitted for an extension to 1981, and that UNDP should consider also the possibility of further funding past that date.

42. The Commission felt that it would be helpful if some indication could be given about the possibilities of the Project being extended past its present termination date of 31 December 1979. It was pointed out by the representative of the UNDP, that as had already been explained to the Executive Committee, any extension would depend on the decisions of the UNDP Governing Council but in view of the interest shown in the Project by the member countries there was a good possibility of a continuation until the end of the present UNDP 5-years Programming Cycle in 1981. An extension past that date would certainly be assisted by the Commission making its interest known at that time.

43. The Commission expressed its keen interest in the small-scale fisheries sub-project, for which financing was being sought from CIDA, Canada. It was considered that this was a matter of high priority, since it was likely to have a rapid and beneficial impact on a rather depressed segment of the fishing community. It was pointed out that certain countries in the area had already gained some experience in the development of artisanal fisheries and that there could be beneficial results from close collaboration between the WECAF Project and national programmes.

44. The meeting was informed that Canada was already supporting fisheries development, particularly in the South China Sea and in the CECAF area, and would be prepared to assist in the implementation of the sub-project, provided that it fitted in with Canadian programme ideas. With regard to fishery research activities, Canada would support national and international organizations, particularly where their work was likely to result in an improvement of the indigenous capabilities.

45. It was suggested that one point which perhaps did not clearly emerge from the report of the Executive Committee was the need to examine and improve the present methods of marketing fish from the small fishing communities. It was thought that, even with their traditional boats and gear, artisanal fishermen could often catch more fish if they knew it could be disposed of at a reasonable price. Though a marketing expert was included in the small-scale fisheries project, perhaps the WECAF Project could study the situation in more detail. What was required were new forms of processing, product development and improved marketing systems.

46. The Commission expressed interest in obtaining assistance through projects financed by the FAO Technical Cooperation Programme. It was explained that such projects had to fulfil certain basic conditions and were expected to yield quick results. The responsibility for submitting projects rested with member countries but the staff of the WECAF Project could certainly assist in their formulation.

47. The Commission drew attention to the extraordinary needs of the region as regards fisheries development. There was no shortage of tasks to be done, only a lack of the human and financial resources necessary to carry them out. The Executive Committee had realized that the Project could not do everything that had been recommended and, since a detailed evaluation could not be carried out in the time available, the Committee had agreed on certain priorities (as identified in paragraph 38) which would guide the Project staff in implementing its programmes of work. The importance of assisting countries most in need and of activities of regional rather than national significance was stressed.

48. The Commission made a strong appeal to countries both inside and outside the region and to international agencies to assist by financing those activities which would help to promote fisheries development. The meeting emphasized that without the necessary funds it would be impossible to achieve the development that was so vital to the well-being of the region.

49. The Commission approved the report of the Executive Committee, which is attached as Appendix F.

RELATIONS WITH OTHER BODIES IN THE AREA CONCERNED WITH FISHERIES

50. The Commission considered this matter on the basis of the information provided in document WECAF/78/10. Particular attention was drawn to relations with the Intergovernmental Oceanographic Commission (IOC) through its Association for the Caribbean and Adjacent Regions (IOCARIBE), with the Sistema Económico Latino-Americano (SELA) and with the Gulf and Caribbean Fisheries Institute (GCFI).

51. The representative of IOCARIBE, the membership of which included many WECAF member countries, gave a brief account of how his Association which had been established in 1976 had grown out of the work of the Cooperative Investigation of the Caribbean and Adjacent Regions (CICAR) the work of which had been completed just before that date. Attention was drawn to the recommendations of the inaugural session of IOCARIBE as these related to fisheries (Annexes 1 to 7 of document WECAF/78/10).

52. The Commission was informed of the results of the IOCARIBE Interdisciplinary Workshop, which had been organized in Martinique in November 1977 to draw up scientific research programmes in the area in support of fisheries projects. Two major research programmes were identified at the Workshop, one relating to the trap fishery of the Lesser Antilles and the other to the spiny lobster fishery in Central America.

53. The "Scientific Studies for Improvement of the Trap Fishery Management in the Lesser Antilles" included an extensive programme of hydrographic, ichthyoplankton and trap fisheries observations in the areas of St. Lucia and St. Kitts/Nevis to understand the basic mechanisms controlling the nearshore fish populations. The "Scientific Programme in Support of the Management of the Spiny Lobster Fisheries in Central America", which was intended to provide information on the stock structures of the lobster in the Caribbean, included, in addition to biochemical, larval and oceanographic studies, a coordinated programme of lobster tagging and fisheries information.

54. The Commission noted with appreciation that these investigations were being planned and that the WECAF Project was already considering cooperation in the execution of the fishery parts of these programmes. It requested its member countries involved to give all possible assistance to these programmes.

55. Attention was drawn to a recommendation of the Workshop for the protection and management of marine turtles in the area. It was noted that the hawksbill turtle, if rehabilitated, could be an important resource for the small-boat fisheries, but that the species was at present seriously depleted. It was hoped that WECAFC could help with this.

56. The Regional Fishery Officer referred to SELA and his assistance to its Permanent Secretariat in establishing the Action Committee on Marine and Freshwater Fishery Products.

57. The Secretary of the Action Committee informed the Commission that the overall objective of SELA was to promote the social and economic development of its member countries by strengthening regional cooperation. The Action Committee had been set up as a temporary mechanism to foster fisheries development. It had 13 member countries, six of them members of WECAFC.

58. The Action Committee's programme of work included general diagnosis of the problems of the fishery sector and information exchange and projects for a marine survey of sardine, jack and mackerel, tuna exploitation, shrimp by-catch utilization, low-cost product development, quality control, aquaculture and training. SELA could assist in setting up multinational ventures for fishing or marketing of fishery products. Funding for projects was being sought through organizations such as Asociación Latinoamericana de Instituciones Financieras de Desarrollo (ALIDE).

59. The Commission was also informed of the meeting of the Gulf and Caribbean Fisheries Institute which had been held at Cartagena in November 1977 just before the Joint Meeting of the WECAFC Working Parties on Stock Assessment of Shrimp and Lobsters and on Assessment of Fish. GCFI was a private body and the meeting had been funded partly by USAID and partly by the University of Miami and nearly all political entities in the Caribbean had been represented. The meeting had studied invited background papers on subjects such as fishery management and administration, education and training, research, demand factors and financial and technical assistance. The meeting had also studied the impact of extended economic zones of jurisdiction which raised particularly difficult problems in the Caribbean.

60. Some delegations expressed concern about the number of bodies in the area dealing with fisheries. Many had prepared their work programmes unilaterally and without consultation and were devoting time and resources to training, research, technical assistance and financing. While there appeared to be a clear distinction between the scientific work of IOCARIBE and the fisheries activities of the Commission, the distinction was far from clear for the work of other organizations such as SELA. It was felt that there was duplication if not triplication and many member countries of WECAFC were probably also members of other bodies to which they might even have to pay membership fees. It was therefore proposed that the Commission should promote the holding of a meeting in 1978 or as soon thereafter as possible with the representatives of other organizations in

the region which were involved in fishery development work. This should eliminate duplication for 1979 and a coordinated plan of activities should continue to be prepared in the future on a cooperative basis. The Secretariat of WECAFC should prepare an agenda and invite to the meeting all the bodies interested in fisheries in the Caribbean. Preliminary proposals should emanate from the Secretariat for a date and place for holding the meeting. Further meetings should be held at least once every two years, perhaps at the same time as the Commission's sessions.

61. The Secretariat said that there was no budgetary provision for a meeting of the type requested in 1978 but every effort would be made to meet the Commission's request.

62. Document WECAFC/78/10 also referred to a resolution on fishery training adopted at a meeting held in Havana in November 1977 on cooperation in fisheries of non-aligned and other developing countries. It was agreed that the training aspect of this matter would be studied under agenda item 8 "Fishery Development Opportunities".

FISHERY DEVELOPMENT OPPORTUNITIES

63. Discussion on this item took the form of an informal seminar divided into three separate subjects: (i) Resource level, (ii) State of fisheries and, (iii) Development opportunities, for each of which a discussion leader was chosen who introduced the subject and acted as moderator. The main documents considered were WECAFC/78/8, which dealt with past and projected fish supply and demand and also discussed development opportunities in the WECAFC sub-areas and in specific fisheries, and WECAFC/78/13, which summarized fishery training needs in the region.

64. It was noted that there was a growing gap between production and demand for fish in the region and an analysis of the available data showed that there were resources available which were capable of further exploitation. It was felt that the small-scale fishery sector offered good possibilities of increasing production, provided that an appropriate transfer of technology could be achieved. This would involve the development of suitable training programmes and a number of institutions existed in the area where these might be carried out. Various offers were made by countries both inside and outside the region to receive a limited number of persons from the region for specialized training in various disciplines.

65. The Commission noted with appreciation these offers of assistance. As regards the provision of scholarships, the Secretariat was requested to consult all Member States of WECAFC which offered such scholarships to obtain further details. This information should then be circulated to the member countries who could subsequently make arrangements with the donor countries on a bilateral basis.

66. The Commission considered a proposal from the Cuban delegation for the establishment of a regional training centre, making use of the facilities already existing in that country. Such a centre could provide courses for fishermen and extension workers, combining practical work with theoretical training. Instruction could be given in both English and Spanish. The Commission unanimously accepted the offer made by Cuba and recommended that a detailed study of the facilities offered should be carried out by the WECAF Project with the assistance of the secretariat and its findings presented to the Executive Committee.

67. The Commission also noted with interest the creation in Cuba of a centre for the development of fishery products and the offer by the Cuban delegation to assist through this centre, member countries to make better use of their catches. The WECAF Project, together with the secretariat, was requested to obtain further information to see whether it would be possible to submit to the Executive Committee proposals for cooperation between the centre and the member countries.

68. A summary of the discussions, indicating the names of the discussion leaders is given in Appendix G. The purpose of the summary is to give a rapporteur's view of the discussion rather than an agreed statement by the Commission. It was therefore not considered formally for adoption.

NATIONAL AND REGIONAL EFFECTS OF AN EXTENDED ZONE OF JURISDICTION OVER FISHERIES

69. The Commission considered this item on the basis of document WECAFC/78/11. It expressed its appreciation of the factual information provided on the progress of negotiations at the United Nations Conference on the Law of the Sea and on the emerging new regime for fisheries. It agreed that consideration of these matters should be restricted to those technical and institutional aspects for which FAO, and therefore the Commission itself, had responsibility, thus excluding problems of jurisdiction or questions related to national sovereignty.

70. When reviewing the new regime of the sea and its implications for the conservation and development of fisheries in the Western Central Atlantic, the Commission decided to center its discussions on three points requiring follow-up action.

(i) Seminar on the Changing Law of the Sea and the Fisheries of the Western Central Atlantic

71. The Commission was informed that FAO had organized recently, for the member countries of two other regional fishery bodies in the South China Sea and the Eastern Central Atlantic, seminars on the legal and institutional aspects of fishery management and development in the context of the changing regime of the sea. These seminars, in which fishery administrators and lawyers were invited to participate, had dealt primarily with national legislation and institutions, including fishery development corporations, joint ventures or similar arrangements, and bilateral agreements. All delegations expressed a strong interest in the organization of a similar seminar for the WECAFC area and requested FAO to try and seek the necessary funds.

72. The observer from Canada informed the Commission that his country had acquired considerable experience in developing fisheries in its extended zone of jurisdiction and in negotiating bilateral agreements. This experience could be shared with interested countries. He recalled that Canada had demonstrated its interest in transferring this kind of knowledge by financing the seminar that had been organized for West African countries at Banjul, Gambia, in September 1977. He noted the strong support expressed by the Commission for a similar seminar in the Western Central Atlantic and indicated that Canada might consider favourably assisting with the preparation of such a seminar if finances were available. The Commission took note of this information with gratitude.

(ii) Identification of shared resources

73. The Commission noted that while most living resources occur in areas which are, or will be, under national jurisdiction, the biological characteristics of these resources and their migratory patterns would still make it advisable or even necessary for governments to cooperate at the regional or sub-regional level in the conservation and optimum utilization of the fisheries. A better knowledge of these resources would make it possible to determine the extent of cooperation required among the countries of the Western Central Atlantic. The Commission, therefore, requested FAO to undertake an identification of resources shared between two or more countries in the sense that these resources inhabit two or more exclusive economic zones, possibly in different life stages or seasons, or migrate from exclusive economic zones into adjacent high seas. It was agreed that this work, to be carried out by a consultant, would be of considerable interest to the relevant subsidiary body of the Commission and to the Commission itself.

(iii) Broadening of the terms of reference of the Commission to include fishery management and development

74. The Commission noted that when it was established by the FAO Council in November 1973, it was stated explicitly in the preamble of Council's Resolution 4/61 promulgating its Statutes, that the Commission would not be concerned with management and regulation of the fisheries in the Western Central Atlantic. It pointed out in this respect, as it had done when requesting a study aimed at identifying shared resources, that the geographic conditions prevailing in the Western Central Atlantic made it not only desirable but also necessary for governments to cooperate in the rational utilization of those resources that were of interest to two or more countries. The Western Central Atlantic was one of the few sea areas, if not the only area, where there existed no intergovernmental body to provide advice on fishery management. The Commission noted further that all other regional fishery bodies established within the framework of FAO have management functions and that the Western Central Atlantic Fishery Project, which reports to the Commission, can deal with all aspects of fishery development and management. It therefore decided unanimously to request the FAO Council, through the Director-General, to amend the Commission's Statutes so that it could promote the development, conservation, rational management and best utilization of living marine resources in its area of competence. It stressed, however, that the Commission should only carry out this task at the request of the countries concerned and that these functions should be advisory in the sense that the Commission could only formulate recommendations.

75. The observer from the EEC informed the Commission that the Community had now assumed responsibility for the management of fishery resources in waters falling under the jurisdiction of its Member States. This would imply that the Community should participate fully in the work of the Commission, as was the case with other regional fishery bodies, particularly if the terms of reference as was being proposed by the Commission, were to include advice on management. In view of the fact that membership of the Community as such raised problems of a legal and constitutional nature, he proposed that the question be considered further at the Twelfth Session of the Committee on Fisheries in June 1978. It was agreed that the Secretariat would report on developments to the next session of the Commission.

FUTURE ARRANGEMENTS FOR THE SECRETARIAT OF WECAFC

76. The Commission considered this matter on the basis of the information provided in documents WECAFC/78/9 and WECAFC/78/9, Sup.1 attention being drawn to the fact that not only the Committee on Fisheries at its Eleventh Session in April 1977 but also the FAO Conference at its Nineteenth Session in November 1977 had considered the future of regional fishery bodies and had recommended the decentralization of activities. This should lead to an increased involvement by coastal states in each area in the work of the regional fishery bodies without weakening in any way the unique and essential role of Headquarters particularly in maintaining information and data services and in highly specialized technical matters.

77. The Commission noted that as matters stood at present neither WECAFC nor any of the other eight FAO regional fishery bodies had an individual separate budget their work being funded from the central regular programme budget of FAO under the principal headings shown in the annex to document WECAFC/78/9.

78. It was noted that these costs did not include the time that Headquarters and other FAO staff spent on Commission matters. Clearly if this was added, the financial contribution of FAO would be very considerably larger than the figure of approximately 50 000 dollars per year shown in the annex.

79. On the basis of the information in document WECAFC/78/9, Sup.1 the Commission noted that the additional cost of setting up a secretariat in the region could be divided into two headings:

- (a) the salaries of international staff
- (b) the local cost of a secretariat.

It was noted that the approximate annual cost of a professional staff member for servicing the Commission or for doing statistical work was in the order of 50 000 dollars a year per person. Costs for secretarial or statistical services would be in the order of 20 000 dollars a year per person. Clearly the cost would vary with the number of staff in the secretariat. For instance, if the proposal in the report of the Working Party on Fishery Statistics to set up a WECAFC statistical office (document WECAFC/78/4, paragraph 33 (b) was to be accommodated within the WECAFC regional secretariat, there would be an increase in cost, perhaps even above the figures shown in document WECAFC/78/9, Sup.1, as there would be a need to employ statistical clerks. As to local costs, it was noted that some were non-recurring expenses involved in setting up an office. These might amount to nearly 30 000 dollars while recurring expenses for the payment of local staff, the rent and maintenance of office buildings and general office expenses for public utilities and office supplies might amount to a further 30 000 dollars a year.

80. A number of delegations pointed out that there were two very separate aspects to the proposal. The first was the desire of the member countries to have a secretariat for the Commission in the region. There was unanimous support for this. The second aspect, however, conditioned the first. It was financing. Even if a member country were to offer to host the regional secretariat and pay for local costs, it was likely that FAO would still have to find the funds for the additional international professional and secretarial staff needed. While FAO would be prepared to consider the possible redeployment of existing staff and hence of funds, resources were limited and one solution might be to seek the assistance of the funding agencies of the developed countries. This would only be an interim solution.

81. The Commission noted that the future of FAO regional fishery bodies was to be discussed at the forthcoming session of the Committee on Fisheries to be held in Rome in June 1978. The financing of the decentralization of activities of regional fishery bodies would undoubtedly come up for discussion. The majority of the delegations felt that it would be wise to await the conclusions of the Committee on Fisheries within the context of the overall budget of the Fisheries Department of FAO and the place the activities of the regional fishery bodies were to have in that budget. Many member countries in fact believed that their financial contribution to FAO should cover all activities including those of the regional fishery bodies. The observer from Canada said that decentralization of the secretariat should be supported as this would lead to people in the region having a greater role in the work of the Commission.

82. The delegations of Colombia, Panama and Venezuela expressed interest in hosting the Secretariat of the Commission if and when it was moved to the region. The secretariat informed the Commission that a similar offer had been received by the Director-General of FAO from the Government of Trinidad and Tobago during 1977.

83. In welcoming these offers the Commission supported the transfer of the WECAFC Secretariat to the region and requested the Director-General to study how this could be done after the matter had been discussed in the Committee on Fisheries. Once a means had been found of financing a WECAFC Secretariat in the region, the Director-General should be invited to consult with member countries of the Commission to determine the site of the Secretariat.

ANY OTHER MATTERS

(a) Amendment of the Commission's Rules of Procedure

84. The Commission considered this item on the basis of document WECAFC/78/12 and agreed to amend its Rules of Procedure as suggested in the document.

(b) The effects of pollution on artisanal fisheries

85. One delegation drew attention to the ill effects of pollution upon artisanal fisheries and the marine environment in which small scale fishermen worked. The Commission accordingly requested the WECAF Project to look into this matter and prepare an inventory of the artisanal fisheries that were possibly suffering from marine pollution. The Commission approved a proposal that an item should be placed on the agenda of the Third Session "The Effects of Pollution on Artisanal Fisheries in the Marine Environment".

ELECTION OF OFFICERS

86. Under Rule II.1 of the Rules of Procedure the Commission is required to elect at the end of each session a Chairman and a maximum of three Vice-Chairmen who remain in office until the election of the new Chairman and Vice-Chairmen.

87. Acting on the recommendation of the Nominations Committee, Mr. E. Oltuski (Cuba) was unanimously elected Chairman of the Commission. Dr. C. Arellano Lennox (Panama) was unanimously elected as first Vice-Chairman and Colombia and Jamaica as the other Vice-Chairmen.

88. Under Resolution WECAFC/I/1 the membership of the Executive Committee for the Implementation of the International Project for the Development of Fisheries in the Western Central Atlantic consisted of the Chairman and Vice-Chairmen of the Commission and representatives of not more than four other members of the Commission. Acting on the recommendation of the Nominations Committee, Brazil, Mexico, the United States of America and Venezuela were unanimously elected members of the Executive Committee.

DATE AND PLACE OF THE NEXT SESSION

89. The Commission accepted with pleasure an invitation by Cuba to hold the Third Session of WECAFC in Havana, preferably in May 1980 (the month of flowers).

ADOPTION OF THE REPORT

90. This report was adopted by WECAFC on 26 May 1978.

Appendix A

LIST OF DELEGATES AND OBSERVERS

MEMBERS OF THE COMMISSION

Bahamas

THOMPSON, R.W.
Senior Fisheries Officer
Ministry of Agriculture and Fisheries
P.O. Box N3028
Nassau

PEREZ FERNANDEZ, Dr. R.
Director
Centro de Investigaciones Pesqueras
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

Barbados

FERNANDEZ CALZAT, J.
Jefe, Departamento de Colaboración
Económica
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

Brazil

ROSA, H.
Senior Adviser
International Fishery Affairs
Superintendencia do Desenvolvimento
da Pesca
Avenida W-3 Norte
Quadra 506, Bloco C
70 000 Brasilia, D.F.

FOUNT CHAVEZ, L.
Subdirector
Centro de Investigaciones Pesqueras
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

Colombia

GALLEANO, Dr. A.R.
Embajada de Colombia
Apartado 4407
Panamá 5, Panamá

CARBONELL ELLI, Lic. F.
Consejero Político
Embajada de Cuba
Panamá, Panamá

France

HERRANDEZ, Dr. A.
Asesor de Pesca
OPSA
Ministerio de Agricultura
Carrera 10 N° 20-30
Bogotá

BONNET, N.
Directeur
Centre de recherches "Antilles-Guyane" de
l'Institut scientifique et technique
des pêches maritimes
97231 - Robert, Martinique

GOMEZ DE CASTRO, Luz Piedad
Primer Secretario
Embajada de Colombia
Apartado 4407
Panamá 5, Panamá

Guatemala

Cuba

OLTUSKI, E.
Viceministro
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

Guyana

Haiti

Jamaica

KIRTON, Dr. A.G.
Director
Law of the Sea Division
Ministry of Foreign Affairs
Kingston

ROYER, E.A.
Acting Director of Fisheries
Fisheries Division
Ministry of Agriculture
P.O. Box 470
Kingston

Japan

KATO, S.
Consejero
Embajada del Japón en Panamá
Calle 50 y Calle 61
Edificio Don Camilo
Apartado 1411
Panamá 1, Panamá

KIKUCHI, Y.
Embajada del Japón en Panamá
Calle 50 y Calle 61
Edificio Don Camilo
Apartado 1411
Panamá 1, Panamá

Korea (Republic of)

KIM HAN MO
Fisheries Attaché
Embassy of the Republic of Korea
2320 Massachusetts Avenue
Washington D.C. 20008, U.S.A.

Mexico

CIFUENTES, J.L.
Director
Programa Investigación México/FAO
Alvaro Obregón 269 (10° piso)
México 7, D.F.

Netherlands

Nicaragua

GALEANO ESPINOSA, I.
Jefe, Sección de Proyectos
División de Pesca
Instituto de Fomento Nacional
Apartado 629
Managua

URROZ ESCOBAR, J.
Jefe, División de Pesca
Instituto de Fomento Nacional
Apartado 629
Managua

Panama

ARELLANO LENNOX, Dr. C.
Director General de Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 9658
Panamá 5

BRIN MARTINEZ, P.
Director
Departamento de Organismos, Conferencias
y Tratados Internacionales
Ministerio de Relaciones Exteriores
Panamá

GONZALEZ, E.
Funcionario
Departamento de Organismos, Conferencias
y Tratados Internacionales
Ministerio de Relaciones Exteriores
Panamá

CABRERA, J.M.
Jefe, Asesoría Legal
Ministerio de Comercio e Industrias
Apartado 9658
Panamá 5

FRANQUEZA, A.
Subdirector General
Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

RUIZ STOUT, R.
Jefe, Pesca Artesanal
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

GONZALEZ MORENO, C.R.
Jefe, Biología Marina
Departamento de Investigaciones Biológicas
Dirección General de Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

GALVEZ, F.
Jefe, Bio-Estadística Pesquera
Dirección General de Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

MUSCHETT, A.I.
Asesor Económico
Dirección General de Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

AROSEMENA, Dalva
Bióloga Marina
Dirección de Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

BAKES, R.
Biólogo
Departamento de Biología Marina
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

AVILA, Judith
Oficial de Estadística
Departamento de Bio-Estadística Pesquera
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

OLIVER, Isabel
Oficial de Estadística
Departamento de Bio-Estadística Pesquera
Ministerio de Comercio e Industrias
Apartado 3318
Panamá 4

HARARI, R.
Subdirector
Proyecto Pesquero Cooperativo BDA-BID
Banco de Desarrollo Agropecuario
Apartado 5282
Panamá 5

MENDIETA, R.
Jefe, Evaluación de Proyectos Pesqueros
Banco de Desarrollo Agropecuario
Apartado 5282
Panamá 5

RAMIREZ, B.
Jefe, Sección de Mercadeo
Banco de Desarrollo Agropecuario
Apartado 5282
Panamá 5

BARRIOS, A.
Director del Proyecto Pesquero
Banco Nacional de Panamá
Panamá

HUMBERT, F.
Presidente
Asociación Nacional de la Industria
Pesquera Panameña
Panamá

AROSEMENA LACAYO, C.
Secretario
Asociación Nacional de la Industria
Pesquera Panameña
Panamá

PRINGLE, E.
Oficina del Puerto Pesquero de Vacamonte
Autoridad Portuaria Nacional
Apartado 8062
Panamá 7

BELISARIO RODRIGUEZ, B.
Oficina del Puerto Pesquero de Vacamonte
Autoridad Portuaria Nacional
Apartado 8062
Panamá 7

Poland

Spain

MESSEGUER, J.L.
Consejero Legal
Dirección General de Pesca Marítima
Ruiz de Alarcón 1
Madrid

Trinidad and Tobago

United Kingdom

HALL, Dr. D.N.P.
Principal Fisheries Adviser
Ministry of Overseas Development
Eland House
Stag Place
London SW1 5DH

LEWIS, I.R.
British Vice-Consul
British Embassy
Via España
Panamá, Panamá

United States of America

ROEDEL, P.M.
Fisheries Advisor
Agency for International Development
Washington, D.C.

BULLIS, H.R.
Senior Scientist
Southeast Fisheries Center
National Marine Fisheries Service
75 Virginia Beach Drive
Miami, Florida 33149

DAMMANN, A.E.
Caribbean Fishery Management Council
Room 202, Federal Building
St. Thomas, Virgin Islands 00830

FORD, T.B.
Vice-Chairman
Gulf of Mexico Fishery Management Council
L.S.U. - Center for Wetland Resources
Baton Rouge, LA, U.S.A. 70803

JONES, A.C.
Director for Fishery Management
Southeast Fisheries Center
National Marine Fisheries Service
75 Virginia Beach Drive
Miami, Florida 33149

JOSEPH, E.B.
CHM. South Atlantic Regional Fishery
Council
Marine Resources Center
P.O. Box 12559
Charleston, S.C.

WEIDNER, D.M.
Foreign Affairs Officer
National Marine Fisheries Service
National Oceanic and Atmospheric
Administration
Department of Commerce
Washington, D.C. 20235

Venezuela

LUGO V., E.
Dirección General de Desarrollo Pesquero
Ministerio de Agricultura y Cría
Torre Norte
Centro Simón Bolívar - Piso 9
Caracas

RODRIGUEZ BERROTERAN, H.
Dirección General de Desarrollo Pesquero
Ministerio de Agricultura y Cría
Torre Norte
Centro Simón Bolívar - Piso 9
Caracas

OBSERVER FROM A MEMBER NATION
NOT MEMBER OF THE COMMISSION

Canada

HINDS, L.
Fisheries and Marine Advisor -- CIDA
Fisheries and Marine Service
International Directorate
Ottawa, Ontario

REPRESENTATIVES OF UNITED NATIONS
AND SPECIALIZED AGENCIES

United Nations Development Programme

RIPLEY, Dr. W.E.
Fishery Officer
Division for Global and Interregional
Projects
UNDP
United Nations
New York, N.Y. 10017, U.S.A.

POKORNY, I.
Resident Representative of UNDP
in Panama
UNDP
Apartado 6314
Panama, Panama

IOC Association for the Caribbean
and Adjacent Regions

TROOST, D.G.
Associate Regional Secretary
IOCARIBE
P.O. Box 812
Port of Spain, Trinidad and Tobago

EUROPEAN ECONOMIC COMMUNITY

FARNELL, J.
Senior Administrator
Directorate-General for Fisheries
Commission of the European Community
200, rue de la Loi
1040 Bruxelles, Belgique

OBSERVER FROM AN INTERGOVERNMENTAL
ORGANIZATION

Latin American Economic System

CARDENAS RONCO, J.J.
Secretario
Comité de Acción Productos del Mar y
Agua Dulce
SIELA
Avenida Aviación 2550-A
San Luis, Lima, Perú

FAO

WECAF Project

DOUGET, W.F.
Programme Leader
WECAF Project
Apartado 6-4392
El Dorado
Panamá

CHAKRABORTY, D.
Consultant
WECAF Project
Apartado 6-4392
El Dorado
Panamá

LINTERN, D.A.
Economist
WECAF Project
Apartado 6-4392
El Dorado
Panamá

VILLEGAS, L.
Resource Evaluation Expert
WECAF Project
Apartado 6-4392
El Dorado
Panamá

Regional Office for Latin America

TAPIAS, C.
Regional Fisheries Officer
RIAT
Casilla 10095
Santiago, Chile

Field

ERRHARDT, N.M.
Biólogo Pesquero
Proyecto de Investigación y Desarrollo
Pesquero
Apartado Postal M-10778
Mexico 1, D.F., México

Headquarters

WATZINGER, H.
Assistant Director-General
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

LABON, Dr. A.
Director
Fishery Industries Division
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

CARROZ, J.E.
Principal Legal Officer (International
Fisheries)
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

BOERUMA, L.K.
Senior Fishery Resources Officer
Fishery Resources and Environment Division
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

HENDERSON, J.D.M.
Senior Fishery Liaison Officer
Office of Assistant Director-General
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

CHAIRMAN OF WECAF/C

E. Oltuski (Cuba)

SECRETARIAT

Host Government

Liaison Officer	Dr. C. Arellano Lennox
Organizing Committee	Dr. C. Arellano Lennox A. Muschett Zunilda Girón Nubia García Irma I. de Sáenz Lucía B. de Repetto
Conference staff	Marta Alvarado Marta Herrera Argelia Rivera Concepción Powell Gina Bernal Vielka Jiménez Nisla Nájera Yolanda de González Anayansi de Mora Crisel Alveo Xiomara González

FAO

Secretary of WECAF/C	J.D.M. Henderson
Meetings Officer	Myrtha Poblete-de la Fuente
Translators	T. Curtis E. Tarazona
Chief Interpreter	F. Piraud
Interpreters	C.A. Allport A. Bennaton S. Blondeau C. de Espinosa D. Fernández de Córdoba H. Ramler J. Rossignol
Secretarial assistance	Luisa Almagià Alicia M. Lorenzo Maria Teresa Ruspantini

Appendix B

ADDRESS AT THE OPENING SESSION BY HIS EXCELLENCY JULIO E. SOSA,
MINISTER OF COMMERCE AND INDUSTRY, PANAMA

Gentlemen,

I have come here with particular pleasure today to this international gathering to state on behalf of the Government of the Republic of Panama our very firm support for all those activities which, like this meeting, will help the countries of the region to progress towards overcoming underdevelopment and economic dependence.

I extend our cordial and heartfelt welcome to each of the delegations of countries and international organizations who are here today in this historic building where the main points were signed of the new Panama Canal Treaty, which is now approved and marks the birth of a new Panama with no fifth frontier.

It is the vocation of Panama to identify itself with and seek inspiration from all efforts to raise man from deprivation and poverty. It was in this spirit that the revolutionary Government of Panama offered to provide the headquarters of the Project and thereby contribute to and benefit from programmes to develop the rational use of natural resources in the area of the Western Central Atlantic Fishery Commission; and continuing with our professional faith in WECAFC we offered to host the session which is meeting in this room today.

It gives our country pleasure to host a programme such as that embodied in the Commission which should facilitate exchanges of many kinds between our countries. We are firmly convinced that we can achieve real progress through the solidarity of peoples who form a collective undertaking and development programmes. From similar problems and concerns spring similar hopes and the will to overcome these problems promotes brotherly feelings. The recent recognition of the sovereign claims of this country is a vivid example of what I have just said. Progress towards recognition of our cause by the United States of America was provided by the solidarity of other peoples in the region and in the world.

It is now our concern to move forward with economic development and the solution of our food problems through the proper and rational use of the natural resources we possess and in particular our fishery resources.

For a long time our countries exploited their natural resources in a disorderly way or worse still left their exploitation to others who did this neither rationally nor for the benefit of their legitimate owners.

For this reason it is extremely important that the future development and use of natural resources should be linked to the plans of the various countries and that there should be standard rules and agreements for this joint exploitation for the benefit of our peoples.

I have confidence in the positive results of this second session of WECAFC. I base my conviction upon a close look at the list of participants, their long years of service in the countries from which they come, the standing of the institutions for which they work and the programme of work before you. This is an arduous programme and it contains a number of items which deserve special comment.

An examination of the situation of the stocks in the area on the basis of assessments of present resources gives rise to the hope that the Commission will make well thought-out recommendations about the species which can continue to be exploited and those for which caution must be exercised. This is a major responsibility in a world where food resources are at present lacking and it is vital to quantify what resources can be exploited without bringing about their exhaustion. Species such as shrimp and others have been fished to their maximum limit of production or are very close to that limit. For this reason recom-

mentations have to be carefully balanced between present food needs and other responsibility to future generations.

Investment decisions in the western central Atlantic may well have been avoided or delayed as the statistics for the area are not generally reliable. We are aware of the efforts of the specialized working party on statistics and the recommendations from that body which will be made to the Commission about standards for obtaining information on fisheries.

Your Commission will have to consider the national and regional effects of the extension of fishery jurisdiction by many countries. By the end of 1977, 62 coastal states in the world had extended their jurisdiction to 200 miles and 64 more have announced their intention of doing so. Five member countries of this Commission including Panama had already extended their limits to 200 miles between 1965 and 1972, before the establishment of WECAFC. The reasons for extending fishery jurisdiction or the territorial seas out to 200 miles were explained at that time and continue to be as valid now as they were then.

Our peoples regard the sea as a source of food and other wealth and, although today we are certainly not in a position to exploit these resources fully, this is no reason for our not claiming them as ours and enabling us to obtain from the sea the benefits which they represent. With the new regime of the sea the area open to free fishing grows smaller every day; this need be a source of concern only to those countries which, relying on their war-like strength, have always unilaterally exploited the resources of weak countries without providing them with technical training or any possibility of joint exploitation on the basis of mutual respect.

You have before you the delicate task of reviewing the need for national and regional cooperation in the light of the new 200 mile limit and in this sense WECAFC can act as a catalyser for reaching various types of agreement.

Our country is at present participating in the work of a number of regional bodies which are dealing directly or indirectly with matters related to fishery production. Oceanographic research, the launching of new programmes, the channelling of technical and economic resources and the development of industrial and artisanal fisheries may be adversely affected by the proliferation of committees and programmes which by duplicating and sometimes triplicating functions neutralize our development thereby favouring those who may see this Commission as a threat to their fishery interests and may not wish it to achieve its objectives. It is your responsibility as delegates to examine the objectives and programmes of WECAFC and to establish the relations and lay down the types of action needed between the various bodies in the region interested in fisheries.

This meeting finds our country in the throes of a revolutionary process which is the result of our state of deprivation. We are building a new Panama where all social strata at all economic levels can work out their destiny as part of the revolutionary process. To do this we shall need to call on all the resources we have. Thus we consider that the rational exploitation of the resources of the sea conceived as a dynamic part of production gives us the opportunity to broaden the spectrum of our economic and social objectives and maritime sovereignty.

It is not only our duty as a country but also our undertaking before all humanity to bring about a substantial increase in the rational use of our natural fishery resources as a part of our food policy to achieve levels of production that will ensure an adequate supply of high-quality protein to all markets.

It is not, however, our purpose to bring about changes or adopt methods in fisheries that are not suited to the means we have. We must seek to build new structures for marine production based on our own resources, on our ability to manage them and the establishment of suitable marketing channels of our own.

In all this we must not forget that if changes are to be successful the artisanal fisherman who is almost beyond the margin of our social structure must be fully integrated into society as our countries have recognized his right to a place in the fabric of society. The man of the sea like everybody else seeks not only his freedom but also wishes to take an active and essential part in the economic and social development of his country.

Gentlemen,

The time in which we live confront our countries with challenges in their economic and social development. If we recognize them as such it must be our undeviating purpose that the achievement of success in development must be the result of clearly established priorities within the productive process such as to ensure that activities are part of a programme that will solve problems confronting us. I am sure that this meeting will make a real contribution to the difficult task ahead.

Many thanks.

ADDRESS BY MR. H. WATZINGER
ASSISTANT DIRECTOR-GENERAL (FISHERIES), FAO

Mr. Chairman, Ladies and Gentlemen,

I am extremely glad to be making my first visit to this region as Assistant Director-General of Fisheries and to represent the Director-General of FAO at the second session of the Western Central Atlantic Fishery Commission. The Caribbean and Latin America are two regions which are very well known to me, having spent a good part of my life here, and I am fully aware of the problems encountered by fisheries administrations, Governments, and the commercial section in promoting fisheries development here. Panama lies at the crossroads, as it were, of two great continents and your Commission is comprised of member countries from both. Panama is also the host of the FAO/UNDP Regional Project for the Development of Fisheries in the Western Central Atlantic and the Regional Marketing Information Services project, the first of its kind established by FAO. It is therefore fitting that Panama City was chosen as the venue for this meeting. I should like to extend my sincere thanks and those of the Organization to the Government of the Republic of Panama for hosting these sessions.

The Western Central Atlantic Fishery Commission is meeting during a period of significant change, which is affecting not only the fishery activities of the countries of this region, but also the nature of the activities of the Commission itself and its very future. Many other FAO regional fishery bodies, notably the Indo-Pacific Fishery Commission, have been examining their functions and responsibilities in the light of worldwide developments and have decided in their own interests and those of member countries to modify their constitutions so that they could play more significant roles in the development of fisheries in their regions.

You, Gentlemen of this Commission, are placed in a similar position. The two most significant developments for fisheries are the Law of the Sea negotiations and the emerging ocean regime and the search for a more equitable economic order. The former brings resources and areas under exclusive national jurisdiction, while the latter emphasizes among other things the promotion of national and regional self-reliance.

These developments acquire a greater complexity in the special circumstances of the WECAFIC region. In this region, the extension of national jurisdiction over fisheries for 200 miles from baselines effectively eliminates for the greater part the "high seas" element of the region. Certain countries have traditionally fished in areas which now fall under the national jurisdiction of other Member States. Many of the resources are shared, migrating from one zone to another, and others occupy several zones over the seasons or over their life cycles. The opportunity for mutually beneficial cooperative activity is therefore great and FAO hopes that WECAFIC can become an effective instrument for the purpose. A first step could be to arrange for a detailed analysis of the resources, identifying those that are shared and the nature of the sharing as far as these are known. Other could include the preparation of guidelines, based on scientific knowledge, useful for the eventual sharing of total allowable catches and the disposition of "surpluses" and the preparation of overviews of the historical disposition of fishing effort and origins of catches.

Some countries will doubtless wish to enter into bilateral agreements with other coastal states or with outside countries to improve the utilization of their resources, and the processing and marketing of catches. WECAFIC could provide a useful forum for such negotiations and if countries so desire, FAO could provide assistance in this regard.

Other matters which members might wish to consider could be the possible benefits and mechanisms for cooperation in the surveillance of fishing operations in the region, in the monitoring of permitted catches, in regular monitoring of the state of the resources and

similar actions. Some of these might have to be in the form of joint services. Finally, it will also obviously become necessary to consider management measures and regimes if catches are to be sustained in the future. I am aware that your articles of agreement specifically exclude management, but perhaps it is time to reconsider such issues.

Gentlemen, I do not wish in any way to impinge on your national sovereignties and your freedom of action. Some of the ideas I have put forward may appear somewhat radical and far reaching. But WECAFC belongs to you and you should in all fairness examine what this body could and should do for you. The new situations which have emerged call for a capacity to meet them with open minds and with a correct understanding of the international mechanisms and actions required to promote and protect the interests of the Member States.

In this connection, you should also keep in mind the roles of the regional projects - in particular the Project for the Development of Fisheries in the Western Central Atlantic. This UNDP funded project executed by FAO is an integral part of the Commission, serving, as it were, as its development arm. But whereas the Project cannot continue indefinitely, we may reasonably assume the Commission will, and you may give consideration to the future role of the Commission when the Project terminates. We hope that in the resolution of that issue careful consideration will be given to the relations that would hold between the Commission and the Project.

Mr. Chairman, Ladies and Gentlemen, I have given you a brief statement of the emerging fishery situation, of FAO's policy in regard to fishery commissions and of some critical issues requiring consideration. In the final analysis the responsibility for these regional bodies should rest with member countries. While FAO had a pioneering role in setting up these bodies, the acquisition of greater experience in recent years and the changing legal and economic regimes have made its role a supporting one. This is as it should be. We hope that with time Member States will shoulder even greater responsibilities, with FAO's role diminishing, in the long term, to that of a consultative one.

I look forward therefore to your deliberations on these issues with interest and wish you a useful and beneficial meeting.

AGENDA 1/

1. Opening of the session
2. Adoption of the agenda and arrangements for the session
3. State of stocks
 - (a) General
 - (b) Shrimp and lobster
 - (c) Other stocks
4. Fishery statistics
5. Western Central Atlantic Fishery Project (Report of the Executive Committee)
6. National and regional effects of an extended zone of jurisdiction over fisheries
7. Future arrangements for the secretariat of WECAFC
8. Fishery development opportunities
9. Relations with other bodies in the area concerned with fisheries
10. Any other matters
11. Election of officers
12. Date and place of the third session
13. Adoption of the report

1/ These items appear in the report in the order in which they were discussed.

Appendix E

LIST OF DOCUMENTS

- WECAFC/78/1 Provisional agenda
- 2 Annotated provisional agenda
- 3, Rev.1 Provisional timetable
- 4 Report of the First Session of the WECAFC Working Party on Fishery Statistics, Panama, Panama, 16-17 May 1978
- 5 Action arising from the report of the Joint Meeting of the Working Parties on Assessment of Fish and of Shrimp and Lobster Resources
- 6 Report of the Joint Meeting of the WECAFC Working Party on Assessment of Fish Resources and Working Party on Stock Assessment of Shrimp and Lobster Resources, Cartagena, Colombia, 18-23 November 1977
- 7 Report of the First Session of the Executive Committee for the Implementation of the WECAF Project, Panama, Panama, 18-20 May 1978
- 8 Fishery development opportunities in the WECAFC area
- 9 Establishment of a WECAFC secretariat in the region
- 9, Sup.1 Rough indication of costs of a Regional Secretariat for WECAFC
- 10 Relations with other bodies in the area concerned with fisheries
- 11 Developments in the regime of the sea and their implications for fisheries with particular reference to WECAFC
- 12 Proposed amendments to the Rules of Procedure of WECAFC
- 13 Summary of fishery training needs in the Western Central Atlantic
- WECAFC/78/Inf.1 List of documents
- 2 Information for participants
- 3 List of delegates and observers (provisional)
- 4 Report of the First Session of the Western Central Atlantic Fishery Commission, Port of Spain, Trinidad and Tobago, 20-23 October 1975
- 5 Report of the Eleventh Session of the Committee on Fisheries, Rome, 19-26 April 1977
- 6 Fishery training needs in the Western Central Atlantic
- 7 Community fishery centres
- 8 [This document was not issued]
- 9 Address by Mr. H. Watzinger, Assistant Director-General (Fisheries), FAO
- 10 Address at the opening session by His Excellency Julio E. Sosa, Minister of Commerce and Industry, Panama.

REPORT OF THE FIRST SESSION OF THE
EXECUTIVE COMMITTEE FOR THE IMPLEMENTATION OF THE WECAF PROJECT

Panama, Panama, 18-20 May 1978

PROCEDURAL AND ORGANIZATIONAL MATTERS

Opening of session

1. The First Session of the Executive Committee for the WECAF Project took place from 18 to 20 May 1978 at the Palacio Justo Arosemena, Panama City, Panama. Mr. E. Oltuski opened the session as Acting Chairman of the Executive Committee. A list of delegates and observers is given in Annex 1 of this report.

Adoption of agenda

2. The provisional agenda as adopted appears in Annex 2. The list of documents presented to the Executive Committee is in Annex 3.

PROGRESS REPORT ON PROJECT ACTIVITIES

3. The Committee considered document WEC AFC: X/78/2 which described the background to the present phase of the UNDP/FAO WECAF Project and the various project activities which had been undertaken since it was initiated on 1 January 1977. It was pointed out that, because of UNDP financial problems, there had been a gap of six months between the end of the first phase and the commencement of the present phase and that field activities had effectively only begun after the Project became established in its Headquarters in Panama on 1 September 1977.

4. With the exception of the fish processing technologist, the main members of the Project's staff have now been recruited (the resource evaluation specialist, the economist and the fishing technologist). Considerable use has been made of consultants in a variety of disciplines. Project staff have participated in a number of missions, seminars and workshops, as well as in other activities described in the report, which is attached as Annex 4.

5. The Committee considered that the report was interesting and comprehensive and that the Project, after the initial unavoidable delays, was now progressing rapidly and developing an active programme. It was pleased to note the close relationship that had already been established with IOCARIBE. The need for the Project to cooperate with all organizations connected with fisheries in the region was stressed. The Committee agreed that the report effectively described the work of the Project to date.

WEC AFC WORKING PARTIES ON STOCK ASSESSMENT OF FISH RESOURCES AND SHRIMP AND LOBSTER RESOURCES

6. The Committee considered document WEC AFC: X/78/3 (report of the Joint Meeting of the WEC AFC Working Party on Assessment of Fish Resources and Working Party on Stock Assessment of Shrimp and Lobster Resources, Cartagena, Colombia, 18-23 November 1977). Attention was drawn to the general conclusions in the report and to the specific recommendations which had implications for the WECAF Project.

7. It was agreed that a newsletter to keep scientists and managers in the region informed of national and regional developments in fisheries and resource research would be most valuable. Such a newsletter should also include information on the activities of the Project, in view of their widespread nature and interest to member countries. It could well be produced by the Project.

8. The meeting noted with appreciation that the report gave an exhaustive picture of the resource situation in the area as far as available information permitted but it was clear that there was a serious lack of the statistical and biological data required to make reliable resource assessments, particularly in the case of the fish resources.

9. It was considered that a substantial effort is needed to improve this situation, requiring the active cooperation of all participating countries, together with the international agencies. It was felt that the Project should try to stimulate cooperation in research, particularly on resources exploited by several countries.

10. It was suggested that WECAFC, in order to become a strong and effective organization, would benefit from the establishment of a permanent scientific committee, with a full-time secretariat, which could deal with matters arising between meetings, maintain contacts with member countries and international agencies, follow up recommendations and prepare the meetings. Such a permanent committee would, of course, require substantial financing.

11. It was agreed that fishery development activities should not be held up until complete resource information was available but should proceed within the limits of current knowledge and adjusted as better information came to hand.

12. It was pointed out that the data available for the industrial fisheries was much better than that for the artisanal fisheries and it was suggested that an investigation to develop relatively simple indicators on the state of exploitation of the latter could usefully be undertaken by the Project. Such an approach might provide a quicker way of estimating the state of the artisanal fisheries than the traditional stock assessment methods. The Project might consider the recruitment of a special consultant for this work.

13. The meeting felt that in view of the very large amount of research work that needed to be carried out, it was essential that priorities be established that would produce practical results. Whilst the priorities of resource studies were not discussed in detail it was suggested that the Project should:

- (a) play a leading role in helping member countries to upgrade their statistical programmes
- (b) identify additional information needs
- (c) continue to seek the support of other institutions working in the field of marine research.

REPORT OF THE IOCARIIBE INTERDISCIPLINARY WORKSHOP

14. The meeting considered document WECAFC/78/10 which included recommendations adopted at the IOCARIIBE Workshop held in Martinique from 28 November to 3 December 1977. At this workshop, two research programmes were prepared which were believed to be of great importance to the fisheries of the region. The first related to the trap fishery of the Lesser Antilles and the second to the spiny lobster fishery in Central America.

15. The objectives of the first programme, which was entitled "Scientific studies for improvement of trap fishery management in the Lesser Antilles", were to investigate how nearshore fish populations are controlled and what are the mechanisms of recruitment to the fish stocks, and to determine how scientific data may be used to assist rehabilitation and management in the trap fishery of the area designated for study.

16. The programme is conceived as an intensive interdisciplinary study and two main areas have been designated for investigation, St. Lucia and St. Kitts and Nevis. In the latter, the trap fishery is well developed and over-exploited, whereas in St. Lucia it is less well developed.

17. The WECAF Project has been requested by IOCARIIBE to be the responsible agent for the fisheries part of the programme, for which the basis will be a statistical sampling programme which will permit an evaluation to be made of the trap fishery. The Project has been asked to nominate a suitable person to take charge of this work.

18. The second programme, which is entitled "Scientific programme in support of the management of the spiny lobster fisheries in Central America", has as its main objective to determine, mainly through larval studies, whether there exists only one stock or several separate ones. With this information, it should be possible to decide whether management strategies should be identified for each country or whether the stocks in the whole region should be managed together.

19. This programme includes, in addition to biochemical, larval and oceanographic studies, a coordinated programme of lobster tagging and the collection of relevant information through interviews with fishermen. Assistance from the WECAF Project in the fisheries aspects of the programme would be most useful.

20. It was pointed out to the Committee that the IOCARIIBE Programme prepared at the Martinique Workshop would be considered at the forthcoming IOCARIIBE meeting in August and any comments on the proposals which WECAF considered appropriate could be presented there.

21. The meeting was informed that the Project, in principle, wished to participate in the research projects. The meeting took note of the proposals and decided that it should express its interest in them. Participation would, however, have to remain within the Project's means, taking account of the priorities for the various items of its work programme. It was stressed that close contact should be maintained with IOCARIIBE on these matters.

REVIEW OF DATA ON PELAGIC RESOURCES

22. The Committee considered document WECAF: X/78/5, which was an abstract of a report prepared by a Project consultant to review the existing data on the pelagic resources in the WECAF area. The resources examined were clupeoids (herrings, sardines and anchovies), carangids (scads, jacks, runners and bumpers), coryphaenid (dolphinfish), exocoetids (flyingfishes), scombrids (mackerels excluding tunas), bluefish, butterfishes, sharks and squids. The unexploited potential of a number of these species was thought to be considerable. Various recommendations were made in the report of the type of action necessary to improve the knowledge about these resources.

23. The meeting was informed that these recommendations coincided with some of the Project ideas and were already being implemented. In particular, the handbook for the identification of species was nearing completion and should be available by the end of 1978. The Project also intended to prepare a simplified field guide for use by persons in commerce and industry, especially fishermen and fish dealers. The collection of landing statistics and a priority listing of species by geographical zone were also included in the Project's programme but these activities were hampered by the lack of a statistician.

24. The importance of pelagic species in the development of artisanal fisheries was stressed. It was felt that future work on small-scale fisheries should be directed to practical aspects such as the improvement of existing fishing gear or the introduction of new methods which might increase fish production in a relatively short period of time. The meeting was informed about various on-going or planned programmes designed to increase the knowledge about pelagic species.

25. The Committee felt that it was difficult to identify appropriate criteria for deciding on priorities at the moment. It was suggested that, assuming the necessary resources were available, priority should be given to ensuring that the Project should benefit those countries with the most serious economic limitations and which most depended on food from the sea.

26. The Committee took note of the report and the various recommendations and it was agreed that the Project should take them into account with a view to implementation as far as this was possible.

STATUS OF FISHERY STATISTICS AND FISHERY RESEARCH CAPABILITY

27. The Committee considered documents WECAFC: X/78/6 and WECAFC: X/78/4. The first reviewed the status of fishery statistics and fishery research capability in a number of countries in the WECAF area. The second was the report of the First Session of the WECAFC Working Party on Fishery Statistics which took place in Panama on 16-17 May 1978.

28. The review of fishery statistics indicated that the most obvious limitations were:

- (a) the reliability of the available statistical data, especially those from the artisanal fisheries
- (b) the lack of data on the magnitude and state of exploitation of some resources
- (c) the inadequate numbers of trained people working on fishery statistics, resource evaluation and related subjects.

29. The Committee was informed of actions proposed by the Project to try to improve the situation. These included the provision of technical assistance to member countries, regional training courses in statistics, resource evaluation and aquaculture, and financial and technical support to working groups for the evaluation of the state of exploitation of some of the common fisheries of the region.

30. The Committee considered that the document gave a fair assessment of the current situation, except that Jamaican fishery research capabilities were higher than stated and that the document should be amended to show this.

31. The Committee supported the recommendations presented and recommended that the Project should implement them according to its possibilities.

32. The report of the WECAFC Working Party on Fishery Statistics was presented to the meeting by its Chairman. The Committee considered the recommendations made by the Working Party which were of significance for the future activities of the Project.

33. The Committee was in accord with the recommendation of the Working Group on Statistics to extend the southern boundary of major fishing area 31 to 10° South latitude and expand the Commission's area of responsibility to cover the new area 31. This would give the same geographical boundaries to the Commission and the Project. It was felt that, whilst the proposal made to extend the Commission's area to include the western coast of Central America might be of importance to the Project, it would not be appropriate to discuss it in the Executive Committee, since it would obviously be very fully debated in the meeting of the Commission.

34. The implications of the various recommendations and suggestions made in the report were considered by the Committee and it was felt that they should serve as a basis of the Project's future work in the field of fishery statistics. The Project was asked to implement them to the extent that its resources and other commitments allowed.

FISHERY DEVELOPMENT OPPORTUNITIES

35. It was intended to consider under this item document WECAFC: X/78/7 which reviews fishery development opportunities in the area. However, in view of the very broad scope of the subject and that this topic has been allocated one and a half days for discussion at the Commission meeting, it was decided to postpone the discussion of this matter until the session of the Commission.

SUB-PROJECT FOR THE DEVELOPMENT OF ARTISANAL FISHERIES

36. The Committee considered document WECAPC: X/78/8 which was a draft of a sub-project entitled "Development and demonstration of advanced small-scale fishing". It was explained that this sub-project had been submitted to CIDA, Canada, for financing.

37. The meeting was informed of the main elements of the proposal. There would be a preliminary phase of about one year, when the sites for two demonstration units would be selected, appropriate boats and gear identified and procured, and the necessary shore infrastructure decided upon and constructed. This would be followed by an operational phase of about four years when four boats would be in operation. Four masterfishermen, two mechanics and a marketing specialist would be provided, tests would be made to improve existing fishing gear and practical demonstrations would be given in fishing and fish handling. Economic studies of the operations would be made, counterparts would be trained for extension and the knowledge gained would be disseminated through workshops and other ways. This work would be disseminated to other countries in the region through the participation of personnel from these countries in the operational phase of the sub-project. The cost to the donors was likely to be in the region of U.S. \$3 million.

38. The Committee was informed about an artisanal fisheries project in Colombia, which was also being financed by CIDA and which was to begin shortly. The Cuban delegation explained that they had had considerable success in developing artisanal fisheries from a very low level to a state of quite good productivity and offered to cooperate with the sub-project through its experience gained in this way.

39. The meeting expressed great interest in the sub-project which, it was felt, was possibly one of the most important activities of the Project. It was considered that its implementation could have an immediate impact on the small-scale fisheries of the region.

40. The Committee recommended very strongly that this sub-project be adopted and carried out and hoped very much that the negotiations that have begun with CIDA would produce the necessary funds.

FUTURE ACTIVITIES OF THE PROJECT

41. The Committee considered the Project's programme of work for 1978, which had been appended to document WECAPC: X/78/2, and also a paper setting out various Project proposals for external financing. It was pointed out that the Programme of Work had been prepared at the end of 1977 and that some of the activities mentioned had already been completed. In addition, four other projects had been prepared for individual countries, for which external funding would be necessary.

42. There was a general feeling that perhaps the Project was attempting to do too much and that it should strive to concentrate its efforts on a smaller number of activities which would have a significant and fairly rapid impact on fisheries development in the region. The need to concentrate on activities which were of regional rather than national importance was stressed.

43. The Committee considered that, in planning its future programme of work, the Project should give priority to the following areas:

- (i) development of small-scale fisheries
- (ii) training
- (iii) fishery statistics, stock assessment and resource surveys
- (iv) better utilization of fishery production
- (v) fishery development planning.

44. The meeting placed the utmost importance on the implementation of the sub-project for the development of small-scale fisheries. It was felt that consideration might be given to extending it to more than the two sites presently envisaged provided adequate financial resources were available. If it could be amplified to cover perhaps a few more countries which were typical of the region in various ways, it would be extremely useful in facilitating the transfer of the experience gained to the region as a whole.

45. There was a clear need for training at all levels in the region. Not only was it important to train scientists, administrators and fishery extension workers but equally importantly fishermen, and people engaged in fish processing and marketing. It was considered that emphasis should be placed on training of a practical nature, and that much could be done through the transfer of expertise already existing in the region. Similarly it was felt that the creation of a regional training centre must be considered during the forthcoming session of the Commission. The Committee noted with interest the intention to provide in-service training for counterparts from the region, which would bring the Project much closer to the member countries and also provide a nucleus of competent personnel. It was hoped that this activity could be initiated in the second half of 1978.

46. The Committee's attention was drawn to the sub-project in the WECAF Project document relating to a pelagic resource survey, which it was considered was of importance. The suggestion was made that perhaps it could even be carried out by the member countries themselves, with some financial and technical support from the Project.

47. It was pointed out that with the general extension of exclusive economic zones that was taking place, it was essential that countries increased their knowledge of their fishery resources. It was thought that, whilst the main commercial species were already fairly well exploited, there were a number of species which were not fully exploited but which had interesting possibilities. It was considered that it would be preferable to concentrate on a relatively small number of species, particularly those which were of commercial interest and where conditions for their exploitation could be initiated quite quickly.

48. It was agreed that the improvement in fishery statistics essential for a better understanding of the resources would be a lengthy process. The recommendations of the Working Party on Fishery Statistics would, however, serve as a basis for deciding on the type of work most appropriate in this field.

49. The Committee considered that greater utilization of the total fish production in the region could be achieved. At present some species which were fairly readily available were not generally accepted and there was also a considerable amount of fish being discarded by the shrimp trawlers, of which greater use could be made. The situation required new methods for collecting the catch, additional processing facilities, work on product development and improvements in marketing and distribution so that as much as possible of the fish caught could be utilized for human consumption. It was important to try to increase food production in the cheapest way possible.

50. It was felt that the Project should become acquainted with all the national fishery development programmes which were being developed in the area and analyse their relationship with the Project's programmes. Advice should be given to individual countries in preparing their development plans since it was important that, as far as possible, they should be coordinated with fisheries development in the region as a whole.

51. The Committee approved and recommended the Programme of Work which had been presented by the WECAF Project. The Committee, having identified the main priorities which should be followed, requested that the Project should adjust its Programme accordingly. The Committee recognized the high quality of the work which was being carried out by the Project Leader and his staff and were satisfied that the Project was developing in a dynamic way.

52. It was felt, however, that it was essential for the Committee to meet more frequently than every two years, which was the present arrangement. It was considered, therefore, that ways should be found that would enable it to meet at least annually.

PROPOSED EXTENSION OF THE PROJECT

53. It was pointed out to the Committee that the Project was due to terminate at the end of 1979. This would give it little time to develop a Programme of Work that would be of benefit to the region. Experience in other areas had demonstrated the importance and need of regional fishery projects and it was considered that any extension proposed for WECAF should not be too short. It was pointed out that any extension of the WECAF Project would depend on the decisions of the UNDP Governing Council but there was a good possibility of continuation since the member countries had strongly expressed their support for an extension of the Project.

54. It was agreed that FAO should be asked to submit a request to UNDP for an extension of the Project to 1981 which is the end of the present UNDP 5-year Programming cycle, and also request UNDP to consider further funding for the Project during the following 5-year cycle.

OTHER MATTERS

55. The Committee expressed its appreciation to the Government of Panama for the very substantial support which it is providing to the WECAF Project. The representative from UNDP, who echoed the same sentiments, pointed out that Panama was also providing similar assistance to the UNDP/FAO Fish Marketing Information Service for Latin America, which also has its headquarters in the country.

Annex 1

LIST OF DELEGATES AND OBSERVERS

MEMBERS OF THE COMMITTEE

Bahamas

THOMPSON, R.W.
Senior Fisheries Officer
Ministry of Agriculture and Fisheries
P.O. Box N3028
Nassau

Brazil

ROSA, H.
Senior Adviser
International Fishery Affairs
Superintendencia do Desenvolvimento
da Pesca
Avenida W-3 Norte
Quadra 506, Bloco C
70 000 Brasilia, D.F.

Colombia

GALEANO, Dr. A.R.
Embajada de Colombia
Apartado 4407
Panamá 5, Panamá

Cuba

OLTUSKI, E.
Viceministro
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

PEREZ FERNANDEZ, Dr. R.
Director
Centro de Investigaciones Pesqueras
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

FERNANDEZ CALZAT, J.
Jefe, Departamento de Colaboración Económica
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

FONT CHAVEZ, L.
Subdirector
Centro de Investigaciones Pesqueras
Ministerio de la Industria Pesquera
Ensenada de Potes y Atares
Puerto Pesquero
La Habana

CARBONELL ELIE, Id. F.
Consejero Político
Embajada de Cuba
Panamá, Panamá

Guyana

Jamaica

ROYER, E.A.
Acting Director of Fisheries
Fisheries Division
Ministry of Agriculture
P.O. Box 470
Kingston

Trinidad and Tobago

United States of America

BULLIS, H.R.
Senior Scientist
Southeast Fisheries Center
National Marine Fisheries Service
75 Virginia Beach Drive
Miami, Florida 33149

DAIMANN, A.E.
Caribbean Fishery Management Council
Room 202, Federal Building
St. Thomas, Virgin Islands 00830

HOOKEER, Dr. P.J.
Director for Research
Southeast Fisheries Center
USDC - National Marine Fisheries Service
75 Virginia Beach Drive
Miami, Florida 33149

JONES, A.C.
Director for Fishery Management
Southeast Fisheries Center
National Marine Fisheries Service
75 Virginia Beach Drive
Miami, Florida 33149

WEIDNER, D.M.
Foreign Affairs Officer
National Marine Fisheries Service
National Oceanic and Atmospheric
Administration
Department of Commerce
Washington, D.C. 20235

REPRESENTATIVE OF THE UNITED
NATIONS DEVELOPMENT PROGRAMME

RIPLEY, Dr. W.E.
Fishery Officer
Division for Global and Inter-
regional Projects
UNDP
United Nations
New York, N.Y. 10017, U.S.A.

OBSERVERS FROM MEMBER NATIONS
NOT MEMBERS OF THE COMMITTEE

France

BONNET, M.
Directeur
Centre de recherches "Antilles-Guyane"
de l'Institut scientifique et tech-
nique des pêches maritimes
97231 - Robert
Martinique

Korea (Republic of)

KIM HAN MO
Fisheries Attaché
Embassy of the Republic of Korea
2320 Massachusetts Avenue
Washington, D.C. 20008, U.S.A.

Panama

ARELLANO LENNOX, Dr. C.
Director General de Recursos Marinos
Ministerio de Comercio e Industrias
Apartado 9658
Panamá 5

FAO

WECAF Project

DOUCET, W.F.
Programme Leader
WECAF Project
Apartado 6-4392
El Dorado
Panamá

CHAKRABORTY, D.
Consultant
WECAF Project
Apartado 6-4392
El Dorado
Panamá

LINTERN, D.A.
Economist
WECAF Project
Apartado 6-4392
El Dorado
Panamá

VILLEGAS, L.
Resource Evaluation Expert
WECAF Project
Apartado 6-4392
El Dorado
Panamá

Regional Office for Latin America

TAPIAS, C.
Regional Fisheries Officer
RLAT
Casilla 10095
Santiago, Chile

Headquarters

LABON, Dr. A.
Director
Fishery Industries Division
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

BOEREMA, L.K.
Senior Fishery Resources Officer
Fishery Resources and Environment Division
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

HENDERSON, J.D.M.
Senior Fishery Liaison Officer
Office of Assistant Director-General
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

SIMPSON, J.G.
Senior Project Operations Officer
Operations Service
Fisheries Department
FAO
Via delle Terme di Caracalla
00100 Rome, Italy

ACTING CHAIRMAN OF THE
WECAF EXECUTIVE COMMITTEE

E. Oltuski (Cuba)

SECRETARIAT

Host Government

Liaison Officer

Dr. C. Arellano Lennox

Organizing Committee

Dr. C. Arellano Lennox
A. Muschett
Zunilda Girón
Nubia García
Irma I. de Sáenz
Lucía B. de Repetto

Conference Staff

Marta Alvarado
Marta Herrera
Argelia Rivera
Concepción Powell
Gina Bernal
Vielka Jiménez
Wislá Nájera
Yolanda de González
Anayansi de Mora
Grisel Alveo
Xiomara González

FAO

Programme Leader, WEGAF Project	W.F. Doucet
Secretary of the Executive Committee	J.D.M. Henderson
Meetings Officer	Myrtha Poblete-de la Fuente
Translators	T. Curtis E. Tarazona
Chief Interpreter	F. Piraud
Interpreters	A. Bennaton S. Blondeau C. de Espinosa D. Fernández de Córdoba J. Rossignol
Secretarial Assistance	Luisa Almagià Alicia M. Lorenzo Maria Teresa Ruspantini

Annex 2

AGENDA

1. Opening of the session
2. Adoption of the agenda and arrangements for the session
3. Progress report on Project activities
4. Recommendations of the Joint Meeting of the WECAFC Working Party on Assessment of Fish Resources and Working Party on Stock Assessment of Shrimp and Lobster Resources, that concern Project activities
5. Recommendations of the IOCARIBE Interdisciplinary Workshop that concern Project activities
6. Review of existing data on pelagic resources and recommendations for future research
7. Review of the status of fishery statistics and fishery research capability
8. Review of fishery development opportunities
9. Review of a sub-project for the development of artisanal fisheries to be funded by CIDA, Canada
10. Future activities of the Project, including project proposals for external financing
11. Proposed extension of the Project
12. Other matters

LIST OF DOCUMENTS

- WECAFC: X/78/1 Provisional agenda
- 2 Progress report on project activities
 - 3 Report of the Joint Meeting of the WECAFC Working Party on Assessment of Fish Resources and Working Party on Stock Assessment of Shrimp and Lobster Resources, Cartagena, Colombia, 18-23 November 1977
 - 4 Report of the First Session of the WECAFC Working Party on Fishery Statistics, Panama, Panama, 16-17 May 1978
 - 5 Review of existing data on pelagic resources in the WECAF area
 - 6 Review of status of fishery statistics and fishery research capability in the WECAF area
 - 7 Fishery development opportunities in the WECAF area
 - 8 Draft of sub-project, "Development and demonstration of advanced small-scale fishing"
- WECAFC: X/78/Inf.1 List of documents
- 2 Information for participants (available as WECAFC/78/Inf.2)
 - 3 Report of the First Session of the Western Central Atlantic Fishery Commission, Port of Spain, Trinidad and Tobago, 20-23 October 1975 (available as WECAFC/78/Inf.4)
 - 4 Fishery training needs in the Western Central Atlantic (available as WECAFC/78/Inf.6)
 - 5 Summary of fishery training needs in the Western Central Atlantic (available as WECAFC/78/13)
 - 6 An assessment of crustacean resources of the Western Central Atlantic and the Northern Southwest Atlantic
 - 7 A review of the fishery resources in the Western Central Atlantic
 - 8 An assessment of the fish stocks and fisheries of the Campeche Bank
 - 9 Relations with other bodies in the area concerned with fisheries (available as WECAFC/78/10)
 - 10 List of delegates and observers

Annex 4

PROGRESS REPORT ON PROJECT ACTIVITIES

INTRODUCTION

1. The present phase of the UNDP/FAO WECAF Project was initiated on 1 January 1977. It was preceded by a preparatory phase of 16 months which ended on 30 June 1976, during which time a number of studies basic to the programming of development activities in the region were carried out, notably "An Assessment of Crustacean Resources of the Western Central Atlantic and the Northern Southwest Atlantic", "A Review of the Fishery Resources in the Western Central Atlantic", "An Assessment of the Fish Stocks and Fisheries of the Campeche Bank", and "Fishery Training Needs in the Western Central Atlantic". These studies are available for the information of participants at this meeting.

2. As you will recall, the UNDP became faced with rather serious financial difficulties in the first half of 1976, giving rise to a significant curtailment of UNDP funded activities. As a result, the implementation of the programme envisaged for Western Central Atlantic fisheries had to be postponed - the first phase of the Project ended on 30 June 1976 and the one now in course began only six months later.

3. Because of the uncertainty prevailing in the first half of 1976 as to when the WECAF Project would become operational and, indeed, what funds would be available for the implementation of planned activities, many of the organizational requisites were left in abeyance, especially the selection of a Project Headquarters in the area and the recruitment of staff. In consequence, although the Project was declared operational when the Programme Leader was appointed on 1 January 1977, the stage was not yet set for the immediate initiation of field activities.

4. These observations are made to give members of this Committee some of the background which in large measure served to retard the implementation of the programme of work now in progress. The descriptive account which follows is therefore given in two parts: one, dealing with activities prior to the establishment of the Project Headquarters in the WECAF area, what can be considered the organizational stage; the other, concerning activities initiated since the Project moved to the area on 1 September 1977.

PROJECT ACTIVITIES FROM 1 JANUARY TO 30 AUGUST 1977

5. The period was taken up for the most part with organizational tasks and follow-up on activities initiated during the Project's preparatory phase, including participation in field missions. This is the period when the Project was based in Rome and the Programme Leader was still without staff. The activities in this period are treated under six headings.

(1) Familiarization with the WECAF area and contacts with the fishery officials

6. While the Project was not logistically located during this period for convenient travel in the area, a total of two and one half months were spent visiting Western Central Atlantic member countries. Fourteen of the twenty-three participating countries were visited. Exchanges of views with fishery officials on Project objectives and programmes, as well as on national fishery situations and problems, served to generate support for the Project, especially in those countries where little interest had yet been demonstrated. Such consultations also proved extremely useful for the orientation of Project activities in line with country needs and for the finalization of the Project Document.

7. During this reconnaissance of the area, contacts were also made and a base for cooperation established with other agencies/entities concerned with the development of fisheries, especially: the Caribbean Common Market, the Caribbean Development Bank, the British Ministry

of Overseas Development (London and Barbados), the University of West Indies, EEC delegation (Guyana), IDB, USAID, and CIDA (Canada).

(2) Selection of Project site

8. The inconvenience of directing field activities in a Project covering an area as vast as WECAF from a base as remote as Rome made the establishment of the Project Headquarters in the area itself a matter of urgent necessity and concern. Although rumours had emerged from the first meeting of the WECAF Commission in Port of Spain in October 1975 that several governments had interest in hosting the Project, no formal offers had been received by the time the Project began in January 1977. It was therefore necessary "to go hunting", so to speak, for a convenient and strategic location. Following numerous consultations, Panama City was selected in July and negotiations were concluded to permit the establishment of the Headquarters there on 1 September 1977.

(3) Negotiations regarding the implementation of the sub-project "Development and demonstration of advanced small-scale fishing" - proposal for financing by the Canadian International Development Agency, Canada

9. The members of this Committee will have an opportunity to examine this proposal in greater depth later on in the proceedings. At this stage it is only pertinent to report on the action taken during the period under review pursuant to the realization of CIDA's assistance to small-scale fisheries.

10. The proposal was formulated during the preparatory phase of the Project and submitted to CIDA for consideration in May 1976. For a number of reasons the proposal had not been acted upon by the time the current Project began. Because of the importance of small-scale fisheries in most countries of the WECAF area, and because of the desirability of initiating an action programme which could benefit a large number of fishermen in a relatively short time, negotiations were entered into with CIDA early in the year pursuant to the financial support envisaged.

11. CIDA approved the sub-project in principle in February 1977 provided (1) it were first implemented in member countries of the Caribbean Community (CARICOM) and (2) that the CARICOM Secretariat and individual member countries confirmed the need for the assistance proposed.

12. In due course and after numerous contacts and consultations both with CIDA officials and the CARICOM Secretariat, CIDA took the decision to field a mission to the CARICOM area in order to review the small-scale fishery proposal with the governments of the countries to be served, and to ensure that the programme proposed was formulated to respond to their needs. This mission, which was headed by the WECAF Programme Leader, visited the countries of Antigua, Barbados, St. Lucia, Grenada, Trinidad and Tobago, Guyana and Jamaica from 23 May to 10 June. Government officials in charge of fisheries in Montserrat, Dominica and St. Kitts also participated in the meetings. Strong support for the small-scale fishery sub-project was received in all countries visited.

(4) Preparation of fish identification sheets

13. A research project undertaken by FAO on behalf of WECAF prior to the period of this review was the preparation of identification sheets for all commercial or essentially commercial species found in the WECAF area. Because of the importance of this information for the work envisaged by the Project in resource evaluation, improvement of fishery statistics and marketing, and in view of FAO's shortage of funds to complete this major work in 1977, Project funds were set aside to finance the services of a taxonomist for a period of two months and to defray the cost of printing. The completed work consisting of six volumes of drawings and descriptions is now available for participants at this meeting.

(5) WECAF/IOCARIBE relationship

14. Close contacts were maintained with IOCARIBE through meetings in Rome and at IOCARIBE Headquarters in Port of Spain from the beginning of the Project. A joint IOCARIBE/WECAF mission visited the countries of Central America in June to discuss resource research proposals and generate country interest in participating in an interdisciplinary fishery workshop planned for late November in Martinique. Plans were also finalized for a similar mission to the Lesser Antilles early in 1978. Also, preliminary planning was made relative to the organization of a future IOCARIBE workshop on the commercial cultivation of conches and mangrove oysters.

(6) Recruitment

15. Despite the list of priority issues confronting the Project from its incipience, especially assessment of fishery resources, improvement of fishery statistics, advice on fishery development planning, administration and management, and assistance to small-scale fishermen, efforts at recruitment of staff to respond to these needs did not produce results. This was due in part to the difficulty of finding suitable candidates to serve in an area where the three languages of FAO are employed, and also to the fact that the site of the Project Headquarters was not known before July 1977. The best that could be done was to ensure that an economist, a biologist and three consultants would join the Project after the Headquarters had been established.

PROJECT ACTIVITIES DURING PERIOD 1 SEPTEMBER 1977 - 31 MAY 1978

16. As the Project moved to Panama City on 1 September 1977, the following few months were largely devoted to getting the new office operational and finalizing the work programme. The work programme, which is appended to this report, will come up for review later on in the proceedings.

17. Efforts at staff recruitment began to bear fruits in September. The Project economist arrived on 11 September, followed by the biologist on 14 October and the fishing technologist/masterfisherman on 22 February 1978. An Associate Expert with experience in development planning from the Federal Republic of Germany also joined the Project at the end of March. Still awaited is the fish processing technologist who, in accordance with the Plan of Operation, should have been at the Project site by January this year.

18. Compensating in large measure for the late arrival of the Project's core staff was the recruitment of four consultants (a fishery biologist, a fishery technologist and a fishery statistician, each for two months, and an aquaculture expert for one month) whose contribution is described later in this report. In addition, three consultants have recently joined the Project, a naval architect, a statistician and an expert in fishery training who will remain for one, two and three months respectively. The activities during the period are treated under six headings.

(1) Missions

Venezuela

19. At the request of the Government of Venezuela, the Programme Leader together with a consultant technologist visited Caracas the first week of November 1977 to review and finalize a project proposal for assistance to the Fishery Technology Institute, La Salle Foundation, based in Isla Margarita. A project document was finalized during this mission and subsequently submitted to and approved by UNDP. The assistance to be provided consists of four experts (refrigeration engineer 24 m/m, fishery technologist 18 m/m, aquaculture specialist 18 m/m and fishing gear specialist 36 m/m) and 21 m/m of consultancies in related fields.

Guyana/Trinidad and Tobago

20. At the request of the Resident Representative of the UNDP in Guyana on behalf of the CARICOM Secretariat, the Programme Leader participated in a mission to Guyana the first week of March 1978 with the Regional Adviser of the Intergovernmental Maritime Consultative Organization (IMCO) to discuss the training requirements for fisheries and maritime services in the CARICOM area and explore the possibility of combining facilities to meet these training needs into one central training entity. Final decision could not be reached on this occasion. This will have to await the conclusions of a special committee established by the Standing Committee of Ministers of Transport of CARICOM to study the matter, scheduled to meet later this year.

Lesser Antilles

21. A joint IOCARIBE/WECAF mission was fielded to the Lesser Antilles in April, similar in purpose to the mission which visited the countries of Central America in July 1977. The Project biologist participated in this mission on behalf of WECAF and considerable support for Project activities was generated.

Central America

22. An exploratory mission made up of two WECAF consultants visited the countries of Central America during the last week of April this year to review with governments alternative means of exploiting and utilizing the resources they hold in common more fully and rationally, in view of the extended fishing jurisdictions they have adopted. In particular, the mission explored the position of governments respecting a number of options open to attain these ends - joint ventures and other forms of association.

(2) Seminars, workshops and meetings

Guyana

23. Seminar on Potential Utilization of Fish Resources - the By-catch of the Shrimp Industry - The Project economist attended this seminar organized by the Guyana IDRC Fishery Project, in cooperation with the Guyana National Science Research Council, held in Georgetown on 17-21 October 1977. This gave the Project an opportunity of being brought up to date on research activities carried out in some countries of the region relative to the utilization of incidental fish catches made by industrial shrimp trawlers and to plan for collaboration, principally with IDRC and the Ministry of Overseas Development, in future research, experimental and development work.

24. Unfortunately the seminar was not attended by all countries of the region having experience in the utilization of shrimp by-catches, so that a more thorough study of existing practices and problems is necessary. In this connection, a consultant is now under recruitment to carry out a survey of the major shrimp fishing countries in the WECAF area.

Colombia

25. Meeting of the Gulf and Caribbean Fisheries Institute and Seminar on Artisanal Fisheries - The Project staff participated at these meetings during the period 13-17 November 1977. A paper was presented on the purposes, aims and aspirations of the WECAF Project, which generated a good deal of interest on the part of a number of participants. The meetings provided an opportunity for the staff to meet and discuss Project activities with representatives of some 15 countries of the WECAF area.

26. WECAF Joint Working Party on Fish and Crustacea Resources - The Project biologist participated in this Working Party held in Cartagena on 18-23 November 1977. Ten member countries of WECAF were represented. The recommendations of this meeting will be presented to the members of this Committee later on in the proceedings.

Martinique

27. IOGARIBE Interdisciplinary Workshop - The Project biologist also participated in this workshop held in Martinique from 28 November to 2 December 1977. Oceanographers, biologists and fishery administrators from 21 countries of the WECAF area were in attendance, as well as observers from the Organization of American States, the Caribbean Development Bank, the Caribbean Fishery Management Council, FAO and IOC/Unesco.

28. While the recommendations of this workshop will be discussed later on in the proceedings, it is appropriate to mention two specific research programmes which were formulated of great interest to the WECAF Project, namely, (1) scientific studies for the improvement of trap fishery management in the Lesser Antilles and (2) scientific support for the management of Central American lobster fisheries. Both of these will be integrated in WECAF's work programme.

Puerto Rico

29. Fish Expo, 5-8 April 1978 - On invitation, the Programme Leader participated in a seminar to discuss the activities of the WECAF Project.

Canada

30. Meetings with CIDA - Two meetings were held with officials of CIDA (Canada), one in September 1977 in Ottawa, the other in March 1978 in Belize. The purpose of the first meeting was to present the report of the CIDA/WECAF mission to CARICOM member countries in May/June of 1977; the second was a follow-up, in an attempt to speed up CIDA's decision to implement the small-scale fishery sub-project.

31. While it may appear that progress has been slow in negotiations with CIDA, it must be recognized that the procedures governing identification, preparation and approval of project requests are extremely lengthy. What can be reported at this stage is that the last meeting relative to the finalization of the sub-project is to be held in June this year; and unless unforeseen difficulties arise, approval should be obtained in August and implementation started in September this year.

(3) Assistance to governments in fishery development planning

32. At the request of governments, the Project economist visited Bermuda, Surinam, Barbados and Dominica to review their fishery situations, discuss the major constraints to development and advise on development planning.

33. The Project has an important role to play in this field and every effort will be made to meet requests for assistance from all countries of the Project, either through the Project's core staff or by the recruitment of special consultants.

(4) Evaluation of artisanal fishery development possibilities

34. The Project fishing technologist visited the countries of Colombia, Bahamas and the Dominican Republic during April-May to examine the status of artisanal fisheries and recommend a plan of action for their improvement. His reports and recommendations are now under study.

(5) Consultancies

Resource evaluation

35. Mr. J.W. Reintjes, fishery biologist, was recruited for a period of two months in the latter part of 1977 to review the state of knowledge of pelagic resources in the WECAF area, identify the area where additional research should be undertaken and specify the methodology to be employed. His report is available for review later on in the proceedings.

Fish processing technology

36. Dr. R. Kreuzer, fishery technologist, was recruited for a period of two months, also in the latter part of 1977, to review existing practices in fish handling and processing in selected countries and to recommend a programme of action. The islands/countries visited were Panama, Cayman Islands, Turks and Caicos Islands, British Virgin Islands and Haiti. Four project proposals for technical assistance were prepared for discussion with the countries concerned.

Aquaculture

37. Mr. M. Mistakidis, aquaculture expert, visited the countries of Panama, Nicaragua, Trinidad and Tobago, and Surinam in November/December 1977 to examine the possibilities for aquaculture and recommend follow-up action. His recommendations are now under study.

Fishery statistics

38. Mr. E. Greenhood, fishery biologist/statistician, was recruited for two months (March/April 1978) to assess the methods of collecting and compiling fishery statistics in a number of countries in the area and to recommend appropriate improvements. The countries of Bahamas, Jamaica, Panama and Barbados were visited. His report relative to future action is now under review.

39. The work of this consultant marks the beginning of an arduous, time-consuming but most necessary activity to which the Project must give serious attention. More man/months than are provided for in the Project document will be needed to make a serious attempt at improving and standardizing fishery statistics in the WECAF area; and as soon as money can be made available, a full-time statistician will need to be recruited to carry on this important assignment.

(6) Other activities

40. In addition to involvement in the activities described above, the core staff of the Project has to the present been engaged in the following:

- (a) preparation of country profiles describing the fishery situation, development potential, status of statistics and resource research capability in the countries of the area
- (b) preparation of project proposals for UNDP or external financing (to be reviewed later in the proceedings)
- (c) assistance to countries in planning exploratory fishing surveys
- (d) organization of an economic study of the shrimp industry
- (e) preparation for working parties on fishery statistics and evaluation of shrimp resources.

CONTRIBUTION OF HOST GOVERNMENT

41. It is appropriate to single out that the Government of Panama has been a generous and cooperative host. From the very beginning of the Project, it has shown great interest in the WECAF programme of work. It has provided good office facilities, an adequate support staff and more than fulfilled the administrative and financial obligations inherent in hosting a Project of this kind.

42. The overall cost to the Government of providing a Project Headquarters to the end of 1979 is of the order of U.S. \$179 000, U.S. \$79 000 in cash and the balance in kind.

Appendix G

FISHERY DEVELOPMENT OPPORTUNITIES

Summary of discussions

The subject was divided into three sections:

- (i) Resource level - discussion leader, Dr. C. Arellano-Lemnox
- (ii) State of fisheries - discussion leader, Dr. J.J. Cardenas
- (iii) Development opportunities - discussion leader, Dr. A. Labon

The documents for the discussions were WECAFC/78/8, "Fishery development opportunities in the WECAFC area"; WECAFC/78/13, "Summary of fishery training needs in the Western Central Atlantic"; WECAFC/78/Inf.6, "Fishery training needs in the Western Central Atlantic"; and WECAFC/78/Inf.7, "Community fishery centres".

It was pointed out that, although the total fish landings of the member countries of WECAFC had increased by approximately 1.3 million tons between 1965 and 1975, landings from the Commission area had not increased significantly. In fact, catches from the Western Central Atlantic were now less than one-third of the total landings of the WECAFC member countries.

At the same time, it was estimated that the demand for fish in these countries would increase from the 1975 level of 5.1 million tons to 6.6 million tons by 1985 and to 8.5 million tons in 1995. These estimates, which were considered to be conservative since they were based primarily on forecasted population growths, suggest that there will be substantial deficits between domestically caught supplies of fish and potential total demand unless efforts are made to increase the rate of fisheries development. Although circumstances vary between countries, in some cases deficits will amount to more than half the total needs.

A review of the available information on the fishery resources of the region indicates that it should be possible to increase production substantially. Various resources were identified which were considered to be capable of withstanding greater exploitation. The small shoaling pelagic species seemed to offer good possibilities, while some island states indicated that they had commercially valuable demersal stocks which were still virtually untouched because they were beyond the reach of the vessels and equipment being used.

Within the traditional areas of exploitation, it was considered unlikely that opportunities for the development of new industrial fisheries existed but it was felt that further review was needed of the possibilities of developing offshore operations on an industrial scale which might occur as a result of the extension of exclusive economic zones. Participants thought that attention should be concentrated on the small-scale fishery sector, particularly since most of the resources identified seemed to be accessible to it and since the gears and techniques required for their exploitation were already known. However, a transfer of technology to the artisanal fisherman would be necessary if the full potential of this sector was to be realized.

While knowledge of the resources was not as comprehensive as desired, in most cases enough was known to enable progress to be made. Scientific research should be carried out in parallel with development and fishery programmes should be modified, if necessary, as improved information became available.

It was pointed out that it would not be sufficient merely to increase the level of production but that an integrated approach would be needed which covered the whole chain

of activity of catching, handling, processing and marketing so that the fish reached the consumer in adequate condition and at a reasonable price. Marketing aspects have been identified as an important problem for a significant number of countries in the area. Better handling should result in an improvement in the quality of the fish landed and thus reduce the volume of post-harvest losses.

The concept of community fishery centres was considered to be of significance in the region since it was based on an integrated approach to the development of artisanal fisheries which could be tailored to suit the specific needs of different countries or different areas. A number of countries in the region had been quite successful in developing their artisanal fisheries and the results of their experience should be passed on to others. Some of these countries have, in practice, developed a system similar to that described in WECAFC/78/Inf.7.

Apart from increasing production, it was also essential to improve utilization of the catches already made. Here the most obvious need was to find ways of better utilizing the by-catches of the shrimp trawlers. Although a number of the countries in the region were already using part of the by-catch, no satisfactory approach to the problem has been found that would be generally applicable and further work on this matter was desirable.

Greater use could also be made through product development of a number of species which are at present not generally consumed.

It was pointed out that development in fisheries required not only equipment, such as boats and gear and shore facilities, but also the human resources necessary to use this equipment. Whilst the acquisition of the material necessities could usually be achieved in a relatively short time, the training of human resources was a lengthy process.

The problem in the region was further complicated by the great disparity in the size of the member countries. There were large countries with significant fisheries potential and substantial manpower requirements and very small states whose needs were significantly less. In the latter case, the development of national training programmes were probably not justified but the regional approach, which would seem to be the logical alternative, was complicated by the fact that five major languages - English, French, Spanish, Dutch and Portuguese - were spoken in the area, as well as various local languages used by important segments of the population.

Participants emphasized that training was required in many disciplines, including research workers, operators of vessels and shore based facilities, and extension workers. It was also needed at all levels, ranging from courses aimed at a fairly low level of trainees to masters and degree courses in marine biology, fish technology and many other fields. Several countries from outside the region have offered training for a limited number of people but this, however, would not satisfy the region's basic requirements, especially of the great number of sea-going personnel that were needed.

Three training institutes exist in the area: the Caribbean Fisheries Training and Development Institute in Trinidad, the Fisheries Apprentices School at Trinité, Martinique, and the schools run by the Cuban National Fishery Institute. It was necessary to take a very close look at the capabilities of these existing institutions to meet the region's requirements and work out a long-term training programme for the region.

Whilst the great need is for trained and educated people, it was emphasized that the training of artisanal fishermen raised particular problems. For them, institutional training was not appropriate and the use of extension workers seemed to be the only solution. Such workers had to be given the broad type of training that combined practice with theory and would enable them to help the fishermen progress to a higher level. At the same time, it was essential that after receiving training they were capable of integrating themselves in the fishing communities, gaining the trust and confidence of the fishermen. The number of extension workers required was substantial, if they were to be able to provide effective assistance to the fishing communities.

Although most attention was devoted to the problems of training the artisanal fishermen, it was recognized that the existing industrial fisheries were also capable of further improvement and there was a need for institutionalized training to provide skippers, mates and engineers for the commercial fishing vessels.

Some participants pointed out that it was possible through the chartering of vessels and through joint ventures to get training in the latest fishing methods at a relatively low cost. Requirements relating to the transfer of technology, were fairly normal in joint venture agreements.

It was pointed out that many countries in the region are facing problems of readjustment of fishing policies and plans as a result of extended jurisdiction over exclusive economic zones. There was a need for a coordinated effort to develop fisheries, on a regional or sub-regional basis, as failure to exploit the resources would result in pressure from other countries to be allowed to share in the fishery. At the last COFI meeting, FAO had been requested to realign its programme so as to provide better assistance to coastal states in developing their fisheries and the organization was ready to assist governments on request in analyzing their national needs.

To sum up, it was noted that there was a growing gap between the production and demand for fish in the region but that there were resources available which were capable of further exploitation. The small-scale fishery sector offered good possibilities of increasing production provided an appropriate transfer of technology could be achieved. Improved handling, processing and marketing could substantially reduce post-harvest losses, particularly in regard to the shrimp by-catch. Suitable training programmes needed to be developed for all types of workers in the industry and at all levels and a number of institutions existed in the area where they might be carried out. Offers made by countries both inside and outside the area to provide training facilities could be taken up with advantage.

